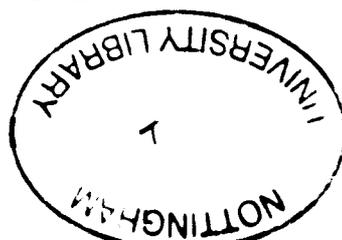


MARKETING – ENTREPRENEURSHIP INTERFACE IN
SMALL AND MEDIUM SIZE ENTERPRISES :
THE CASE OF SINGAPORE

BY
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Most importantly, I give thanks to God, from whom all blessings flow.

Foo Hee Luan

December 2003

*“And Jesus looking upon them saith, With men it is impossible,
but not with God: for with God all things are possible.”*
Mark 10: 27

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ABSTRACT

Marketing and entrepreneurship may be described as being both sides of the same coin. Both are different and yet similar. While their focus may differ, both need to co-exist in a firm as they complement and overlap each other. However, the extent of the overlap will depend on contextual issues such as the type of economic, the stage of economic development, the type of entrepreneurial activity pursued and the strategic orientation of the firm.

This research study explores the extent of the marketing-entrepreneurship interface in small and medium size enterprises (SMEs) in Singapore. The choice of Singapore as the context is highly relevant for three main reasons. First, no similar study on Singapore has been done before. Second, Singapore has achieved much since her independence in 1965 and is excellent example of a successful mixed economy and relatively well-developed economy in Asia. Third, continuing efforts by the government to 'remake' Singapore by fostering entrepreneurship makes it a highly suitable context.

A hybrid of qualitative and quantitative research approaches were used in this research study. The findings of this study indicate that while marketing orientation and entrepreneurial orientation are clearly related, entrepreneurial orientation appears to be more important than marketing orientation in contributing to the firm's overall performance. This does not mean that marketing is less important to the SMEs; it means that all things being equal, an entrepreneurial orientation may be more crucial to the firm's performance.

This study also confirms the importance of entrepreneurship if Singapore is to continue to succeed into the future. The low-cost competitive advantage that Singapore had enjoyed in the past is being eroded as other countries in the region catch up with lower costs. Foreign Multinational Corporations (MNCs) now have many other choices of countries to invest in. Furthermore, Singapore's small population of 4 million means that there is no critical mass to provide a ready market for these MNCs. This research reinforces the need for politicians, policy planners and firms to give greater support to promoting entrepreneurship

Chapter 1

Introduction

1.1 Introduction

The main purpose of this chapter is to discuss the context of Singapore as the background for this research on the extent of the marketing-entrepreneurship interface in the small and medium size enterprises (SMEs) sector. Singapore's progress as a unique mixed economy since independence in 1965 provides an ideal and relevant backdrop for such a study. In addition, its small size and ongoing efforts to re-invent itself in the face of new and more severe challenges in the new century makes it a suitable context for this study. An overview of the key arguments, the research questions, the importance of the research and its main contributions will also be discussed.

Since its independence in 1965, Singapore has made tremendous progress terms of its economic development and this has translated into tangible achievements and dramatic changes in its economic and social landscapes. These outstanding achievements have been well documented and widely recognized in the literature. (Saw & Bhathal [eds] 1981; Pang, 1981; Chen [ed] , 1983; Lee & Low, 1990; George, 1992; Toh & Low, 1993; Low, 1993; Huff, 1994; Low & Lim, 1997; Han, et al., 1998; Toh & Tan, 1998; Low, 1998; Lee, 1998; Lam & Tan [eds], 1999; Lee, 2000; Vasil, 2000; Lim, 2001; Reynolds, 2002; Peebles & Wilson, 2002) To this day, it has remained a classic example how a small country without natural resources of its own or a large hinterland for its economic output has achieved double-digit economic growth for many years. With a small population and thus no critical mass of its own, Singapore's economic policies from the beginning was to ensure its survival by looking outwards beyond its domestic markets. One key factor for its astounding economic success has been strong political leadership with a highly paternalistic approach to economic development supported by a population that has been a willing party to this arrangement. (Vasil, 2000; Peebles and Wilson, 2002) In the 1990s, however, double-digit growth began to give way to declining single-digit growth due to a rapidly changing environment where the competitive advantages of Singapore have been eroded. Other countries in the region had begun to catch up by pursuing similar economic strategies while offering relatively lower costs to foreign investors. Against this background, the government has felt a growing need to move from an orderly paternalistic approach to a more hands-off approach in economic planning and development that encourages SMEs and the population in general to be more entrepreneurial. SMEs must develop and market products and

services to the global markets on their own instead of relying on the government always for leadership and guidance. (Lim, 2001; Peebles & Wilson, 2002; Reynolds, 2002). Ultimately, the solution to Singapore's woes lies with individuals willing to move out of their comfort zones and start taking risks.(Elegant, 2003). Prime Minister Goh Chok Tong has also stated that if Singapore is to become a place where people can fulfill their aspirations, where they can explore many different things, it will no longer make sense for the government to always control and regulate every activity. (The Straits Times, 15 July 2003)

Section 1.2 discusses the recent and ongoing public discussions by the political leadership, the business community, the academic community and others on the need for a more entrepreneurial culture in Singapore. Since its independence in 1965, Singapore's economy had been primarily driven by foreign investments from Multinational Corporations as well as Government-linked Companies (GLCs). However, while this strategy had been highly successful in the past, the new economy today requires a different approach, one that is less structured and dependent on government initiatives, one requiring a greater degree of local entrepreneurship amongst individuals and companies.

Section 1.3 discusses the role of government in promoting entrepreneurship as an engine in developing the country's economy. For some time now, the government has recognized the need to move away from a highly structured top-down form of economic planning. Since independence, it has been largely government entrepreneurship that has created modern Singapore. However, in the present environment, the entrepreneurial buzz must come from individuals and companies. The various measures undertaken by the government to promote such a mindset are discussed in this section.

Section 1.4 provides a description of various studies indicating a general decline in entrepreneurship in Singapore over the years and a discussion on the possible reasons for this phenomenon. Some people attribute the decline to the education system which emphasizes structured thinking and academic results and which discourages individualism and risk taking. Others blame the traditional Asian culture which favours scholarship and high positions in traditional careers. Yet others blame government policies which reward the intellectual elite resulting in an entire generation who see good examination results as the key to a stable career and a secure future.

Section 1.5 discusses the specific efforts made by government and the private sector to bring about a change in mindset and a return to a more entrepreneurial culture. These efforts include government adjusting and changing regulations that may stifle entrepreneurship as well other efforts to give recognition to enterprises and entrepreneurs. One major result of these efforts is the appointment a minister with cabinet rank to champion the promotion of an entrepreneurial culture in Singapore.

Section 1.6 discusses the link between entrepreneurship and marketing and the key arguments and research questions. It could be argued that entrepreneurial success is dependent on a marketing orientation and vice-versa and one without the other is inadequate for eventual success in the marketplace. Thus, the marketing-entrepreneurship interface is an area that requires further research. The key arguments relate to the co-relationships of the marketing-entrepreneurship interface to the firm's performance. In this connection, some key research questions will also be discussed.

Section 1.7 discusses the importance of this particular research and its contributions. Although marketing-entrepreneurship interface as a research area has been undertaken for some years, specific research into the interface in the context of an economy like Singapore has been limited. This research has made important findings with regard to the importance of the marketing-entrepreneurship on the SME's performance in the context of a developing economy. Many such researches focus on the interface in relations to innovation, the learning organization, buying behaviour, supply chain management, and others. Given the ongoing emphasis on developing an entrepreneurial culture in Singapore, this research has potential for making major contributions to government policy making as well as to academic study.

Section 1.8 provides an overview of the research methodology used in conducting this research. The use of a two-stage process is explained and justified. First, in-depth interviews are conducted with 16 entrepreneurs to clarify their understanding of issues and the questions that might be used in the survey questionnaire in the second stage of the process. Based on the in-depth interviews, issues and terms were further crystallized and these were taken into consideration when preparing the questionnaire to be used in the second-stage of the research process.

Section 1.9 provides an outline of the organization of the thesis. A brief overview of each of the ten chapters is provided.

Section 2.0 concludes with a summary of Chapter 1 and an indication of what could be expected in Chapter 2.

1.2 The Need For A More Entrepreneurial Culture.

Since the early 1990s, Singapore's political leaders have openly spoken of the need to instill a spirit of risk-taking and entrepreneurship in the population. After nearly four decades of micro-managing the people to create one of Asia's most disciplined societies, it now needs to undo some of the collateral damage done by that state-directed 'nanny' capitalism. Critics claim that Singapore's education system, known for its emphasis on mathematics and the sciences, is partly to blame for a culture that discourages free thinking and instills a fear of failure. (Saywell and Plott, 2002)

In his speech during the 8th Singapore Business Awards on 8 January 1993, Senior Minister Lee Kuan Yew lamented on the lack of entrepreneurship in Singapore:-

Something is missing, either a sense of adventure or a compelling need to make more money.....I fear the entrepreneur is both born and also made by circumstances. We cannot change how people are born but we can and must change our circumstances to help encourage more Singaporeans to emerge as entrepreneurs (<http://business-times.asia1.com.sg/mnt/SBA/>)

This theme was reiterated during the inaugural Ho Rih Wah Leadership in Asia lecture organized by the Singapore Management University and held on 5 February 2002, when Senior Minister Lee Kuan Yew again discussed the lack of entrepreneurial culture in Singapore. In this speech, he suggested that although "*few are born entrepreneurs, and not many will succeed*", there is such a thing as an "*entrepreneurial culture in a society that encouraged many to try to succeed in business.*" . The factors that have led to this lack of entrepreneurial spirit may be due to culture and circumstances. Traditional Chinese culture has always valued first, the scholar "*shi*", second, the farmer, "*nong*", third, the worker, "*gong*" and fourth and last, the merchant, "*shang*". Although this is the social hierarchy of an agricultural society, much has not changed in popular culture in countries with predominant Confucian culture, including Singapore. However, Singaporeans can slowly change their mindset with changing values and circumstances. Being a young society of immigrant stock, the values and culture are not too deeply imbedded. According to Senior Minister Lee, the new values which might foster

entrepreneurship could be modeled on the four salient features of American society, namely: (a) *a national emphasis on personal independence and self-reliance*, (b) *respect for those starting new businesses*, (c) *acceptance of failure in entrepreneurial and innovation efforts* and (4) *tolerance for a high degree of income disparity*. (The Straits Times, 6 Feb 2002).

In a symposium in Japan on 5 June 2003 organized by leading business daily Nihon Keizai Shimbun, Senior Minister Lee Kuan Yew stated that in general Asians raised largely in Confucianist societies tend to have a problem thinking outside the box:-

This is a problem for all Confucianist societies. We were very good at the mass production level. We produced people who could organise big regiments but we did not produce the maverick generals and this is the period that we must do that. (Straits Times, 6 June 2003)

However, this view on Singapore's poor level of entrepreneurship has not been fully shared by all. In the 1999 budget debate in Parliament, the then Minister for Information and the Arts Brigadier-General George Yeo stated that the entrepreneurial spirit is in the blood, the history and culture of Singaporeans and that he was not concerned about the lack of entrepreneurial drive here. According to him, the government's role is to ensure that Singapore's rules and regulations better enable this entrepreneurial spirit to come forth in the new high-tech knowledge economic setting. (Straits Times, 13 March 1999)

The need to develop local entrepreneurship has also been suggested by Koh (1987), who argues for this on several grounds. One argument is based on the desire to reduce 'excessive' dependence on foreigners as the source of one's livelihood. The local entrepreneur is also likely to be "*more 'committed' to the economy, less footloose and show greater stability in his investment pattern than the average foreign investor who may be here today, and gone tomorrow*"(pp. 89). Another argument is based on the political objective that growth should be for Singaporeans. If the growth objective is narrowly defined to be that of increasing GNP rather than GDP, then to the extent that local entrepreneurs' income go into GNP while foreigners' income do not, "*encouragement of such entrepreneurship would, other things being equal, enhance GNP.*" (pp 90).

Indeed, entrepreneurship has clearly been identified as "*a key factor in reinventing our economy as Singapore struggles to make sense of the world's changing business climate and to find our*

niche therein.” (Buenas, 2003) However, even if the need for a more entrepreneurial culture is clear, it is one thing to point this out and quite another to do something about it. Whether it is the role of government to reverse such a trend is an issue that needs to be explored.

1.3 Government’s Role in Promoting Entrepreneurship

In its 1999 report, Global Entrepreneurship Monitor (GEM) had stated that *“promoting entrepreneurship and enhancing the entrepreneurial dynamic of a country should be an integral element of any government’s commitment to boosting economic well-being.”* (The Straits Times, 23 June 1999)

According to Hall (2002), developing countries do not have enough SMEs relative to the population. In most developed economies, there is one active entrepreneur managing an SME for every 20 people. However, in the developing economies in APEC , the average is one in every 124 people. In Singapore, although there are slightly over 100,000 SMEs, comprising 92% of total establishments, employing 51% of the workforce and generating 34% of total value added. However, their productivity is only half that of the non-SME establishments. (SME 21, www.spring.gov.sg; The IFER Report, July 2002.). SMEs face structural weaknesses which lead to their poor productivity performance. These weaknesses include: (a) weak entrepreneurial culture, (b) insufficient management know-how and professionalism, (c) shortage of professional and technical manpower, (d) insufficient use of technology, (e) outmoded, unproductive methods of operation , (f) limited ability to tap economies of scale, (g) small domestic market.(SME 21, www.spring.gov.sg). Many of these problems ,however, are not unique to SMEs in Singapore, but are also faced by SMEs in other countries as well. (Wickham, 1998; Bridge, et al., 1998; Asian Productivity Organisation, 2002; Beaver, 2002; Tan, 2002; Schaper, 2003)

On 27 March 2000, Deputy Prime Minister Tony Tan said in a wide-ranging speech that the government would have to revamp its way of doing things in the face of rapidly changing conditions. When Singapore started to industrialise in the 1970s, changes were gradual and incremental. In such a situation, Singapore constructed an economic engine based on political stability, good infrastructure, a disciplined workforce and openness to multi-national corporations. This strategy had provided the country with above-average economic growth for the last 30 years. However, the present circumstances are very much different. The Old Economy is now replaced by the New Economy and Singapore is faced with the dilemma of how to navigate from the old economy with which it is familiar to the unfamiliar new economy. In

this new environment, speed and nimbleness in seizing market opportunities would be critical. The presence of entrepreneurial talent is crucial. In essence, three key changes are required: (a) new ways of promoting growth, (b) new ways of paying workers, and (c) new labour practices. (Straits Times, 28 March 2000). Later, Dr. Tony Tan suggested that government must take the lead in developing entrepreneurs. Non-intervention might work in Silicon Valley, but not in Singapore. According to him, *“once the government leads, the private sector will follow, then the government can step back.”* (Straits Times, 26 July 2000)

This new government position was also stated by Deputy Prime Minister Lee Hsien Loong when he spoke at the New Economy conference organized by the Economic Development Board (EDB). According to him, *“we must create an environment where an individual’s success depends on his own efforts and abilities, rather than on largesse from the state.”* However, he acknowledged that direct government programmes to develop enterprise play only a secondary role and stated that *“a primary factor is whether we have the talent – people with the ideas, the dynamism and the risk-taking spirit to venture forth, seize a market opportunity and operate a businesses.”* (Business Times, 3 August 2001)

This need to change the mindset of Singaporeans was re-iterated by Deputy Prime Minister Lee Hsien Loong in an interview with the Far Eastern Economic Review. (Saywell and Plott, 2002) :-

...we talk about promoting entrepreneurship and getting people to have a mindset that you don’t just want to be an employee but you should start out, do something, take risks and grow a business, not just in Singapore but in the region and internationally. That’s a mindset issue. It’s also a talent issue. (pp 49)

In his National Day Rally address on 18 August 2002, Prime Minister Goh Chok Tong said that Singapore can become an entrepreneurial society. However, to achieve this, Singapore needs to develop a creative as well as culturally vibrant environment. In addition, it must continue to revamp the education system to foster an entrepreneurial spirit among the young. According to him:-

To support our entrepreneurs, we need to develop an overall environment that encourages people to discover, create and experiment. (The Business Times, 19 August 2002)

The main argument here is that entrepreneurial instincts and skills can be developed from young, which is why Singapore has begun restructuring its educational curriculum and methods of teaching to produce students who can think creatively and unconventionally. Thus, many schools and some junior colleges have started Young Enterprise Clubs. The National University of Singapore (NUS) has set up NUS Enterprise while the Nanyang Technological University (NTU) has its Nanyang Technopreneurship Centre.

In the inaugural Singapore Innovation Award 2001 presentation on 16 Nov 2001, Prime Minister Goh Chok Tong stated that Singapore need not start from scratch in its quest to become an innovative nation. After all, Singapore had found innovative solutions in the past. For example, Singapore has no oil fields but is the world's third-largest oil-refining centre. Although it is land scarce, it has managed to reclaim seven off shore islands to form a world-class chemical hub on Jurong Island. However, five elements are needed for Singapore to become more innovative and these are: (a) talent, (b) an innovative mindset, (c) tolerance of failure, (d) and understanding of global market needs and (e) inspiring role models. (New Paper, 17 Nov 2001)

It is clear that the government is not only frank and open in recognizing the problems associated with a declining entrepreneurial culture, but is acute aware that it needs to provide leadership to reverse the decline. This includes providing a helping hand whenever needed. The EDB declared that in its new push to grow industries in the New Economy, both multinational corporations (MNCs) and small and medium enterprises (SMEs) will be equal in the eyes of the EDB. (Business Times, 3 August, 2001). In September 2001, a new S\$50 million government fund to help start-ups was announced. According to Deputy Prime Minister Tony Tan, this new Start-up Co-Financing Scheme had been set up to "*foster entrepreneurship, risk-taking and innovation activities in Singapore*". The EDB would match dollar for dollar any seed funding raised by a start-up from the private sector. (Straits Times, 19 September, 2001). Indeed, SMEs borrowed S\$360 million from the government in 2000 to grow their business – a sign perhaps that the entrepreneurial spirit had been resuscitated. (Straits Times, 4 February, 2001) In May, 2003 the Operation and Technology Roadmapping (OTR) programme was announced. Under this initiative, public sector technology experts are sent into growing small and medium size enterprises (SMEs) peer into the future and identify needs for the next five years. Modeled after the OTR programme started by the University of Cambridge in the UK, the scheme was designed to help firms identify the right products and services and then have in place the necessary technologies to deliver these things. The programme is co-ordinated by the Agency for Science, Technology and Research (A*Star) and subsidized by Spring Singapore's Local Enterprise

Technical Assistance Scheme. The OTR scheme is the latest component of the multi-agency Growing Enterprises with Technology Upgrade (Get-Up) campaign. So far, some 32 scientists have been seconded to SMEs under another Get-Up scheme. (Straits Times, 30 May, 2003)

Dr. Thomas Emerson, director of the Donald J. Jones Centre for Entrepreneurship at Carnegie Mellon University has suggested that the need for entrepreneurship is clear, as entrepreneurs constantly drive out inefficiencies in markets and drive new techniques and technologies into society. According to him, efforts must be made to remove the stigma of failure in cases where entrepreneurs fail in their ventures. At the same time, *“Singapore needs to focus on building the infrastructure to encourage and support successful entrepreneurship and to reward and recognize that success”*. (Buenas, 2003) Certainly, it is evident that strategic vision and words of encouragement have been backed by concrete measures to ensure that the decline in entrepreneurial decline in Singapore will in time be arrested before it is too late. What remains to be seen is the long-term results of this major overhaul effort to change mindsets and bring about economic revival through a more vibrant entrepreneurial culture.

1.4 The Decline in Entrepreneurial Drive

The 2000 Global Entrepreneurship Monitor (GEM) reported that Singapore has one of the lowest scores in the total entrepreneurial activity (TEA) index, with a score of 2, just ahead of Japan (1) and Ireland (1). This compares most unfavourably with Brazil (16), South Korea (14), United States (13) and Australia (11). In its report, GEM states that despite higher than average GDP growth, Singapore has one of the lowest rates of entrepreneurial activity, probably because of *“the high dependence of Singapore’s economy on the external sector.”* (Business Times, 17 January 2001; Asian Entrepreneur, March-April, 2001).

A survey conducted by Babson College throughout 2001 found Singaporeans scoring poorly in entrepreneurial spirit. Singapore ranked 27th among 29 countries in terms of entrepreneurial activity. As few as 5% of Singaporeans between the ages 18 and 64 were involved in establishing a new business. Japan and Belgium ranked below Singapore, but other countries fared better, including Britain, India, Canada, the United States, Korea and Australia (The Straits Times, 4 Dec 2002)

In another survey of entrepreneurship in 37 countries run by United States-based Babson College and the London Business School – and carried out in Singapore by the Centre for

Entrepreneurship at the National University of Singapore, it was found that University graduates here are less likely to start new business ventures compared to students who are educated no further than secondary school level. One in 10 junior college graduates take the entrepreneurial plunge compared with just one in 25 university or polytechnic graduates. According to Prof. Wong Poh Kam at the Centre for Entrepreneurship, *“this lack of entrepreneurial propensity among Singapore university graduates is totally at odds with other countries where it is university graduates who are most likely to start up a new business.”* The survey found that social and cultural attitudes such as fear of failure still deter many Singaporeans from striking out on their own. (The Straits Times, 15 Nov 2002)

The reasons why Singapore can be such an outstanding success in economic development and yet remains relatively lacking in the world league of entrepreneurship, to which Chinese overseas communities have historically contributed significantly, can be attributed to Singapore being a “catch-up capitalism” as apposed to the “pioneer capitalism” of other more entrepreneurial societies (Hampden-Turner & Tan, 2002). So long as Singapore was catching up, the values and qualities it possesses serve it well such as: right first time, abstract thought, excellence predefined, hard sciences, early developers, and opportunities seized. However, now that Singapore has hit the front, the creativity and innovation of pioneer economies are sorely needed such as: erring and correcting, concrete operations, excellence redefined, softer sciences, late developers, and disadvantages overcome. According to Hampden-Turner and Tan (2002) several action steps need to be taken to reconcile these contrasting values and turn Singapore into a pioneering culture.

Haley (2003) suggests that the Singapore government has enjoyed *“an outstanding record of success based on its ability to attract MNCs and corresponding capital”*. Consequently , the *“socially re-engineered Singaporean culture appears hierarchy , disciplined, authoritarian, and a showcase for technocratic management.”* One result of this is *“a diminishing ability to produce creative, innovative and productive workers for the knowledge economy and the MNCs that dominate it.”* This implies that since independence in 1965, the top-down economic planning and strict emphasis on social order and discipline has produced an entire generation of people whose entrepreneurial drive and individualism have been severely impaired. The tight controls necessary in the early days of double-digit economic growth have now become a stumbling block and a major change in mindset backed by gradual loosening of controls appear inevitable if the entrepreneurial spirit is to be rejuvenated.

Many people also blame the education system for the lack of entrepreneurship in Singapore (Saywell & Plott, 2002). However, according to Senior Minister of State for Education Tharman Shanmugaratnam, the reasons may lie much deeper. He offers two key legacies inherited by Singaporeans as the underlying causes. One is the British education system which is traditionally geared towards producing an elite to run the country and the financial hub. The other is the long-standing East Asian tradition that places scholarship above all endeavours. Thus alternative routes to success were given little respect. However, the tide may be changing as a new generation of Asian entrepreneurs is emerging from the Asians returning from the United States who “*carry with them some of the American spirit of seeing failure as a pathway to success*”. (The Straits Times, 7 Sept 2002)

Some feel that although the government recognizes the need to retool the economy, this is being held back by the country’s excessive saving rates. They argue that one way to unleash the entrepreneurial forces is to free up and redirect some of the huge pools of capital held by both the government and individuals. Singapore has huge fiscal surpluses which even the International Monetary Fund (IMF) considers as being well in excess of what the government needs. The country’s gross savings rate of 51.5%, including the fiscal surplus and the national pension scheme, is the highest in the world. Some economists suggest that running current account surpluses of more than 20% of GDP means that Singapore is in effect “*exporting 20% of its savings to other countries which would be better off deployed domestically*.” (Saywell & Plott, 2002)

Many suggest that the predominant involvement of Government-linked Companies (GLCs) in businesses is a major reason for the decline in entrepreneurship in Singapore. They argue that the very existence of such companies discourages the emergence of a vibrant private sector. Through its investment arm, Temasek Holdings, the government holds significant stakes in almost every major business sector – from ports, banks, airlines, telecoms, media, shipping and utilities. The government argues that these are well-run commercial entities. (Peebles & Wilson, 2002; Saywell & Plott, 2002) While some argue that these GLCs are crowding out the smaller local SMEs, others hold the view that they have a crucial role to play as in terms of capital, experience and talent, they are better equipped than SMEs to help Singapore compete globally. Krause (1987) has offered 3 explanations for government enterprises : as a carry-over from colonial administration, as a response in meeting specific needs such as those created by the Ministry of Defence, as in the case of new ventures, to encourage investors to take the plunge.

Others are of the view that the SMEs have to address their own inefficiencies instead of blaming the GLCs for their woes. (Straits Times, 28 August 2002). In a research on GLCs' performance, UOB Kay Hian found that GLCs which generate more than 60% of their sales domestically and are reliant on one key domestic customer have far superior Return on Equity (ROE) than the average GLC. Examples of such GLCs are Singapore Food Industries, Singapore Airport Terminal Services, SIA Engineering and ST Engineering. (Business Times, 8 July 2003). Perhaps, this might lend credence to those who argue that GLCs in Singapore do indeed monopolize the domestic market and in the process squeezing out potential local entrepreneurs. Krause (1987) has pointed out that the greatest need is not for the government to sell existing enterprises to the private sector, but for having less government control over the economy. This can come about *"through the government restraining itself from absorbing new investment opportunities, and by encouraging local private entrepreneurs to do the investing instead."* (pp 126). On the other hand, prominent businessman Kwek Leng Beng has expressed the view that local SMEs need to develop their own 3 C's – Character, Capital and Capacity – adding that *"War or peace, good times or bad times, if you look hard enough, there are always opportunities."* Speaking at the International Small Business Congress (ISBC) 2003, he added that, *"Singaporeans have been too well looked after. This is the time for them to face the challenges, and try to do it on their own, instead of the Government always helping – you must let the crying baby cry!"* (Straits, 23 September 2003)

Nevertheless, in an interview, Mr. Raymond Lim, Minister of State in charge of championing entrepreneurship, pointed out the government's seriousness in the current drive to promote entrepreneurship by accepting the "yellow pages" rule recommended by the Economic Review Committee's subcommittee on Entrepreneurship and Internationalisation which he chaired. This rule advocates that whenever a particular product or service is in the yellow pages – that is, produced by the private sector – the government should not produce it. (Khanna, 2003). However, the government can only create the conditions that foster entrepreneurship and the rest will be up to aspiring entrepreneurs. In a lecture to students at Raffles Institution on 2 May 2003, Mr. Raymond Lim said that the government can help clear road blocks for motorists, but the onus is on them to pay for the petrol. In the same way, hopeful entrepreneurs should not look to the authorities for cash handouts to start a business. He added, *"If you want the Government to give you cash before you decide to take the plunge, don't become an entrepreneur. What the Government can provide is training and infrastructure."* (The Straits Times, 3 May, 2003). It is clear thus that while the government is prepared to provide incentives and create a conducive environment for entrepreneurship to blossom and thrive, it will not provide cash handouts for

entrepreneurs to start businesses. To further spur entrepreneurship, another initiative was launched on 26 May, 2003. Called the Action Community for Entrepreneurship (ACE) , it comprises some 20 prominent businessmen and professionals backed by a high level multi-agency public sector secretariat, the platform will help foster a culture of enterprise build a business-friendly environment. According to Mr. Raymond Lim, *“the aim of ACE is to rekindle the spirit of enterprise – a society where people are quick to seize opportunities , take risks and make a difference , create something new, in whatever they do.”* (The Business Times, 27 May 2003). As part of the ACE programme , five key initiatives were launched:-

- **BlueSky Evening** – monthly get-together for entrepreneurs and wannabees to network and meet bankers, venture capitalists, angels, consultant, etc.....
- **Skylight Chat** – roundtable with ACE members; part of BlueSky Evenings
- **Entrepreneurs’ Speakers Circuit** – roadshow to spread the message among civil servants, students and general public
- **Entrepreneur Home Office Scheme** – business start-ups at home
- **Action crucibles**

In addition, five teams were formed to identify project areas and implement them. The five focus areas are:-

- Rules
- Financing
- Culture
- Global Entrepreneurial Executives
- Intellectual Property

These efforts are indicative of the seriousness with which initiatives are introduced and implemented.

After being at the bottom of the Global Entrepreneurship Monitor (GEM) index for two years, improvements began to show in the 2002 report, which ranked Singapore 22nd out of 37 countries. It could be that earlier efforts to promote innovation and encourage entrepreneurship may be bearing fruits. (Today, 6 Feb 2003). Perhaps, this might be the beginning of a new trend in terms of efforts to foster an entrepreneurial culture in Singapore. However, although this is an improvement over the 2001 report when Singapore was ranked 27th out of 29th countries in terms

of entrepreneurial activity, the country is still below par. In terms of total entrepreneurial activity (TEA), Singapore had an index of 5.9 compared with the worldwide average of 8. This means that only 5.9% or 188,000 of Singapore's 3.19 million workforce is involved in entrepreneurial activity, against 8% worldwide. (The Business Times, 24 July 2003)

1.5 Government and Private Sector Initiatives to Foster Entrepreneurship.

The government's efforts to foster entrepreneurship in Singapore can be seen from different perspectives.

It has made several efforts to examine rules and regulations which stifle entrepreneurship and established panels and committees to seriously explore ways to move forward. One example is the initiative called Pro Enterprise Panel (PEP) set up by SPRING Singapore in August 2000 to champion small businesses by looking into red tapes which hinders enterprise. The panel is chaired by the Head of the Civil Service and comprises top civil servants as well as businessmen, including the Head of the Economic Development Board (EDB). It invites groups from the business community – industry by industry, and the chambers of commerce – to discuss how their companies' operations have been stifled by government red tape and how things could be improved. To-date, PEP has handled 500 specific complaints, with about half resulting in rule changes. (The Business Times, 8 Feb 2003)

Against this backdrop, the government established the Economic Review Committee (ERC). One sub-committee formed was the Entrepreneurship and Internationalisation Sub-committee (EISC) which released its report on 15 September 2002. In its report, the EISC made several key recommendations to relax rules and regulations in order to encourage entrepreneurship to flourish. Ten of the key recommendations are as follow (Table 1.1):-

- Impose 'sunset' rule on all business licenses. Regulators must rejustify licenses periodically.
- Reset license fees to recover costs rather than maximize revenue.
- Allow Housing & Development Board (HDB) to be re-mortgaged or sub-let to help entrepreneurs raise capital.
- Encourage cash-flow-based and other forms of non-collateralised financing for companies.
- Set up private equity exchange
- Free up Central Provident Fund (CPF) balances above a level sufficient for basic retirement needs.
- Make entrepreneurship education non-examinable activity in schools. Include business projects in curriculum.
- Attract top global entrepreneurs to serve as mentors and company board members.
- Revamp scholarships so that private sector gets its fair share of talent.
- Stop Government-linked Companies (GLCs) from performing 'national service' and ensure they are run commercially. Non-strategic businesses to be divested.

Table 1.1 Summary of EISC Recommendations

Source: Business Times, 14-15 Sept 2002

The Economic Review Committee (ERC) released its final recommendations on 6 Feb 2002. In its report to the cabinet, the committee proposed immediate measures to deal with the current uncertainties as well as longer-term strategies to restructure the economy and turn Singapore into a truly global city, thriving in a changed world. These longer-term strategies include: (a) expand external ties; (b) maintain Singapore's competitiveness and flexibility, (c) encourage entrepreneurship, (d) promote twin growth engines of manufacturing and services and (e) developing the people. (Streets, 7 Feb 2003; Straits Times, 8 February 2003; Today, 7 February 2003, Business Times, 7, 8-9 February 2003). The highlights of the ERC report may be summarized in Table 1.2 below (Table 1.2):-

Vision 2018

- A globalised economy with diversified sectors, a creative and entrepreneurial nation.
- .Economy grows 3-5% a year

Immediate Issues: cut costs, stay competitive

- Press towards full economic recovery by 2004
- Defer any restoration of employers' CPF rate beyond 36% by two years; progressive increase to 40% thereafter
- But immediate phasing-in of:
 - cut in salary ceiling for CPF rate contributions from S\$6000 to S\$5000
 - a lower employee CPF rate of 16% for those between 50 and 55 years, from 20% now.
- Appoint a minister to champion entrepreneurship.
- Establish ministerial committee to lead drive to develop the service sector.

Table 1.2 Summary of ERC's key recommendations

Source: Business Times, 7 February 2003

The ERC recommendations were accepted by the government in almost its entirety with some of them to be implemented immediately while others would take time due to their complexity. This

was announced in the 2003 Budget speech by the Finance Minister on 28 Feb 2003. One significant development was that a minister was immediately appointed to spearhead the entrepreneurship drive.(Straits Times, 1 March 2003; Business Times, 1 March 2003). Predictably, the minister appointed was Mr. Raymond Lim, Minister of State in the Ministry of Trade and Industry and Chairman of the Economic Review Sub-committee on Entrepreneurship (EISC). In an interview soon after his appointment, Raymond Lim stated that he planned to slash unnecessary red tape, widen access to finance, and create a culture friendly to entrepreneurship. Of these 3 obstacles, he feels that the third is paramount as there is a need to create a culture where innovative ideas to create something that is different is encouraged and given space. In this regard there is a clear line between a businessman and an entrepreneur as *"it is not just a question of you starting a company. It is actually much wider than that. It is the willingness to pursue new ideas with the aim of trying to make a difference."* (Teo, 2003). While this has generally been welcomed, some have cautioned the danger of the process becoming a format or template. While cutting red-tape is correct in the short-term, it is also necessary to revise wholesale formats and templates that give officials a sense of righteousness but actually block their minds to worthy alternatives. (Endeshaw, 2003). However, a survey of 407 key decision makers in SMEs has shown that they expect the recommendations of the ERC to have a positive impact on their businesses and the economy (Straits Times, 31 October 2003).

During its 7th meeting at around the same time, Economic Development Board (EDB)'s International Advisory Council, a high-powered panel consisting of the world's most powerful CEOs, reaffirmed that Singapore could only survive the harsh economic reality if it transforms itself into what they term as a 'A Global Entrepolis'. This refers to a city jam-packed with the globe's best entrepreneurs. This will in turn generate jobs, greater investment and wealth. (Straits Times, 1 March 2003, Straits Times, 2 March 2003)

In addition to tangible policies to 'remake' Singapore into a more entrepreneurial society, other more intangible efforts like giving public recognition in the form of awards for deserving entrepreneurs and business people. Such awards include: The Phoenix Award for entrepreneurs who have overcome major business failures and emerged more successful; the Entrepreneur of the year award and Women Entrepreneur of the year award by the Association of Small and Medium size Enterprises (ASME), Businessman of the year award, Enterprise award, and Outstanding Chief Executive award jointly organised by The Business Times and DHL Worldwide Express since 1985. The Enterprise 50 award, jointly organized by Andersen Consulting (now known as Accenture) and Business Times, and supported by the Economic

Development Board since 1995, is a ranking of the 50 most enterprising, private-held local companies in Singapore. It aims to recognize the spirit of enterprise and to acknowledge the contributions made by local companies to Singapore's growth and has become a list to watch. (Enterprise 50 The Book, 1998). All these awards are designed to provide publicity, promote and spark or ignite interest in Entrepreneurship as a career option. Indeed, the proliferation in entrepreneurship awards and the like have prompted some critics to question the need for so many of such awards which are of similar nature. Others however think that this is a good thing as it underscores the growing social acceptance of entrepreneurs in Singapore. After all, not the same entrepreneurs get honoured every time. (Today, 29 July, 2003; Business Times, 18 August 2003; Straits Times, 20 August, 2003)

In addition, the government has also encouraged universities, polytechnics and even schools to be more pro-active in fostering the spirit of entrepreneurship amongst students.

In a unique experiment to nurture entrepreneurship, the National University of Singapore has introduced a programme called NUS Enterprise (International), where a group of its most promising students will be dispatched to Silicon Valley to spend a year working in a technology start-up and attend classes at Stanford University. On their return, *"it is hoped that this group of students will form the basis of a new generation of technopreneurs who will help commercialise the university's untapped intellectual capital and bring new life to the Lion City's economy"* However, not all agree that such experiment will be effective in producing potential entrepreneurs. Universities can expose students to the idea, activity and opportunities for entrepreneurship to flourish. They may even build support system such as incubators, business plan competition, internships, and seed funding. However, these merely lower the initial hurdles and at the end of the day, the individual still has to make the decision to become an entrepreneur. (Anderston, 2002). Nevertheless, in May 2003, the National University of Singapore (NUS) set up a new incubation centre in the heart of Silicon Valley to help local start-ups enter the US market at a lower cost than they would otherwise have faced. This initiative by NUS Enterprise, the entrepreneurial arm of NUS, costs US\$ 80,000 (S\$139,000) and six months to rent and set up, will offer administrative support, secretarial services and all other office essentials. In addition, it would also put new start-ups in touch with established entrepreneurs, including Singaporean and American businessmen, and even help find suitable start-ups. (Straits Times, 31 May 2003; Today, 31 May-1 June, 2003). Budding entrepreneurs at the Nanyang Technological Institute (NTU) have also been given access to a \$1million fund, plus experts from Singapore Technologies, to help them get a business off the ground. This initiative to nurture potential

entrepreneurs is part of a tie-up with Singapore Technologies that will allow NTU students to also attend lectures conducted by senior management staff from the government-linked conglomerate. (Straits Times, 7 June 2003)

Polytechnics also have their own enterprise programmes. Examples include the EnterpriZe fund which was set up at Ngee Ann Polytechnic to encourage full-time students with innovative business ideas to start up and test their ideas in the marketplace. Nanyang Polytechnic reportedly has an Entrepreneurship Programme Centre allowing staff to supervise students working on projects and help bring them up to a cutting-edge standard or patent level. Singapore Polytechnic will have a Centre for Innovation and Enterprise which will provide support to help students realise their projects from conception to design of prototypes to the eventual marketing of the product. ((Today, 26 May 2003)

Wang (2003), however, feels that all the efforts to remake Singapore is *“only talking the right talk, but not yet managing to walk the right walk. Planners are doing little more than tinkering with the old model!”* According to him, Singapore is still very much dependent on its geographic location as a port and logistical hub. What Singapore needs to do is to shift its economy in the direction of an abstract economy much like that in Los Angeles in the United States. In such an abstract, innovation-economy, services and industries are lured to the city, not by its geography, but by the fact that it is a fun place to be, the environment is pleasant and the atmosphere liberal. People are drawn to such an environment because of its cultural diversity, receptiveness to new ideas and its reputation for creativity and innovation. Although such unfettered freedoms are clearly not readily and openly evident, it is obvious that the government is aware of the need to loosen its grip on many aspects of life in Singapore. The real issue is the pace of relaxation of rules and the parameters of the outbound markers which are acceptable by wider society in general, and not just by the vocal minority.

Kassim (2003) also wonders whether the current measures taken are sufficient. For one thing, Singapore's neighbours are also turning to promoting local entrepreneurship to revitalize their economies. Malaysia's special economic package in May 2003 unveiled a slew of new schemes backed by huge funds, to support small businesses, which are now being treated as new sources of growth. Thailand is likewise pursuing a similar strategy. Another reason is that entrepreneurs in Singapore often complain of lack of funding as a key problem they face. Yet, the irony is that government support comes only when you have proven to be successful. However, the government's position on this as stated by the Minister in charge of promoting entrepreneurship,

Mr. Raymond Lim is that *“the government should not be in the business of picking winners, but it can serve as a market catalyst to improve chances of business in getting financing from the market.”*

Nevertheless, Singapore’s determined efforts to remake the economy by fostering a more entrepreneurial culture may be starting to bear fruits. It shot back to second spot in the survey of the world’s most competitive economies for 2003 conducted by the Swiss-based International for Management Development (IMD). The annual survey examines dozens of criteria, from economic growth to wealth and employment rates. In the revamped ranking system, Singapore was placed second in competitiveness for countries with populations of less than 20 million. Last year, Singapore was ranked 6th, down from 3rd in 2001, out of these smaller countries. (Straits Times, 14 May 2003; Business Times, 17-18 May 2003.). The same study also rated Singapore as the top spot for attracting the best talents, with a score of 8.246 out of 10. (Straits Times, 23 May 2003). A study by Prof Michael Porter published in the World Economic Forum’s 2002/2003 Global Competitiveness Report ranked Singapore 1st in Innovation Policy and 10th in National Innovative Capacity (Table 1.1):-

Innovation Policy	National Innovative Capacity
1. Singapore	1. United States
2. Israel	2. United Kingdom
3. Canada	3. Finland
4. Finland	4. Germany
5. Taiwan	5. Japan
6. Germany	6. Switzerland
7. United States	7. Sweden
8. Tunisia	8. Taiwan
9. Australia	9. Canada
10. United Kingdom	10. Singapore

Table 1.3 Country Ranking on Innovation Policy & National Innovative Capacity 2003/2003
Sources: World Economic Forum’s 2002/2003 Global Competitiveness Report; Straits Times, 19 November 2003

In a speech at the British Chamber of Commerce 's SME of the year awards dinner on 5 June 2003, the Entrepreneurship Minister Mr. Raymond Lim mentioned that the 11,000 foreign SMEs in Singapore are testimony to just how attractive the country is as a launch pad for SMEs trying to break into the region and beyond. These SMEs account for a tenth of all SMEs here, contributing about S\$21.7 billion or 17.5% of total value added for the commerce , service and manufacturing sectors.(Straits Times, 6 June 2003)

1.6 The Marketing-Entrepreneurship Interface : its importance, key arguments and research questions

The importance of entrepreneurship in the development of a nation's economy is well-documented. However, there is an argument that entrepreneurship needs marketing to be more effective and vice-versa. To what extent marketing and entrepreneurship are intertwined and inextricably linked is a matter of ongoing research. (Tzokas, et al, 2001).

Research interest in the marketing-entrepreneurship interest has been on-going since the 1980's. Although both disciplines have their own distinct research paths for a long time, it has been recognized that there are many areas of commonality and convergence. Although there are both differences and overlap in these two subjects, it has been suggested that the main differences are between traditional marketing and pure entrepreneurship. Traditional marketing operates in a consistent environment, where market conditions are continuous and the firm is satisfying clearly perceived customer needs. Pure entrepreneurship, on the other hand, operates in an uncertain environment, where market conditions are discontinuous and the needs of the market are as yet unclear. (Collinson, 2002). However, this distinction may be too simplistic as the practice of marketing and entrepreneurship are very much dependent on contextual issues.

Marketing and entrepreneurship have been described as being both sides of the same coin. Both are different and yet similar. One cannot excel without the active presence of the other. While the focus of both disciplines may differ, both need to co-exist in a firm as they complement each other much like the Chinese concepts of the Yin and the Yang. However,, the degree of the overlap will vary dependent on contextual issues as discussed in Chapter 4. Many other variations to this theme have been proposed in the literature. (Murray, 1981; Morris and Paul, 1987; Nystrom, 1998; Miles and Arnold, 1991; Hills and LaForge, 1992; Carson et al, 1995; Hills, 1994; Ennew and Binks, 1996; Foxall and Minkes, 1996; McGowan and Durkin, 2002; Collinson, 2002; Stokes, 2002; Fillis, 2002) These are discussed in further details in Chapter.3.

The effects of entrepreneurial proclivity and market orientation on business performance have also been well documented. There appears to be a direct relationship between firms which display a high degree of entrepreneurial proclivity, ie, firms that are innovative, risk-taking and proactive, and those that are highly market-oriented, ie. firms that foster intelligence generation and dissemination and are highly responsive.(Matsuno, Mentzer & Ozsomer, 2002). Furthermore, longitudinal studies have also shown that firms possessing higher levels of market orientation, particularly in competitor orientation, national brand focus and selling orientation tend to exhibit superior performance. (Noble, Sinha & Kumar, 2002)

A study on the marketing effectiveness of Singapore SMEs reveal that the better performing firms tend to display 3 major categories of characteristics: (1) they adopt a serious marketing orientation as a business philosophy, (2) they adopt a market-based organization structure, and (3) they adopt marketing-related practices. (Ghosh, 1996).

Ghosh et al (2001) further explore the key success factors, distinctive capabilities and strategic thrusts of top SMEs in Singapore and found that the strategy dynamics of these SMEs consist of the following:-

- A committed, supportive and strong management team
- A strong, visionary and capable leadership
- Adopting the correct strategic approach
- Ability to identify and focus on market
- Ability to develop and sustain capability
- A good customer and client relationship

Approximately 60% of the companies surveyed were of the 'Defender' type organization (typology from Miles and Snow, 1978) and the proactive type companies tend to place higher importance on the following factors for excellent performance:-

- Satisfying customer needs
- Close working relationships between top management and employees
- Regionalization
- Leadership
- Availability of financial and technology resources and support

In a study of the emerging economy in China, Liu, et al (2003) have found that there is a clear link between market orientation and entrepreneurial orientation in a firm. Their findings indicate that state-owned enterprises (SOEs) are largely market and learning oriented, with the emphasis on corporate entrepreneurship. Enterprises with a higher level of market orientation are also more entrepreneurial and learning oriented and also achieve a higher organizational performance compared with those enterprises with a lower level of market orientation.

At the heart of marketing and entrepreneurship are both the practice of innovation and change, identifying opportunities in the marketplace with growth potential and marshalling the resources needed to exploit them. (Carson, et al, 1995). Creativity and innovative activity is at the heart of any understanding of the nature of the interface between marketing and entrepreneurship. (Fillis, 2002; McGowan and Durkin, 2002). The interface can also be seen in from many other perspectives , both at the philosophical level as well as at the functional level. (Hills and Laforge, 1992; Hills, 1994; Gardner, 1994; Cravens, wt al, 1994). Such an interface is not a static process but rather a dynamic process which starts with the creative process. A creative management approach which ties together economic , organizational and psychological elements will be helpful in understanding the dynamic marketing-entrepreneurship interface in a strategic management perspective. (Nystrom, 1998).

It could be argued that the elements of both an entrepreneurial orientation and a marketing orientation are necessary for organizational success in the marketplace. As discussed earlier, Murray (1981) had pointed out that marketing could well be the home of the entrepreneurial process while Collinson (2002) argues that there are many areas of commonality and convergence between the two disciplines. However, Teach and Miles (1997) suggest that while entrepreneurship has not become a primary field in the discipline of marketing, entrepreneurship is a growing and important area and should become incorporated fully into the domain of marketing.

Studies by Ghosh (1996) and Ghosh, et. al. (2001) discussed earlier suggest that successful SMEs in Singapore tend to be more market-oriented. However, these studies did not explore the issue of the marketing-entrepreneurship interface and their impact on the firm's performance. The need for further research specifically into the marketing-entrepreneurship interface and its linkage to performance in the SMEs sector is timely. This research hopes to improve understanding of the extent of the relationships between marketing orientation and

entrepreneurship in the context of SMEs in Singapore. It will also contribute to the understanding of the relationship between the marketing-entrepreneurship interface and the firm's performance.

The key arguments that will be put forward relate to the relationships between the marketing-entrepreneurship interface and the firm's performance in the SME sector. Specifically, the argument is that marketing orientation relates to entrepreneurial orientation and vice-versa. At the same time, both orientations have an impact on the firm's relative performance. However, the extent of the marketing-entrepreneurship interface may be contextual upon the type of economic system prevailing in the country, the stage of its economic development, the entrepreneurial activities pursued and the strategic orientation of the firm. These key arguments are discussed in further details and conceptualized in a model in Chapter 4.

On the basis of these arguments, the key research questions that will be tested will relate to the extent marketing orientation and entrepreneurial orientation are correlated, and the extent to which these two orientations in turn correlate to the firm's performance. These questions are also further hypothesized in Chapter 4.

1.7 Importance and Contributions of this Research

The marketing-entrepreneurship interface has been the subject of research for several years. Murray (1981) was among the first to suggest that marketing may be ideal home to the entrepreneurial process and as such there are many implications for marketing management. Morris and Paul (1987) studied the inherent definitional and conceptual similarities between marketing and entrepreneurship and supported the hypothesis that marketing orientation and entrepreneurial orientation are positively related. Miles and Arnold (1991) had evaluated the relationship between marketing orientation and entrepreneurial orientation and found that the marketing orientation can exist independently and does not always need aspects typical of an entrepreneurial orientation such as an organisation's tendency to be innovative, accept risks and act in a proactive manner. Furthermore, the entrepreneurial orientation can be developed in an organisation based upon the dynamics of the environment, which supports the proposition by Murray (1981) that the marketing function tends to act in an entrepreneurial manner when faced with competitive environments. Since then, Hills and LaForge (1992), Hills (1994) and others (Gardner, 1994; Carson, et al., 1995; Chaston, 2000; Lodish, et . al, 2001, Collinson, 2002) have supported the validity of the concept of the marketing- entrepreneurship interface. Teach and Miles (1997) suggest that while entrepreneurship has not become a primary field in the discipline

of marketing, entrepreneurship is a growing and important area and should become incorporated fully into the domain of marketing. According to Teach and Miles (1997), a large number of marketing faculty recommend that marketing doctoral students should focus on entrepreneurship, adding weight to the evidence that suggests that entrepreneurship may ultimately become a fully accepted area in marketing. This view is shared more or less by Brush, et al (2003) who suggest that doctoral education in entrepreneurship is at the nexus of a set of complex, sometimes contradictory institutional forces. They further suggest that it is only through the development of PhD-trained academics that entrepreneurship can achieve acceptance as an intellectually substantive and rigorous disciplines because *“the research training and academic placement of entrepreneurship doctoral students will drive the next generation of breakthrough research”*

Many of these researches over the years have argued that the marketing-entrepreneurship interface has a positive influence on organizational performance. However, most of these studies have explored the interface within the context of the western economy, in particular, the United States (Morris and Paul, 1987; Miles and Arnold, 1991; Teach and Miles, 1997; Matsuno, et. el., 2002) and Europe (Foxall and Minkes, 1996; Nystrom, 1998; Chaston, 2000; McGowan and Durkin, 2002; Fillis, 2002; Stokes, 2002). Studies into the marketing-entrepreneurship interface in small firms have also been based on the context of western economies. (Tzokas and Kyriazopoulos, 2001).

Few studies have focused on the extent of the marketing-entrepreneurship interface on organizational performance in the Asian context. . Liu, et. al (2002; 2003) have studied the marketing-entrepreneurship-learning interface in China’s state-owned enterprises and found these to be positively linked. Their findings indicate that those enterprises with a higher level of market orientation tend to be more learning oriented and place greater emphasis on corporate entrepreneurship. They are also likely to have better organizational performance than those enterprises which are not marketing-entrepreneurship-learning oriented.

Siu and Martin (1992) have focused their study on the economic, non-economic and political forces as impetus to the development of entrepreneurship in Hong Kong. Their findings indicate that the future success of Hong Kong depends on fresh immigrant entrepreneurs knowledgeable about western management philosophy since the old entrepreneurs responsible for Hong Kong’s past success would retire soon. Sin, et. al (2002) have studied the effect of relationship marketing orientation on business performance in a service-oriented economy, with Hong Kong as the context. Their findings indicate that relationship market orientation is a multidimensional

construct consisting of six dimensions: shared value, communication, empathy, reciprocity and trust, and there are strong relations among these six behavioural components. Further, the firm's degree of relationship marketing orientation is positively associated with sales growth, customer retention, return on investment, sales growth and overall performance in Hong Kong's service sector.

Other researches into the marketing-entrepreneurship interface have addressed related variables and within various other contexts other than S.E. Asia or Singapore. Nystrom (1998) suggests a creative management approach tying together economic, organizational and psychological elements in order to understand the dynamic marketing-entrepreneurship interface. Other studies relate to the interaction between entrepreneurial style and organizational performance in small firms (Chaston, 1997) and the gaining of first mover advantage and adding value through challenging existing marketing paradigms (Chaston, 2000)

Fillis (2002) has researched into creativity as a key competency at the marketing-entrepreneurship interface, linked with related issues such as innovation, vision, leadership and motivation. McGowan and Durkin (2002) have researched into the competencies within the small firm, with emphasis on the adoption of the internet at the marketing-entrepreneurship interface. Powpaka (1998) has studied the factors affecting the adoption of marketing orientation in Thailand while another study relate to the link between market orientation and performance. (Appiah-Adu, 1998). A further study researched market orientation across two separate countries representing two different stages of economic development, with Zimbabwe representing the developing country and Australia representing the developed country. (Mavondo, 1999)

Deng and Dart (1994) have studied the adoption of market orientation in the context of Canada using a synthesis of constructs by Kohli and Jaworski (1990) and Narver and Slater (1990) plus some of their own suggested variables. Gray, et al (1998) also studied the relationship between marketing concept, market orientation and the firm's performance with market environment as the moderating influence in the context of New Zealand.

Tellefsen (1998) studied constituent market orientations in the context of the Norwegian utilities market and found that market orientation exists in an organization towards a series of internal and external constituencies.

Matsuno and Mentzer (2000) examine the effects of strategy type on the market orientation-performance relationship and found evidences that support the moderating effects of business strategy on the strength of the relationship between market orientation and performance. Matsuno et. al., (2002) further examine the structural influences (both direct and indirect) of entrepreneurial proclivity and market orientation on business performance. McGowan and Durkin (2002) suggest that innovative activity is at the heart of the marketing- entrepreneurship interface.

Hurley and Hult (1998) have studied the interfaces between innovation, market orientation and organisational learning. They suggest that market orientation and performance may benefit from reframing existing models to incorporate innovation more directly. Baker and Sinkula (1999, 2002) have also researched into the market orientation-learning orientation-product innovation linkages and found these to be positively co-related. Farrell and Oczkowski (2002) have examined two rival models in interfaces : the market orientation-organisational performance model, and the learning orientation-organisational performance model. Other variations relate to market orientation and the learning organization (Slater and Narver, 1995), market orientation and organizational performance (Han, et al., 1998), market orientation and internalization (Cadogan, 1994) and correlation between market orientation and performance in the Australian public sector. (Caruana, et al., 1997)

Harris (2002) is more concerned with the need for a more market-oriented approach for measuring market orientation. Philips et. al., (2002) suggest that market-focused and price-based strategies have contrasting effect on performance. Sanzo, et. al. (2003) have also studied the role of market orientation in business dyadic relationships and propose a theoretical causal model in which the cultural market orientation that buyer firms show appears as a conditioning factor of their loyalty towards a supplier. In another separate study, Sanzo (2003) also studied the effect of market orientation on buyer-seller relationship satisfaction and found that the buyer's cultural market orientation is one of the pillars on which the existence of effective bidirectional communication at multiple levels between the firm and a supplier rests. Martin and Grbac (2003) have studied the use of supply chain management to leverage a firm's market orientation and suggest that translating a strong supplier orientation into strong supplier relationships is one way to enhance the effect of a strong market orientation on performance.

Other studies relate to the role of entrepreneurship in building cultural competitiveness in different organizational types (Hult, et al., 2003), management perspective on American and

Chinese entrepreneurial and managerial orientations (Parnell, et. al., 2003), the role of opportunities in the entrepreneurial process (Eckhardt and Shane, 2003), emerging issues in corporate entrepreneurship (Dess, et. al., 2003), review and synthesis on venture creation and the enterprising individual (Shook, et. al., 2003)

It is clear that although there have been studies on the marketing-entrepreneurship interface, they have been in relationship to a variety of other variables or combinations of variables. None of these studies relate to the link between the marketing-entrepreneurship and the firm's performance. In addition, these studies have not focused on Singapore as a specific context. As discussed in Section 1.6, earlier studies in the Singapore context found that successful SMEs in Singapore tend to be more marketing oriented and display certain strategic characteristics. (Ghosh, 1996; Ghosh et. al., 2001.). But even these studies have also not specifically addressed the issues of the marketing-entrepreneurship interface and their relationship to the firm's performance.

Furthermore, as pointed out by Lee and Low (1990), *"In the Singapore context, studies on contemporary entrepreneurship are few and far in-between"*. Goh (1987) examined the entrepreneurial characteristics of engineers in Singapore. Chew (1988) did a survey of manufacturing SMEs in 1985 and obtained a profile as well as a list of problems facing them. In view of the relative scarcity of literature pertaining to local entrepreneurs in Singapore, Lee & Low (1990) conducted a survey *"to trace and sketch local entrepreneurship patterns rather than attempt a detailed, and therefore limited, portrait."* Chan et. al (1994) have provided a narrative of the experiences of entrepreneurs in Singapore, but these were about first generation immigrant entrepreneurs who came to Singapore during and after the second world war. Tan (2002) has also surveyed SMEs in Singapore to assess how they handled the Asian financial crisis in the period 1997-2000, their plans for the future and their strategies for success. In all these studies, however, specific issues relating to the marketing-entrepreneurship interface had not been addressed.

Thus, at the general level, this research is important as it contributes to a further understanding of the marketing-entrepreneurship in the context of Singapore. Specifically, its contributions may be discussed at two different levels: the academic level and the practical level. Its academic contribution is in offering a significant advance to the current literature on the marketing-entrepreneurship interface in general and its relevance in the Singapore context in particular. While it is often assumed that only bigger firms led by corporate managers are capable of being

marketing oriented, our findings indicate that entrepreneurs running SMEs do understand the importance of marketing and are able to adopt a market orientation. Indeed many such entrepreneurs have a keen interest in marketing and how it can enhance their firms' success. The findings also indicate that while marketing orientation and entrepreneurial orientation are clearly related, entrepreneurial orientation appears to be more important than marketing orientation in contributing to the firm's overall performance. In the context of SMEs in Singapore, it would appear that while marketing skills and talents may be readily obtainable, entrepreneurial talents are more elusive and are far more crucial to the firm. However, this does not mean that marketing is any less important to the SMEs; it means that all things being equal, an entrepreneurial orientation ranks higher in terms of contributing to the firm's performance. Thus the major contribution to literature is that marketing can be the 'home' of entrepreneurship not only in the highly developed western economy (Murray, 1981; Teach & Miles, 1997), but also in a small relatively developed economy like Singapore.

This research also has a number of important contributions in view of the ongoing emphasis on entrepreneurship as the key engine to Singapore's future economic growth. First, it confirms that entrepreneurship indeed must be encouraged at all levels of society if Singapore is to continue to succeed into the future. While the mainstay of the government's economic policy has been to encourage investments by foreign MNCs into Singapore to generate employment and transfer technology, knowledge and skills, clearly this policy is beginning to show its drawbacks. The low-cost competitive advantage that Singapore had enjoyed in the past is being eroded as other countries in the region who can offer reasonable infrastructure at far lower land, labour and other costs. Foreign MNCs thus have many other choices of countries to invest in. Furthermore, Singapore's small population means that there is no critical mass to provide a ready market for these MNCs' products and services. Given these constraints, this research confirms the need for politicians and policy planners to give greater support for entrepreneurs.

Second, this research also has an important contribution to make to entrepreneurs and managers. Entrepreneurs need to invest more time and effort in seeking opportunities beyond Singapore, and to be more creative and innovative in providing products and services that meet the needs of global markets. Since SMEs will play an increasingly important role in the economy, entrepreneurs should move beyond just recognizing the criticality of the marketing-entrepreneurial interface to the firm's performance. They might consider elements of marketing and entrepreneurship as being complementary.

Third, this research also contributes to the further understanding of professional managers and executives on the relevance and importance of the marketing-entrepreneurship interface. Managers in general will appreciate better how the marketing-entrepreneurship interface relate to the performance of the firm. Managers who rely greatly on modern marketing for their success need to focus on the development of an entrepreneurial orientation as well. While some characteristics of entrepreneurship cannot be taught, other elements of an entrepreneurial orientation can be fostered, adopted and implemented. An increase in the understanding of the role of the marketing-entrepreneurship in enhancing the firm's performance will help change managers' mindset with regards to entrepreneurship in general.

1.8 Research Methodology

As the research methodology will be discussed in greater details in Chapter 6, this section provides only a brief overview of the approaches undertaken in this research. Essentially it is a two-stage research comprising both qualitative (in-depth interviews) and quantitative (mail survey) approaches. The first stage involves the use of in-depth interviews with 16 entrepreneurs to clarify key issues and understanding of concepts and terms used in the study. This is useful as the terms in the research questions may have different connotations for entrepreneurs coming from different backgrounds. According to Miles and Huberman (1994), in such qualitative research, analysis is done with words, which can be *“organized to permit the researcher to contrast, compare, analyze and bestow patterns upon them”* (pp. 7). One major strength of qualitative data is that *“they focus on naturally occurring, ordinary events in natural settings, so that we have a strong handle on what ‘real life’ is like”* (Miles and Huberman, 1994: pp 11). Using the in-depth interview as a preliminary qualitative research approach has many other advantages (Neuman, 1994; Rubin and Rubin, 1995; Malhotra, 1996; Zikmund, 1997; Taylor and Bogdan, 1998). These are discussed further in Chapter 6.

The second stage involves the quantitative research approach using a carefully prepared survey questionnaire which has been carefully worded based on the qualitative in-depth interviews in the first stage. The questionnaire is administered to appropriate samples that have been targeted based on established criteria which are discussed in Chapter 6. Using the survey questionnaire to collect data from carefully sampled respondents has many advantages for the researcher. (Mangione, 1998; Neuman, 2000). Furthermore, the survey questionnaire approach has been used in researches relating to market orientation (Deng and Dart, 1994; Appiah-adu, 1998;

Matsuno, et. al, 2002), and to the marketing-entrepreneurship interface (Morris and Paul, 1987; Miles and Arnold, 1991; Ray, 1994).

A combination of both qualitative as well as quantitative research approaches have thus been used to enhance the effectiveness of this research.

1.9 Structure of Thesis

This thesis is organized into 10 Chapters

Chapter 1 introduces the choice of Singapore as the context for this research into the marketing-entrepreneurship interface in the SMEs sector. The declining of an entrepreneurial culture in post-independence Singapore, the importance and need for a more entrepreneurial spirit to drive the knowledge economy, efforts by government and private sector to address the situation, are also discussed. These issues form the background leading to a need for this research into the impact of the marketing-entrepreneurship interface on SMEs' performance. Finally, the importance and contributions of this research are discussed.

Chapter 2 provides a literature review on entrepreneurship and attempts to present the various perspectives of entrepreneurship. These include the two broad categories of entrepreneurs in economics, the Austrian School and the Schumpeterian School. Other interpretations of what makes a person an entrepreneur are also discussed. What is clear is that entrepreneurs can be defined from the perspective of what they are (ie their common characteristics or traits) and what they do that make them entrepreneurial (ie their innovativeness)

Chapter 3 continues with a literature review of the marketing-entrepreneurship interface and how one might be dependent on the other. The marketing concept calls for a focus on marketing as a philosophy and function of business where the entire organization revolves around the needs of their customers. Seeking to satisfy the needs of customers becomes the centerpiece of the organisation's strategy. Entrepreneurship has to do with the seeking and seizing of opportunities and coming up with innovative products and services that meet market needs. To what extent the marketing-entrepreneurship interface is evident is highly contextual and dependent on other contributing factors.

Chapter 4 develops the model and proposition on then various linkages between marketing and entrepreneurship. Such an interface is contextual on a number of factors. A high level of marketing orientation is likely to be synonymous to a high level of entrepreneurial orientation. Such an interface may also be dependent on the industry environment and is likely to have an impact on the performance of the firm in the marketplace. Thus, the firm's performance is a dependent variable while the extent of the marketing- entrepreneurship interface are independent variables in the main hypothesis proposed. These hypotheses are based in the context of a given economic system (mixed economy) and stage of economic development (largely developed).

Chapter 5 discusses the selection of Singapore as the context for testing the hypotheses proposed in Chapter 4. It traces the economic development of Singapore from independence in 1965 to the present time. The economic development of Singapore may be discussed in a few broad phases. From independence in 1965 to the mid-1970s were years of high unemployment aggravated by the withdrawal of British military bases in 1968. Emphasis was thus placed on the creation of employment and all sorts of entrepreneurial activities were encouraged to create jobs. The 1970s were years of high growth as multinational corporations (MNCs) were wooed intensively to invest in Singapore to take advantage of its low labour costs and efficient infrastructure. The 1980s saw a major recession and the need for economic restructuring as costs became uncompetitive. The 1990s witnessed the Asian financial crisis and the pressing need to reposition Singapore's economy to a knowledge-economy or new economy, where a high level of creativity and innovation is required. In the new century, entrepreneurship has become a key pillar in developing the economy further.

Chapter 6 discusses the research methodology and design that has been undertaken to test the hypotheses. A construct is first developed to determine the key variables used to determine marketing orientation, entrepreneurial orientation, industry environment and relative performance of the firm. A survey questionnaire is then developed and pilot-tested through in-depth personal interviews with 16 entrepreneurs representing a cross-section of the population. An aide-memoir is used to guide the in-depth interviews (see Appendix I) The questionnaire is then further refined and an empirical survey conducted with 118 responses received. The descriptive analyses of this empirical survey are discussed in Chapter 8 while the correlation and regression analyses are discussed in 9.

Chapter 7 discusses the preliminary analysis of pilot interviews with the 16 selected entrepreneurs. Qualitative analysis of the interview notes was undertaken and the key findings

presented. These entrepreneurs are all successful in their chosen field and several key success factors contributing to the success of their ventures were discovered. Most of them find the industry environment they operate in to be very competitive and difficult. However, they all feel that a marketing orientation is important and a crucial element in the success of their ventures.

Chapter 8 discusses the descriptive analysis of the empirical survey conducted with a larger sampling of 118 entrepreneurs. The mean age of respondents was 41 years and the majority of them, 88 respondents or 76% were male; this perhaps reflect the general Asian societal norm that enterprises are generally dominated by men. In terms of education, 24% have had a polytechnic education while 32% have had a university education. This could reflect that the education level of today's entrepreneurs are higher than in the past. The majority of the respondents have some background in marketing either directly from reading up and attending seminars or through their education. This is most helpful as it could mean that they understand generally the questionnaire fairly well and could provide meaningful responses to the survey questions. Questions in the four key research areas— marketing orientation, entrepreneurial orientation, relative performance of the firm and industry environment – were examined for their reliability. Factor analysis suggested that the measurement scales performed as expected. However, reliability analysis showed that questions under 'industry environment' were unreliable and were thus dropped from further analysis.

Chapter 9 provides further in-depth analyses of the co-relationships between various variables. Key variables like industry type, firm size, turnover and educational level of respondents are examined in-depth to determine their co-relations to the four key research area – marketing orientation , entrepreneurial orientation, relative performance and industry environment . It was found that questions asked in the section on 'industry environment' have low correlations values with other questions. However, correlations of the various other key research areas are clearly and significantly demonstrated.

Chapter 10 concludes the study with the observation that the key hypotheses discussed in Chapter 4 have been tested using correlation and regression analyses. In general, the relative performance of the firm is positively linked to the level of marketing and entrepreneurial orientation of the firm. In the same way, a marketing orientation is positively linked to an entrepreneurial orientation. However, the size of the firm and the educational level of the entrepreneur also have some implications on these linkages. One notable observation from the

survey is that the nature of the industry environment does not appear to have a significant impact on the extent either the entrepreneurial orientation or the marketing orientation of the firm.

1.10 Summary

In addition to providing an outline of the structure of this research thesis, this chapter has also discussed the rationale for using Singapore as the context for this research on the marketing-entrepreneurship interface. Singapore is excellent as the setting and context for this research for a number of reasons. With Singapore's ongoing emphasis on entrepreneurship as a key driver of economic growth in the future, this research study is both relevant and timely. While there have been research studies into the marketing-entrepreneurship interface in a variety of contexts, none has yet been conducted for Singapore in particular. As a reasonably developed small economy with a small population and located in a region with relatively less developed economies, the findings from this research study can shed further light on the relevance of the marketing-entrepreneurship interface in the SME sector. Furthermore, it can serve as a starting point for similar research studies not only in the S.E. Asian region, but also elsewhere in the world.

The next chapter follows with a literature review on entrepreneurship and how it is linked to the marketing-entrepreneurship interface.

Chapter 2

Entrepreneurship & The Entrepreneur

2.1 Introduction

This Chapter reviews the literature on entrepreneurship and the entrepreneur from economics and sociological viewpoints. The purpose is to provide a background on the various thoughts on the entrepreneurship and to link them to the marketing-entrepreneurship interface to be discussed in Chapter 3. The term 'entrepreneurship' has been described as originally derived from the French word 'entreprendre' meaning "to undertake", (Burke, 1986) 'between-taker' or 'go-between' (Lee & Low, 1990). The Collins Modern English Dictionary defines the entrepreneur as "*a person who organizes a business undertaking, assuming the risk for the sake of profit.*" Clearly, the emphasis on 'risk-taking' in a business setting appears to be the common theme generally associated with the terms 'entrepreneurship' and 'entrepreneur'. However, over the years these terms have been subjected to a variety of interpretations from different perspectives.

The concept of entrepreneurship is essentially derived from the theory of economy and society. J.B. Say coined the term 'entrepreneur' around 1800 in his discussions of the entrepreneur as a person who shifts economic resources out of an area of lower productivity into an area of higher productivity and higher yield. The entrepreneur's role is to exploit change, not by doing things better but by doing things differently. Entrepreneurship is thus the force that drives Adam Smith's 'invisible hand'. (Zimmerer and Scarborough, 1996; Wickham, 1998).

Often, when one refers to an entrepreneur, the immediate thing that comes to mind is that of an individual who is not a salaried employee in a corporation, but rather someone who braves the challenges and risks of working for himself or herself. Entrepreneurs are also described as non-conformists of some sort who defy conventional wisdom and do things their own way, driven by a strong desire to succeed whatever the odds. Often, money is not their main motivation. (Curran, Stanworth & Watkins, 1986; Maul & Mayfield, 1990; Stevenson, et al., 1990; Curran & Blackburn [eds], 1991; Stanworth & Gray [eds], 1991; Banfe, 1991; Ray, 1994; Shefsky, 1994; Storey, 1994; Rye, 1995; Zimmerer and Scarborough, 1996; Schwarz, 1999; Wawro, 2000; Baven, 2001; Kuratko & Hodgetts, 2001, Kaplan, 2001; Southon and West, 2002; Hisrich and Peters, 2002)

According to Kao (1997) entrepreneurs are all for wealth-creation and value-adding. Such an orientation might be termed “entrepreneurialism” which can be viewed as “*an ideology based on the individual’s need to create and/or innovate, and transform creativity and innovative desire into wealth creation and value-adding undertakings for the individual’s benefit and common good.*” (Kao, 1997: pp 124) Entrepreneurs and entrepreneurship are thus invariably associated with innovation, economic organisation and growth during risk and/or uncertainty (Dollinger, 1999). Most definitions would also include the element of willingness to take risks in the pursuit of an opportunity (Lambing and Kuehl, 2000). Others suggest that entrepreneurs are not necessarily risk-takers, but at best risk-avoiders or risk-managers. (Manimala, 1999)

However, in the last 20 years terms such as ‘*corporate entrepreneurs*’ and ‘*corporate entrepreneurship*’ (Kirzner,1980 ; Stevenson, et. al.,1990; Johannisson,1991; Cooper, 2000; Dess, et. al., 2003); ‘*intrapreneurs*’(Pinchot,1985; Hisrich, 1986; Prokopenko, et al.,1991; Pinchot and Pellman, 1999), ‘*intrepreneurship*’ (Cooper, 2000), ‘*administrative entrepreneurship*’, ‘*opportunistic entrepreneurship*’, ‘*acquisitive entrepreneurship*’, ‘*initiative entrepreneurship*’, ‘*incubative entrepreneurship*’ (Schollhammer, 1982; Kao, Raymond, 1997) ‘*extrapreneurs*’ (Johannisson, 1991; Kao, Raymond, 1997), ‘*political entrepreneurship*’ (Lee ,1994; 1995; Han et. al., 1998, Kwok, 1999; Wilson & Millman, 2003.), ‘*Copreneur*’ (Zimmerer, 1996), ‘*government as entrepreneur*’ (Krause, 1987), ‘*government entrepreneurship*’ (Farrell, 2001) , ‘*technopreneurship*’ (Long, 1998; Tan, T.,1998 ; Goh, 1999; Teo, 2002), ‘*entrepreneurial state*’ (Kwok, 1999), ‘*social entrepreneur*’ (Dees, et al., 2002; Mort, et al, 2003; Today, 12 May, 2003), ‘*collective entrepreneurship*’ (Mourdoukoutas, 1999; Reich, 1999), ‘*team entrepreneurship*’ (Reich, 1999), ‘*true entrepreneurs*’, ‘*partial entrepreneurs*’ & ‘*reluctant entrepreneurs*’ (Ennew, et al., 1998) and so on have been used to describe the entrepreneur in various situations, both within the corporation as well as outside.(Kiser,1989). Indeed, Jones (2001) has coined the term ‘*spiritreneur*’ to emphasize the spiritual aspects of entrepreneurship. Some have expressed the view that such entrepreneurship, corporate or otherwise , is not necessarily inborn but can be learnt and therefore can be taught. (Drucker, 1985; Stopford, et al.,1994 ; Rye,1994; Tan, Q.,1995; Zimmerer and Scarborough, 1996; Morato, 1997 ; Kuratko and Hodgetts, 2001). Others feel that while entrepreneurship by itself cannot be taught, the entrepreneurial mindset can certainly be nurtured through formal and informal learning processes. (Kao, 1997). Some hold the view that while entrepreneurship can certainly be encouraged by favourable conditions and incentives at the national level, the entrepreneur must possess certain inherent fundamental characteristics or traits. (The Straits Times. 6 Feb 2002)

Many 'schools of thoughts' such as macro school, micro school, great person school, psychological characteristics school, classical school, management school, leadership school, intrapreneurship school, have also been suggested to explain the conditions or circumstances likely to encourage or trigger entrepreneurial behaviour and action. (Cunningham and Lischeron, 1991; Kuratko and Hodgetts, 2001; Fayolle, 2002). Although typically the term is used to describe an individual operating in a business situation, some have argued that entrepreneurs exist in the public sector and universities as well. (Propkopenko, et al., 1991; Beckerling, 1993; Amit, et al., 1993; Boyett, et al., 1995; Thurow, 1999.) . Indeed general practitioners practicing medicine in the public sector have been known to be entrepreneurial (Ennew, et al, 1998). School teachers can also been described as being entrepreneurial in the way they teach and motivate their students. (The Straits Times, 21 July 2000; Stokes, 2002).

Meyer and Heppard (2000) suggest that all firms, whether large or small, are striving to create strategies which are entrepreneurial. These firms are now recognising the importance of continuing emphasis on entrepreneurship as part of their strategic long-term vision.

Because the entrepreneur has been defined and described in many diverse ways, each with a different emphasis, some issues concerning the entrepreneur need to be addressed, for example: are entrepreneurs those who operate only outside the company or organisation?; are entrepreneurs necessarily risk-takers?; do entrepreneurs display some common characteristics not found in non-entrepreneurs?; are such entrepreneurial characteristics in-born or can these be learnt?; are entrepreneurs so because of what they do or what they are?

This chapter thus discusses these issues by reviewing the literature on entrepreneurship and the entrepreneur and attempts to categorize them meaningfully.

Section 2.2 identifies perspectives of the entrepreneur from the economics discipline, primarily because much of the work on entrepreneurship were originally derived from the study of economics. Broadly speaking, there are two main approaches toward entrepreneurship in economics. One approach treats the entrepreneur as someone who actually bring about changes to a static economic situation thus causing disequilibrium (the Schumpeterian School). The other approach takes almost the opposite viewpoint that entrepreneurs actually promote equilibrium (the Austrian School). Some view both extremes as being complementary (Cheah, 1990; Witt, 1995; Casson, 1990) Others ask whether risk-taking and uncertainty are necessary pre-requisites for

entrepreneurship to prevail.(Knight, 1921; Kirzner, 1980; Cole,1965; Perlman & McCann, 1996). Others are concerned with the entrepreneur's judgment and alertness and as someone who manages factors of production.

Section 2.3 focuses on the issue of whether entrepreneurs can be categorized into various types, and if so, how significant these categories are to the type of entrepreneurial activities pursued. At the basic level, entrepreneurs could be classified broadly as either craftsmen or opportunists. (Woo, et al.,1991). While this approach may be useful on a smaller sample, it can be problematic when a larger sample is considered. Entrepreneurs can be looked at in terms of those who pursue routine activities or those who pursue new-type activities (Leibenstein); arbitrage , speculative or innovative entrepreneurship (Kirzner, 1985); catalytic, allocating, refining or omega entrepreneurship.(Binks and Vale, 1990); those who are profit-seeking , those not motivated by profit and those who within the corporation.(Kiser, 1989; Prokopenko, et al., 1991 ; Amit, et al.,1993; Beckerling, 1993; Toh, 1993; Huefer,1994; Lee,1994)

Section 2.4 examines various other approaches in defining the entrepreneur beyond economics. Some definitions of the entrepreneur focus on the flamboyant and maverick nature of the individual. In general, many such definitions either emphasize *what entrepreneurs do* that make them so or *what they are* that set entrepreneurs apart from others.. These two approaches may be termed the 'functional' approach and the 'indicative' approach respectively (Casson,1981; Stevenson, 1999; Manimala, 1999). The functional approach explores the things that entrepreneurs do ; these include creation of value and wealth, pursuit of opportunities, introducing innovations and undertaking of risks. The indicative approach focuses on the major characteristics of entrepreneurs. Whether all entrepreneurs display such characteristics and traits is crucial since there is a possibility some successful entrepreneurs who may not necessarily possess such characteristics at all. Even if there are some common similarities in the characteristics displayed by such entrepreneurs, the issue of whether these are inborn or can be learned continues to interest researchers and scholars. Other approaches prefer to combine elements of these two approaches and these are also evaluated.

Section 2.5 attempts to develop a working definition based on the literature review in the previous sections. The difficulties and problems encountered in trying to pinpoint an accurate definition of the entrepreneur over the years are discussed. Scholars and commentators have for years not been able to agree on a common definition as a platform for further research. It has been commented

that the lack of a universally-accepted definition may retard further progress in the study of entrepreneurship in general (Gartner, 1990). One position considers a working definition as necessary in the study and research of entrepreneurship (Amit et al.,1993) while the opposite position argues that the search for a widely accepted definition is insignificant.(Bull, et al.,1993). Nevertheless, the development of the working definition in this study takes into consideration the evaluation of the various approaches identified in the literature review in the previous sections. An important consideration is the context of this investigation. Since this study focuses on the marketing – entrepreneurship interface issue within the SME sector in the context of Singapore, the adopted working definition of the entrepreneur will be one relevant to this study.

Section 2.6 provides a summary of the chapter and provides an indication of what can be expected in the next chapter.

2.2 The Entrepreneur in Economics

This section reviews entrepreneurship and the entrepreneur from the various perspectives in economics. While considerable diversity exists in the definition of entrepreneurship and the entrepreneur, it is recognized that two broad groups of theories – economics and sociological – provide much of the determinants of entrepreneurship (Koh, 1987). However, because much of the literature on entrepreneurship have evolved originally from economics, it is useful to begin from the economics perspectives. Instead of developing a chronological review of these perspectives, it will examine common themes and patterns associated with the different economists' views on entrepreneurship and the entrepreneur. Such themes would include issues of risk-taking, uncertainty, judgement, the entrepreneur as manager, the entrepreneur as a factor and user of resources and so on.

2.2.1 *Two Broad Approaches*

Generally there are two broad approaches in considering entrepreneurs and entrepreneurship in economics : the Austrian school and the Schumpeterian school .(Reekie,1984; Brouwer, 1991; Meijer, 1995; Schmidt, 1996)

The Austrian School founded by Carl Menger propose that entrepreneurs essentially exercise an equilibrating force on a market forever in disequilibrium and in the process bringing it a position

of equilibrium. (Kirzner, 1972; Reekie, 1984; Meijer, 1995) The Austrian entrepreneur essentially promotes equilibrium within an existing situation by bringing stability to a market through the introduction of his products or services. This assumes that such activities are orderly and help to maintain the harmonious balance of supply and demand in the market. The entrepreneur is thus someone who has a stabilising influence on the market. It must be emphasized that although equilibrium is always elusive there is continuous adjustment towards an ever changing equilibrium condition. Alvarez and Barney (2000) suggest that Austrian economics is mostly used when referring to dynamic systems typically found in entrepreneurial environments. Austrian theory is a disequilibrium perspective which maintains that entrepreneurs, through innovations, move markets closer toward equilibrium.

According to Reekie (1984), there are 3 broad groups of scholars from the Austrian School. The *first* group comprised the founder, Carl Menger (1840-1921) and his main followers - Wieser (1851- 1926) and Bohm-Bawerk (1851-1914); the *second* group comprised Mises (1881-1973), and Hayek (born 1899) and the *third* group consisting of currently Kirzner and Rothbard.

The argument of the Schumpeterian School is that the entrepreneur moves the economy away from one equilibrium towards another higher level equilibrium through 'creative destruction' or introduction of various forms of innovations (Reekie, 1984; Brouwer, 1991 ; Bull et al., 1993; Thurow, 1999; Hamel, 2000) The Schumpeterian entrepreneur brings about disequilibrium by promoting the change of an existing situation. (Reekie, 1984; Cheah, 1990; Thurow, 1999; Hamel, 2000; Kuratko & Hodgetts, 2001). This perspective sees the entrepreneur as someone who actually upsets the existing situation by bringing about changes through the introduction of his products or services. Adjustments and adaptations are necessary throughout the market if adoption of the new products, services or approaches is unsuccessful. In some cases, structural changes are required as the existing way gives way to the new way.

Schumpeter (1934) has identified the entrepreneur as someone who introduces innovations or "new combinations":

The carrying out of new combinations we call "enterprise"; the individuals whose function it is to carry them out we call "entrepreneurs". (Pg. 74)

According to him, new combinations may appear in 5 forms:-

- *The introduction of a new good or a new quality of a good.*
- *The introduction of a new method of production.*
- *The opening of a new market*
- *The conquest of a new source of supply of raw materials or half-manufactured goods.*
- *The carrying out of the new organization of any industry. (Pg. 66)*

In the context of Schumpeter's entrepreneur, innovations would include not only the introduction of new products or techniques but also the creation of new markets, improvement of management techniques, supply sources and distribution methods. Schumpeter's 'combinations' can be said to reflect some elements of the marketing as well as production dimensions:

- The 'introduction of new good' or 'a new quality of a good' would suggest an element of the marketing dimension, since such an activity would have to take into consideration the satisfaction of consumers' needs, which is a basic pillar in marketing.
- The 'introduction of new method of production' here would suggest the element of a *production dimension*, since it is concerned with production efficiency, productivity and so on.
- The 'opening of a new market' would strongly indicate a *marketing dimension*, with suggestion of a systematic approach of marketing to seek a market that matches the entrepreneur's products, objectives, resources and so on.
- The 'conquest of a new source of supply of raw materials or half-manufactured goods' would suggest the *production dimension*, since in this instance the source of supply adds directly to the improvement in the production or manufacture of the product, rather than the marketing of the product.

- The ‘carrying out of the new organization of any industry’ here could suggest a production dimension, since such an activity would be carried out to facilitate production efficiency in the first instance. However, new forms of organizations could also be developed to improve services to customers.

Thurow (1999) has highlighted the relevance of this argument in the new economy. He maintains that *“successful businesses must be willing to cannibalize themselves to save themselves. They must be willing to destroy the old while it is still successful if they wish to build the new before it is successful. If they won’t destroy themselves, others will destroy them”* (pp 31-32). Such disequilibrium conditions create high-returns, high-growth opportunities which entrepreneurs exploit. The first disequilibrium situation could be created by radical changes in technologies which present opportunities for entrepreneurs. The second disequilibrium situation, which Thurow(1999) terms *“sociological disequilibrium”*, can be created by entrepreneurs when they introduce new social habits resulting from changing consumer trends. The third type of disequilibrium, which Thurow (1999) terms *“developmental disequilibrium”*, presents opportunities whenever there are countries at very different income levels; entrepreneurs can replicate the activities of the developed world in the underdeveloped world. Capitalism is a process of creative destruction. The new destroys the old. Both the creation and the destruction are essential to driving the economy forward. Entrepreneurs are central to this process of creative destruction, since they are the individuals who bring the new technologies and the new concepts into active commercial use. They are the change agents of capitalism. (Thurow, 1999: pp 83). This viewpoint is shared by Harvard Professor Clayton Christensen who coined the term *‘disruptive innovation’* to describe products and services which eventually could destroy even established market players. (The Business Times, 23-24 August 2003; Singapore Investment News, December 2003)

This viewpoint has also been endorsed by Hamel (2000) who suggests that Schumpeter’s wave of ‘creative destruction’ has become a tsunami in the present era. From these observations, it would appear that some of these forms of entrepreneurship are very much related to marketing while others may be more production-oriented. Even so, the latter might still depend on a marketing to be effective. In essence, we can also argue that Schumpeter’s ‘combinations’ rarely happen by chance but instead occur through proactive acts of innovations by the entrepreneur.

Schumpeter (1934) points out:

...everyone is an entrepreneur only when he actually “carries out new combinations.” and loses that character as soon as he has built up his business. when he settles down to running it as other people run their businesses.” (Pg. 78)

Schumpeter's argument here is that individuals are entrepreneurs only temporarily and switch from being entrepreneur to non-entrepreneur, that is, an administrator or a manager of the business. The entrepreneur, in his viewpoint, becomes one only when he is in the act of creating or introducing change ('new combinations') and ceases to be one after that.

Kao (1997) has gone further and states that *“no one is an entrepreneur all the time. but everyone has been an entrepreneur at some time.”* (pp 236) This implies that while entrepreneurship per se cannot be taught, by interacting with people and through formal and informal learning situations, a person's mindset regarding entrepreneurship may be influenced to some extent.

Thus the entrepreneur is a change agent who constantly brings about changes by seizing opportunities, often leaving behind the old and replacing them with the new. As pointed out by Thurow (1999), *“there are no institutional substitutes for individual entrepreneurial change agent”* Without entrepreneurs, economies become poor and weak. The old will not exit; the new cannot enter. (pp 92)

Generally the Austrian and Schumpeterian schools of thought appear to take the opposite viewpoints on the fundamental economic role of the entrepreneur. However, Binks and Vale (1990) have argued that the Austrian entrepreneur does not really achieve equilibrium, but merely attempts to move forward towards it. In their view:

“the motives in defining and discussing the nature of the entrepreneur reflect the need to provide an identity to the decision-maker who is responsible for pursuing the ever-elusive equilibrium between demand and supply: elusive because demand and supply conditions are always changing.”

Thus while there are basic differences to the two approaches, there are also inherent similarities and the two concepts are not totally at odds with each other. (Reekie, 1984; Binks and Vale, 1990; Cheah, 1990; Fiet, 2002).

Cheah (1990) proposes that these two different approaches need not be treated as contradictory; indeed, they are opposites yet complementary much *“like the forces of the yin and yang of Chinese philosophy and folklore”*. He suggests that *“each force rises gradually to a peak and then ‘gives way’ to its opposite (complementary) force.”* (Pg. 344) In a situation characterized by complete certainty, the long-run scope for the Schumpeterian entrepreneur in promoting disequilibrium is greater as his innovative activities will lead to opportunities which do not exist prior to their discovery. Consequently, this leads to a disruption of the existing equilibrium and transforms it into a situation where disequilibrium is evident.

Fiet (2002) has also expressed an alternative viewpoint that the two broad approaches to entrepreneurship in economics are the neoclassical view and the Austrian view. The neoclassical view assumes that *“economic actors are rational and operate independently in the markets that are in equilibrium”* In such an equilibrium state, rational buyers and rational suppliers co-determine prices and everyone earns the same level of profit. However, in such a state, there is no incentive for entrepreneurs to bear the risk of creating new products and processes. On the other hand, in Austrian economics *“markets are in disequilibrium and profits are a disequilibrium phenomenon.”* Such disequilibrium enables entrepreneurs to discover market imbalances and introduce what Schumpeter describes as new combinations to exploit the market imbalances. (pp. 48). According to Fiet (2002), it is entrepreneurs who make discoveries. What sets the entrepreneurs apart from others is that *“they make discoveries that may be exploited to create new wealth. Someone else can be hired to perform everything else that entrepreneurs do.”* (Fiet, 2002: pp 1)

Alvarez and Barney (2000) suggest that Schumpeter’s economic model, which assumes equilibrium until the entrepreneur “shocks” that equilibrium, is perhaps one of the most useful theories in the study of entrepreneurship. Because of human enterprise and advancing knowledge and technology, entrepreneurs will invent equilibrium-destroying innovations in the pursuit of profits.

However, as the uncertainty level increases following the activities of the Schumpeterian entrepreneur, the scope for the Austrian entrepreneur becomes more relevant in the short-run. In such a situation, the Austrian entrepreneur promotes equilibrium by engaging in activities such as *“arbitrage, speculation, non-radical or adaptive innovation, and imitation, as well as planning*

and management efforts in response to market signals and other indicators of market opportunity.....” and this in turn leads to a higher level of certainty.

On this basis, it is fair to say that while both entrepreneurs are complete opposites viewed in terms of their effect on the equilibrium, their roles actually complement each other when viewed along the dimension of certainty and uncertainty ; such roles become more relevant at different times along such a dimension.

Casson (1990) has identified *four* approaches to entrepreneurship in economic theory. The *first* approach has to do with the factor distribution of income and “*seeks to identify a factor for which profit is the reward.*” The *second* is a dynamic approach emphasizing market processes and “*emerges from a critique of the static Walrasian concept of perfect competition.*” The *third* approach concerns “*the heroic Schumpeterian vision of the entrepreneur as an innovator whose ‘creative destruction’ regulates growth and fluctuation in the economy.*” The *fourth* approach is concerned with the relation between the entrepreneur and the firm and “*focuses on the entrepreneur as decision-maker - in particular, his motivation and his perception of the environment....*”

In general, however, these four approaches identified by Casson (1990) can be said to contain elements of both the ‘Austrian’ School and the ‘Schumpeterian’ School on entrepreneurs and entrepreneurship.

2.2.2 The Entrepreneur : risk-taking and uncertainty

The entrepreneur’s role in risk-taking, according to Schumpeter, is quite clear:

The entrepreneur is never the risk-bearer.....the risk falls on him as capitalist or as possessor of goods, not as entrepreneur. Risk-taking is in no case an element of the entrepreneurial function. (pg. 137)

The key distinction here is that risk-taking is not an inherent function of the entrepreneur but the result of the roles he plays as a consequence of being an entrepreneur. Risk-taking is thus not necessarily a quality or characteristic of an entrepreneur as often emphasized by other writers.(McClelland, 1961; Meredith, et al., 1982; Timmons, 1985; Gibb, 1990) The entrepreneur

does not deliberately seek to take risks but accepts this as part of the overall role of an entrepreneur.

Tropman, et al (1989) offer a somewhat similar view on the question of risk-taking, that is, although risk is certainly a component of the introduction of new ideas, products, and services, risk is neither a necessary nor a sufficient condition. It is a new approach not the risk that characterizes an entrepreneur. (Pg. 6)

Manimala (1999) suggests that entrepreneurs need not be 'risk-lovers' as traditionally thought of them. It is more likely that their love for what they do urge them to accept and manage the risks involved. They are therefore more of risk-managers and sometimes risk-avoiders, but may not be risk-takers. Although risk-taking could be a necessary and probably unavoidable role that the entrepreneur may have to play in the activities he performs as one, it is not a pre-requisite requirement to becoming one.

While risk-taking to some extent is inherent in the very nature of entrepreneurship, the common notion that the entrepreneur is a risk-taker in a reckless sort of way or a gambler of some sort may not be entirely correct. Rather, the entrepreneur is likely to be someone who takes calculated or moderate risks in a venture. Even so, such risks are undertaken when the entrepreneur is fairly confident of the outcome of the decision and in that sense the entrepreneur does not operate in an environment of total uncertainty.

Knight (1921) pointed out that risks do not necessarily mean uncertainty.

The word 'risk' is ordinarily used in a loose way to refer to any sort of uncertainty viewed from the standpoint of an unfavorable contingency, and the term 'uncertainty' similarly with reference to the favorable outcome

The key difference is that risk would mean some quantity susceptible to measurement whereas uncertainty would be largely non-quantitative. As pointed out by Perlman & McCann (1996), *"risk relates to knowledge of the appropriate probability distribution; uncertainty implies that we do not know whether any such distribution exists, and that in fact it may not exist."*

However, in a situation of complete certainty, the entrepreneur would make decisions based on information he believes to be absolutely reliable and to that extent, the level of risk would be minimal. The extent to which risk-taking becomes an issue in entrepreneurship is therefore highly dependent on whether he operates in a situation of certainty or uncertainty.

According to Cole (1965), uncertainty is inherent in entrepreneurship which is “*characterized by a large measure of uncertainty, such actions being modified in greater or less degree by contemporary economic and social forces*”. (Aitken, 1965: pp. 33)

The issue of uncertainty in the context entrepreneurship is therefore relevant and crucial as it clarifies the environment in which the role of the entrepreneur is significant. Without the element of uncertainty, entrepreneurial risk-taking may not be an issue at all. (Schmidt, 1996; Wubben, 1996; Garelo, 1996; Aimar, 1996; Davidson, 1996)

Kirzner (1982) has clarified that, in the absence of entrepreneurship, uncertainty is responsible for what would be a failure to perceive the future in a manner sufficiently realistic to permit action. Entrepreneurship pushes aside to some extent the swirling fogs of uncertainty that must be kept in view when studying the market process. (Casson [ed] 1990 : pp. 97)

The importance of this linkage to uncertainty is not because the entrepreneur accepts the hazards of business in an uncertain world but because “*the entrepreneur, motivated by the lure of pure profits, attempts to pierce through these uncertainties and endeavors to see the truth that will permit profitable action on his part*” (Casson [ed] 1990:pp. 98)

2.2.3 The Entrepreneur : judgement & alertness

Casson (1982) has emphasized the element of ‘judgement’ in defining the entrepreneur as “*someone who specializes in taking judgmental decisions about the coordination of scarce resources*”. (Pg. 23)

The issue of judgement is relevant in entrepreneurship because it is related to the issue of risk-taking. Entrepreneurs are not reckless risk-takers but approach risk-taking in a measured calculated manner under conditions of some uncertainty. In that context, the entrepreneur exercises judgement in various aspects such as which venture to participate in, who to work with, which

markets to enter and so on. In other words, the entrepreneur needs to make a judgment on what types of risks to take and how much of those risks to take.

It could therefore be argued that 'uncertainty' and 'judgement' are both elements in 'risk-taking'. If no risks are involved, it would be quite unlikely that judgement is required, especially in situations of certainty. It is likely that the degree of risk-taking and judgement increases with the level of uncertainty in a situation

Reekie (1984) in commenting on the emphasis on judgement in the definition by Casson (1982), states:

This definition enables Casson to concentrate on full-time, decision-taking managers (and not just on any and all 'purposeful human actors' as would Austrian economists) in their role as coordinators of means and ends which are known, albeit only with probabilities of unity or less. (pp. 90)

According to Reekie (1984), this definition enables Casson "at least partially, to break away from neoclassical assumptions of perfect knowledge and equilibrium."

Apart from the elements of risk-taking, uncertainty and judgement, discussions on the entrepreneur in economics have also revolved around the issue of alertness. The importance of alertness in defining the entrepreneur has been proposed by Kirzner (1985), who argue that entrepreneurial activities "reflect(s) the decision-maker's belief that he has discovered possibilities that both he and his actual or potential competitors had hitherto not seen." (pp 7) Such discoveries may reflect alertness to changed conditions or other neglected opportunities which may already be in existence but remain unexploited or potential opportunities that are likely to arise in the future.

Kirzner (1980) has also suggested that it is the approach of the entrepreneur that differentiates him from others:

If an employer hires an entrepreneur, clearly it is the employer who is the entrepreneur because he has seen the entrepreneurial quality of the employee rather than the employee himself.

This distinction is important because it differentiates the entrepreneur from the non-entrepreneur in terms of his alertness in recognizing opportunities, including opportunities that might be presented by entrepreneurial employees. Thus, *“even if an employee has the alertness to recognize opportunities, but has not had the alertness to recognize his own alertness, to that extent he lacks a fundamental entrepreneurship.”* The clear differentiation here is that entrepreneurship consists of finding opportunities to make profit for oneself:

To the extent that an employee in a corporation is able to make profit for himself, entrepreneurship can and does exist within the corporation. The extent to which such profit is legitimate, or the particular legitimate forms such profit-making may take, may be quite subtle. (IEA, 1980, Pg 55-56)

Eckhardt and Shane (2003) have proposed that the role of opportunities in the process of entrepreneurship needs to be re-examined. According to them, prevailing theories on entrepreneurship have sought to explain entrepreneurship as a function of the types of people engaged in entrepreneurial activity. They argue that early researches on entrepreneurship focus on equilibrium theories which fail to capture entrepreneurship adequately. They suggest that to *“successfully explain entrepreneurship requires researchers to assume or allow disequilibrium.”* Accordingly, they define entrepreneurial opportunities as *“situations in which new goods, services, raw materials, markets, and organizing methods can be introduced through the formation of new means, ends, or means-ends relationships.”* For entrepreneurial opportunities to exist, people must not agree on the value of resources at a given time. In order to exploit entrepreneurial opportunities, the entrepreneur must believe that the value of resources, used in accordance to a particular means-ends framework, would be higher than if exploited in their current form. Several forms of entrepreneurial opportunities are also suggested: information asymmetry-based opportunities, supply vs. demand side changes, productivity-enhancing vs. rent-seeking opportunities, and initiator of the change.

This viewpoint appears to be shared by Shook, et. al. (2003) who also suggest that early researches on entrepreneurship assume perfect information and markets are in equilibrium. They argue that *“the equilibrium framework assumes that no individual could discover a misalignment that would generate an entrepreneurial profit because at any point in time, all opportunities have been recognized and all transactions perfectly coordinated.”* They have

therefore suggested a model explaining the new venture as the direct outcome of the individual's intentions and consequent actions. This model is illustrated in Figure 2.4

However, it is important to note that alertness itself is something already inherent within the entrepreneur. Entrepreneurial alertness is not a resource to be used for decision-making but something which is already part of the entrepreneur's characteristic.

In this viewpoint, the potential availability of entrepreneurial alertness in a society is not to be seen as something available to be used by society. Instead, the quality of entrepreneurial alertness is recognized as something which emerges into view and displays itself at the precise moment when decisions have to be made.

It can be argued that from the standpoint of economics, the entrepreneur is someone who has a strong sense of alertness in seeking out opportunities and capable of risk-taking and making judgement under conditions of uncertainty. All these are aspects of decision-making by the entrepreneur. By making such crucial decisions, the entrepreneur creates the future. As pointed out by Davidson (1996), "*entrepreneurship, which is but one facet of human creativity, by its very nature, involves cruciality*". (Pg. 32)

Kao (1993, 1997) distinguishes 3 aspects that need to be considered when studying entrepreneurship, namely, (a) entrepreneurship as the process of doing something new (creative) and/or something different (innovative) for the purpose of creating wealth for the individual and adding value to society, (b) the entrepreneur as a person who undertakes a wealth-creating and value-adding process and (c) Enterprising culture as a commitment of the individual to the continuing pursuit of opportunities and developing an entrepreneurial endeavour.

2.2.4 The Entrepreneur & factors of production

Wilken (1979) defines entrepreneurship as "*the combining of factors of production to initiate changes in the production of goods.*" (pp. 60) Changes can be quantitative (eg expansion or changes in the amount of goods produced) or qualitative (eg innovation or production of new goods, or changes in the manner in which existing goods are produced)

In this respect, three categories of innovations are identified:

- **Factor innovations:** *those involving factors of production (eg. Financial, labour, materials)*
- **Production innovations:** *Technological innovations (creation of new techniques, application of invention, organisational innovations)*
- **Market innovations:** *Changes in the way the “entrepreneur relates to the market for his goods” (Product innovations, diversification, discovery of market yet to be exploited)*

This viewpoint of the entrepreneur as a change agent who introduces changes to the market by his activities essentially fits well into the Schumpeterian idea of the entrepreneur who causes ‘creative destruction’ by introducing ‘new combinations’.

Cole (1965) notes that in its simplest term, entrepreneurship can be defined as “*the utilization by one productive factor of the other productive factors for the creation of economic goods.*” However, such a definition, admits Cole (1965) means little as it raises other questions like: Why? How? Through what institutions and instrumentalists?

According to Lim (2001), entrepreneurs play an important role being innovators in an economy. They may or may not be inventors or capitalists. Their functions include the introduction and spread of new and better methods of production and distribution, the finding of new markets, the discovery of new sources of material supply and new methods of mobilization of resources, and the introduction and spread of new products and services. Thus the presence of entrepreneurship is a key component contributing to the level of economic development of a country. Lim (2001) has suggested the EGOIN Theory which states the level of economic development is a direct function of the EGOIN; that is, the higher and better the EGOIN, the higher the economic achievements of the country will be. Conversely, the lower the EGOIN, the lower will be the economic achievements, EGOIN being the acronym for Entrepreneur (E), Government (G), Ordinary Labour (O), Investment (I), and Natural Resources (N). In terms of capital, EGO is human capital, ‘I’ is physical capital and ‘N’ is natural capital. The EGOIN Theory emphasizes the strategic and dynamic role of EGO, the human capital, which is the active agent of

development. This is contrasted with IN, which are important but inactive agents. The 'G' or government or political leadership is the centre of 'E' and 'O'. In a command economy, there is no 'E', which explains its ability to develop economically. (Lim, 2001: pp 334)

The entrepreneur himself can also be viewed as a scarce resource. According to Kirzner (1980), we must begin to recognise entrepreneurship "*as a scarce, valuable resource of which our economic models had better begin to take careful account*" (IEA Pg.9)

Thus, the entrepreneur can be considered as a scarce resource and a factor of production which needs to be nurtured and managed well. At the same time, the entrepreneur is also someone who is able to marshal resources and manage factors of production for the good of the economy.

2.2.5 The Entrepreneur as Manager

The question of whether the entrepreneur is also a manager has also been discussed extensively in the literature.

Korth (1985) makes a clear distinction between the two roles. While recognizing that the two roles might be complementary and tightly interwoven, he argues that they are distinct from each other and cites the following example:

Henry Ford, for all his entrepreneurial genius in building the Ford Motor Company, almost destroyed it by his inability to manage it well and by his inability to let others do it for him.

Even though the entrepreneur may possess the leadership to marshal resources, the talent to spot and exploit opportunities, and the courage to take risks, he may or may not necessarily be a good manager.

Bull, et al (1993) also maintain that the entrepreneur and the manager are distinct from each other:

A manager who operates an existing business, perhaps even with continuous adjustment in small steps, does not cause discontinuity and thus, by definition, is not an entrepreneur.

This viewpoint is shared by Baumol (1993), who considers it important to differentiate between the entrepreneur and the manager. The manager oversees the tasks assigned to him:

The managers see to it that inputs are not wasted, that schedules and contracts are met, that routine pricing and advertising outlay decisions are made, that simple growth processes entailing no novel procedures take place, and so on.

However, Hornaday (1990) has suggested that the professional manager is but one type of small business owner, the other being the craftman and the entrepreneur. Business ownership involves exploitation of innovation and growth, loyalty to the firm/career, and desire for independence / personal control. This typology of the small business owners presume that these 3 types of business owners overlap in terms of the three attributes as illustrated in Figure 2.2

On the other hand, another viewpoint of entrepreneurship sees it as a form of management that relies on leadership. According to Kim Clark, the then Dean of the Harvard Business School:

... entrepreneurship is a kind of management. It's a kind of leadership. It's not just something which applies to a few people or a few circumstances. It's a way of managing and leading. (Asian Business; April 1997: pp. 44-45)

In this viewpoint, entrepreneurship in its most basic level has to do with leading and managing. It is not something limited only a start-up company, a small business or to firms in any particular industry. It is something far more prevalent and fundamental.

While the entrepreneur may also double as a manager, his role is not the same as he/she must be more innovative in finding and implementing new ideas or new approaches and also to lead and inspire others in his team. So while some entrepreneurs may be also good managers, it does not follow that all managers are necessarily entrepreneurial or need to be so. According to Senior Minister Lee Kuan Yew of Singapore, the manager is primarily someone who administers and manages available resources in the most efficient way whereas the entrepreneur is someone who

sees opportunities where others see problems.(The Straits Times, 6 Feb 2002; The Business Times, 6 Feb 2002)

Kao (1997) has suggested that much is wrong with corporate management today with its over emphasis on , among other things, profit maximisation, and use of *“dehumanised strategies that squeeze humanity out of the organisation”* . He observes that in corporate management, four leadership styles may be possible, namely position or autocratic leadership, democratic leadership, professional or technical leadership and entrepreneurial leadership. According to Kao (1997), *“an entrepreneurial leader is someone who can always work with others and is a dynamic individual, with a positive, supportive attitude who believes that in every problem situation there are perceived opportunities.”* (pp 260) When such leadership exists in a corporation, rank, position, title or location and size of office do not matter to the individual. This suggests that the corporate manager can also be entrepreneurial provided he displays such entrepreneurial leadership.

An entrepreneurial corporate manager can create an enterprising culture in the corporation. This does not mean that everyone in the corporation starts a business, but that everyone has an enterprising spirit. Too much control can stifle entrepreneurship and in an entrepreneurial corporate environment, *“staff roles are important, but they also have the entrepreneurial role to play like everyone else.”* (pp 213)

Kao (1997) offers the view that an entrepreneur-founder can transmit his entrepreneurial values throughout the organisation through a systematic 5-stage transfer process. This implies that as the entrepreneur’s venture grows, the need for a deliberate and well-planned succession programme may be necessary if the venture is to grow further. This viewpoint is endorsed by Hamm (2002), who has suggested that the qualities that serve entrepreneurs well in launching businesses often bring them down as their companies grow. This is because of four tendencies which retard their ability to scale. These are loyalty to comrades, task orientation, single-mindedness and working in isolation. But this is not to say that in the early stages of their businesses, entrepreneurs do not plan. A study by Bhide (1994) indicates that the comprehensive , analytical approach to planning undertaken in the corporate world may not be suitable for start-ups. Entrepreneurs typically lack time and money for market research and analysis . However, astute entrepreneurs do plan and strategize extensively, though not in a complete manner, because they realise that *“businesses cannot be launched like space shuttles, with every detail of the mission planned in advance.”*

2.2.6 *Beyond the Austrian – Schumpeterian Schools*

According to Baumol's (1993), the role of the entrepreneur *"is that of disturber of the economy: it prevents the economy from falling into a rut"* This Schumpeterian perspective views the entrepreneur as being unable to leave things in their existing state and is prone to shaking the existing equilibrium. If things start off in equilibrium, this status will be soon undermined by the entrepreneur's innovative acts. By the same token, if the initial state entails disequilibrium, the entrepreneur's alertness will not allow it to continue.

Bull, et al (1993), having reviewed selected literature on the entrepreneur, also maintain that Schumpeter's definition is most accurate:

Schumpeter's definition is acceptably precise. An entrepreneur is the person who carries out new combinations, causing discontinuity. The role is completed when the function is completed.

While the Schumpeterian view is common, not all feel that the distinction is clear. Binks and Vale (1990) have reviewed the definitions of other economists and comment that some clear issues have not been addressed in the definitions they reviewed. They note that in all these definitions *"there is a failure to make a clear distinction between the process of economic development and any associated employment."* They argue that the generation of economic development and resulting employment should not be treated lightly:

This simplification that entrepreneurs, economic development and employment creation are all part of an 'enterprise package' has led to the formulation of policies which fail to accommodate the mechanisms of development and employment.

Based on an analysis of the contributions made by the above writers, Binks and Vale (1990) conclude that there exist three categories of entrepreneur which appear to have been identified in the historical concept:

- Entrepreneurs who are reactive, that is, *"they respond to market signals and in doing so convey and facilitate the market process. They are the agents of adjustments."*

- Entrepreneurs “*who cause economic development by introducing and innovating ideas which fundamentally rearrange the allocation of factors of production.*”
- Entrepreneurs “*who, in their management, cause improvements of a gradual nature to existing products and processes. They do more than merely purvey the market process, they change it but in a gradualistic rather than a fundamental manner.*”

Clearly, these three categories of entrepreneurs can be said to embody elements of both the Austrian and the Schumpeterian ideas of the entrepreneur. The entrepreneur in categories (i) and (iii) resemble the Austrian entrepreneur as they clearly move toward equilibrium by making adjustments in a gradual manner. The entrepreneur in category (ii) is close to the Schumpeterian entrepreneur as clearly by introducing innovations and rearranging the factors of production, he upsets the existing equilibrium.

Binks and Vale (1990) therefore offer an alternative viewpoint of the entrepreneur. In their definition, entrepreneurial activity is “*an unrehearsed combination of economic resources instigated by the uncertain prospect of temporary monopoly profit.*”

Gibb (1990) has also tried to analyze the definitions of the entrepreneur from the economists’ viewpoints and have categorized these definitions in Fig 2.1 as follow:

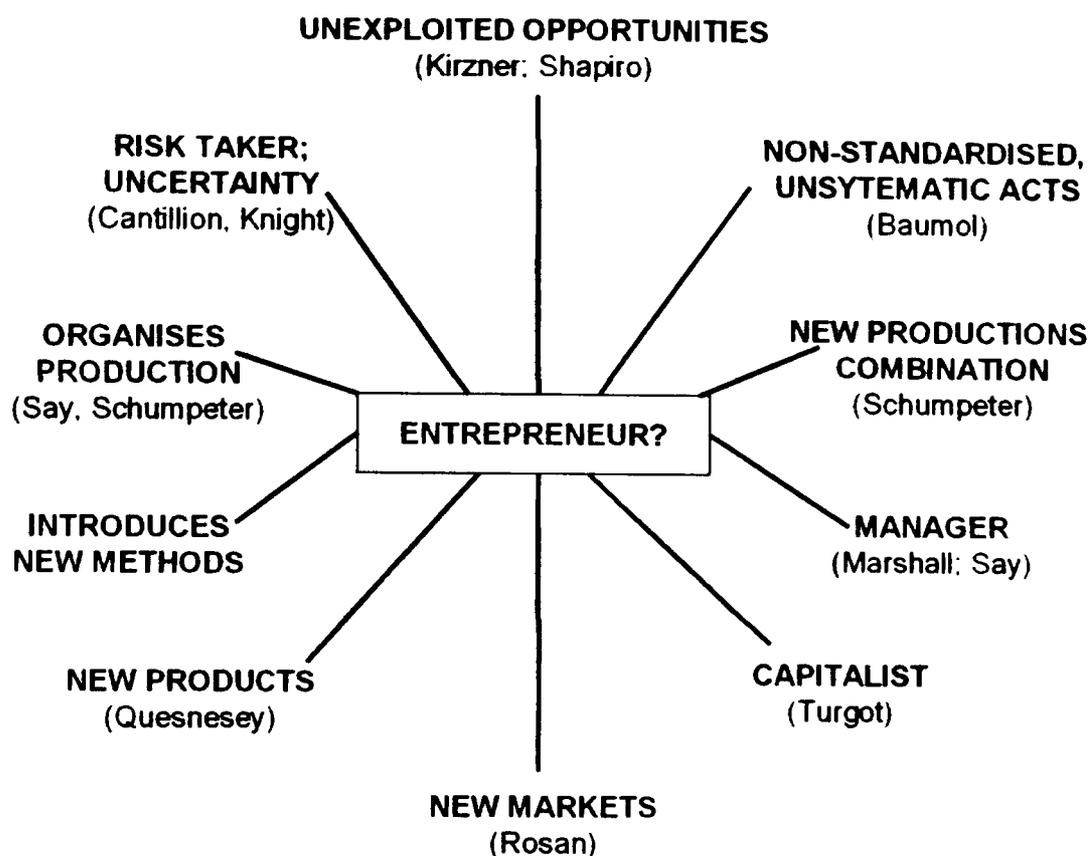


Figure 2.1 The Economists and the Entrepreneur

Source: Donckels, Rik and Miettinen, Asko [eds] (1990), *New Findings and Perspectives in Entrepreneurship*: pp 36 . Gower Publishing Company, UK.

Although the notion of the entrepreneur in economics may be broadly categorized as belonging to the ‘Austrian School’ and the ‘Schumpeterian School’, there are clearly various perspectives of thinking within these two schools. The main argument between these two schools is whether the entrepreneur maintains equilibrium (The Austrian School) or destroys existing equilibrium (The Schumpeterian School). However, as pointed out by some writers, the line between the two opposing schools may not be all too clear. (Cheah, 1990; Binks and Vale, 1990),

In reviewing past definitions on entrepreneurship, Wu (1989) has also pointed out the overlaps and inconsistencies. According to Wu (1989), Say’s notion of the entrepreneur was ambiguous because the entrepreneur was sometimes treated “as a capitalist and at other times as a labourer.” Cantillon characterized the entrepreneur as an individual who engages in business “without an assurance of the profits he will derive from his enterprise.” Von Thunen, according to Wu, described the entrepreneur as a person “who is preoccupied with the fortune of the business”; through trial and tribulation, he deals daily with contingencies.

Clearly, the types of attributes and activities associated with the entrepreneur in economics can be varied and numerous. Kirzner (1985) has noted:

What is remarkable is that economists have, over the past two and half centuries, reached such a variety of conflicting conclusions concerning the essential character of such entrepreneurial activities. (Pg 6)

In summary, the entrepreneur in economics may be broadly classified as Austrian or Schumpeterian on the basis of the entrepreneur's role towards equilibrium. However, as pointed out by Visser (1995), "*general equilibrium models leave no place for the entrepreneur, and economics without the entrepreneur is like Hamlet without the prince....*" On closer examination, it would appear that the line separating the two categories is not as clear as it might seem and in many respects, there are similarities. However, on balance, it would appear that Schumpeter's view of the entrepreneur is widely accepted by many writers (Binks and Vale, 1990; Baumol, 1993; Bull, et al., 1993; Thurow, 1999; Hamel, 2000) on the basis that the entrepreneur is an agent of change by virtue of his entrepreneurial activities.

2.3 Types of Entrepreneur

This section deals with the issue of whether entrepreneurs can be categorized and if so, how such categorization could add further understanding of the entrepreneur. At a more general level, entrepreneurs might be classified as those who are craftsmen as against those who are opportunists as proposed by Woo et al (1991). Entrepreneurs might also be classified as those who are corporate entrepreneurs working within the corporation (Kirzner, 1980; Pinchot, 1985; Hisrich, 1985; Kiser, 1989; Prokpenko, 1991; Stevenson et al., 1990) or those starting ventures on their own or with others. In public sector entrepreneurship, typologies like '*true entrepreneurs*', '*partial entrepreneurs*' and '*reluctant entrepreneurs*' have also been used to describe general practitioners practicing medicine. (Ennew, et al., 1998) In economics, entrepreneurs have also been classified in a number of typologies (Reekie, 1984; Casson, 1990; Cheah, 1990; Binks & Vale, 1990; Gibb, 1990). This section reviews some of these classifications and attempt to draw some conclusions that might be relevant

2.3.1 Craftmen vs Opportunists

Woo, et al (1991) suggest that entrepreneurs can be broadly classified as either craftmen or opportunists:

Research studies over the last decade appear to converge on two types of entrepreneurs. craftmen and opportunists... ..

In their study, craftmen entrepreneurs are those that are likely to have a blue collar background with limited education and managerial experience. Such entrepreneurs would typically prefer technical work to administrative tasks. They are usually motivated by needs for personal autonomy rather than the desire for organisational or financial success.

On the other hand, entrepreneurs who are opportunists tend to have broader experiences and higher levels of education. Such entrepreneurs are likely to be motivated by financial gains and the opportunity for building a successful organization.

This classification is simple and probably useful as a basic approach to understanding entrepreneurship. Craftmen typically are hands-on and practical and tend to value their skills and take pride in doing a good job. Craftmen tend to value the particular job they perform or the things they are making to the extent that what they do is more important than being in business. Opportunists, on the other hand, conjure up images of entrepreneurs who seize business opportunities regardless of whether they have a background in the particular industry. They tend to value the business process and value the money making aspects of being in business and being successful.

However, the problem with this simple approach is that it does not address the many contextual complexities of entrepreneurship. Some entrepreneurs might enter a particular trade not necessarily because of his particular background, eg, those who inherit a business. In other cases, entrepreneurs might be limited in the type of ventures available because of the environment, eg entrepreneurs in a developed market economy vs those in a developing economy and so on.

On a small sample, this categorization might be applicable but on a larger sample, it might not be appropriate. Woo et al (1991) concede this:

Craftmen-opportunist classifications may be highly convenient ways of anchoring our classifications and descriptions of entrepreneurs, yet the polarity inherent in such a distinction was not supported on a large sample.

Thus, while the craftmen-opportunists might be a convenient way to classify entrepreneurs it does not provide for a comprehensive typology for examining many other relevant details.

Hornaday (1990), however, has pointed out that small business owners are not all necessary entrepreneurs and it is useful to examine entrepreneurship as part of wider owner typologies, with the craftman being part of the typologies. The 3 types of business owners identified by Hornaday (1990) are the craftman, the professional manager and the entrepreneur as illustrated in the following diagram. (Figure 2.2):

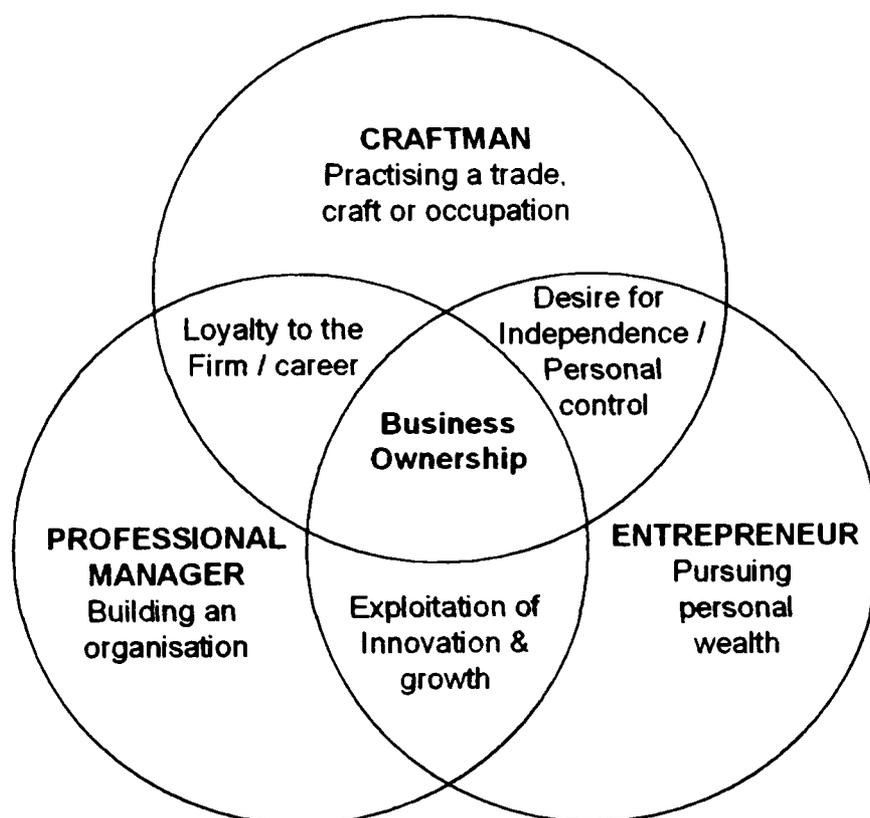


Figure 2.2 Three types of small business owner

Sources: Hornaday, R. W. (1990). "Dropping the E-words from Small Business Research", *Journal of Small Business Management*, Vol 28: pp 22-33; Bridge, Simon .. O'Neil, Ken .. and Cromie, Stan (1998), *Understanding Enterprise, Entrepreneurship and Small Business*: pp 50, MacMillan Press, UK

Krueger (1995) has suggested that entrepreneurs and enterprising persons must both perceive the probable outcome of their endeavours in a favourable light and believe that they have the wherewithal to succeed. In this process, perception is very important and may be more important

than reality. The favourable perception may be derived from personal preference and social approval for enterprise / entrepreneurship. The wherewithal come from experience , innate and learned attributes that might enhance enterprising propensity and from skills , knowledge, and resources that increase self-efficacy. However, the light and the wherewithal by themselves may not be sufficient. A trigger or key event may be necessary to start the individual on an enterprise course of action. These suggestions by Krueger (1995) may be illustrated as follows (Figure 2.3):

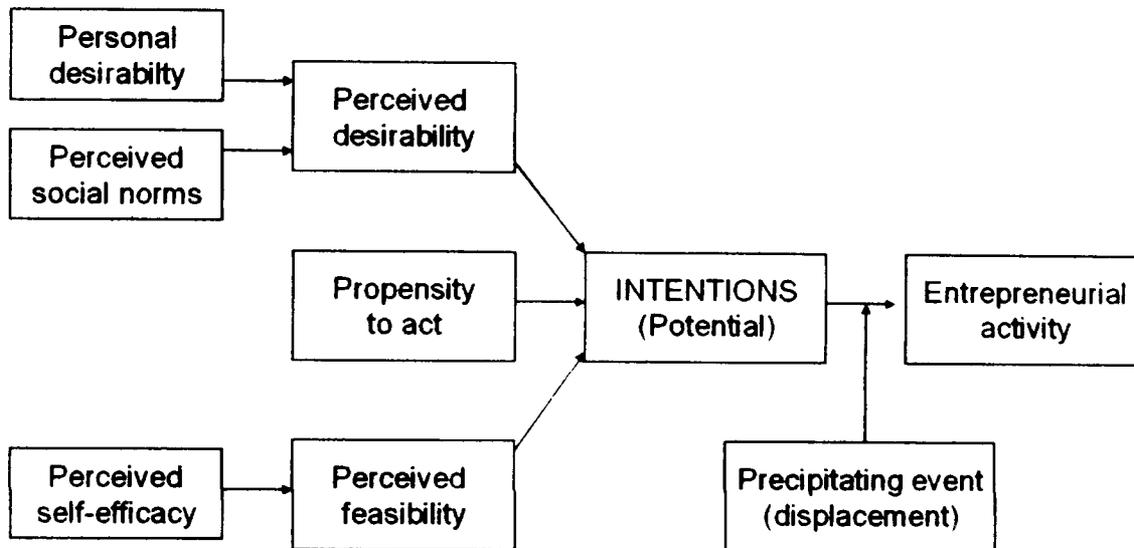


Figure 2.3 Intentions model of entrepreneurial potential (simplified)

Sources: Krueger, N. F. (1995), *Prescription for Opportunity : How Communities Can Create Potential for Entrepreneurs*, Washington, DC., Small Business Foundation of America, Working Paper 93-03 : pp 10; Bridge, Simon ., O’Neil . Ken ., and Cromie, Stan (1998), *Understanding Enterprise, Entrepreneurship and Small Business*:pp 56 , MacMillan Press, UK

This approach is shared by Shook, et al (2003) who suggest that new ventures are neither forced into being random or passive by-products of the environment. They suggest a model with entrepreneurial intentions as a starting point to the seizing of opportunities. The entrepreneurial intention is a conscious state of mind that precedes action. Once an entrepreneurial intention is formed, the search for opportunities begin, after which a decision has to be made whether or not to exploit the opportunity. Once a decision to pursue the opportunity is made, action is then undertaken to translate intent into a new venture. The final component in the framework is the enterprising individual. This framework is illustrated as follows (Figure 2.4):

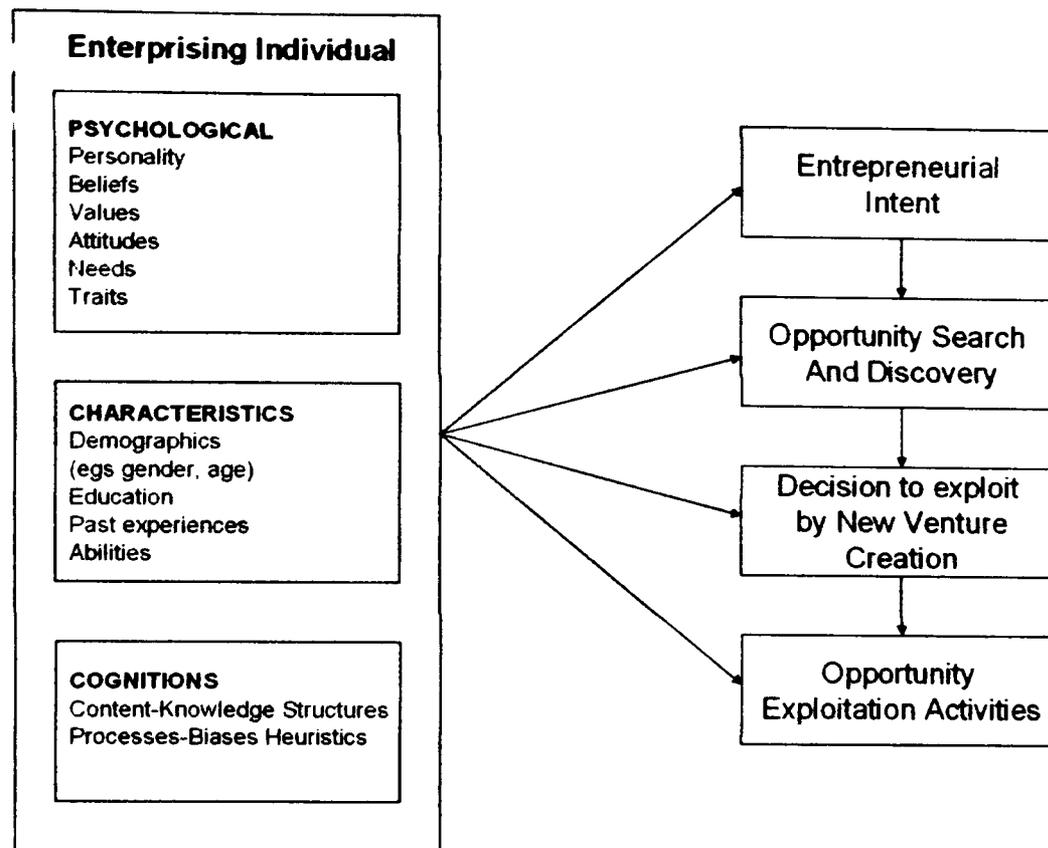


Figure 2.4 Model on Venture Creation and the Enterprising Individual
 Source: Shook, Christopher L., Priem, Richard L., and McGee, Jeffrey E. (2003), "Venture Creation and the Enterprising Individual : A Review and Synthesis", *Journal of Management*, 29 (3) 2003: 379-399

It could be argued, therefore, that entrepreneurs who seek, see and / or seize opportunities may have some predisposition or attributes for such behaviour. This suggests that not all opportunity seeking behaviour may be inborn and may be due to influences from society or the environment.

2.3.2 Routine and 'new-type' entrepreneurs

Leibenstein has identified two broad types of entrepreneurs based on their activities: the first type he called routine entrepreneurship("*which is really a type of management*") and the rest he classified as Schumpeterian or "*new type*" or "*N-entrepreneurship*".(Casson, 1990: pp. 525)

Routine entrepreneurship refers to "*activities involved in coordinating and carrying on a well-established, going concern in which the parts of the production function in use (and likely alternatives to current use) are well known and which operates in well-established and clearly defined markets.*"

N-entrepreneurship, on the other hand, refer to *“the activities necessary to create or carry on an enterprise where not all the markets are well established or clearly defined and or in which the relevant parts of the production function are not completely known.”* To be successful, the entrepreneur *“must fill in for the market deficiencies”*

In reviewing Leibenstein’s theory of entrepreneurship, Binks and Vale (1990) note both the positive aspects as well as shortcomings.

The first major positive aspect refers to *“the existence of a notion of inefficiency and lost output which may be attributed to a mismatch between the utility functions of the labour component of the commercial process”*. The second refers the *“perceived ability to supplement skill patterns that enhance organizational performance.”* In support of this, Binks and Vale (1990) quote the example of the transfer of Japanese management skills into British industry in recent years.(pp 38)

The shortcomings relate to *“the static elements which prohibit a clear perception of the dynamic role of entrepreneurship.”* Binks and Vale (1990) argue that Leibenstein’ entrepreneur disregards the everchanging environment within which the Schumpeterian entrepreneur operate. (pp 38 - 39)

However, in summary, Binks and Vale (1990), acknowledge the usefulness of Leibenstein’s theory of entrepreneurship, in particular *“the distinction which Leibenstein draws between entrepreneurial activity that principally relies upon a wholly new combination of resources and that which refines an existing combination.”*(pp. 39)

2.3.3 Arbitrage, speculative and innovative entrepreneurship

Kirzner (1985) has suggested that there are three major types of entrepreneurial activities : arbitrage activity, speculative activity and innovative activity.

Arbitrage activity involves the *“discovery of a present discrepancy (net of all delivery costs) between the prices at which a given item can be bought and sold.”* Such entrepreneurs discover an opportunity for pure gain because those who sell at the low price are simply unaware of those who buy at the higher price, and vice versa. In this respect, the arbitrage entrepreneur might be an opportunist. (Woo et al., 1991)

Speculative activity is engaged by the entrepreneur “*who believes that he or she has discovered a discrepancy (net of all relevant carrying costs and to be revealed through subsequent history) between the prices at which a given item can be bought today and sold in the future.*” Such entrepreneurs are also opportunists who are able to take calculated risks in a situation of uncertainty.

Innovative activity “*consists in the creation (for a future more or less distant) of an output, method of production, or organization not hitherto in use.*” This aspect of entrepreneurship focuses on the strategic orientation and creative capability of the entrepreneur in spotting opportunities that others might not notice.

Although these three major categories of entrepreneurial activities imply that only the functional approach is considered, this is not the case. All these activities are likely to be conducted by entrepreneurs with certain characteristics or traits. For example, arbitrage and speculative activities are likely to be undertaken by entrepreneurs who are not averse to risk-taking and who are unafraid of failure. Innovative activities are more likely to be undertaken by entrepreneurs who are creative and have a strategic orientation. Such activities would also fit well into the N-entrepreneurship proposed by Leibenstein.

2.3.4 Catalytic, allocating, refining & omega entrepreneurs

Binks and Vale (1990) have identified four types of entrepreneurs:

- *The Catalytic entrepreneur*
- *The allocating entrepreneur*
- *The refining entrepreneur*
- *The omega entrepreneur*

The catalytic entrepreneur is someone who introduces innovative changes that have such a major impact that they displace the equilibrium in the circular flow as defined by Schumpeter. It is only the catalytic activity that introduces the potential for growth but it is the allocating activity that capitalises on that potential. (Binks and Vale, 1993)

The allocating entrepreneur is alert to market gaps and the patterns of demand that emerge. The allocating entrepreneur may sense opportunities following a catalytic event. Binks and Vale (1993) suggest that in recessionary and depressed economic conditions, these two types of entrepreneurship are particularly crucial. In terms of risk, the catalytic activity will carry the highest degree of risk as *“there is no precedent or data on which to calculate risk”*. Allocating activity will carry substantial but lesser risk. (Binks and Vale, 1993)

The refining entrepreneur is the one who aims to profit from improved organisational efficiency applied to an existing allocation of resources. Such refining activity is the least *‘risky’* variant of entrepreneurship. (Binks and Vale, 1993)

The omega entrepreneur is a subgroup of the refining entrepreneur and is a temporary entrepreneur in so far as the initial viability, or quasi viability, of the business is derived from low, post-disturbance cost.

Having identified the four groups of entrepreneurs, Binks and Vale (1990) go on to stress that *“the entrepreneur can include an individual ploughing a lone furrow, a group of individuals working independently of any business organisation, or an existing commercial organisation.”*

2.3.5 Profit & non-profit oriented entrepreneurs

However, monetary goals such as profits may not be the only objective of all entrepreneurs. Kiser (1989) writes:

Hyman Rickover was a military-minded entrepreneur. He had a vision and fought tenaciously for its realization but was not motivated in his struggle by money. Lawrence Livermore Laboratory is the child of Edward Teller, a defense science entrepreneur motivated by ego and ideology. (pp 1)

A similar view is expressed by Toh (1993):

Many successful entrepreneurs are not driven by materialism. There are other things at stake. It may be a passion for a product or a desire to make contribution to the country. (The Sunday Times, November 14, 1993)

These views on the entrepreneurs not being motivated by profit or materialism are shared by Huefer et al (1994) who highlights the success of Peter Ueberoth in organising the 1994 Olympics as an example.

Amit, et al (1993) categorise entrepreneurs as follow:

Entrepreneurs can be categorized into those who are profit-seeking, either working individually or in a corporate setting, and those who are not profit seeking, working in charitable, government and other not-for-profit organizations (eg universities).

In a study of public sector entrepreneurship in the context of primary health care, evidence suggests that different types of entrepreneurship in the form of reduction in inefficiency, price-quality arbitrage and innovation exist among general practitioners. Three broad groups of entrepreneurs may be identified among the general practitioners. The '*true entrepreneurs*' tend to be enthusiastic and have a certain zeal for fundholding. The '*partial entrepreneurs*' tend to be internally oriented (for example improving offices and computers) while the '*reluctant entrepreneurs*' tend to be characterized by ideological resistance to private care and markets in health care. (Ennew, et al., 1998)

The entrepreneur is thus someone working individually or within an organization who brings about innovative ideas. This implies that while there may be an element of risk involved in bringing about such innovations to the marketplace, profit may not necessarily be a pre-requisite since the entrepreneur may exist in non-profit and government organizations. This notion of the entrepreneur contrasts sharply with the conventional description of the entrepreneur who is often seen in the context of profit-making as a result of risk-taking.

2.4 The Entrepreneur Beyond Economics.

In the previous section, entrepreneurship and the entrepreneur from the various perspectives in economics were discussed. Since the concept of entrepreneurship originated and evolved from the discipline of economics, this was a useful starting point and several themes were highlighted and reviewed. To provide a balance to the overall literature review, this section will discuss entrepreneurship and the entrepreneur from perspectives beyond economics. Attempts to define entrepreneurship and the entrepreneur have also come from many other sociological directions -

from those who write generally about entrepreneurs to academics and researchers who offer a variety of perspectives. This section begins with a general discussion of entrepreneurship and the entrepreneur. Two general approaches are then distinguished and discussed. The first approach focuses on the functional approach, that is, the things that entrepreneurs do that make them entrepreneurs. This approach largely has to do with the activities of entrepreneurship. The second approach – that is, the indicative approach – focuses on the things about the entrepreneur that make them entrepreneurs. This approach has much to do with the behavioural characteristics of the entrepreneur or the attributes by which an entrepreneur may be recognized.

The section ends with a working definition of what might constitute an entrepreneur in the context of this research, with particular reference to entrepreneurship in the SME sector in Singapore.

2.4.1 The General Approach

Maul and Mayfield (1990) capture one simplistic perspective of the entrepreneur which emphasizes the entrepreneur's journey as one "*filled with crossroads, detours, and unexpected challenges.*" The very word 'entrepreneur', according to them, "*evokes images of the adventurer, the pioneer, an independent spirit in pursuit of the fulfillment of passions and dreams, one who dares assume the risk of the success or failure of a business venture*".

In this common view often perceived by the general public, the entrepreneur is seen as an interesting character to be admired for his ability to meet challenges and making something out of very limited resources. The entrepreneur is seen as an opportunist who seizes the chance whenever opportunities are sensed. Sometimes, the entrepreneur is viewed as a flamboyant or maverick character.

Shefsky (1994) has suggested that "*dictionary definitions of entrepreneur are useless*" and has preferred to define 'entrepreneur' by tracing the components of the word to their latin roots: 'entre' means enter; 'pre' means before; and 'neur' means nerve center, that is:

... someone who enters a business - any business - in time to form or change substantially that business's nerve center.....It doesn't matter whether the business is a fledging start-up or an institutional giant.

The entrepreneur in this context refers to someone who creates a business and brings about changes to the direction of the entity he has started.

Burch (1986) describes the entrepreneur and entrepreneurship as follows:

Entrepreneurship is the act of being an entrepreneur, a derivative of the French term 'entreprendre', which means 'to undertake; to pursue opportunities; to fulfill needs and wants through innovation and starting business'.

In this definition, the entrepreneur is one who undertakes a venture, organizes it, raises capital to finance it, and assumes all or a major portion of the risk. Burch's entrepreneur is *"the change agent, the source of innovation and creativity, the schemer, the heart and soul of economic growth."* (Burch, 1986, Pg 24)

Kuratko & Hodgetts (2001) define entrepreneurs as *"individuals who recognize opportunities where others see chaos, or confusion. They are aggressive catalysts for change within the marketplace."* In their perspective, entrepreneurship is *"more than the mere creation of business... .. (it) is the symbol of business tenacity and achievement."* These perspectives are fairly similar with those of other writers on entrepreneurship. (Zimmerer and Scarborough, 1996; Hisrich and Peters, 2002.)

Generally entrepreneurs are seen as individuals in the business context who starts a business venture and turning it into a success regardless of the circumstances. However, this does not tell us very much with regards to the specifics like: what characteristics do entrepreneurs possess?; Is it the way they think ? Is it what do they do that make them entrepreneurs? Is becoming an entrepreneur a process?

Thus, at the broad level, we could describe entrepreneur as enterprising individuals who undertake risk by venturing into new ventures or enterprises and entrepreneurship as the whole process of being entrepreneurial and enterprising. We can further subject entrepreneurship and the entrepreneur to a more detailed review from two separate but complementary approaches.

2.4.2 Functional and Indicative Approaches

According to Casson (1982), the entrepreneur can be looked at from two approaches: the functional approach and the indicative approach. The functional approach says simply that *'an entrepreneur is what an entrepreneur does'*. It specifies a certain function and deems anyone who performs this function to be an entrepreneur. The indicative approach provides a description of the entrepreneur by which he may be recognized.

In the functional approach, it might be possible to determine entrepreneurs from the activities he performs in the market, eg, introducing of a new product or service, creating a new market, being able to differentiate himself from other businesses, being more marketing-oriented than competitors, being able to take calculated risk and so on. On the other hand, the indicative definition is very practical and sees the entrepreneur in terms of his legal status, his contractual relations with other parties, his position in society, and so on. The indicative approach also sees the entrepreneur in terms of the behavioural characteristics displayed. Entrepreneurs might be seen as people who are bold, decisive, innovative and creative, not afraid of failure and so on.

It can be said that the functional definition focuses on entrepreneurial activities and things the entrepreneur does that makes him entrepreneurial whereas the indicative definition focuses on the personality and traits of the entrepreneur.

Stevenson (1999) has suggested that neither approaches is being sound since the degree to which entrepreneurship is synonymous with 'bearing risk', 'innovation', or even 'founding a company' is not uniformly found in all entrepreneurs. Each of these terms focuses on some aspects of some entrepreneurs. That is, if one has to be a founder to be an entrepreneur, then neither Thomas Watson of IBM nor Ray Kroc of MacDonald's will qualify "*yet few would seriously argue that both these individuals were not entrepreneurs.*" (Stevenson, 1999). Indeed, Manimala (1999) has suggested that the focus of entrepreneurship research has to shift from 'what entrepreneurs are' to 'what entrepreneurs do'

In summary, entrepreneurship can be approached from many perspectives and as a theory, there is no one best single well-articulated underlying theory of entrepreneurship. As pointed out by Alvarez and Barney (2000), "*a fundamental issue that may underlie the inability to develop*

entrepreneurship theory is that the necessary and conditional assumptions of entrepreneurship are at best difficult to model in economic terms.” (pp 64)

2.4.3 The Entrepreneurs' Activities : what they do that make them entrepreneurs.

Timmons (1989), views entrepreneurship at the micro-level and sees it *“as the ability to create and build something from practically nothing. It is initiating, doing, achieving, and building an enterprise or organisation, rather than just watching, analyzing or describing one.” (Pg. 1)*

The entrepreneur in this context has the ability or sense to detect an opportunity in the midst of chaos, contradiction and confusion. He displays the ability to build a team of people to complement his skills and talents. This includes also the ability to seek out and utilize resources, financial and otherwise, to carry out his venture. The entrepreneur in this definition is also willing to take calculated personal and financial risks.

Drucker (1985), much in line with Schumpeter, acknowledges that innovation and creation of value are key elements of entrepreneurship. He, however, warns that the elements of risk-taking and starting of small businesses may not necessarily reflect true entrepreneurship. Drucker (1985) argues that a husband and wife who start another stall or restaurant are not necessarily entrepreneurial although they undertake some risks in the venture. This is because *“all they do is what has been done many times before,..... but create neither a new satisfaction nor new consumer demand”*.

In contrast, Drucker (1985) cites the example of MacDonal’s chain of restaurants as being entrepreneurial on account of the element of innovativeness in the venture:

It did not invent anything new.....But by applying management concepts and management techniques..... McDonald’s both drastically upgraded the yield from resources, and created a new market and a new customer. This is entrepreneurship. (pp 21)

According to Drucker (1985), the entrepreneur is able to use innovation as a specific tool to *“exploit change as an opportunity for a different business or a different service.”* Entrepreneurs

therefore search purposefully for the sources of innovation and use these to create and exploit opportunities.

Drucker's view is shared by Banfe (1991) :

.....an entrepreneur does not open another muffin shop. An entrepreneur creates a different way to serve a muffin; delivering it to homes or customers with a special butter or jam, or some other unusual twist which did not exist before. The entrepreneur finds a new way to market muffins, perhaps aroma or ambience or service. (pp. 1)

A similar view has been expressed by Y.Y. Wong, founder of the WyWy Group in Singapore, who was reported to have said at the Charter Meeting Of Global Growth Companies held in Singapore on September 19, 1995, *"the young man who starts a chicken rice stall.....this does not make him an entrepreneur.....He neither creates a new pleasure nor a new consumer desire.....Entrepreneurship is a practice that creates new markets and new customers through innovative means."* (The New Paper, 20 September 1995.) This viewpoint was further reinforced in an interview Y.Y. Wong gave in early 1999 when he suggested that *"entrepreneurship is not only a matter of IQ. It embodies creativity, innovation, change, perseverance and purposefulness."* (Asia 21, February 1999: pp 6-9)

Robinson (1990) emphasizes innovation as a key in defining the entrepreneur, who *"looks for the incongruous in the world, treats it as an opportunity and then subjects his vision to detailed and thorough scrutiny"*.(pp. 27)

Banfe(1991), puts it this way:

Entrepreneurship is rethinking conventional paradigms, discarding traditional ways of doing things. The old and proven methods might have applied in the past, but entrepreneurs are possessed with contriving new ways which are better, or they simply create new and improved products.(pp. 2)

These various definitions emphasize one common thread that characterize typical entrepreneurs. They do not necessarily have to introduce a new product or service, although that could be a possibility. What is more essential is the innovative or fresh approach taken by the person that

makes him entrepreneurial. The element of innovation or innovativeness therefore is the central theme that characterizes the approach of entrepreneurs.

Kao (1989; 1991) sees entrepreneurs as catalysts who use creativity to conceive innovations and zeal to implement them. In his view, entrepreneurship attempts *“to create value through recognition of business opportunity, the management of risk-taking appropriate to the opportunity, and through the communicative and management skills to mobilize human, financial, and material resources necessary to bring a project to fruition”*

This viewpoint is shared by Kuratko & Hodgetts (2001), who define the entrepreneur as *“a catalyst for economic change who uses purposely searching, careful planning, and sound judgment in carrying out the entrepreneurial process. Uniquely optimistic and committed, the entrepreneur works creatively to establish new resources or endow old ones with a new capacity, all for the purpose of creating wealth”*

The issue of the entrepreneur as someone who takes some risks is pointed by Anderson, et al (1990):-

.....we treat anyone who is willing to risk his or her money, time, and prestige on a new venture as an entrepreneur.

However, as pointed out by Manimala (1999), entrepreneurs may be more aptly described as risk-managers or even risk-avoiders, but certainly not always risk-takers.

Nevertheless, the entrepreneur in this context is seen as someone who exercises some degree of creativity in exploiting opportunities. He is also seen as someone with the ability to marshal resources to achieve success in the venture (Timmons, 1989). However, he is also someone who is ready to take some risks in the pursuit of opportunities.(Anderson et al., 1990)

Stevenson, et al. (1989) do not consider it useful to limit the definition of the entrepreneur to economic functions that are “entrepreneurial” or to the traits common in potential entrepreneurs. Instead, entrepreneurship is given a behavioural dimension:

From our perspective, entrepreneurship is an approach to management that we define as follows: the pursuit of opportunity without regard to resources currently controlled. (pp. 7)

This summary definition of entrepreneurial behaviour is further refined against the background of six critical dimensions of business practice: strategic orientation, the commitment to opportunity, the resource commitment process, the concept of control over resources, the concept of management, and compensation policy.

Christensen, et al (1994), in rejecting that narrow definition of entrepreneurship from the perspectives of inherited personality traits or small business ownership, see it as “*learned behavior that is opportunity driven without regard for the resources currently controlled.*” Specifically, they define entrepreneurship as the “*ability to make rapid commitment to opportunities that arise in a multi-stage decision mode, often using other people’s resources, managing through networks of personal relations, with the expectation that one will be rewarded in direct proportion to the new value created*”. (pp 61-62)

The entrepreneur is seen as decisive in making decisions with regards to managing resources and managing relationships. In the process of doing so, the entrepreneur is able to inspire confidence in others about the venture. At the same time, the entrepreneur must also create value for others as pointed out by Morris, et al (1994):

...we define entrepreneurship as the process of creating something different, with value, by devoting the necessary time and effort; assuming the accompanying financial, psychic, and social risks; and receiving the resulting rewards of monetary and personal satisfaction. (pp. 189)

This definition of entrepreneurship is in line with the observation of Hills (1994; 1995) who characterizes entrepreneurship as:

A process that takes place in different environments and settings that causes changes in the economic system through innovations brought about by individuals who generate or respond to economic opportunities that create value for both these individuals and society. (pp. 16)

The way entrepreneurs generate or respond to opportunities need not be in the context of pure chance and could be well planned and managed. Casson (1982) emphasizes the aspect of active planning and management in describing the entrepreneur:

An entrepreneur may be characterized as an active planner, and a non-entrepreneur as a passive planner. Because entrepreneurs are active planners they invest heavily in decision-making, while passive planners allow their decision to be taken as it were by default. (pp. 28)

Carland, et al (1984) have also considered the entrepreneur in terms of his innovative behaviour in pursuing and managing business success:

An entrepreneur is an individual who establishes and manages a business for the principal purpose of profit and growth. The entrepreneur is characterized principally by innovative behavior and will employ strategic management practices in the business.

This is very much in line with the observation of Bjerke (1998) who sees entrepreneurship as “*the co-creation and co-maintenance of a new venture by various economic actors.*” (pp 264)

McGrath and MacMillan (2000) state that habitual entrepreneurs have five characteristics in common, namely (pp.2-3):-

- They passionately seek new opportunities
- They pursue opportunities with enormous discipline
- They pursue only the very best opportunities and avoid exhausting themselves and their organizations by chasing after every option.
- They focus on exception – specifically, adaptive execution.
- They engage the energies of everyone in their domain.

Brandt (1997) claims that the 1970s entrepreneur tended to start something, build it up, sell out, get out and start the cycle again. The 1990s entrepreneur, on the other hand, tends to be part of an entrepreneurial team that sticks with the ship and keeps on innovating.

Wickham (1998) suggests that entrepreneurs are first and foremost individuals who live and function within a society. They are not characterized by every action they take, but by a particular set of actions aimed at the creation of new wealth. In other words, entrepreneurship is about value generation.

Reich (1999) has proposed the concept of “*collective entrepreneurship*” where the team is really the hero of any successful entrepreneurial venture. In this context, collective entrepreneurship exists where individuals skills are: (a) integrated into a group, (b) close working relationships among people at all stages of the process, (c) entails different organization structure, and (d) workers do not fear technology and automation as a threat top their jobs. Indeed, Mourdoukoutas (1999) has suggested that “*the business strategy of the future will be one that focuses on revenue growth and on the constructive destruction of conventional corporations through collective entrepreneurship, rather than on operational effectiveness alone.*”(pp.1) This is particularly so because of globalization, increasing integration and interdependence of world markets.

The entrepreneur can thus be seen from the perspective of the things he does that make the person an entrepreneur. Some of these most common functions entrepreneurs typically perform identified from the literature review are summarized in Table 2.1:

What entrepreneurs do: The functional approach	References
<i>Creates wealth / value; Creates something from nothing</i>	Drucker (1985); Timmons (1989); Kao, J (1989, 1991); Kao, Raymond (1993); Morris et al (1994); Hills (1994; 1995); Kuratko & Hodgetts (1999); Bjerke (1998)
<i>Seeking , detection, & exploiting opportunities</i>	Drucker (1985); Stevenson et al (1989); Timmons (1989); Kao, J (1989; 1991); Christensen et al (1994); Hills (1994;1995); McGrath and MacMillan (2000).
<i>Pursues innovations & innovativeness ; Acts differently; acts in new ways</i>	Carland (1984); Drucker. (1985); Robinson (1990) ; Wong (1995); Miner (1996); Brandt (1997)
<i>Plans & manages resources; Able to marshal resources</i>	Casson (1982); Carland et al (1984); Stevenson et al (1989); Kao, John (1989; 1991); Kuratko & Hodgetts (1999).
<i>Takes moderate / calculated risks</i>	Kao, John (1989; 1991) ; Anderson et al (1990)

Table 2.1 Summary of the common functions of entrepreneurs

The functional approach to examining the entrepreneur brings out the things that they do most often and most consistently that make entrepreneurs. These key behavioural dimensions of the entrepreneur can also be examined vis-a-vis the entrepreneur’s character traits or personality to determine any possible linkage or relationship.

2.4.4 The Entrepreneurs' Personality & Character Traits: what they are that make them entrepreneurs

The issue of whether entrepreneurs by nature display a set of standard character traits or personality is an interesting one. If such personality can be observed to be uniform among entrepreneurs, it could mean that entrepreneurs can be identified at a fairly early stage. Also, it will clarify the issue of whether entrepreneurs are born or whether they can be trained. Another possible issue that could be resolved would be whether individuals develop these characteristics after they have become entrepreneurs or whether the characteristics are already there in the first place and becoming an entrepreneur is only a matter of time. In addition, we could ask whether there are successful entrepreneurs who display none of these characteristics.

McClelland (1961) has identified 3 major characteristics displayed by entrepreneurs with high need for achievement:

- *The first is that of taking moderate risk.*
- *The second is the taking of personal responsibility.*
- *The third is their interest in concrete knowledge of the results of decisions*

The first key characteristic of an entrepreneur is taking moderate risk, often through innovation. The taking of moderate risks here does not mean just arithmetic ability based on established rules. Rather, taking moderate risks would imply taking a decision without knowing in advance whether the decision will be correct. Such decision-making is not gambling but involves a combination of knowledge, judgment, and skill. When the decision turns out well, the entrepreneur then get a sense of personal achievement.

The second characteristic concerns the taking of personal responsibility. Entrepreneurs prefer tasks which challenge them and involve a moderate degree of risk. Again, this does not imply they are gamblers because in gambling situations even if they win, they get no sense of personal achievement since winning is the result of luck, not skill. They want the outcome of a decision to be dependent on their own skill or ability and to that extent prefer to take personal responsibility for their decisions.

The third characteristic has to do with their interest in concrete knowledge of the results of decisions. According to McClelland (1961), the entrepreneur also likes a job that gives him accurate knowledge of the results of his decision. Such results might be growth in sales, output or profit margins as these yardsticks ordinarily tell him whether he has made a correct decision or not.

Meredith, et al. (1982 pp.3) citing a workshop conducted at the East-West Center, Honolulu in 1977, state that "*entrepreneurs are action-oriented, highly motivated individuals who take risks to achieve goals*". They provide the following list of characteristics and traits that provides a working profile of entrepreneurs: *Self-confidence; Task-result oriented; Risk-taker; Leadership; Originality and Future-oriented*

These qualities are fairly consistent with what others have written about entrepreneurs from the perspective of characteristics or personality. For example, Pierce (1980) suggests that "*...the successful entrepreneur must have admirable qualities*" and states:

He must be energetic, imaginative, courageous, knowledgeable and able to command respect. But he need not be unselfish, nor even honest. Leadership may call for skill, but it is not of the essence of entrepreneurship to know of and to promote everything that might be relevant to the wider needs of society. (IEA, 1980 : pp 131)

This perspective sees the entrepreneur as having crucial qualities necessarily for personal success and not necessarily the wider success which include the interest of society at large. That could mean that monetary profits might well over-ride non-monetary goals. This could place the entrepreneur in a negative light as it could portray him as a mercenary of some sort, one aspect referred to as '*the dark side of entrepreneurship*'.(Kuratko & Hodgetts, 2001)

This self-centredness of the entrepreneur has also been highlighted by Casson (1982), who states that "*entrepreneurs are motivated by self-interest*", are more concerned with "*the amount of deference and respect they receive from other people*" and "*operate their business purely with a view to maximising the profit they obtain from a given amount of effort.*" (pp 250)

Whether motivated by self-interest or otherwise, the entrepreneur is nevertheless someone who relishes a challenge. Pine et al. (1982) describe entrepreneurs as "*generally divergent thinkers.*

eschewing traditional solutions. For them, 'it's always been done this way' is meaningless, and 'it can't be done' is a challenge". (pp. 14)

Timmons (1985), having distilled from 50 research studies, summarizes the characteristics of the entrepreneur as follow: *Total commitment, determination and perseverance; Drive to achieve and grow; Opportunity and goal orientation; Taking initiative and personal responsibility; Persistent problem solving ;Realism and a sense of humour; Seeking and using feedback; Internal locus of control; Calculated risk-taking and risk-seeking; Low need for status and power; Integrity and reliability.*

These characteristics are both external as well as internal. The external characteristics are easily observed as they manifest themselves quite distinctly. These would include commitment, determination and perseverance, realism and a sense of humour, seeking and using feedback and calculated risk-taking. Other internal characteristics like internal locus of control might be more difficult to observe.

According to Burch (1986), "*a galaxy of personality traits characterize individuals who have a high propensity to behave entrepreneurially.*" He lists nine of the more salient ones as follow : *A desire to achieve; Hard workers; Nurturing quality; Accept responsibility; Reward - oriented efforts; Optimistic; Excellence oriented; Organizer; Money oriented.*

Kao, Raymond (1993, 1997) has done a comparison of the characteristics of entrepreneurs based on the studies of Hornaday (1982) and Gibb (1986). This is shown in Table 2.2:

Hornaday (1982)	Gibb (1986)
<i>Self-confidence</i> <i>Perseverance, determination</i> <i>Energy, diligence</i> <i>Resourcefulness</i> <i>Ability to take calculated risks</i> <i>Need to achieve</i> <i>Creativity</i> <i>Initiative</i> <i>Hard work</i> <i>Flexibility</i> <i>Positive response to changes</i> <i>Independence</i> <i>Foresight</i> <i>Dynamism, leadership</i> <i>Ability to get along with people</i> <i>Responsiveness to suggestions</i> <i>and criticisms</i> <i>Profit-orientation</i> <i>Perceptiveness</i> <i>Optimism</i>	<i>Creativity</i> <i>Initiative</i> <i>High achievement</i> <i>Risk-taking (moderate)</i> <i>Leadership</i> <i>Autonomy and independence</i> <i>Analytical ability</i> <i>Hard work</i> <i>Good communication skills</i>

Table 2.2 Comparison of Entrepreneurial Attributes

Source: Donckels Rik and Miettinen, Asko (eds) (1990), *New Findings and Perspectives in Entrepreneurship* :pp 69, Gower Publishing, UK.

The above list implies that entrepreneurs have characteristics that are mentally, emotionally and physically stable and positive. One key characteristic of entrepreneurs appears to be their optimism and proactive attitude as a change-agent.

Indeed, Kiser (1989) goes as far as to compare entrepreneurs to political reformers:

The qualities needed by entrepreneurial innovators are similar to those of political reformers, for they are fundamentally a similar breed. Both need a vision to pursue. Both have to be optimists as well as risk-takers. Political reformers want to reengineer society and entrepreneurs want to engineer new products. Yet, both have the same ultimate challenge: to sell their vision and to make it work in practice. (pp. 205)

Gibb (1990) has argued that the entrepreneur can be defined as “an individual exhibiting a high profile of a number of enterprising attributes” which he lists as follow: Initiative; Strong persuasive powers; Moderate rather than high risk-taking ability; Flexibility; Creativity; Independence / autonomy; Problem - solving ability; Need for achievement; Imagination; High belief in control of one’s destiny; Leadership; Hard work. (Donkels & Miettinen [ed], 1990: pp 39)

Anderson, et al. (1990) list the following as among the most prominent entrepreneurial characteristics and traits : *Innovative; Willing to take risks; Aggressive; Self-confident; Willing to Work Long Hours; Highly competitive; Superior in Conceptual Ability; Educated; Healthy.*

Caird (1990) suggests that significant entrepreneurial characteristics may include the following:

- *strong motivation, governed by a high need to achieve, a high need for autonomy and power and a low need for affiliation*
- *behaviour, characterized by calculated risk-taking and innovation*
- *self-concept, governed by an internal locus of control. (pp 143)*

Chell, et al. (1991) have proposed that entrepreneurs are: *Opportunistic; Innovative; Creative; Imaginative; Ideas-people; Proactive; Agents of change.* They go on to observe that:

entrepreneurs (as distinct from owner-managers) appear to thrive on change; they enjoy a lot of activity going on around them and, we would suggest, are restless and get bored easily. (pp. 8)

Handy (1991) observes the following quality about successful entrepreneurs with regard to their mental approach and attitude towards failure:

Entrepreneurs, the successful ones, have on average nine failures for every success. It is only the successes that you will hear about, the failures they credit to experience.....Getting it wrong is part of getting it right.....if you do not try you will not succeed and if it fails, there is always another day, another opportunity. (pp. 55)

This approach emphasizes the mental toughness attribute as a key quality of successful entrepreneurs who are able to face failures and even take them as learning experiences . Instead of being brought down by failure, such entrepreneurs recover from their failure by mentally treating it as the flip side of success.

Amit, et al (1993), describe the following as essential characteristics of entrepreneurs:

.....creativity, adaptiveness, technical know-how, vision and leadership ability, managerial and organizational skills, ability to make decisions quickly and to act in a rapidly changing and uncertain environment, personal integrity, a range of cognitive decision-making biases, and the entrepreneur's cultural background and education. (pp 817)

This observation is more or less similar to Chan, et al (1994):

... he is independent, hardworking, flexible, adaptive, innovative, risk-taking and visionary. He has a generalized set of personality competences which enable him to meet new challenges and adapt to them flexibly; he will conceive new ideas and implement them against the odds; he will seize whatever opportunity there is to develop his business vision. (pp. 173)

Miner (1996) suggests that there are actually four types of entrepreneurial personalities, namely, (a) the personal achiever, (b) the super salesperson, (c) the real manager and (d) the expert idea generator. Each of these entrepreneurial types has his/her own unique characteristics and is most likely to succeed in certain types of situations where those characteristics are most relevant.

Kuratko & Hodgetts (2001) point out that “*new characteristics are continually being added to this ever-growing list*” but nevertheless propose that the most commonly quoted entrepreneurial characteristics include the following: *Commitment, determination and perseverance; Drive to achieve; Opportunity orientation; Initiative and responsibility; Persistent problem solving; Seeking feedback; Internal locus of control; Tolerance for ambiguity; Calculated risk taking; Integrity and reliability; Tolerance for failure; High energy level; Creativity and innovativeness; Vision; Self-confidence and optimism; Independence; Team building.* These characteristics are very much similar to those listed by other commentators. (Gibb, 1986; Donckels, et al., 1990; Hornaday, 1992; Zimmerer and Scarborough, 1996; Bjerke, 1998; Baven, 2001; Kaplan, 2001; Hisrich and Peters, 2002; Southon and West, 2002.)

In his interviews with a cross section of various successful entrepreneurs throughout S.E. Asia, Church (1999) has identified some common threads linking these personalities as : work hard; study and obtain at least a university education; be honest; be motivated; have

a goal; seize opportunities when they come; keep your intentions clear; be prepared to overcome obstacles; work seven days a week if necessary; be lucky.(pp. XI) . In addition, one other common thread he observes is that many of these entrepreneurs “*started building their businesses in times of economic and political crises...*”(pp XIV)

Thus, the list of attributes or characteristics common among characteristics are not conclusive . In concluding their discussion on the question of entrepreneurial tendencies, Anderson, et al (1990) have commented:

.....it is nearly impossible to create a profile of an entrepreneur that would easily differentiate her or him from the average person in the work force. (pp 10)

The character traits that are supposedly possessed by entrepreneurs are diverse in the literature and there appears to be no standard set. As pointed by Amit, et al (1993), “ *we simply do not know whether there is an essential set of entrepreneurial characteristics and what that set is.*”

However, although there has been no clear universal agreement on the definite personality or traits that characterizes successful entrepreneurs, it is nevertheless fairly obvious that some common characteristics appear to be displayed by successful entrepreneurs. On that basis, an understanding of the more prevalent traits can be useful to the understanding of entrepreneurs and entrepreneurship.

Lafuente and Salas (1989) have defended the relevance of personal characteristics in the study of entrepreneurship:

Personal characteristics of entrepreneurs, and especially their motivations and work experiences, are therefore relevant factors in the study of entrepreneurship, since they will lie behind the supply side of entrepreneurial activities and will have to be closely identified in any public policies orientated to promote such activities. (pp 18)

However, Bhide (1994) has suggested that there is no ideal entrepreneur. Successful entrepreneurs “*can be gregarious or taciturn, analytical or intuitive, good or terrible with details, risk-averse or thrill-seeking.*” This viewpoint is shared by Crainer and Dearlove (2000), who state that “a

smart entrepreneur is a smart entrepreneur regardless of their age, social status, or shoe size.”

In reality, it is all about new patterns of thinking than it is a hard and fast demographic grouping.

Despite the limitations of approaching entrepreneurship from the perspective of the entrepreneur’s characteristics or personality (what they are), it is nevertheless useful as it provides a list from which some distillation might be made. From the review of the literature, the characteristics that appear to be most commonly associated with the entrepreneur can be summarised as in Table 2.3:

What entrepreneurs are: The indicative approach	References
<i>Imaginative; creative; original; Innovative; visionary; far-sighted; Future-oriented; foresight.</i>	Pierce (1980); Meredith et al (1982); Pine et al (1982); Hornaday (1982); Timmons (1985); Gibb (1986; 1990); Kiser (1989); Anderson et al (1990); Caird (1990); Chell et al (1991); Amit et al (1993); Chan et al (1994); Crainer and Dearlove (2000)
<i>Determination; perseverance; committed; independent; hardworking; drive; energy; takes the initiative.</i>	Pierce (1980); Meredith et al (1982); Hornaday (1982); Timmons (1985); Burch (1986); Gibb (1986); Anderson et al (1990); Chan et al (1994); Church (1999); Schwarz, 1999.
<i>Willing to risks; takes moderate / Calculated risk-taker</i>	McClelland (1961); Meredith et al (1982); Timmons (1985); Hornaday (1982); Gibb (1986; 1990); Kiser (1989); Caird (1990); Johnson (1990); Anderson et al (1990); Chan et al (1994) .
<i>Optimistic; highly motivated</i>	Meredith et al (1982); Hornaday (1982); Casson (1982); Kiser (1989); Caird (1990); Kuratko & Hodgetts (2001); Church (1999).
<i>Opportunistic; quick to seize opportunities</i>	Chell et al (1991); Chan et al (1994); Church (1999).
<i>Need for achievement; Goal-oriented</i>	McClelland (1961); Meredith et al (1982); Timmons (1985); Burch (1986); Gibb (1986; 1990); Johnson (1990); Church (1999).
<i>Self-confidence; knowledgeable; responsible; leadership</i>	McClelland (1961); Pierce (1980); Meredith et al (1982); Hornaday (1982); Timmons (1985); Burch (1986); Gibb (1990); Anderson et al (1990); Amit et al (1993).

Table 2.3 Summary of the common characteristics of entrepreneurs.

2.4.5 Functional and Indicative Perspectives : putting them together

It would appear from the literature reviewed so far that the entrepreneur is not just what the entrepreneur does (the functional approach) or what the entrepreneur is (the indicative approach). To define the entrepreneur in terms using this simplistic approach would deny the complexities involved. Clearly, the entrepreneur may be a combination of what he does and what he is.

According to Tropman, et al (1989), the entrepreneur is both thinker and a doer. As a thinker, he “sees an opportunity for a new product or service, a new approach, a new policy, or a new way of solving an historic problem.” As a doer, “he seeks to have an impact on the system with her or his idea, product, or service. It is this thinking-doing combination that gives entrepreneurial efforts their special appeal.” (pp. 5)

Gartner (1990) has attempted to identify the entrepreneur through various attributes and these are classified along 8 themes: *The Entrepreneur; Innovation; Organization creation; Creating value; Profit or Non-profit; Growth; Uniqueness; The Owner-Manager.*

Clearly, these elements include not only characteristics of the entrepreneurs (what they are) but also the things they do (what they do). The first element clearly shows the personality or characteristics required of the entrepreneur while the second element involves what they do. In fact we could say the other elements involve the process of entrepreneurship (eg profit/non-profit, growth, unique)

Another combination approach proposed by Tropman , et al (1989) is described as the “Ensemble Approach to Entrepreneurship” or “The Four C’s Theory Of Entrepreneurship” which encompasses four basic concepts: *Characteristics, Competencies, Conditions, and Context* (pp. 10).

The concept of *Characteristics* covers the psychological traits of the entrepreneur. The concept of *Competence* suggests that certain skills and behaviors of entrepreneurship can be learned and must be practised. The concept of *Conditions* suggest that certain conditions - within the family, within the Firm, within the Community - that are favorable must prevail; these can be largely given in part, but they can also be cultivated. Finally, there are certain *Contexts* - larger scale, macroenvironmental forces – that affect entrepreneurship; these are largely beyond the control of the entrepreneur.

The Four C’s approach also clearly incorporates elements of the entrepreneur’s personality as well as actions. Characteristics imply the presence of some key traits inherent in the entrepreneur while competencies would indicate his skills or capabilities , ie. what he does. The external aspects in the framework , conditions and context would indicate that the entrepreneur is able to function in circumstances sometimes beyond his control.

Cunningham and Lischeron (1991) regard entrepreneurship as a multi-faceted phenomenon and proposes six different schools of thoughts, with each offering a special dimension to one or many of those facets. These schools may be summarized as follow (Table 2.4):

Entrepreneurial School of Thought	Focus
Great Person School	Inborn characteristics of entrepreneurs and their success stories.
Psychological Characteristics School	Specific and unique psychological traits of entrepreneurs.
Classical School	Innovation and creativity . Identification of opportunities
Management School	Pursuit of business opportunities and use of appropriate management tools to concretize their accomplishments
Leadership School	Leadership qualities of entrepreneurs
Intrapreneurship School	Entrepreneurship behaviour in existing organizations.

Table 2.4 The Six Entrepreneurial Schools of Thought

Source: Cunningham, J. Barton and Lischeron, Joe (1991), "Defining Entrepreneurship", *Journal of Small Business Management*, 29 (1), January, 1991: 45-61

The first facet (Great Person School) focuses on the personal qualities and values of the entrepreneur, where the entrepreneur is considered as an extra-ordinary being. The second (Psychological Characteristics School) considers the distinctive traits and special psychological characteristics of the entrepreneur. The third (Classical School) considers the issue of innovation and identification of opportunities. The fourth (Management School) suggests that entrepreneurial success may be improved by technical and non-technical managerial skills. The fifth (Leadership School) suggests that entrepreneurs are often leaders who assign objectives to and guide their employees toward the achievement of specific goals. The sixth (Intrapreneurship School) recognizes the need to change the strategic orientation to make the firm more adaptable. Companies suffer from a lack of innovation and insufficient capacity to respond to an ever changing global environment.

However, in reviewing the proposition of Cunningham and Lischeron (1991), Fayolle (2002) points out that such an approach would require that researchers need to understand each dimension of the entrepreneurial process. In reality, however, not all successful entrepreneurs might fit into the categories at any one time. It would seem not possible to understand the entrepreneurial phenomenon by isolating it in order to only study one of the facets. Each contributes knowledge to the object of study from its own perspectives. It is by taking all these facets and variables into account that a complete and comprehensive understanding of the phenomenon can be achieved and therefore make it casier to describe , explain and to understand. Therefore, Fayolle (2002) suggests

the relevance of the process approach in the scientific observation of entrepreneurship, seen as a multi-faceted phenomenon.

Kuratko and Hodgetts (2001) have also developed a 'schools of thought' approach by dividing entrepreneurship into specific activities. This involves two major viewpoints which are further sub-divided into six distinct schools of thought; three within each of the two different views (Figure 2.5):

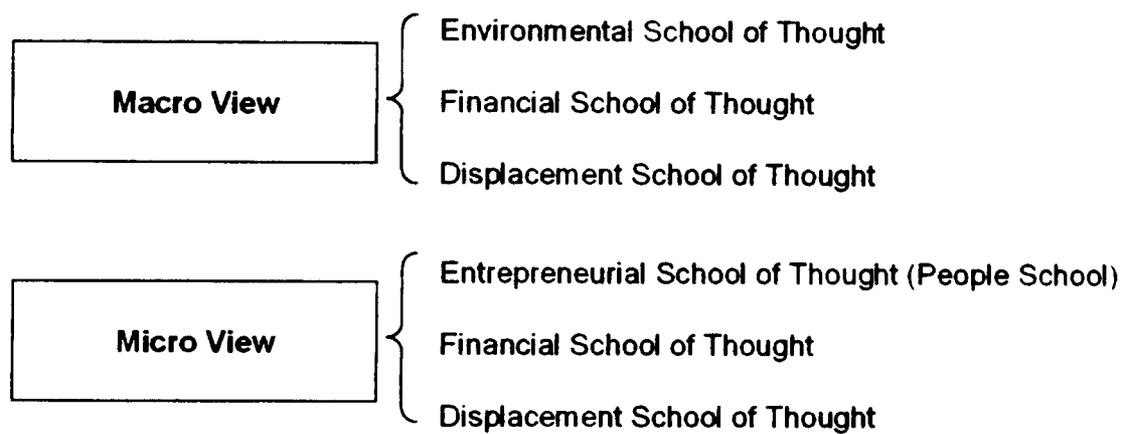


Figure 2.5 Environmental Schools of Thoughts

Source: Kuratko, Donald F. and Hodgetts, Richard M., (2001), Entrepreneurship : A Contemporary Approach, 5th ed., Harcourt College Publishers, USA.

The macro view of entrepreneurship presents a broad range of factors relating to the success or failure in entrepreneurial ventures; these are classified into three schools of thought, namely (i) The Environmental School Of Thought; (ii) The Financial / Capital School Of Thought and (iii) The Displacement School Of Thought.

The Environmental School focuses on the external factors that may be a positive or negative force in the entrepreneur's life. In this argument, the entrepreneur's desires are moulded by the influence of institutions, values and mores in the society he lives in.

The Financial / Capital School focuses on the capital-seeking process and emphasizes the search for seed capital and growth capital as central to the development of entrepreneurship. This School examines entrepreneurship from an entirely financial standpoint, arguing that decisions involving finances occur at every major point in the entrepreneurial venture from start-up right through to decline or succession.

The Displacement School looks at entrepreneurship from the perspective of group dynamics. In other words, the group *“affects or eliminates certain factors that project the individual into an entrepreneurial venture.”* This assumes that individuals will not pursue a venture unless they are displaced from doing other things. The three types of displacement are : political displacement, cultural displacement and economic displacement.

The micro view on entrepreneurship explores the factors that are specific to entrepreneurship and are part of the internal locus of control. In this perspective, the entrepreneur has the ability or control the outcome of each influence. Within this view are three schools of thought: (i) The Entrepreneurial Trait School (Or People School), (ii) The Venture Opportunity School and (iii) The Strategy Formulation School.

The Entrepreneurial School focuses on the characteristics or traits that are common to successful entrepreneurs. If these traits can be copied or emulated, then entrepreneurial success can possibly developed. Furthermore, if some of these key traits can be observed at an early age, then entrepreneurial success may be identified in advance and the risks of failure may be eliminated or minimized.

The Venture School focuses on the opportunity aspect of entrepreneurship. This school emphasizes the search for sources of ideas, the development of concepts, and the implementation of opportunities. In this viewpoint, creativity and market awareness are crucial and *“developing the right idea at the right time for the right market niche is the key to entrepreneurial success.”*

The Strategic Formulation School emphasizes the planning and management process of successful entrepreneurial venture. This perspective focuses on the management capability of entrepreneurs that require an interdisciplinary approach to seek success from unique markets, unique people, unique products and unique resources.

While the “Schools Of Thoughts” approach does attempt go beyond the functional and indicative approach in describing the entrepreneur and entrepreneurship, it is by no means conclusive.

Another approach which integrates the functional and indicative approaches with other factors might be the multidimensional approach proposed by Johnson (1990). In this approach, entrepreneurship is seen as a complex, multidimensional, framework which combines the individual, the environment, the organization and the venture process. Each of these dimensions consists of specific factors (Table 2.6):

<p><i>The individual:</i> Need for achievement; Locus of control; Risk-taking Propensity; Job satisfaction; Previous work experience; Entrepreneurial parents; Age; Education.</p>
<p><i>The environment:</i> Venture capital availability; Presence of experienced entrepreneurs; Technically skilled labor force; Accessibility of suppliers; Accessibility of customers or new markets; Government influences; Proximity of universities; Availability of land or facilities; Accessibility of transportation; Attitude of area population; Availability of supporting services; Living conditions.</p>
<p><i>The organization:</i> Type of firm; Entrepreneurial environment; Partners; Strategic variables (cost, differentiation, focus); Competitive entry wedges</p>
<p><i>The process:</i> The entrepreneur locates a business opportunity; The entrepreneur accumulates resources; The entrepreneur markets products and services; The entrepreneur produces the product; The entrepreneur build an organization; The entrepreneur responds to government and society.</p>

Table 2. 6 A Multi-dimensional Typology on Entrepreneurship

Source: Johnson, Bradley. R. (1990), “Toward a Multidimensional Model of Entrepreneurship : The Case of Achievement Motivation and the Entrepreneur”, *Entrepreneurship Theory and Practice*; Spring, 1990: 39-54.

This approach has some similarities to the 4 C’s approach proposed by Tropman et al (1989). It essentially incorporates the key factors that work interactively to influence entrepreneurship. It moves away from the departmentalized approach and takes a dynamic, process view which appears to be more realistic. Variations of the process approach to the study of the entrepreneur and entrepreneurship have also been suggested by several other writers. (Ronstadt, 1984; Kao, R. 1993; Hills, 1994; 1995; Bygrave, 1994; 1997)

While there are limitations to approaching entrepreneurship from the perspectives of what entrepreneur does (the functional approach) and what he is (the indicative approach), it is

nevertheless useful as both aspects of the entrepreneur are closely linked. What the entrepreneur does can be the direct result of what he is. Both these approaches can be integrated as follow (Table 2.7):

What entrepreneurs do: The functional approach (Table 2.1)	What entrepreneurs are: The indicative approach (Table 2.2)
<i>Create wealth / value; create something from nothing.</i>	<i>Visionary; far-sighted; future-oriented; foresight.</i>
<i>Seeking, detection & exploiting opportunities</i>	<i>Highly motivated; determination; perseverance; committed; independent; opportunistic; quick to seize opportunities.</i>
<i>Pursues innovations & innovativeness; acts differently; acts in new ways</i>	<i>Imaginative; creative; innovative; hardworking; drive; energy; takes the initiative.</i>
<i>Plans & manages resources; able to marshal resources.</i>	<i>Self-confidence ;knowledgeable; responsible; leadership.</i>
<i>Takes moderate / calculated risks</i>	<i>Willing to take risks; moderate/calculated risk- taker</i>

Table 2.7 Integrating the functional and the indicative approaches

2.5 Towards a Definition in the context of this Research

Having reviewed the literature on entrepreneurship and the entrepreneur, it has become clear that there are no universally accepted definitions at the present time. Many approaches have been proposed but no consensus appears to be forthcoming in the foreseeable future. There are several reasons why consensus is unlikely for some time to come.

2.5.1 Lack of universally - accepted definition.

Although much have been written on the subject of entrepreneurship, the literature at this point is still not very clear or in total agreement on the definition of the entrepreneur and entrepreneurship.

Koh (1987) has commented that "*considerable diversity exists in the definition of the term 'entrepreneur' and in the economic and sociological theories on determinants of entrepreneurship*". The presence of competing theories on what determines entrepreneurial

qualities and the difficulty in testing them imply the need for extreme caution when making cross-country comparisons and when suggesting remedial action. (Koh, 1987: pp 88) Likewise, Lee (1990) has commented that *“the words ‘entrepreneur’ and ‘entrepreneurship’ have no well-defined clear-cut meaning in the literature.”* (pp. 66)

Chan et al. (1994) have lamented that the literature is limited and confusing as *“there is little consensus on who are the entrepreneurs, whether they are born or nurtured, or whether entrepreneurial skills can be developed through training and education.”* (pp 172)

Hisrich (1994) suggests that *“entrepreneurship is an even more confusing term with a multitude of definitions being advanced from an economic, psychological, and business perspective”*. (pp 131-132)

The economist views the entrepreneur as someone organizes assets such as resources, labor and materials and manages them toward new combination of greater value than before. The psychologist sees the entrepreneur as someone driven by influences like the need to achieve, to experiment, to accomplish, to succeed, and to be in a position of authority. The business perspective views the entrepreneur and his or her innovative behavior as a potential threat because the entrepreneur often discovers better ways of utilizing resources ; in the process, the entrepreneur creates wealth and employment opportunities.

Amit, et al (1993) while noting the lack of consensus in the definition of entrepreneurship, points out that *“clearly, there is a need for working definitions of both entrepreneurs and entrepreneurship which distinguish between entrepreneurial activity in different settings and allow measurement and comparison of performance results”*.

Bull, et al (1993), on the other hand, have commented on the need not to be obsessed with the question of definition:

We suggest this desire to invent a better definition has misdirected research efforts away from a useful theory of entrepreneurship. Priorities may have been reversed. It is possible that a reasonable theory of entrepreneurship might resolve the definitional issue or render it somewhat irrelevant. (pp. 185)

Kilby (1971) compares the search for the entrepreneur to hunting the Heffalump, *“a rather large and very important animal”*.

He has been hunted by many individuals using various ingenious trapping devices, but no one so far has succeeded in capturing him. All who claim to have caught sight of him report that he is enormous, but they disagree on his particulars. (Kilby, 1971: pp.1)

Similarly, Gartner (1990) has stated that *“recent reviews of entrepreneurship research have indicated the lack of an agreed - upon definition of entrepreneurship and, more basic, a concern over what entrepreneurship constitutes as a field of study.....”*.

Chell et. al.(1991) also observe that *“the problem of identification of an entrepreneur has been confounded by the fact that there is still no standard, universally accepted definition of entrepreneurship.”(pp. 1)*

Birley and Muzyka (2000) have also stated along the same vein that *“a major question that continues to exercise academics is the exact definition of ‘entrepreneurship’ and how far it extends” (pp. ix)*

One problem with defining the entrepreneur concerns its relationship to enterprise. Caird (1990) points out that *“enterprising people are not specifically entrepreneurs, where an entrepreneur is defined as an innovative business owner-manager who takes calculated risks”*.(pp. 137)

Part of the problem is due to the fact that entrepreneurs and enterprising people may have identical psychological characteristics, the difference being the entrepreneur’s specific association with a business enterprise.

Burch (1986) has suggested that *“.... the entrepreneur remains a partly charted universe and really cannot be fully defined.”*

According to Kao (1991), *“the challenge of defining entrepreneurship is compounded by several factors”*

The first factor has to do with the individual's understanding of entrepreneurship as it means different things to different people. Secondly, "entrepreneurship" is often viewed favourably and seldom seen in negative terms. Third, while "entrepreneur" refers to a person, "entrepreneurship" is more difficult abstract. Fourth, there is currently a lack of well-designed and controlled research studies on the entrepreneur. Finally, definition is difficult when it is assumed that entrepreneurship and management are two different issues in business.

Baumol (1993) has suggested that *"the entrepreneur is at once one of the most intriguing and one of the most elusive in the cast of characters that constitutes the subject of economic analysis."* (pp. 2)

Despite the obvious difficulties and lack of consensus in defining the entrepreneur, it is essential that an attempt is made to identify the entrepreneur in the context of this study so that the direction of the study can remain in focus.

2.5.2 The Entrepreneur in the context of SMEs in Singapore.

In arriving at the working definition of the entrepreneur in the context of this study, key aspects of the literature review have been evaluated and considered.

One approach is to consider the entrepreneur in the SME sector in Singapore from the perspectives of economics. Both the Schumpeterian School entrepreneur and the Austrian School entrepreneur can best describe the entrepreneur in Singapore. Entrepreneurs in the 1990s are likely to be both second-generation entrepreneurs who inherit their businesses as well as first-time entrepreneurs who start the ventures on their own. It might have been possible for those who inherit businesses to continue with incremental innovations whereas successful first-time entrepreneurs are likely to be those who introduce radical innovations or pursue Schumpeter's 'creative destruction.'

Another approach is to consider the entrepreneur from sociological perspectives of what the entrepreneur does (the functional perspective) and the entrepreneur's characteristics (indicative perspective). Singapore is a small competitive marketplace with relatively low entry barriers. To succeed as entrepreneurs here obviously requires great stamina, determination, optimism, hard work, etc.... ie. characteristics typically associated with being entrepreneurial.

Since the context of this research is SMEs, entrepreneurship in the corporate, non-profit and government environments are excluded. Accordingly, the working definition of the entrepreneur for the purpose of this research is as follow:-

The entrepreneur is someone who assumes the risks in exploiting opportunities in the marketplace by starting a new venture or improving the performance of an existing business, either alone or in partnership with others. In the process, the entrepreneur introduces incremental and radical innovations resulting in the achievement of personal, profit and market related goals.

2.6 Summary

This chapter has discussed various perspectives on entrepreneurship and the entrepreneur from two broad directions of economics and social studies. Within economics, viewpoints from the Schumpeterian and Austrian schools were discussed. While some see fundamental differences between these two schools, others see them as being complementary in nature. From the social viewpoint, two broad perspectives were discussed; the functional approach describes the things entrepreneurs do that make them entrepreneurs while the indicative approach describes the character traits that make them entrepreneurial. Whatever the viewpoints, it is clear that entrepreneurship and the entrepreneur have much to do with being a catalyst in the marketplace.

The entrepreneur in this context could be both Schumpeterian as well as Austrian in context. However, since the Schumpeterian emphasis is on discrete rather than gradual change, there are important implications for marketing orientation. In a way, the Schumpeterian entrepreneur would find it difficult to be marketing-oriented because there is no market information involved in his decision-making since such information is yet to be created. In contrast, the Austrian entrepreneur is more likely to respond to gradual changes as a consequence of some sort of prior market information or knowledge.

The next chapter will link entrepreneurship to marketing and provide a discussion on the relevance and importance of the marketing-entrepreneurship interface.

Chapter 3

Marketing & Entrepreneurship : The Interface

3.1 Introduction

In Chapter 2, the various issues relating to entrepreneurship and the entrepreneur from economics and sociological studies were reviewed and discussed. In this Chapter, the various issues relating to the marketing-entrepreneurship interface will be addressed. The purpose is to discuss the arguments relating to the marketing – entrepreneurship interface. This will provide the background for developing the theoretical framework on the marketing-entrepreneurship interface and the thesis's main propositions later in Chapter 4. Issues relating to such an interface have been studied by researchers for several years. In general, marketing is often associated with a more formal discipline and could involve other functional specializations like marketing research, forecasting, environmental analysis and management of the various components of the marketing mix. (Morris and Paul, 1987; Zikmund and d'Amico, 1999; Day, 1999; Kotler, 2003) . It implies that some formal training may be necessary for such marketing skills to be learnt and mastered. On the other hand, entrepreneurship conjures a different sort of image and is often associated with the individual with or without formal training who nevertheless seeks, sees and seizes opportunities in the marketplace and in doing so cause 'creative destruction'. Entrepreneurship has therefore often been associated with innovativeness, risk-taking and proactiveness (Miller, 1983; Hisrich [ed], 1986; Morris and Paul, 1987; Miles and Arnold, 1991; Morris and Lewis, 1995; Bridge, et. al., 1998; Wickham, 1998; Stevenson, 1999; Lambing and Kuehl, 2000; Wawro, 2000; Kuratko & Hodgetts, 2001; Beaver, 2002; Hisrich and Peters, 2002)

Although at first glance, marketing and entrepreneurship might be totally distinct from, and unrelated to, each other, a closer examination reveals some possible and significant linkages that are important to note. (Hills and LaForge, 1992; Hills [ed], 1994; Gardner, 1994; Hisrich, 1994; Hills, 1995, 1997; Morris and Lewis, 1995; Carson, et. al., 1995; Collinson, 2002.) This chapter therefore attempts to examine such an interface to determine the extent and depth of these linkages. If the interfaces are more complementary than oppositional, then marketing may well be the home of the entrepreneurial process as suggested by Murray (1981) . However, the reverse may also be true as entrepreneurship may well be part of marketing process. From the practical point of view, companies may find that the informalities and unstructured elements of entrepreneurship may become a natural and desirable part of future management philosophy and

development. From the perspective of a relatively developed economy like Singapore trying to reinvent itself to stay competitive in a fast changing environment, the implications and lessons learnt can contribute significantly to the reinvention process.

Section 3.2 explores the marketing concept and what it actually means in practice. Definitions on marketing abound in the literature. However, there are no significant differences between many of these definitions except for emphasis. What is crucial is that marketing generally has been accepted to represent a certain philosophy of business which companies and organisations, and even individuals, can adopt for success. Adoption of such a philosophy implies that focus on a few key activities is necessary.

Section 3.3 examines the relationship between market orientation and organisational performance. Terms like 'market orientation' and 'marketing orientation' are discussed and clarified. This is followed by a discussion of the market orientation – organisational performance relationship in both the developing and developed economies. In addition, other variations to the market orientation-performance linkage are discussed. These include antecedents and moderators such as innovation, organisational learning, buyer-seller relationships, using supply chain management as leverage, strategy types, and others.

In Section 3.4, the various other possible orientations that companies and organisations can adopt towards the marketplace are examined. Market orientation could be said to have evolved from various other orientations over time. However, it could also be argued that many companies have not truly arrived at the stage of marketing orientation and continue to adopt various other orientations. While the conventional wisdom is that the market orientation is necessary for superior performance in a rapidly changing business environment, others have argued that in certain circumstances such a perspective is neither practical nor attractive.

Following this, Section 3.5 explores the limitation of the marketing concept in more depth. While the marketing concept might be useful in the modern environment, it could be suggested that it has outlived its usefulness in the light of the rapid changes taking place in the marketplace and overall business environment. One issue that is likely to put pressure on marketing relates to society's needs. In the process of fulfilling consumer needs, marketing might destroy society, particularly in the area of environmental well-being. Other issues on modernism and postmodernism in marketing are also discussed.

Section 3.6 discusses the marketing - entrepreneurship interface as an alternative perspective.. At the macro-level, it would appear that marketing and entrepreneurship share many similarities and both could possibly blend well. However, at the functional level, the major activities carried out by the entrepreneur and the manner he goes about obtaining results might differ somewhat. Overall, it could be argued that despite some sharp differences, entrepreneurship and marketing could well be two sides of the same coin.

Section 3.7 concludes the chapter with a summary and a brief overview of what can be expected in Chapter 4.

3.2 The Marketing Concept

In 1985, The American Marketing Association reviewed over 25 alternative definitions to arrive at this “ *more or less universally accepted definition*” (Hooley, et al, 1990; Evans, et al.,1994):

Marketing is the process of planning and executing the conception, pricing, promotion and distribution of ideas, goods and services to create exchanges that satisfy individual and organisational objectives

The emphasis of this definition appears to be in the management function of marketing in that it involves several activities that need to be undertaken at the management level that will best meet pre-determined objectives. Thus, marketing is a function with a purposely direction which requires a management commitment.

The Chartered Institute Of Marketing (CIM) in the UK defines marketing as follow:

Marketing is the management process responsible for identifying, anticipating, and satisfying customer requirements profitably. (Source:www.cim.co.uk)

This definition shares some similarities with that adopted by the American Marketing Association. Both definitions consider marketing as a management process requiring commitment to marketing activities and pre-determined goals. However, while the American Marketing Association's definition focuses on exchanges and satisfaction of goals, the Chartered Institute Of Marketing is

more direct in identifying profitability as the organisational goal in meeting customers' requirements.

As a further refinement of its role into the future, the CIM through its newly appointed CEO Peter Fisk has identified the need for what he describes as "*new marketing*". According to Fisk (2003), "*new marketing means creating exceptional value for both customers and shareholders.*" Fisk (2003) suggests that to achieve this, "*new marketers need to be more strategic, innovative and commercial than ever before because these are the capabilities needed to drive business success.*" However, this process is not going to be easy as creating exceptional value for both constituents at the same time can be problematic. Value may not necessarily mean the same thing to customers and shareholders when viewed through their respective lenses .

The idea that marketing helps enhance a company's total efforts in the marketplace by making it more competitive than others would make its adoption very attractive to many companies today given the competitive marketing environment. However, marketing here appears to be discussed in a business situation. Whether marketing practices can enhance the 'competitive advantage' of a non-profit organisation or an individual remains unclear at this point.

Thus , marketing is not only useful to a company in the modern business environment, but as a career, it occupies a respectable position in the organisation and by extension within society. The implication here is that as a profession, marketing is becoming as acceptable as any other traditionally well-regarded professions.

According to Baker (1991):

Marketing starts with the market and the consumer. It recognizes that in a consumer democracy money votes are cast daily and that to win those votes you need to offer either a better product at the same price or the same product at a lower price than your competitors. Price is objective and tangible but what is 'a better product'? Only one person can tell you - the consumer. (pp. 7)

The premise that marketing focuses on the customer's needs is obvious here. The provision of '*a better product at the same price or the same product a lower price than your competitors*'

implies the provision of a better value proposition than the competition. The notion that only the customer is able to say what is better product suggests that the marketer must endeavour to know and understand the customer's needs very well. To do this well, marketers need to stay abreast of trends and to adjust to customers' changing needs as they evolve over time. This implies that marketers must be willing to adapt to changes by staying close to the customer through a variety of marketing techniques like market research, consumer research, loyalty marketing, and so on..

Marketing can thus be seen as a philosophy as well as a function of business. As a business philosophy, marketing appears to be a necessary and attractive concept to adopt in view of the competitive and complex modern business environment. The problem is identifying the 'marketing' organisation. After all, it is too easy for management to pay mere lip-service by professing support for a marketing orientation without truly comprehending what that means or actually intending to put it to practice. At the functional level, marketing implies the commitment to a number of key activities. Put in another way, for the marketing concept to take roots, certain essentials must prevail throughout the organisation.

Most marketing texts and literature (Evans, et al.,1994; Stanton, et al.,1991; Husted, et al.,1989; Zikmund, et al.,1989; Lusch and Lusch ,1987; Kohli, et al.,1990; Jobber,1995; Day, 1999; Donaldson and O' Toole, 2002; Kotler, 2003.) are generally in agreement that three major pillars are essential to the marketing concept, namely :-

- **Customer Orientation**
All marketing activities are focused on providing customer satisfaction.
- **Integrated Marketing**
All marketing activities are coordinated
- **Profits and other organisational goals follow customer satisfaction**
Profit and other organisational aims will be met when the needs and wants of the marketplace are successfully served.

While most writers generally agree on these three pillars as essentials of the marketing concept, others have included a fourth pillar.

Baker (1991), for example, suggests that '*real marketing*' has four essential features which are:

- *Start with the customer*
- *A long-run perspective*
- *Full use of all the company's resources*
- *Innovation*

Kotler (2003) defines marketing as “*a social and managerial process by which individuals and groups obtain what they need and want through creating, offering, and exchanging products of value with others*”. (pp.9)

This definition rests on some core concepts which Kotler has identified as : *needs, wants, and demands; products; value, cost and satisfaction; exchange and transactions; relationships and networks; markets; and marketers & prospects*. These core concepts eventually lead to the existence of marketing. According to Kotler (2003) , the marketing concept rests on four main pillars, namely:

- *Target market*
- *Customer needs*
- *Integrated marketing*
- *Profitability*

Marketing can thus be interpreted as a committed philosophy of business which must be supported by marketing activities and programmes and one without the other may not necessarily constitute the marketing concept in practice. As stated by Trustrum (1989):

.....marketing is a combination of the marketing concept, marketing functions and the operational implementation of these functions in the context of the concept.....Thus, to be truly marketing oriented, it is necessary for an organisation to adopt the marketing concept and to plan and implement marketing functions. (pp. 48)

While Trustrum (1989) emphasizes the functional implementation of the marketing concept as more important, another perspective focuses on long-term customer relationships as more crucial to marketing. Gronroos (1989) has proposed a Nordic approach to research in marketing with

emphasis on the elements of 'promise' and 'service' as essential components in any marketing orientation. According to Gronroos (1989):

Marketing is to establish, develop and commercialise long-term customer relationships, so that the objectives of the parties involved are met. This is done by a mutual exchange and keeping of promises. (Pg. 57)

This approach of building and keeping of long-term relationships with customers is endorsed by Donaldson and O'Toole (2002) who suggest that relationship is a strategic asset and a basis for competition. They have suggested the concept of '*strategic market relationship*' which they define as "*the process of analysis and formulation of a relationship strategy for a firm*". The process of implementing this is thus referred to as '*relationship management*'. However, as pointed by Donaldson and O'Toole (2002), management of such relationships should not be seen as merely a functional issue involving salespeople or customer service executives. Rather it involves co-dependence on others and co-involvement with them. Management of relationships must therefore be seen as a core managerial task. Other writers have also endorsed this approach referred commonly to as relationship marketing. (Griffin, 1995; Clark, et al, 1995; Payne, 1995)

According to several viewpoints, the marketing concept is not only applicable to companies operating for financial profit, but also to non-profit organizations, including the public sector. (Lusch and Lusch, 1987; Zikmund et al., 1989; Stanton et al., 1991; Evans et al., 1994; Caruna, et al., 1997; Kotler, 2003). In that sense, the definition of marketing has thus been broadened to include its application in both commercial as well as non-commercial marketplaces..

All these perspectives imply that for the marketing concept to manifest in an organisation management commitment is essential. Furthermore, it must be something that is truly shared throughout the company or organisation by staff at all levels. Marketing must be more than just a buzzword or a lip-service mentioned in passing by top management. At the functional level, it must be reflected throughout the organisation in deeds that are obvious to customers and society. Thus, we could say that the company or organisation as well as the individuals should adopt a marketing orientation.

The issue of whether the marketing concept rests on 3 or 4 main essentials is irrelevant. The point worth noting is that these features are more or less consistent with the concept of

entrepreneurship discussed in Chapter 2. To be effective and successful in a rapidly changing environment most entrepreneurs would want to adopt a customer-oriented approach. After all, without customers, a sustainable business is not possible. In fact, the entrepreneur is likely to be far more customer-oriented than the professional marketer employed by an organisation as he tends to lose much more should he fail to stay close to his customers and satisfy their needs far better than the competition. (Carson, et al., 1995) Certainly, this would be the case if the new entrepreneur is starting out. Even an established entrepreneur cannot afford to neglect the needs or desires of his customers and must strive to exceed their expectations continuously. Furthermore, it has also been established in Chapter 2 that the entrepreneur brings innovations to the marketplace and thus is consistent with the argument put forward by Baker (1991) that innovation is a requisite of the marketing approach.

According to Churchill et al (1994):

Whether done by by an individual or a team, there is general agreement that entrepreneurship involves an act by a motivated individual who innovates by creating value through recognizing (or developing) an opportunity and converting it into a viable product or service.....

As a concept, marketing has been more or less universally fairly well defined and as a philosophy of business appears to be well accepted as having a crucial role to play in the success of both businesses and non-profit organisations in a rapidly changing environment. Hills & LaForge (1992) and Hills (1994) note:

It is rather striking that substitution of the word "entrepreneurship" for the word "marketing" could yield a defensible definition as well! In both cases, there is win-win market behavior.

However, not all share the view that marketing is a well-developed concept. Kohli and Jaworski (1990), for example, have expressed the viewpoint that the marketing concept, as a theory is not very well defined:

.....a close examination of the literature reveals a lack of clear definition, little careful attention to measurement issues, and virtually no empirical based theory (pp. 1).

The main argument here is that while the literature is clear on the philosophical perspective of the marketing concept, it is not so clear on what specific activities are required to turn that philosophy into practice, thus bringing about a market orientation.

Despite this misgiving, Kohli and Jaworski concede that the literature is fairly clear that manifestation of the three pillars of the marketing concept (customer focus, coordinated marketing, profitability) represent a market orientation.

Baldock (2000) argues that firms today are still largely seller-centric and in the buyer-centric market of tomorrow, technologies will enable customers to turn from being 'king' to 'dictator'. In such a development, *"the location of the customer becomes the location of the business - be it on the phone or on the beach."* Baldock (2000) envisions a business model in the future where the customer dictates what he/she wants and where producers scurry and scramble to provide it. Customers will provide trusted intermediaries with their particulars and needs, and these intermediaries will invite producers to bid for their business. Although some successful reverse auction services are available on the internet, Baldock(2000) argues that many companies are only making half-hearted attempts to become customer-centric

It is true that from the definition alone, it is not clear what specific activities are required to translate the marketing philosophy into practice. But then, this would be the case for most definitions, which are essentially statements designed to capture the key aspects of the underlying philosophy. Furthermore since marketing is useful for all types of organisations, it would be futile to try to outline specific activities since these would vary from firm to firm. What is important is that the interpretation of the concept is fairly uniform. In the case of the marketing concept, the 3 or 4 main pillars serve as the main guideposts for companies and organisations adopting the concept to design specific activities consistent with their overall corporate mission and goals.

It could be argued that the implementation of the marketing concept can contribute positively to organizational performance. The next section discusses how such implementation, often referred to as a marketing orientation, may be linked to organizational performance directly and indirectly.

3.3 Market Orientation and its Relationship to Organizational Performance.

Although the adoption of the marketing concept is generally referred to as marketing orientation, a number of other terms have also been suggested . Kohli & Jaworski (1990), for example, argue that the term '*market-orientation*' is preferable to the term '*marketing-orientation*' commonly used to describe a company or organisation in which the major pillars of the marketing concept are operationally manifest. Three reasons are offered :

- *The term 'market-orientation' clarifies that it 'is not exclusively the concern of the marketing function; rather a variety of departments participate in generating market intelligence, disseminating it, and taking actions in response to it.'*
- *It is 'less politically charged in that it does not inflate the importance of the marketing function in an organisation.'*
- *It 'focuses attention on markets (that include customers and forces affecting them)'*

Kohli and Jaworski (1990) define market orientation as one that displays three key elements: intelligence generation, intelligence dissemination and company responsiveness. They propose a model of the market orientation which include antecedents and moderators of the linkage between market orientation and business performance (Figure 3.1):

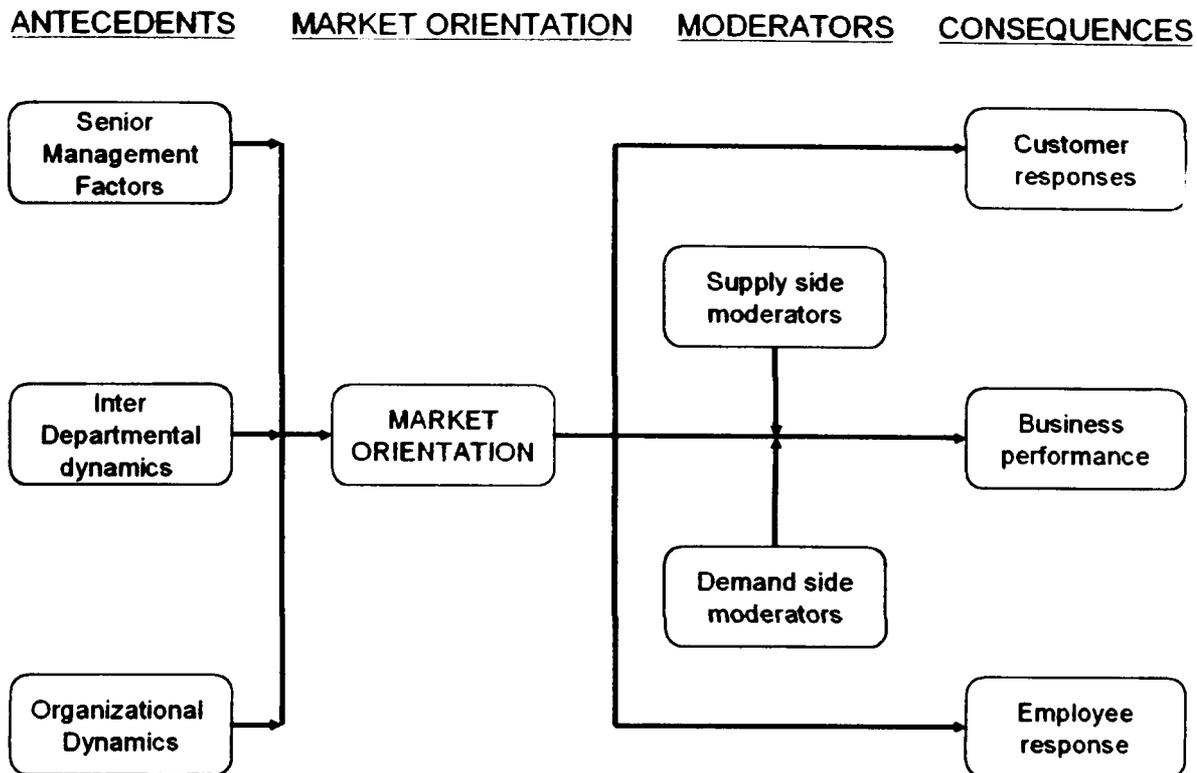


Figure 3. 1 Antecedents and Consequences of a Market Orientation
 Source: Kohli, Ajay K. & Jaworski, Bernard J (1990), "Market Orientation: The Construct, Research Propositions and managerial Implications", *Journal of Marketing*, Vol. 54, April 1990 : pp 1-18

A significant observation from their study is that 'a market orientation may or may not be very desirable for a business, depending on the nature of its supply-and-demand-side factors.' They further comment thus:

A market orientation requires the commitment of resources. The orientation is useful only if the benefits it affords exceeds the cost of those resources .

In this viewpoint, a market orientation may not be desirable in certain conditions when it does not relate to overall business performance. Such conditions might include limited competition, stable market preferences , technology turbulent industries, and booming economies. Managers of businesses in such circumstances should therefore be more concerned with the cost-benefit ratio of a market orientation.

The pre-requisites of 'commitment of resources' , 'the benefits it affords exceeds the cost of those resources' and 'close attention to the cost-benefit ratio' inherent in a market orientation

could suggest that such an orientation is similar to an entrepreneurial orientation. Such prerequisites also suggest elements of opportunity-seeking and calculated risk-taking behaviour that are among the common characteristics of entrepreneurs. It can be argued therefore that market orientation and entrepreneurship are consistent with each other as described in Chapter Two.

Despande (1999) maintains that terms such as *'market oriented'*, *'customer-focused'*, *'market-driven'* and *'customer-centric'* have become synonymous with proactive business strategy worldwide. Pelham and Wilson (1999) equate market orientation to *"being close to the customer"* and suggest that small firm managers can achieve a sustainable competitive advantage by instilling market-oriented behaviours in employees. This orientation can enable small companies to *"focus on their areas of strengths – innovation, flexibility, and greater value added for carefully targeted customer groups."* (Despande[ed] , 1999: pp 168)

On the other hand, Shapiro (1988) suggests that the term *"market oriented"* is a great deal more than the cliché *"getting close to the customer"* and *"represents a set of processes touching all aspects of the company"* In his view, there is no meaningful difference between the terms *"market driven"* and *"customer-oriented"*. These terms are often used interchangeably to mean a company that possess three characteristics:-

- a. Information on all important buying influences permeates every corporate function
- b. Strategic and tactical decisions are made interfunctionally and interdivisionally
- c. Divisions and functions make well-coordinated decisions and execute them with a sense of commitment.

Narver and Slater (1990) define market orientation as:-

The organization culture.....that most effectively and efficiently creates the necessary behaviors for the creation of superior value for buyers and, thus, continuous superior performance for the business.

In this viewpoint, the components of a market orientation are:-

- **Customer orientation** : understanding customers so well as to be able to create continuous superior value for them.

- **Competitor orientation** : awareness of the capabilities of competitors in the short and long term.
- **Interfunctional co-ordination** : all company resources are used to create value for target customers.
- **Organizational culture** : behaviours of employees and management are linked to customer satisfaction.
- **Long-term profit focus** : the ultimate business goal.

Slater and Narver (1998) have also argued that being market-oriented is not the same as being marketing-oriented or customer-led. In response to this, Conner (1999) has suggested that the main argument by Slater and Narver (1998) that strategic success is a function of market-led orientation rather than customer-led orientation is too narrow and gives inadequate weight to the resource endowment and scale differences between companies. Instead, Conner (1999) has argued that *“strategically, a company must be both customer and market-led. It must live and act in the short-term and the long-term.”* Conner (1999) has suggested that the two orientations are not incompatible. Market-orientation should be defined in such a way that the future needs of customer needs are not separable from current needs. Therefore the market-orientation and customer-led orientation should be part of the market-continuum.(Conner, 1999: pp. 1159). In response to this, Slater and Narver (1999) have reiterated their argument that market-orientation is not the same as marketing-orientation. They point out that *“market-oriented businesses are committed to understanding both the expressed and latent needs of their customers, to sharing this understanding broadly throughout the organization, and to co-ordinating all activities of the business to create superior customer value.”*(pp 1167).

Day (1999a) suggests that there are 3 elements that are present in successful market driven organisations, namely:-

- *An externally oriented culture* that emphasizes “superior customer value and the continual quest for new sources of advantage.”
- *Distinctive capabilities* that enable them to “devise winning strategies that anticipate rather than react to market threats and opportunities.”

- *A configuration* “that enables the entire organisation continually anticipate and respond to changing customer requirements and market conditions.”

These elements are represented in Figure 3.2 below:

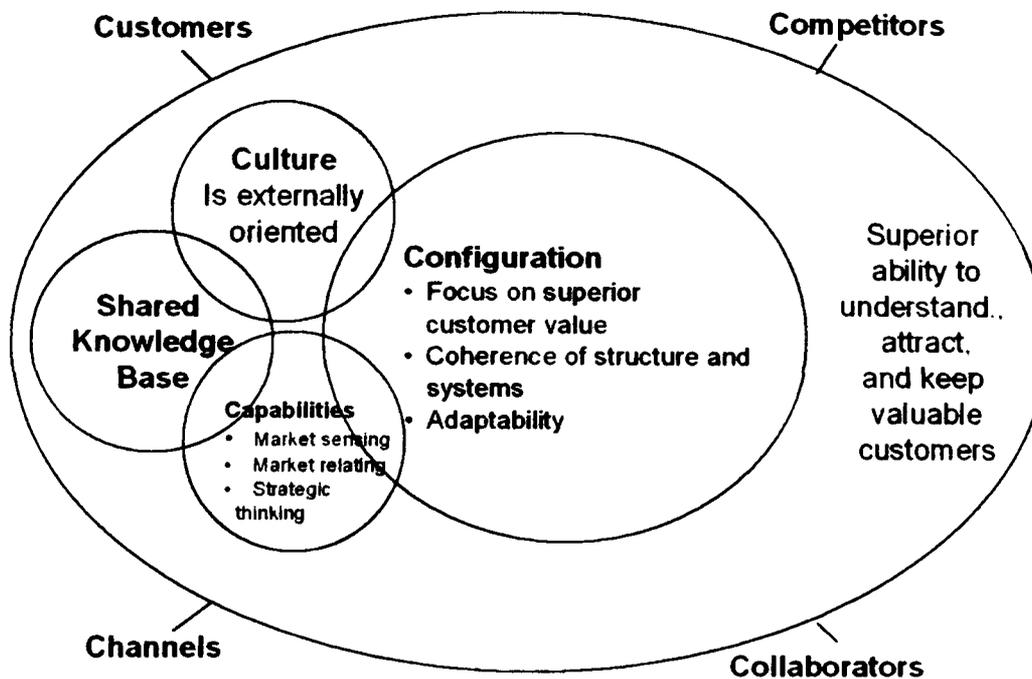


Figure 3.2 The Elements of a Market Orientation

Source : Day, George S. (1999), *The Market Driven Organization*, The Free Press, NY.

These elements are used to devise a checklist to assess the extent of the organisation’s market orientation. (Day, 1999a: pp 249 – 257)

According to Day (1999b), as companies aspire to become market-driven, they exhort employees to get closer to the customer, to stay ahead of competitors and to make decisions based on the markets. However, even the best intentioned management find it difficult to translate these aspirations into action. The problem lies in failed or flawed change programmes, often due to a lack of commitment to the deep-seated changes needed. Day (1999b) makes five suggestions when considering any initiatives to change to a market-driven culture: (1) involve the entire organization, from top to bottom, (2) focus on the conditions enabling people to produce good results – not on the characteristics of the change leaders, (3) top management must create a sense of urgency to energise the change programme, (4) cultural change should follow from behavioural change, and (5) change programmes must generate useful diagnostics on progress through the process. Day (1999b) further suggests six overlapping stages for any such change programme:

1. **Demonstrating leadership commitment.** A leader owns and champions the change, invests time and resources, and creates a sense of urgency.
2. **Understanding the need for change.** Key implementers understand market responsiveness, know the changes needed, and see the benefits of the change initiative.
3. **Shaping the vision.** All employees know what they are trying to accomplish, understand how to create superior value, and see what to do differently.
4. **Mobilizing commitment at all levels.** Those responsible have experience and credibility and know how to form a coalition of supporters to overcome resistance.
5. **Aligning structure, systems, and incentives.** Key implementers have the resources they need to create a credible plan for alignment.
6. **Reinforcing the change.** Those responsible know how to start the programme, keep attention focused on the change and benchmark measures, and ensure early win.

Aspiring to be market-oriented is thus easy but accomplishing it is often more difficult and requires commitment and consistency throughout the organization. Day (2003) further suggests that to create a superior customer-relating capability, companies need *“a clear focus on, and deft orchestration of, three organizational components”*, namely: (a) an organizational orientation that makes customer retention a priority, (b) a configuration that includes the structure of the organization, its processes and incentives for building relationships, and (c) information about customers that is in-depth, relevant and available through IT systems in all parts of the company.

Ruekert (1992) defines the level of market orientation as the degree to which the business unit:

- Obtains and uses information from customers;
- Develops a strategy which will meet customer needs; and
- Implements that strategy by being responsive to customers needs and wants.

These components have much in common with the conceptual frameworks proposed by Narver & Slater (1990) and Kohli & Jaworski (1990) in that it also focuses on the importance of generating and acting on information and intelligence.

Deng and Dart (1994) have taken ‘market orientation’ to mean the implementation of the ‘marketing concept’. Accordingly, they suggest the definitions of the two terms as follow:

Marketing Concept – a business philosophy that holds that long term profitability is best achieved by focusing the coordinated activities of the organization toward satisfying the needs of a particular segment(s).

Market Orientation – the generation of appropriate market intelligence pertaining to current and future customer needs, and the relative abilities of competitive entities to satisfy these needs; the integration and dissemination of such intelligence across departments; and the coordinated design and execution of the organization's strategic response to market opportunities. (Deng and Dart, 1994: 726)

Like Deng and Dart (1994), other writers have explained that market orientation implies the implementation of the marketing orientation or concept. (Gray, et al. 1998; Sanzo, et al., 2003a., 2003b.). Others have expressed the view that market orientation is distinct from marketing orientation in the sense that market orientation addresses organization-wide concerns while marketing orientation reflects a focus on the departmentation of marketing. (Shapiro, 1998., Morgan and Strong, 1998)

Cadogan & Diamantopoulos (1994) have evaluated the two dominant market orientation constructs of Narver & Slater (1990) and Kohli & Jaworski (1990). They compare the three behavioural dimensions of the market orientations provided by Narver & Slater (1990) [*customer orientation, competitor orientation, and interfunctional coordination*] to that of Kohli & Jaworski (1990) [*generating, disseminating and responding to market intelligence*] and attempt to analyse to what extent the elements of the relevant components overlap with each other, both on a conceptual and on an operational level.

According to Cadogan & Diamantopoulos (1994), both conceptualisations of market orientation share a similar nomological network; Narver & Slater's *customer and competitor orientations* are conceptually encompassed by Kohli & Jaworski's *intelligence generation and dissemination* components. Likewise, elements of *interfunctional coordination* are captured by Kohli and Jaworski's *intelligence generation, dissemination, and responsiveness* components. This overlap is illustrated in Figure 3.3 below:

		Kohli & Jaworski (KJ)		
Narver & Slater (NS)		Intelligence Generation	Intelligence Dissemination	Responsiveness
Customer orientation	Conceptual overlap : Yes Operational overlap: Yes Operational examples: KJ: <i>Poll end users to assess product service quality</i> NS: <i>Measure customer satisfaction</i>	Conceptual overlap : Yes Operational overlap: Yes Ambiguous Operational examples KJ: <i>Customer satisfaction data disseminated throughout business</i> NS: <i>Understand customer needs</i>	Conceptual overlap : Yes Operational overlap: Yes Ambiguous Operational examples KJ: <i>Ignore changes in customers' product / service needs</i> NS: <i>Engage in after-sales service</i>	
Competitor orientation	Conceptual overlap : Yes Operational overlap: Yes Operational examples: KJ: <i>Competitor intelligence generated independently several departments.</i> NS: <i>Not applicable</i>	Conceptual overlap : Yes Operational overlap: Yes Operational examples: KJ: <i>Departments slow to alert each other about competitors' actions</i> NS: <i>Salespeople share competitor information</i>	Conceptual overlap : Yes Operational overlap: Yes Operational examples: KJ: <i>Implement responses to competitors' actions immediately</i> NS: <i>Respond rapidly to competitor activities</i>	
Inter-functional coordination	Conceptual overlap : Yes Operational overlap: Yes Operational examples: KJ: <i>Members of manufacturing department interact with customers to learn how to serve them better.</i> NS: <i>Engage in inter-functional customer calls</i>	Conceptual overlap : Yes Operational overlap: Yes Operational examples: KJ: <i>Interdepartmental meetings to discuss market trends and developments</i> NS: <i>Share information amongst functions</i>	Conceptual overlap : Yes Operational overlap: Yes Operational examples: KJ: <i>Departments get together to plan responses to changes taking place in our business</i> NS: <i>Engage in inter-functional integration of strategy</i>	
		Exogenous market influences	Informal/Formal Dissemination	Response Design/ Implementation

Figure 3. 3 Conceptual and Operational Overlaps in Market Orientation Constructs of Narver & Slater and Kohli & Jaworski;

Source: Cadogan, John W. and Diamantopoulos, Adamantios (1994),
Marketing Education Group Conference, Coleraine, N. Ireland.

While the similarities at the conceptual level are pronounced and obvious, the situation at the operational level is different. According to Cadogan & Diamantopoulos (1994):

Narver and Slater's (1990) operationalisation of customer orientation is ambiguous regarding the measurement of customer information dissemination.

This ambiguity arises because the generation of competitor information is not included in the measure of competitor orientation. Furthermore, the measures of competitor orientation and the generation of information concerning exogenous market influences are not provided.

In their viewpoint, all of Jaworski and Kohli's (1993) measurement items capture specific activities related to their respective *intelligence generation*, *dissemination* and *responsiveness* components. In contrast, in Narver and Slater's (1990) measuring instrument, a number of items are included which have uncertain meanings.

Cadogan and Diamantopoulos (1990) then propose a reconceptualisation of the market orientation shown in Figure 3.4:

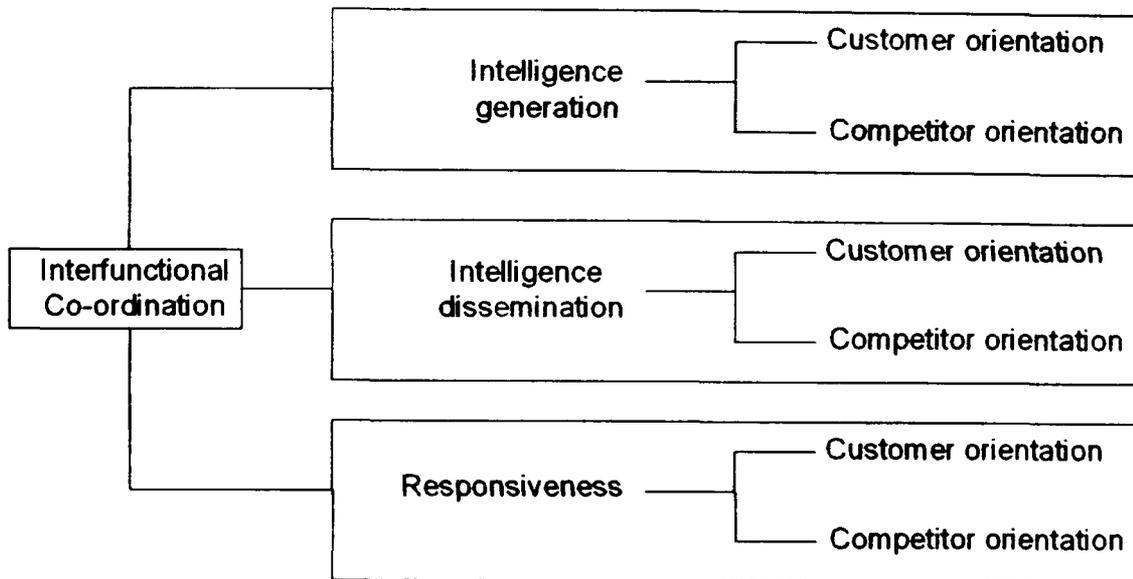


Fig. 3. 4 Market Orientation Reconceptualized
 Source: Cadogan, John W. and Diamantopoulos, Adamantios (1994),
Marketing Education Group Conference, Coleraine, N. Ireland.

Under this modified perspective, *customer orientation* and *competitor orientation* reflect the specific focus of the behaviours associated with the *generation*, *dissemination*, and *responsiveness* to market intelligence. In turn, the manner in which the latter are actually performed is reflected in the *interfunctional coordination* component which steers the entire process.

Gray, et al (1998) have suggested that part of the problem with measuring market orientation lies in the definitions of the terms ‘marketing orientation’ and ‘market orientation’. These two terms are often confused and used interchangeably. The term ‘marketing orientation’ should refer to a business philosophy, that is, the marketing concept while ‘market orientation’ should refer to the implementation of that philosophy or concept. Accordingly, they suggest the following research model to explore the market orientation-performance relationship in the context of New Zealand (Figure 3.5):

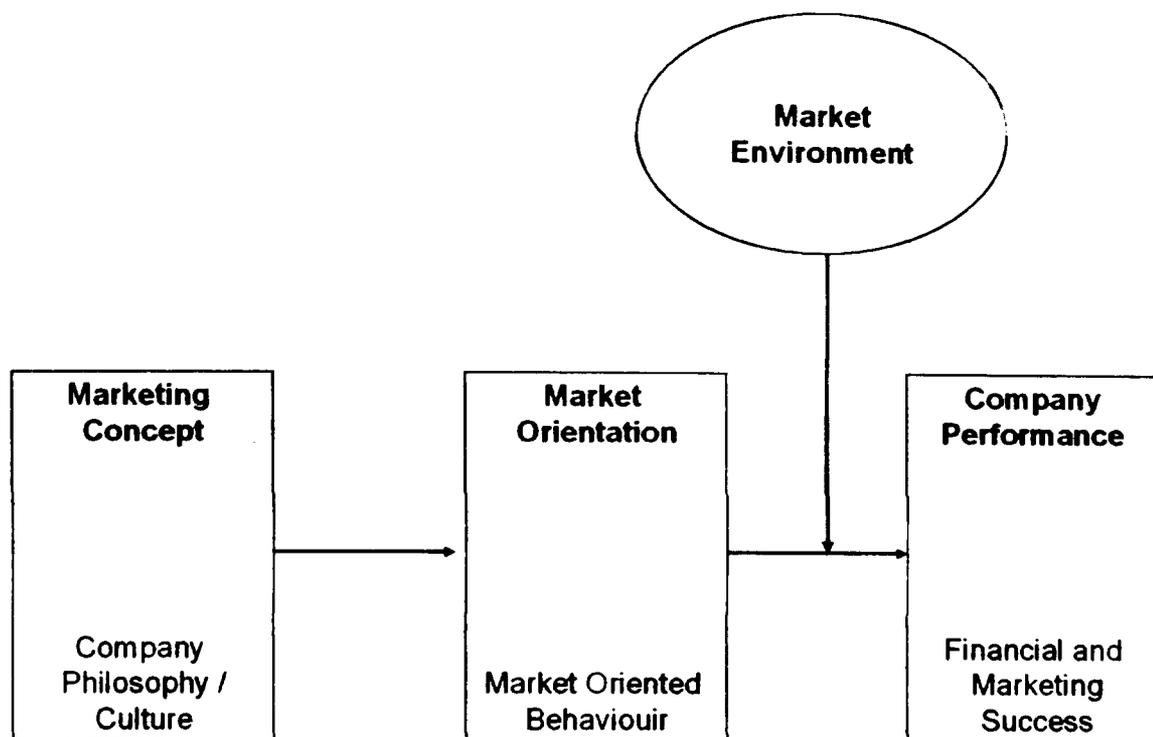


Figure 3.5 : Model of Market Orientation – Performance Relationship
 Source: Gray, Brendan. , Matear, Sheelagh., Boshoff, Christo., and Matheson, Phil.
 (1998), *European Journal of Marketing*, Vol. 32, No. 9/10, 1998: 884-903.

Their findings indicate that in the New Zealand context, market orientation is a multi-dimensional construct consisting of five sub-dimensions, namely, customer orientation, competitive orientation, interfunctional co-ordination, responsiveness and profit emphasis. These sub-dimensions are a synthesis of the constructs suggested by various researchers. (Jaworski and Kohli. 1990, 1993 ; Narver and Slater, 1990; Deng and Dart, 1994)

Harris (2002), however, has suggested that prevailing methods of measuring market orientation are potentially misleading because of three reasons: first, they overly rely on intra-firm informants; second, they focus on management perceptions of the activities and behaviour of an organization and not the extent to which such activities and behaviours compare to those of competitors; and third, the use of single respondents is inappropriate and potentially misleading. Harris (2002) has therefore proposed a more market-oriented approach to measuring market orientation by suggesting that market orientation should be defined as *“the extent to which an organization is perceived to act in a coordinated , customer and competitor oriented fashion.”* Accordingly, he has suggested the measurement of market orientation using both intra-firm and extra-firm informants’ views on the same 3 criteria of interfunctional coordination, customer orientation and

competitor orientation. According to Harris (2002), this method *“is more complex and less parsimonious but is designed to lead to a more informed evaluation of the market orientation.”*

In a study on the adoption of the market orientation in Thailand, Powpaka (1998) has observed that the intention to adopt a market orientation is positively affected by attitude toward market orientation and attitude toward innovation in management orientation. Attitude toward marketing orientation, in turn, is positively affected by relative advantage, compatibility, observability, market turbulence, competitive intensity and attitude toward innovation in management orientation ; and negatively affected by complexity.

Appiah-Adu (1998) has also studied the market orientation – performance link in the context of the transition economy in Ghana. His findings indicate that *“on the whole, market orientation does not directly affect sales growth and ROI performance among Ghanaian firms.”* However, there is an indirect impact through environmental variables such as competitive intensity and market dynamism. Market orientation appears to exert a greater, positive influence on sales growth when the competitive intensity levels are medium to high. In addition, market orientation has an increased effect on ROI in conditions of low market dynamism.

Sin et al (2002) have studied the effect of relationship marketing orientation on business performance in a service-oriented economy in the context of Hong Kong. Their findings indicate that the firm’s degree of relationship marketing is positively associated with sales growth, customer retention, ROI, sales growth and overall performance in Hong Kong’s service sector.

Han et al (1998) in a study to determine whether a market orientation facilitates an organisations’s innovativeness, conclude that it does so. Such innovativeness , in turn, positively influences the organisation’s business performance. At the component level, their findings indicate that the customer orientation component the dominant factor responsible for the phenomenon compares with competitor orientation and interfunctional co-ordination. However, that does not mean that both these two orientations are any less important. The model proposed by Han et al (1998) on the mediator role of innovation on the market orientation – performance relationship is illustrated as follow (Figure 3.6):

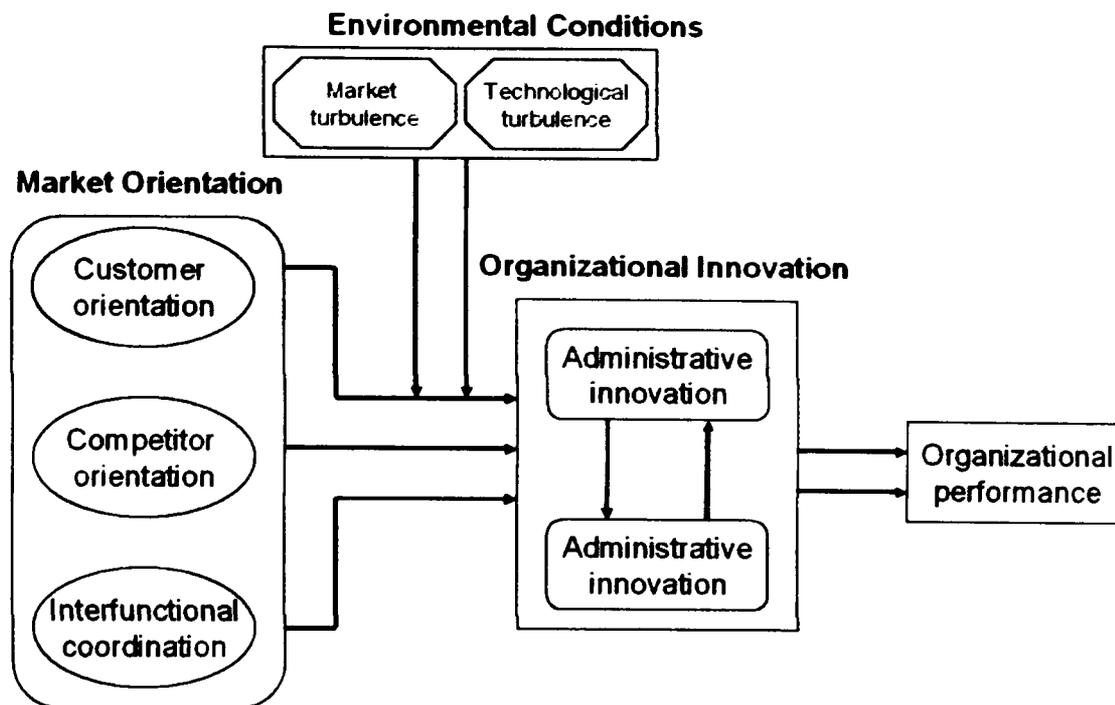


Figure 3.6 : Mediator Role of Innovation on the Market Orientation – Performance Relationship;

Source: Han, Jin K. , Kim, Namwoon, and Srivastava, Rajewndra K. (1998), “Market Orientation and Organizational Performance : Is Innovation a Missing Link?”. *Journal of Marketing*, October 1998: 30-45.

Following this, Agarwal, et al (2003) have also studied the role of innovation in the relationship between market orientation and performance in the service industry.

Hurley and Hult (1998) , however, have concluded that market orientation per se is not critical to performance but organisational learning and the development of firm capabilities can lead to positions of advantage. According to them, organisational learning, when viewed from a behaviour change or implementation perspective, ie equivalent to innovation. Higher levels of organisational innovativeness when combined with resources and other organisational characteristics lead to greater innovative capacity. Their findings indicate that “*market orientation and performance may benefit from reframing existing models to incorporate innovation more directly*”. In addition, they suggest that “*introducing innovation into models of market orientation and performance could supplement or possibly even replace organizational learning constructs.*” The model they propose is illustrated in Figure 3.7 as follows:

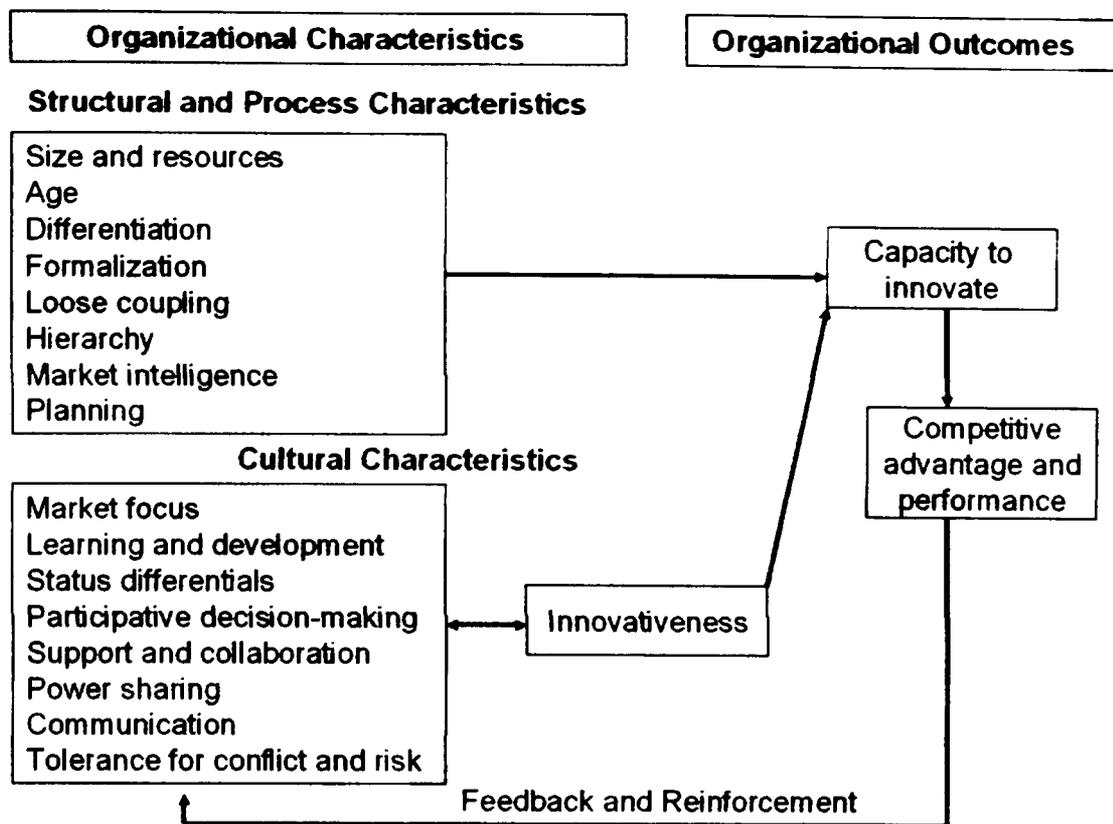


Figure 3. 7 : Organization and Market Driven Innovation.

Source : Hurley, Robert F., and Hult, G. Thomas M. (1998). "Innovation, Market Orientation, and Organizational Organizational Learning : An Integration and Empirical Examination"; *Journal of Marketing*, Vol. 62, July 1998:42-54

Telefsen (1999) has found that a market orientation exists in an organization towards a series of internal and external constituencies. All measured general and partial constituent market orientations are influenced by external historic and situational factors with the impact on each firm moderated by internal organization factors. According to Telefsen (1999), identical antecedents of internal situation, organization learning, organizational systems and architecture influence the overall and each of the partial constituent market orientations. In addition, all partial constituent orientations contribute in unique and interactive ways to the overall economic performance of the firm by way of consequences unique to each constituent. All these suggest that *"a market-driven knowledge management is particularly important and beneficial when conditions are changing in markets where the competition is based on unique value-added."* (Telefsen, 1999: pp. 117)

Another dimension suggested is the link between internal customer orientation and market orientation. Conduit and Mavondo (2001) have suggested that organizational dynamics and managerial action in areas such as employee training, effective communication systems, and managing human resources are critical to building an internal customer orientation and

consequently , a market orientation. Their study indicates that an internal customer orientation is indeed important for the development of a market orientation. Superior value at every stage of the value chain is not possible without the requirements of employees being satisfied, and this in turn will affect the customer at the receiving end.

Baker and Sinkula (1999) have suggested that the integration of learning orientation and market orientation influence organizational performance independent of their effect on product innovation. Their findings indicate that both learning orientation and market-orientation are key to successful innovation-driven performance. Both these two orientations affect organizational performance indirectly through their effect on product innovation. However, a crucial finding is that learning orientation had a direct effect on organizational performance but market orientation did not. This could imply “*the potential preeminence of learning orientation over market orientation*” (Baker and Sinkula, 1999: 305). The conceptual model proposed by Baker and Sinkula(1999) is shown as follows (Figure 3.8):

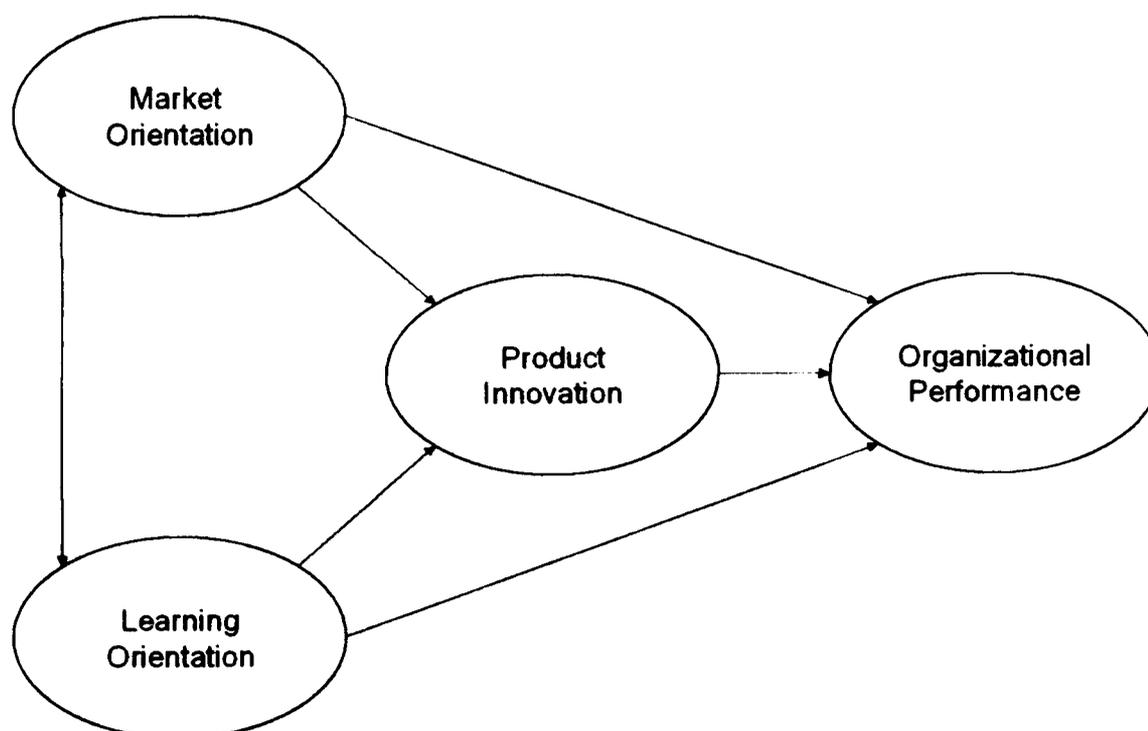


Figure 3.8 : Market Orientation , Learning orientation and Innovation : Relationship to Organizational Performance.

Source: Baker, William, E. and Sinkula, James, M. (1999), “Learning Orientation, Market Orientation and innovation: Integrating and Extending Models of Organizational Performance”. *Journal of Market-Focused Management*, 4, 295-308

In another somewhat similar study, Baker and Sinkula (2002) again suggest that the synergistic effect of market orientation and learning orientation is necessary to achieve product innovation in a firm. Learning orientation here refers to the degree to which firms proactively question whether their existing beliefs and practices actually maximizes organizational performances. A strong market orientation while necessary is not sufficient to produce the type of marketing expertise that can lead to market domination. While market orientation may promote learning, it may not necessarily promote higher order learning that can lead to innovations.

On the other hand, Slater and Narver (1995) have found that *“the marketing function has a key role to play in the creation of a learning organization.”* This is because marketing has an external focus and is well-positioned to appreciate the benefits of market-driven learning and be the *“lead advocate of the market-oriented, entrepreneurial values that constitute the culture of the learning organization.”*

Farrell and Oczkowski (2002) have examined and compared two rival models, namely, the market orientation - organizational performance (MO-OP) model and the learning orientation - organizational performance (LO-OP) model. Their findings indicate that on the single item performance measures of customer retention, return on investment, overall performance, and the multi-item measure of business performance, market orientation was able to encompass learning orientation, but learning orientation was not able to encompass learning orientation. In other words, market orientation was better able to explain variations in those indicators than were learning orientation.

Farrell (2003) has also studied the effect of corporate downsizing on market orientation and found that downsizing-seeking efficiencies through reducing the number of employees has a negative effect on employee trust and employee commitment to a customer focus. Employee trust, in turn, has a positive effect on employee commitment to customer focus and market orientation, and employee commitment to customer focus has a positive effect on market orientation.

Another variation in the research on marketing orientation relates to the impact of market orientation on the dyadic relationships. Sanzo et al (2003a), for example, have suggested five constructs of the business dyadic relationship, namely: trust, affective commitment, communication, satisfaction and cultural market orientation. Their model relating market orientation and business dyadic relationships is illustrated as follows. (Figure 3.9):

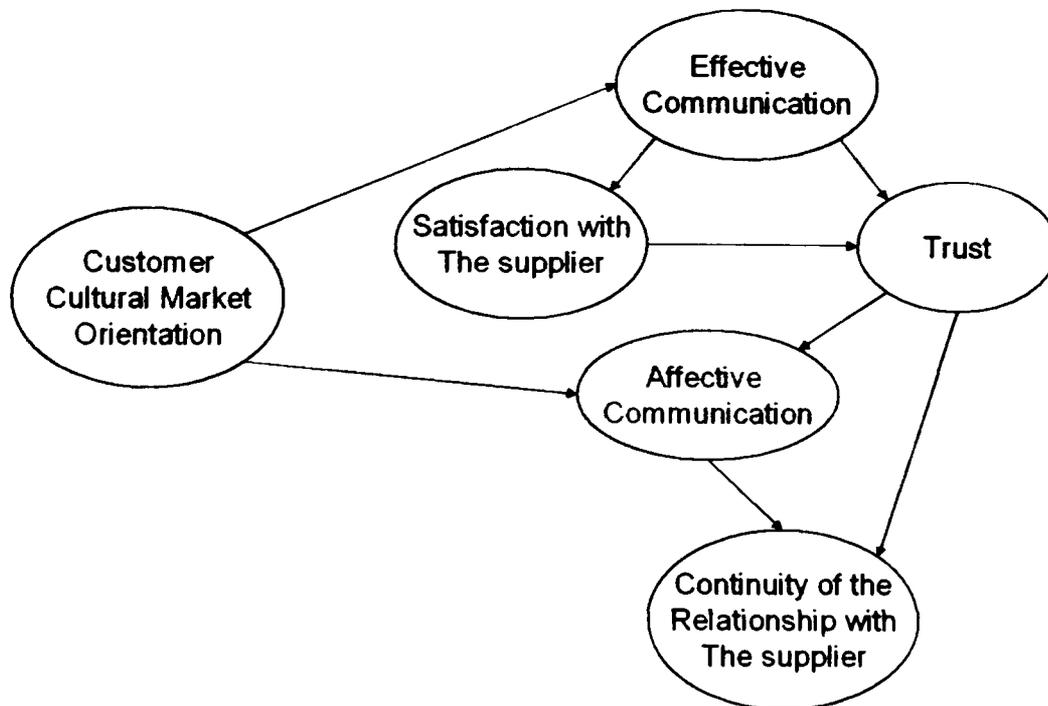


Figure 3.9: Model Relating Market Orientation and Business Dyadic Relationships

Source: Sanzo, Maria. Jose., Santos, Maria. Leticia., Vazquez, Rodolfo and Alvarez, Luis I. (2003), "The Role of Market Orientation in Business Dyadic Relationships: Testing an Integrator Model". *Journal of Marketing Management*, Vol. 19, No. 1-2, Feb 2003 : 73-107

In another separate study on the effect of market orientation on buyer-seller relationship satisfaction, Sanzo et al (2003b) have also found that variables such as cultural market orientation, communication, trust, conflict, coercive and noncoercive influence strategies, perceived value and satisfaction are linked together.

Martin and Grbac (2003) have suggested that one way to leverage a well-developed market orientation to improve a firm's performance is through the use of supply chain management. According to their findings, having a strong market orientation gives firms a significant competitive advantage. One way is to through strengthening supplier relationships. Including supplier information within the firm's market information generation process increases the chances that the supplier information will be cross functionally shared along side the customer and competitor information.

Harris and Cai (2002) have also studied the two forms of market orientations ,namely, market-driven and market-driving, based on the work of Jaworski et al (2000). In this construct, a market-driven approach occurs where market behaviour and structure are given (ie, where existing market

structures and behaviours are accepted by the local firm). Market-driving is possible when firms shape the market structure by altering the composition of market players. Thus, market-driven is defined as “the activities of learning , understanding and responding to stakeholder perception and behaviours within a given market structure” whereas market-driving is “changing the composition and/or roles of players in a market and / or the behaviours of playesr in the market.” (Jaworski et al , 2000: pp 45) These may be illustrated as follows (Figure 3.10)

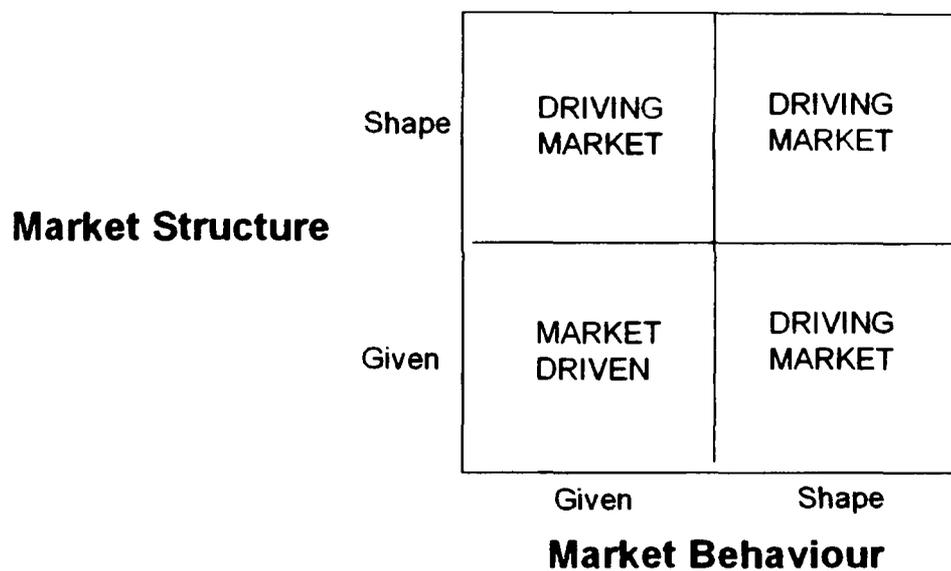


Figure 3.10: Two forms of Market Orientation: Market Driven and Market Driving.
 Adapted from: Harris, Llyod C., and Cai, Kai Yi (2002), “Exploring Market Driving : A Case of De Beers in China” *Journal of Market-Focused Management*, Vol. 5, No. 3, Sept 2002: 171-196 and
 Jaworski, B., Kohli A. K. and Sahay, A. (2000), “Market-driven versus Market-driving”,
Journal of Marketing Science, Vol. 28, No.1: 45-54.

Johnson et al (2003) have suggested a market-focused strategic flexibility perspective incorporating the work of Jaworski et al (2000). This perspective is illustrated as follows (Figure 3.11):

Perspectives

<i>Orientation</i>	<i>Market Driven</i>	<i>Market Driving</i>
	Firm responds to acts within the framework and constraints of existing market structure and characteristics	Firm can and will act to induce changes in the market structure and changes in the behaviours of the players (customers and competitors)
<i>Customer Orientation</i> Identifying, analyzing and answering to customers' needs.	<i>Correction:</i> Predict which technologies are likely to be successful, given consumer needs and preferences. Respond to the market structure	<i>Preemption:</i> Shape consumers' behaviour proactively. Pioneer. Predict how consumer needs and market boundaries evolve with various technological futures.
<i>Competitor Orientation</i> Generating, disseminating and using information about competitors	<i>Protection:</i> Continuous benchmarking. <i>Imitating.</i>	<i>Exploitation:</i> Shape the market structure proactively by deconstruction, construction, or functional modification approach. Identify and develop difficult-to-imitate internal and external competencies. Discontinuous disruption.

Figure 3.11 : Interplay of Market Orientation Perspectives and Market-Focused Strategic Flexibility

Source: Johnson, Jean L., Lee, Ruby Pui-Wan., and Saini, Amit (2003), "Market-Focused Strategic Flexibility : Conceptual Advances and an Integrative Model", *Journal of the Academy of Marketing Science*, Vol. 31, No 1, Winter, 2003: 74-89

In relation to this construct, Johnson, et al (2003) have suggested an integrative framework for Market-Focused Strategic Flexibility which is illustrated as follows (Figure 3.12):

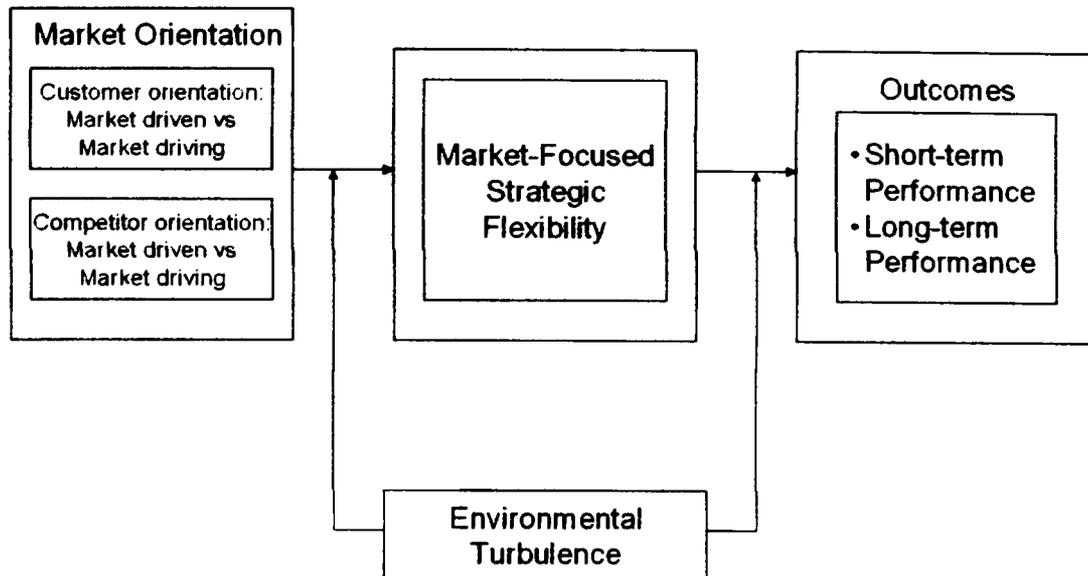


Figure 3.12 : An Integrative Framework for Market-Focused Strategic Flexibility

Source: Johnson, Jean L., Lee, Ruby Pui-Wan., and Saini, Amit. (2003),
 “Market-Focused Strategic Flexibility : Conceptual Advances and an Integrative Model”,
Journal of the Academy of Marketing Science, Volume 31, No. 1, Winter 2003: 74-89

Cravens, et al (1998) suggest that the path to marketing leadership in the new era will only be possible with a market-driven strategy which integrates several components which they list as: market-oriented cultures and processes, superior customer value proposition, positioning with distinctive competencies, organisational change and relationship strategies. These are consistent with a market orientation, which is also referred to as market-focused strategy and market-focused strategic flexibility. (Phillips, et al., 2002; Johnson, et al, 2003)

Matsuno and Mentzer (2000) have studied the role of business strategy type as an alternative potential moderator of the market orientation – performance relationship. The four strategy types – defenders, prospectors, analyzers, and reactors – as defined by Miles and Snow (1978) were used as the basis. Their findings indicate that the relationship between market orientation and economic performance vary across the strategy types. Analyzers gain little benefit in any performance dimension by increasing the market orientation level. Defenders gain the greatest performance benefit in ROI by increasing market orientation level. However, compared to other strategy types,

Defenders appear to lose the most in market share, sales growth, and percentage of new product sales by increasing the market orientation level. Prospectors benefit from the greatest gain, over both Analyzers and Defenders, in market share, sales growth and percentage of new product sales by increasing market orientation level.

Noble, et al (2002) have also studied the performance implications of market orientation and alternative strategic orientations and suggest that *“the concepts of market orientation, strategic orientation and culture are closely intertwined.”* Their findings suggest that there appears to be other competitive cultures beyond the traditional view of market orientation that may lead to strong firm performance. Such orientations include a selling orientation, competitor orientation and national brand focus elements of their market orientation framework. According to Noble et al (2002), this suggests the importance of a broadened perspective in market orientation research. This is because *“different firms, possessing different strategic orientations, may be suited to succeed in various competitive environmentsd.”* (Noble et al., 2002: 36)

Indeed, much have been written about the link between marketing orientation and organizational performance. In the same manner, other variations of the same theme have been proposed including the linkages of organizational learning, innovation, supply chain management, buyer-seller relationships as antecedents to the marketing orientation-organizational performance relationship. (Narver and Slater, 1995; Hurley and Hult, 1998; Powpaka, 1998; Han et al., 1998; Baker and Sinkula, 1999, 2002; Conduit and Mavondo, 2001; Farrell and Oczkowski, 2002; Noble, et al., 2002; Sanzo, 2003a, 2003b; Martin and Grbac, 2003; Farrel, 2003) While there are some differing views with regards to the direct influence of a marketing orientation on organizational performance (Hurley and Hult, 1998), it is fair to say that in general there is some consensus that a marketing orientation can contribute greatly to organizational performance either directly or indirectly. (Kohli and Jaworski, 1990, 1993; Narver and Slater, 1990, 1995; Ruekert, 1992; Deng and Dart, 1994; Gray, et al., 1998; Han et al, 1998; Conner, 1999; Telefsen, 1999; Sin, et al, 2002; Harris, 2002; Harris and Cai, 2002; Phillips et al, 2002; Johnson, et al .2003). Indeed, Langerak (2003) has examined closely 51 studies on the relationship between market orientation and business performance between 1990 and 2002. The results show that there is no unequivocal evidence as to *if* and *when* market orientation has a positive impact on business performance. However there is some limited evidence on *how* market orientation influences business performance. (Langerak, 2003)

The marketing concept or marketing orientation as some prefer to call it is clearly one that places the customer as the focus of the organisation's existence. Organisations who adopt the marketing concept may be considered as being market-oriented, customer-oriented, customer-led, customer-centric, market-focused and so on. However, it could be argued that being close to the customer is essentially being close to the market and thus the distinction between a market-orientation and a marketing-orientation is not really significant. To be close to the customer is in fact being market-oriented. But to be market-oriented would require that the organisation or individual adopt a marketing approach.

Deshpande (1999) has reviewed the major research on market orientation and suggested that the following elements constitute a market orientation: strong knowledge or market-related information, ability of the firm to manage its market research and intelligence system; translation of market knowledge into strategic capabilities (competencies) that become disseminated organizationwide. Market orientation is thus linked to the notion of the learning organization and provides the basis for a corporate strategy that focuses on serving actual and potential customers. According to Despande (1999):

Hence the fit of market orientation within a firm is three-fold : as part of a market knowledge management system, as part of the development of strategic competency as a learning organization, and as a foundation for corporate strategy.(pp 4)

Entrepreneurs seldom operate in isolation and are unlikely to be passive in the marketplace. They are not only alert in sensing opportunities (Kirzner, 1985; 1990.), but are almost always actively seeking opportunities in the marketplace . To succeed in their chosen business or venture, they invariably keep track of market trends with a view of seeking and seizing opportunities. It could be argued that these are requisites that are consistent with a market orientation.

It could be further argued that 'market orientation' and 'marketing orientation' are also consistent with the fundamental outlook of entrepreneurs. By virtue of the fact that entrepreneurs need a marketplace to introduce innovations, it can be implied that entrepreneurs are by default very much market oriented.

However, market-orientation is not the only orientation that firms may appear to pursue. Many other strategic orientations have been written about in the literature. The next section discusses these alternative perspectives so as to provide a balanced overview.

3.4 Other Orientations in Marketing.

Stanton, et al (1991: pp 6-7), believe that marketing, particularly in the United States, evolved from the industrial revolution, in the latter part of the 1800s, and that there are three *general* stages: the production orientation stage, the sales orientation stage and the marketing orientation stage. While many firms have progressed to the third stage, they believe some are still in the first or second stage.

Jobber (1998) has suggested that in addition to the marketing (customer) orientation, a competing philosophy that is adopted by some companies is the production orientation. Such an orientation is *“an inward-looking stance that can easily arise given that many employees spend their working day at the point of production.”*

Other alternative orientations mentioned by Jobber (1998) include the financial and the sales orientations. In the former, *“companies focus on short-term returns, basing decisions more on financial ratios than customer value”*. In the later, companies *“emphasize sales push rather than adaptation to customer needs.”*

Kotler (2003) identifies the various orientations toward the marketplace as ‘concepts’ and accordingly argues that, inclusive of the marketing concept, *“there are five competing concepts under which organizations can choose to conduct their marketing activity”* (Pg. 17) :

- i. **The Production Concept** : this orientation focus on producing and marketing products that are widely available and low in cost. Managers in organizations with such orientation concentrate on achieving high production proficiency and extensive distribution networks.

- ii. **The Product Concept** : this orientation focus producing and marketing products that offer most quality, performance, or innovative features. Management in these product-oriented organizations concentrate on making superior products and improving them over time.
- iii. **The Selling Concept** : this orientation on aggressive selling and promotion activities to push the organization's product.
- iv. **The Marketing Concept** : this orientation emphasizes the understanding of customers' needs and wants as the focus of everything the organization does.
- v. **The Societal Marketing Concept** : this orientation emphasizes the understanding of customers' needs and wants as well as the well-being of society as a whole.

Cravens et al (1998) argue that the market-driven strategy has evolved in four broad stages over the years as shown in Figure 3.13 below:

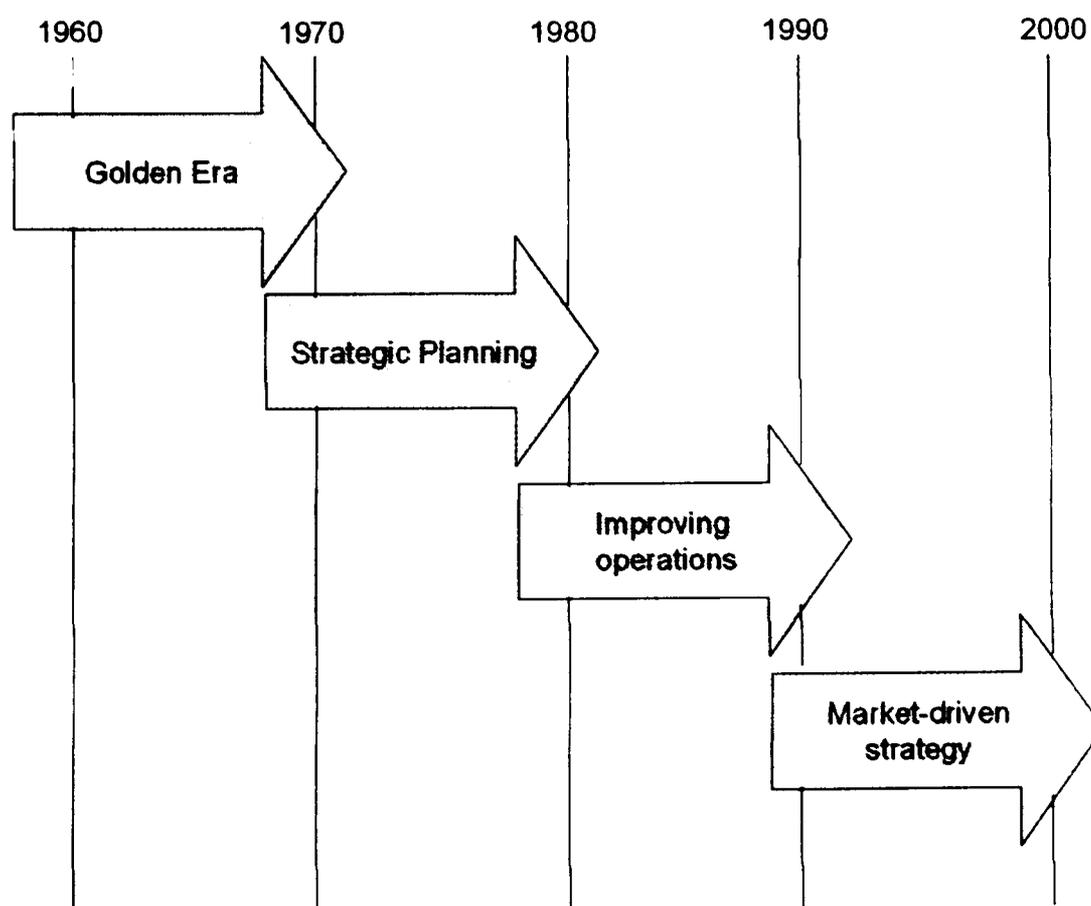


Figure 3.13 Market-driven Strategy Evolution

Source: Cravens, David W; Greeley, Gordon; Piercy, Nigel F.; and Slater, Stanley F. (1998): "Mapping the Path to Market Leadership"; *Marketing Management*, Fall 1998: 29-39; American Marketing Association.

During the golden era companies in the United States held distinctive competitive advantages over other companies in Europe and Japan. This was followed by the strategic planning era when the Japanese industrialization threats posed critical challenges to American corporations in the marketplace. When strategic planning failed to deliver, companies began to improve operations through management tools like total management quality, restructuring, downsizing, and so on. However, while these measures improved internal operations, they did not generate growth. Cravens et al (1998) believe that companies have now moved into the market-driven strategy phase which essentially adopts the premise that *“the market and the customers that comprise the market are the starting point in business strategy formulation.”* (pp 31)

The marketing concept, while generally acknowledged as more superior than the production, product and selling orientations, is not necessarily always relevant in all situations. In an age of consumer concern for the environment, the societal marketing orientation is often cited as the answer. Whereas the marketing concept assumes the sovereignty of the consumer and places his/her needs as a priority and focus in the company's activities, the societal marketing places the needs of the society in general first before all else. Kotler(1997, 2000) states that *“the societal marketing concept calls upon marketers to build social and ethical considerations into their marketing practices.”* Kotler (2003) further comments that *“according to the societal marketing concept, the pure marketing concept overlooks possible conflicts between short-term consumer wants and long-run consumer welfare”*

Some writers are of the view that the production or selling orientations may have their places in marketing as well.

Houston (1986), for example, expresses the view that *“it is important to recognize that under some circumstances, the production concept or the sales concept would be a more appropriate management philosophy for the organization than the marketing concept.”*

Quoting Hirschman (1983), Houston writes:

Hirschman (1983) recognized that producers in the world of art and ideology often have personal goals which are not satisfied by commercial success. These goals stem from a desire to be recognized by one's peers or from some internal sense of accomplishment.

From this perspective, it can be argued that the marketing concept as a normative framework may not be so applicable to artists and ideologists because the personal values and social norms that characterize the production process differ from others.

It could also be argued that in certain circumstances, the marketing concept might even be undesirable and totally out of place. For example, in a situation where demand exceeds supply, it would be inconceivable for the firm to truly satisfy consumer needs since in the first place not all consumers will obtain what they want. Conversely, where supply exceeds demand greatly, the firm might have no other choice but to be sales oriented in using aggressive selling and promotion to clear the inventory and thus ensure the firm's viability. Other situations where the marketing concept might be inadequate would be during civil unrest, wars and other forms of social crises. Survival is the guiding light under such circumstances and companies and organisations can hardly be blamed for not being obsessed with the satisfaction of customer needs. The marketing concept per se is thus not a panacea for all marketing difficulties. (Houston, 1986).

The main argument is that the marketing concept might not be appropriate all the time. Indeed, under certain circumstances, the marketing concept may be adjusted to satisfy the opportunities that present themselves at a given time. Faced with circumstances which require companies to either seize the prevailing opportunities and in the process temporarily forsake the marketing concept or suffer tremendous losses or other consequences that could adversely affect the company's future, the choice is quite obvious. Such seizing of opportunities can be said to be an innovative behaviour consistent with the general characteristics of entrepreneurship.

Pearson(1993) suggests the adoption of the following revised set of four business orientations:

- *Marketing / customer orientation*
- *Accounting/cost orientation*
- *Production / technology orientation*
- *R&D innovation orientation*

According to Pearson (1993), "*these orientations are all expressed as both functional and object orientations.*" These orientations are not mutually exclusive and not one of these may be ignored. For example, even a differentiator has to ensure costs are maintained at a competitive

level. Pearson (1993) thus suggests that *“organisations which are too strongly focused on a single orientation tend to perform poorly in the long run.”* (Pearson, 1993: 242)

Schulz III and Hofer (1999) have proposed the concept of *‘skill-based strategy’* to describe *“the way that highly successful, independent, entrepreneurs and corporate intrapreneurs actually develop and craft effective strategies for their organisations.”* This concept consists of four aspects of skills, namely, (1) first on Skills and Resources and secondly on Opportunities; (2) first on Customers and then on Competitors; (3) first on Customer Benefits and then on Price, and (4) first on Dynamic Capabilities and then on Static Assets. Such a Skill-based Strategy is the key to creating economic value and wealth. This is based on an in-depth study of four highly successful entrepreneurs and/or intrapreneurs by Schulz and Hofer (1999), who conclude that *“entrepreneurial leadership is the key to developing and crafting effective skill-based strategies.”*

We could see from the above discussion that the elements of a market or marketing orientation are evident in entrepreneurial or intrapreneurial success and that the marketing – entrepreneurship interface is a realistic concept. Therefore, we could consider an additional orientation in an environment that is not only changing rapidly but also becoming increasingly more complex :

- *entrepreneurial market orientation.*

In this perspective, a market orientation in terms of being customer-led or customer-centric per se has inherent limitations. While it is certainly desirable to provide products and services that customers need and want, often customers themselves do not know what they really need or want. Just as companies might respond to customers’ needs and wants, often it is the customers who respond to what companies have to offer. As discussed earlier in Section 3.3, market orientation may be seen from two perspectives: market-driven and driving market (Jaworski, et al., 2000; Harris and Cai., 2002) A market-driven perspective has much to do with being customer-led or customer-centric but a driving-market perspective is much more entrepreneurial as it has to do with driving changes to the market structure and market behaviour and creating a market for the firm as a result. In such an instance, the customers actually respond to the firm’s offerings. This perspective is much more proactive, creative innovative and therefore much more entrepreneurial. As pointed out by Thomas and Costello (1999), being customer-driven may be true but *“following it blindly can be downright harmful. For a business to grow and prosper, it’s important to*

recognize some of the potential pitfalls of putting the customer in the driver's seats". Thomas and Costello (1999) offer a checklist of seven questions to help a firm maintain the delicate balance between being customer-driven and profit-driven.

The entrepreneurial market orientation therefore suggests that there is compatibility between market orientation and entrepreneurial orientation. While both concepts appear to have some similarities and differences on the surface, there should be no problems with their interface. Indeed, variations of this interface approach have been discussed extensively in the literature. (Morris and Paul, 1987; Miles and Arnold, 1991; Morris and Lewis, 1991; Ward, 1992; Hills, 1994; Gardner, 1994; Carson et al, 1995; Chaston, 1997; Mc Grath and MacMillan, 2000; Lodish et al, 2001)

The entrepreneurial market orientation as an alternative perspective is even more relevant when viewed against the limitations of the marketing concept. The following section discusses some of these limitations.

3.5 Limitations of the Marketing Concept.

While there is general agreement that the marketing concept has gained wide acceptance in practice, there are evidences in the literature pointing to its limitation and inadequacy.

Houston (1986) has examined the conditions under which the marketing concept offers the proper guidance to the marketer and the conditions under which the marketer should not follow its prescription. According to Houston (1986), few organizations come into being through altruism; they exist to achieve the goals defined by the membership of the organization and not those of their non-member constituency. Initiators of commercial ventures do so to satisfy their own needs. A public programme may meet the needs of the citizens or a political body, but it is nevertheless the goals of the membership that define the organisation's purpose. Some organizations are self-sufficient and the satisfaction of organizational goals do not depend on nonmembers (eg. a membership golf club). Other organisations depend on the behaviour of nonmembers to meet the organisation's satisfaction. Such organisations rely on exchange to meet their needs and on that basis engage in marketing. An organisation benefits from additional information about its exchange partners through : (1) more exchanges, (2) an increase in value received from each exchange, (3) less effort needed for each exchange and (4) less value given up in each exchange.

More exchanges can occur when there are unsatisfied exchange partners remaining. They cannot occur when (a) all potential exchange partners are satiated and (b) the organization has nothing valued by the potential exchange partner to offer in such an exchange. In some cases, product offerings may be conceivable but not feasible. In other cases, a specific organization cannot or will not make the product available. Other situations where exchange partners seek out a marketer, leaving the marketer with no need to pursue the customer. In summary, Houston (1986) suggests the following conditions under which *“gaining information about exchange partners holds no value to an organisation”* (pp 84):

1. Exchange partners are satiated.
2. A desired offering is not to be made available.
3. The value of incremental bits of information about individuals who are members of groups of exchange partners will not exceed the value of gathering that information.
4. The organisation or all of its exchange partners are restricted from varying and/or negotiating what they will offer.

On the other hand, Houston (1986) has pointed out that the marketing concept *“ties directly to the ability of the organisation to meet its own needs.”* In fact, *“it is the organisation’s needs that are served by learning about exchange partners and tailoring product offerings to their needs, whether these needs are financial profits or some nonfinancial goals.”* (Houston, 1986: 84)

Houston (1986) endorses the argument put forward by Hirschman (1983) that as a normative framework, the marketing concept is not applicable to two broad classes of producers – the artists and the ideologists – because of the personal values and social norms that characterize the production process. Furthermore, being a marketer is a role and like other people, marketers play more than one role at a given time. Therefore, *“when the roles of marketer and producer are vested in the same person, it is not unusual to see conflicting goals.”* (Houston, 1986)

According to Houston (1986), the marketing concept is limited in application when it comes to anticipating customer’s future needs:

Dependence on customers’ expressions of their own needs and wants suggests that some marketers have failed to take a long run view of the marketing concept. Customers are not necessarily good sources of information about their needs a decade from now.

Customers do not always know how they will react under different environmental conditions in the future. They also have no idea or insight into the possible value of major technological innovations. Often, customers have to learn about new technologies, beliefs, and consumer behaviour.

The main argument put forth by Houston (1986) is that there are a wide variety of marketers who do not rely on the need to learn about their customers' needs and designing new product offerings to suit those needs. Examples include artists, religious leaders and ideologists. The marketing concept is thus not the only concept useful to the marketer. Houston (1986) proposes other alternative concepts available to marketers such as production concept, offering concept, sales concept and buying concept as discussed in Section 3.4.

Trustrum (1989) also cautions against the over emphasis on customer needs in interpreting the marketing concept:

The customer is not king as, whilst his needs are important, the objective of the marketing concept is to balance these with organisational capabilities to achieve stated objectives. (Pg. 55)

Elliot (1990) proposes that the marketing concept alone is not sufficient to an organisation. To succeed in a rapidly changing environment, organisations must expand dramatically its environmental purview to best ensure its continued viability:

... organisations operating in disturbed reactive environments, if they rely solely on the marketing concept, are likely to find themselves outflanked or overpowered by their competitors. On the other hand, those operating in turbulent environments may find themselves swamped by forces emanating from the distal environment. (Pg. 29)

Elliot (1990) argues that the role of marketing in an organisation is traditionally too focused on brand management and should be broadened to embrace more strategic and environmental awareness. This viewpoint is also endorsed by Kotler (1997, 2000; 2003) who has suggested the societal marketing concept as discussed in Section 3.4 This would imply that Managers need to be proactive , flexible and nimble not only to anticipate changes and respond to these changes as they

arise, but also to have the needs of society in general in mind in the process of marketing products/services.

Ennew et al (1993) have also pointed out the constraints in adopting the marketing concept in the context of the former Soviet Union in the process of transition from a centrally-planned economy to a market economy. The factors acting as constraints in the development of marketing include institutional and infrastructure barriers, uncompetitive market structures, experience barriers, demand barriers, and managerial attitudes and orientation. Other barriers might include technology, resource availability, underdeveloped markets and inadequate legal systems. In a centrally planned economy, the *“system is driven by planner rather than consumer sovereignty; the opportunities for enterprises to vary product offerings are limited and the exchange process is typically characterized by a high degree of monopolization.”* (Ennew, et al, 1993) The need for the marketing concept typically does not arise.

This viewpoint is shared by Hooley (1993), who has assessed the progress made towards the free market in the context of three countries with centrally planned economies : Hungary, Poland and Bulgaria. His findings suggest that the prime factors critical to these countries are competitive pricing and quality. Although these are the same factors considered critical in many western markets, the interesting thing is the reversal of their importance. According to Hooley(1993), *“in the west, quality usually comes first , followed by price. In Central Europe and the East, price is number one followed by quality”* The speed in which changes are taking place in Eastern Europe and the lack of time available for managers both to adjust their attitudes and to develop the necessary skills to cope with them suggest that adoption of the marketing concept is not likely to be a priority for some time.

Thomas (1994) appears to endorse this line of argument. In his opinion, modern marketing may be flawed as it *“derives primarily from the Anglo-Saxon model of capitalism.”* In reality, he argues that this model is *“relatively unsuccessful in a global context and that the most successful marketers , namely the Germans and the Japanese, have used neither business schools nor marketing textbooks to achieve their success.”* According to Thomas (1994), relationship marketing, the integration of quality, customer service, and marketing has been the heart of Japanese competitive strategy for long time. Because of the interdependence, locally and globally, among suppliers and customers as partners , there is therefore a need for rethinking of the function of marketing (Thomas, 1994: pp 61)

Brownlie, et al (1994) have suggested that while in theory marketing concepts and models are applicable to any activity involving exchange, the need for rethinking is necessary. This is because *“without adaptation and development (which requires rethinking) how can they satisfactorily encompass all of the new market and organizational contexts to which they are now being applied?”* In the same vein, Hunt (1994) has suggested that as part of the rethinking process, *“marketing should work towards developing a theory of relationship marketing that focuses on effective co-operation”* Key elements in such a theory should include relationship commitment and trust.

The limitation of the marketing concept in a “postmodern” environment has also been pointed out by Firat, et al (1995), who defines postmodernism as follow:

... postmodernism posits that social experience is an interplay of myths that produce regimes of truth. According to postmodernism, many of the fundamental modernist idea(l)s regarding the individual, self, freedom, agency, and structure are arbitrary and ephemeral rather than essential and fixed.

The main defining difference between modernism and postmodernism is the latter’s rejection of the modernist idea that human social experience has fundamental “real” bases.

Firat et al (1995) then go on to reject some of the basic tenets of the marketing concept. In the area of consumer behaviour, the notion that good marketing could result in consumer loyalty is flawed. Consumer behaviour is inconsistent in the postmodern era and the traditional variables used to explain consumer habits are no longer reliable. Consequently, the erosion of brand loyalty is common and *“with a few exceptions, the reigning icons of consumption in most categories are toppled at some point by challengers. A major recent example of such dethroning is the rapid eclipse of IBM as the leading computer company by a host of challengers.”*

One point of contention is in the common situation where marketing strives to fit the product to the image projected rather than to suit the needs of consumer. According to Firat, et al (1995):

Long before intellectual discussions on postmodernity had started, practising managers were quoting the famous adage: "Sell the sizzle, not the steak." This is a quintessential postmodern approach - the image is the marketable entity and the product strives to represent the image.

Another interesting point highlighted is with regard to the notion of consumer sovereignty in marketing. The marketing concept demands that the needs of consumers be studied and evaluated before the product is developed that meets those needs. The rest of the marketing mix of pricing, distribution and promotion are then used in an integrated manner to make the product accessible to the targetted consumers. According to Firat, et al (1995), *"A lot of marketing practice, and especially what in retrospect generally becomes considered as brilliant marketing practice, defies this."* One case in point is Disneyland where the entire approach is *"to create the fantasy first - a fantasy that is not consumer-driven but a completely worked out vision of key designers that all actors - consumers, employees, agents, reviewers, etc. - will buy into"* . This scenario is also obvious in the marketing of high-technology products such as the Apple Macintosh:

Apple's Macintosh computer was not a consumer-driven innovation but a compellingly seductive vision of a computer that could be a friend to one ("friendly") worked out by Steve Jobs and his design team. The computer - the product - was then developed to fill this vision.

In this example, marketing practice is not driven so much by the philosophy that the customer is King but by *"the quest for a powerful hyperreality that consumers and marketers alike can believe in."*

In summary, Firat et al (1995) state:

In postmodernity, some of the nearest and dearest notions and axioms of marketing may have to be re-examined, recast, or even abandoned. These include the concepts of consumer needs, consumer sovereignty, behavioural consistency, customer orientation, value, product image, buyer-seller separation, individual - organisation distinction, product - process separation, and consumption - production division.

It could be suggested that Walt Disney (Disneyland) and Steve Jobs (Apple Computers) are first and foremost entrepreneurs who turn their visions into opportunities by bringing innovations to the marketplace that capture the imagination of many people. A whole new market is consequently created from nothing and then developed further. At that point, these entrepreneurs adopt marketing techniques to establish themselves and gain a foothold in their respective industries. These entrepreneurial marketers demonstrate that the marketing - entrepreneurship interface is a defensible concept.

However, while it could be argued that marketing is increasingly becoming the home of the entrepreneurial process in an organization (Murray, 1981), both are not necessarily the same. Although they both overlap, there are some areas in which they are each distinct. The entrepreneurial orientation typically include elements of innovativeness, risk-taking and proactiveness (Miller, 1983) or aggressiveness, innovativeness, boldness and expansiveness in decision-making (Ginsberg, 1985). The marketing orientation, on the other hand, typically emphasizes the use of market research, forecasting, competitive intelligence, and formal marketing plans to analyse and uncover existing threats and opportunities in the current environment. (Morris and Paul, 1987).

Brown (1993), in arguing that postmodernism has very serious implications for marketing thought, states:

....postmodernism is characterized by the celebration of skepticism, subversiveness, irony, anarchy, playfulness, paradox, style, spectacle, self-referentiality and, above all, by hostility towards generalizations.....Postmodernists reject attempts to impose order and coherence upon the chaos and fragmentation of reality.(Pg 21)

Brown (1993) suggests that such scepticism towards extant marketing theory is not entirely without basis. For example, the validity, reliability, universality and predictive power of various tools such as the product life cycle, Fishbein's behavioural intentions model, Maslow's hierarchy of needs, the Howard-Sheth model and so on, are far from established despite many years of research.. In the same way, the evolution of the marketing concept also been exposed as unreliable on numerous occasions. Postmodernism therefore compels modern marketing to *"re-examine its theoretical accomplishments, question its epistemological assumptions, appraise the*

appropriateness of its methodological procedures and, most importantly perhaps, justify its continuing existence."

In summary, the marketing concept per se has several limitations viewed from various perspectives. The absolute adoption of the marketing concept is not the only option available to organizations. As discussed in Section 3.4, the entrepreneurial market orientation has been suggested. To explore this alternative perspective, it is useful to explore the extent of the marketing - entrepreneurship interface.

The next section discusses the nature of the marketing-entrepreneurship interface and how it may have a relationship to organizational performance.

3.6 The Marketing - Entrepreneurship Interface.

Although marketing and entrepreneurship have long and established research paths, it has been recognized that these two disciplines have many areas of commonality and convergence. Initial research on the marketing-entrepreneurship interface emerged originally in the US when Professor Gerald Hills from the University of Illinois at Chicago initiated the first meeting on the interface in 1982. This meeting recognized the areas of convergence between the two disciplines and researchers proceeded to work together, culminating in the first American Marketing Association's Research Symposium on Marketing and Entrepreneurship in 1982. (Collinson, 2002)

According to Professor David B. Montgomery, the Sebastian S. Kresge Professor of Marketing Strategy Emeritus at the Stanford Graduate School of Business and concurrently Dean of the School of Business at Singapore Management University (SMU), interfunctional interfaces is one of the critical issues in business education. Such interfunctional interfaces have been described as *"fault zones (as in earthquakes) in corporations."* According to Professor Montgomery, *"the difficulty in the early part of this century will be how to make them work together when they often differ in organizational culture and priorities."* These interface problems will be the real issues in the world of tomorrow. (Asia Inc, July, 2003: pp 72)

One approach to determining the marketing - entrepreneurship linkage is to explore its relationship at the broad management level and then taking it through the various functional areas.

It must be emphasized, however, that this interface is not about marketing by entrepreneurs or small businesses but about the links between the two activities.

Murray (1981) suggests that business problems faced by corporations may be related to an underlying shift in western economies to a business environment that demands a predominately entrepreneurial strategic response by the firm. As part of this response, marketing management must reassess its role. Instead of refining the marketing process in well-developed and relatively well-known product-markets, the new challenge is to find new generic product-markets. This new role can be visualised as a location for the entrepreneurial process in an organization. This in turn has many implications for marketing management.

Morris and Paul (1987) have attempted to examine the relationship between entrepreneurial and marketing orientations of a firm. Both marketing and entrepreneurship represent strategic responses to turbulent environments faced by firms and they suggest that a more entrepreneurial firm will also be more marketing oriented. They observe:

Companies that score higher in terms of entrepreneurial orientation also tend to be more marketing oriented. conservative firms attempting to be more entrepreneurial will find the marketing function to be an effective vehicle for achieving such a move.

This study indicates that the skills in marketing need to reflect the characteristics of entrepreneurship like innovation, risk-taking and proactiveness. Marketers must not only show an understanding of customers' needs but be more entrepreneurial in translating developments in the environment to commercially viable products and services.

Miles and Arnold (1991) have conducted a study to determine whether the marketing orientation construct and the entrepreneurial orientation construct describe the same underlying business philosophy or two unique perspectives. They found that while marketing orientation and entrepreneurial orientation are correlated, supporting the findings of Morris and Paul (1987), they are not the same underlying business philosophy:

Essentially the marketing orientation can exist independently and does not always need aspects typical of an entrepreneurial orientation such as an organization's tendency to be innovative, accept risks and act in a proactive manner.

This apparent paradox can be explained with a number of reasons. One is that the increase in the level of environmental uncertainty may affect the relationship between the two orientations more positively. As environmental turbulence increases in intensity, a marketing-oriented organization might augment this with a more entrepreneurial orientation.

Morris and Lewis (1995) have also attempted to show that entrepreneurship may have much in common with marketing by using a "entrepreneurial intensity" diagram in which five broad scenarios are identified in terms of their variations in entrepreneurial intensity as illustrated in Figure 3.14 :

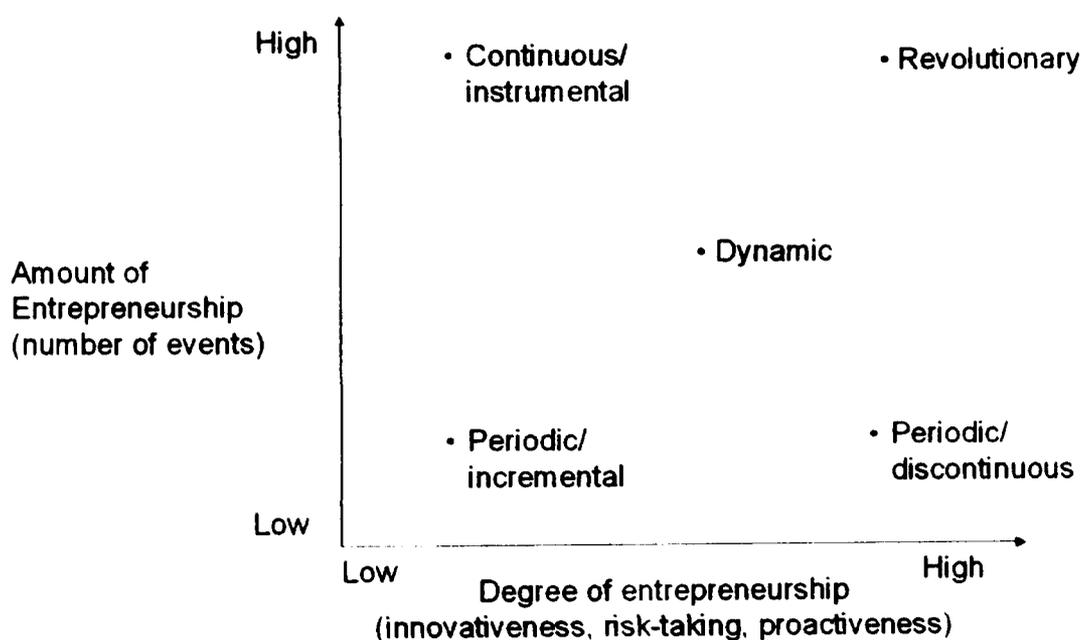


Figure 3.14 Entrepreneurship as a variable phenomenon

Source : Morris , Michael H. and Lewis, Pamela S., (1995);

"The determinants of entrepreneurial activity : Implications for marketing",

European Journal Of Marketing, Vol. 29 No. 7, 1995, pp 31-48.

Using this diagram, it is then possible to identify a wide range of marketing-related efforts reflecting the various entrepreneurial intensity. For example, vendors of jeans and franchisees of consumer products might be considered as periodic/incremental entrepreneurs. Companies that

constantly come up with innovations might be called continuous/incremental entrepreneurs such as Procter and Gamble and Polaroid. Dynamic entrepreneurs might include organizations like CNN and Sony . Those who market breakthrough innovations like AT & T might be labelled as dynamic entrepreneurs. According to Morris and Lewis (1995), it is highly possible that firms which are more entrepreneurial tend to display a stronger marketing orientation . Both marketing and entrepreneurship can be part of the same business philosophy:

..... higher levels of entrepreneurship imply new products and services, shorter product life cycles, new markets and market niches, and new forms and methods of promotion and distribution. All this not only creates a greater need for marketing, but can be accomplished only as a function of marketing.

In this viewpoint, it would appear that entrepreneurship is a part of marketing and vice-versa. In fact, entrepreneurship plays a pivotal role in affecting the evolution of marketing. Where entrepreneurial intensity increases, economic growth and development is enhanced ; in turn, the scope of marketing is affected.

Hills & LaForge (1992) have proposed that *“if we address the entrepreneurial spirit, it can be hypothesized that marketing is the organizational function most dominated by boundary agents: by open interactive systems, and by truly entrepreneurial activity.”* Furthermore, from a management perspective, the relationship between marketing management and entrepreneurship can be demonstrated with the following illustration.(Figure 3.15):

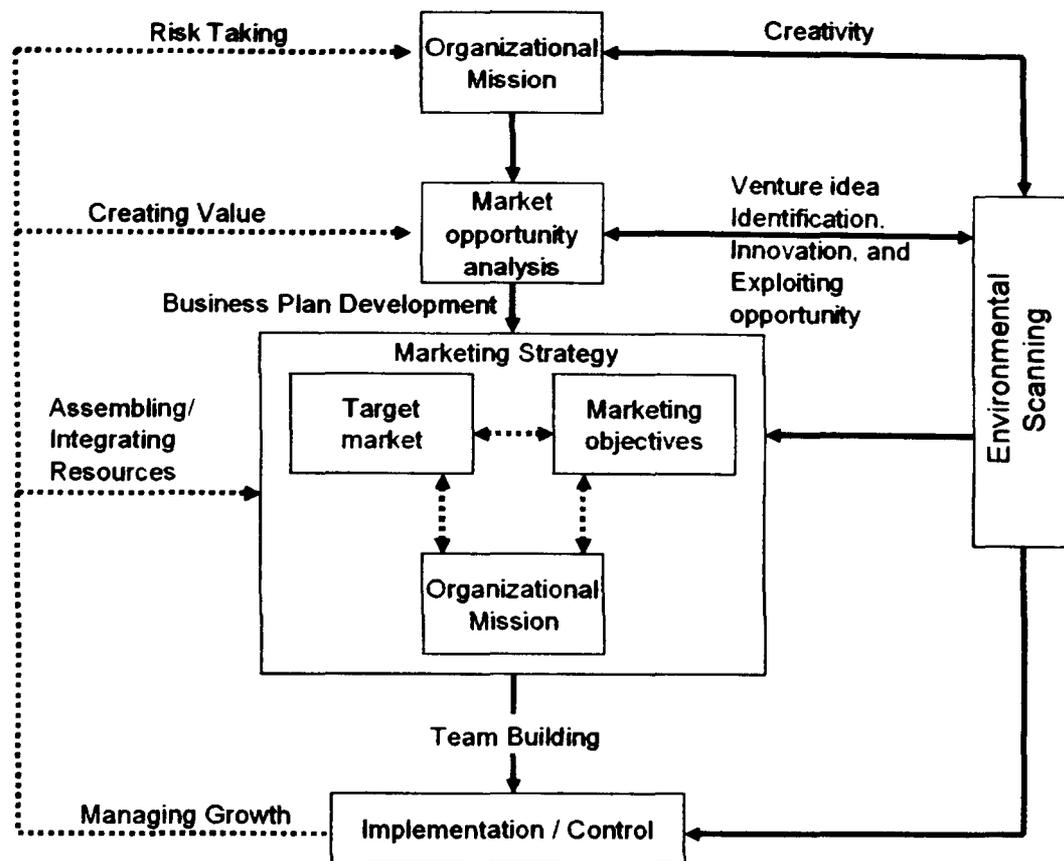


Figure 3.15 Marketing Management and Entrepreneurship

Source: Hills, Gerald E. and LaForge, Raymond W. (1992), "Research at the Marketing Interface to Advance Entrepreneurship Theory", *Entrepreneurship Theory and Practice*, Spring, 1992: 33-59

Using the definition of marketing management as being "the process of scanning the environment, analysing opportunities, designing market strategies, and then effectively implementing and controlling market practices", Hills (1994) points to its interface with the practice of entrepreneurship in several ways:

Venture idea identification, innovation and exploiting opportunities seem to fit naturally between environmental scanning and market opportunity analysis. Team building becomes critical as the implementation stage is approached and the venture is launched. The business plan is partially comprised of market feasibility analysis and marketing strategy.

Success in entrepreneurship and marketing both require that initial sales must be followed by growth management and the use of customer feedback and a constant reappraisal of customer needs in order to create superior value to the customer relative to what competitors have to offer.

Gardner (1994) suggests that “*entrepreneurial behaviour is potential candidate to significantly influence marketing thought and practice because it deals directly with a key concept in marketing: bringing innovation successfully to market.*” By the same token , it is logical to assume that marketing may likewise influence the understanding of entrepreneurial behaviour.

The marketing-entrepreneurship interface, according to Gardner (1994), may be illustrated as follows (Figure 3.16):

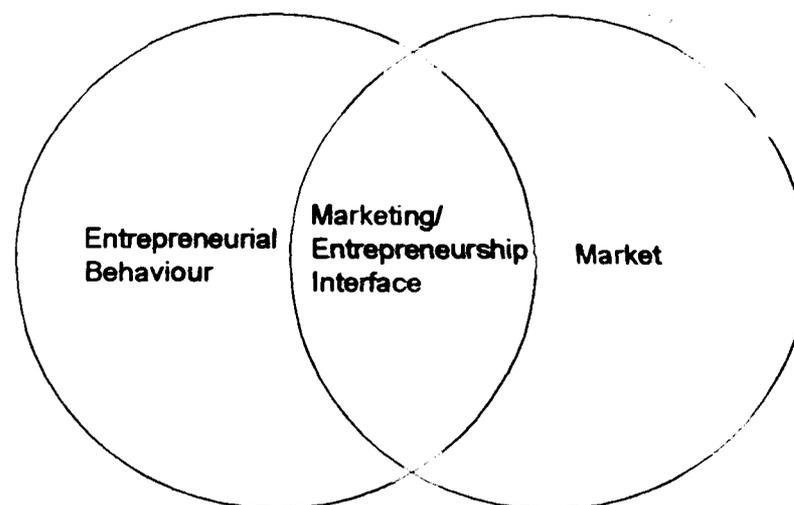


Figure 3. 16 The Marketing - Entrepreneurship Interface

Source: Gardner, David M., (1994), “Marketing / Entrepreneurship Interface : A Conceptualization”, *Marketing And Entrepreneurship : Research Ideas and Opportunities*, Gerald E. Hills [ed] (1994), Quorum Books, Greenwood Press., USA

In the paradigm, the sources of entrepreneurial behaviour could come from inside or outside the organisation and include the individual entrepreneur, the intrapreneur and entrepreneurial organisations themselves. The intrapreneur exists within an organisation , in the same way as entrepreneurial organisations which encourage entrepreneurial behaviour. The individual entrepreneur exists outside the structured organisation , although in time to come he might form a structured organisation himself.

As far as concepts are concerned, Gardner (1994) expresses the view that the important interface concepts necessary to plan for, acquire, and process the information critical for entrepreneurial success would include the following:

- **Marketing concept**
- **Marketing segmentation**
- **Time, place & possession utility**
- **Product life cycle**
- **Strategic planning.**

The first concept is the marketing concept which requires the placing of the customer needs as sovereign. According to Gardner (1994), although there have been critics of the marketing concept, there is no escaping the need to understand the needs and problems and the *“the entire range of issues affecting the market reaction to the particular product and/or serviced introduced by entrepreneur behaviour”*. In addition, the marketing concept suggests *“a thorough familiarity with the purchaser/user of one’s product.”*

The second concept is that of market segmentation, which is closely related to the marketing concept as it *“directs entrepreneurial behaviour towards specific, identified groups of purchasers / users”*. From this concept, the entrepreneur gain the insight and tools to recognize the the specific degree of homogeneity or heterogeneity in a particular market. From this concept also comes the recognition that segments evolve over the product life cycle and may be different for innovations at different stages of development.

The third concept is the creation of time, place and possession utility. Since all marketing activity is ultimately concerned with getting the product and its benefits to the hands of the intended purchaser/user. This approach *“has direct implications for price, promotion, and distribution as well as the attributes added to the product itself”* which are all inherent in entrepreneurial behaviour.

The fourth concept is the Product Life Cycle. This concept implies that products have a limited life cycle, their sales history follows an ‘S’ curve and various marketing strategies and tools have different impact throughout the life of the product. Entrepreneurial skills are required to stay effective throughout the product life cycle.

Finally, the fifth concept is strategic planning which is common to both marketing and entrepreneurial behaviour in that *“anticipating the growth of demand and competition is of critical importance to achieving sustained market success that originates with innovation.”*

Gardner (1994) proposes an Entrepreneurial Behaviour/Marketing Interface Paradigm which is illustrated in Figure 3.17:-

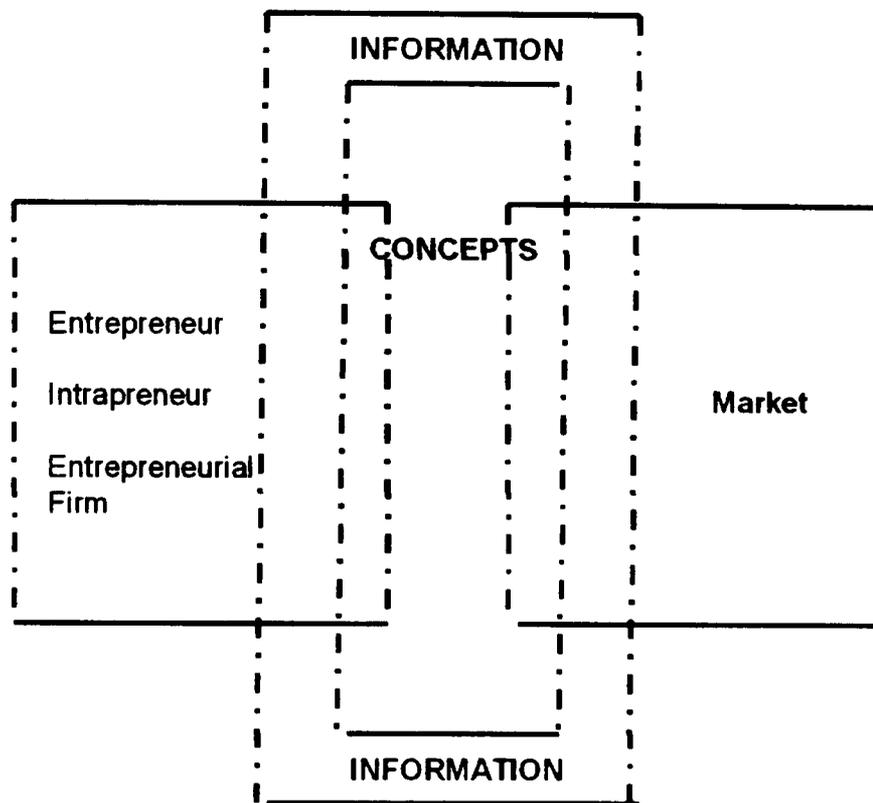


Figure 3.17 Entrepreneurial Behaviour /Marketing Interface Paradigm
 Source: Gardner, David M., (1994), "Marketing / Entrepreneurship Interface : A Conceptualization", *Marketing And Entrepreneurship : Research Ideas and Opportunities*, Gerald E. Hills [ed] (1994).
 Quorum Books, Greenwood Press., USA

The proposed paradigm has implications for the marketing/entrepreneurship interface in three areas : entrepreneurial behaviour, marketing, and markets.

The first implication is that "*successful entrepreneurial behaviour must incorporate a wide range of marketing concepts.*"

The second implication is that since marketing provides the concepts to obtain sustainable competitive advantage, it must provides the tools to manage the Product Life Cycle over its lifetime. In addition, it also recognises the existence or non-existence of opportunities for innovations.

The third implication is in the area of markets, where opportunities can arise from a number of sources. Information here is crucial since it is only with information that *“proper positioning and strategy issues be addressed.”*

However, it is obvious that not all issues relating to the possible interface have been explored and only the key aspects have been discussed as warned by Gardner (1994):-

This exploration of the entrepreneurial behavior/marketing interface is not designed to explore the entire range of entrepreneurial issues. It is only designed to explore the important, but somewhat narrow, range of issues where entrepreneurial behavior and marketing share common ground.

In summary, Gardner (1994) points out to the dynamic nature of the interface and the need for flexibility and adaptability in a rapidly changing environment. It would also be necessary to be aware of the critical success factors in the interface. In addition, he believes that *“the key element in understanding the marketing/entrepreneurship interface is the role of information in entrepreneurial behavior.”*

Hills (1997) also proposes that there is a overlap between the marketing concept and entrepreneurial success which is illustrated in Figure 3.18

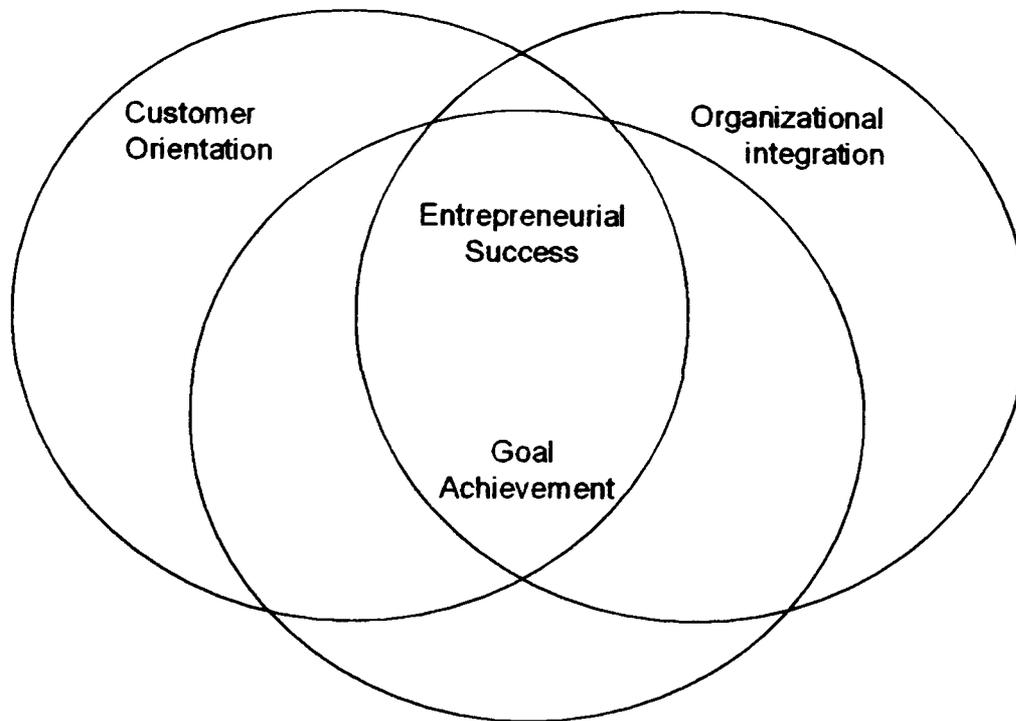


Figure 3. 18 The marketing concept and entrepreneurship
 Source: Hills, Gerald E. (1997); "Market Opportunities and Marketing";
The Portable MBA in Entrepreneurship 2nd edition; (William D. Bygrave;
 ed); John Wiley & Sons, Inc.

The marketing orientation involves the adoption of the marketing concept which comprises customer orientation, an integrated marketing strategy throughout the organization in order to achieve goals. Entrepreneurial success comes only if these three essentials are also adopted in a venture. In that respect, the marketing-entrepreneurship interface seems quite obvious.

It is clear the marketing - entrepreneurship linkage appears to overlap in many aspects. It would be almost instinctive for entrepreneurs to be alert to opportunities in the marketplace in order to survive. In the process of seizing opportunities, entrepreneurs are likely to be more sensitive to the concepts above - satisfying needs; market segmentation; time, place and possession utility; product life cycle and strategic planning. This is particularly so if the advantages in doing so are obvious in terms of results.

Hisrich (1994) provides 5 reasons why the marketing and entrepreneurship interface is important:-

- i. Marketing is one of the two biggest problems (the other being finance) facing entrepreneurs in the United States and throughout the world.

- ii. Many entrepreneurs believe that everybody needs their innovation and have no concept of market reality.
- iii. The mentality of entrepreneurs that their inventions might be stolen by others resulting in inventions being hidden and not benefitting from market feedback.
- iv. Marketing knowledge is lacking in some entrepreneurs, particularly those from a technical or engineering background.
- v. Entrepreneurs can be poor managers

Hisrich (1994) also points out that one important aspect of the marketing-entrepreneurship interface is that it shares much in common, in particular in these areas:

- i. Both should be based on a marketing orientation
- ii. Both have a 'deal' mentality; for the entrepreneur, this refers to the conceiving and developing a venture and for the marketing manager, it refers to the closing of the sale.
- iii. Both require the presence of distinctive competence
- iv. Both are affected by environmental turbulence
- v. Both have a behavioural orientation
- vi. Both are all encompassing - marketing in terms of its models

On the other hand, although there are some similarities between marketing and entrepreneurship, Hisrich (1994) explains that *"operationally, conceptually they are different and may not even interface"* and offer some reasons for this.

The first reason is that the focus of entrepreneurship is innovation and independence: in marketing, duplication is often more prevalent than innovation. Companies tend to follow an established pattern set by the market leader.

The second reason is that entrepreneurship is more internally focused compared to marketing: for example, for a successful product launch to occur, all aspects of the venture must first come together.

The third reason is that the entrepreneur is often protective of his idea or innovation and thus often does not interface with potential customers at an early stage in obtaining consumer feedback.

According to Hisrich (1994):

The similarities between marketing and entrepreneurship are clearly evident in the overlap between the entrepreneurial process and the product planning and development process. Both processes involve the identification of an opportunity and the development of the business plan. (pp. 135)

However, the first point above on innovation being a key feature of entrepreneurship and not that of marketing is not entirely correct. Good marketing requires innovative ideas to succeed in a competitive marketing environment. Over time some duplication in marketing is unavoidable. After all, ideas that work should not be discarded for the sake of being innovative. In the same way, although entrepreneurs are innovative, they are likely to follow market leaders or an established pattern if such an act brings results.

Compared to marketing which needs to be integrated, entrepreneurship is often attributed to an individual with vision and entrepreneurial flair. Certainly, in many cases, these individuals tend to be more internally focused and keep things close to themselves, especially in the initial stages of the venture. However, as the venture grows, management becomes too complex for one person to handle and professional management staff are eventually recruited to help. When that happens, it is likely that integrated and co-ordinated efforts are required for the venture to succeed further.

Whether the entrepreneur seeks consumer feedback in the early stages of the venture or not depends on a number of factors. Most entrepreneurs usually have a high level of self confidence in the first place that they will succeed. This is particularly so for those who choose to become entrepreneurs in a business they are thoroughly familiar with. Furthermore, since entrepreneurs take calculated risks it is likely that they have done some homework and perhaps even much leg work before making any decisions. Although entrepreneurs might not be bothered with formal time-consuming consumer surveys, it is a possibility that they do evaluate consumer feedback in a their own casual ways.

Chaston (1997) has studied the marketing-entrepreneurship overlap from the perspective of the small firm. In his viewpoint, marketing in the smaller firm can be viewed as an integral part of managing entrepreneurial activities. This is because smaller firms face several obvious constraints compared to larger organizations. These might include: goals determined by the owner/manager instead of being based on an analysis of opportunities; lack of the necessary resources to enable proper selection of products and markets, sustaining of long-term growth and optimal organization structure; lack of general management expertise and limited customer base. .

Ward et al (1992) attempt to link the marketing-entrepreneurship link in regards to small-scale enterprises from the perspective of less developed countries (LDCs). They note that "*the entrepreneurial spirit and the need to form businesses clearly exists in LDC's in the ASEAN region*". However, such enterprises face formidable barriers to survival, let alone growth. These problems arise from the limited opportunities in their domestic markets as well as a lack of abilities to form and grow an enterprise. Entrepreneurs in such situations need marketing abilities to grow their businesses, particularly if they desire to expand beyond their domestic markets. According to Ward et al (1992):

The key skills for exploiting export markets are clearly marketing ones - market assessment, understanding buyer behaviour, distribution issues, competitive analysis, etc...

The issue of the marketing-entrepreneurship interface in small and medium enterprises (SMEs) has also been discussed by Carson, et al (1995) who suggest that the key points of interface between marketing and entrepreneurship are opportunity, innovation and consequential change as illustrated in Figure 3.19:

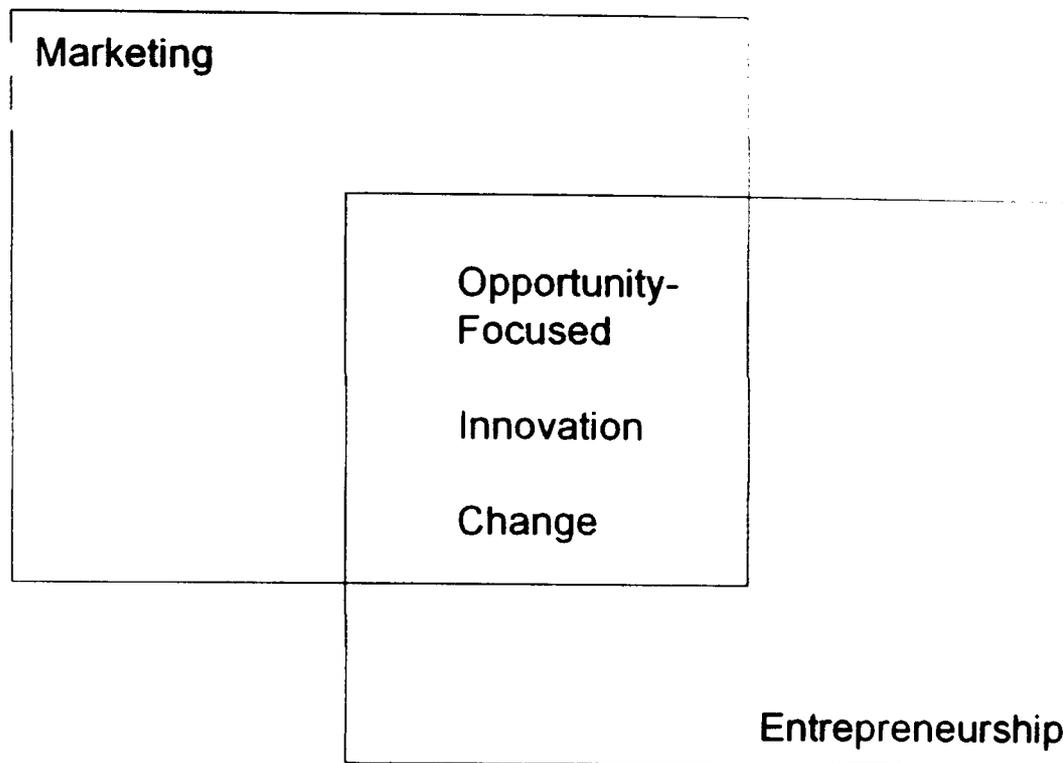


Figure 3.19 Key issues in the marketing-entrepreneurship interface
 Source: Carson, David., Cromie, Stanley., McGowan, Pauric., & Hill, Jimmy.,
 (1995), *Marketing and Entrepreneurship in SMEs : An Innovative Approach*,
 Prentice Hall International (UK) Ltd

From the very beginning, owners of SMEs need to be focused persistently on seeking opportunities, committed to doing new or different things by being innovative and be comfortable with the consequential change that arises. The attitudes and focus of activity required for these are common to both marketing and entrepreneurship.

The common denominator of this interface may be change itself as it is the ultimate outcome of any effective marketing and entrepreneurial activities. The successful implementation of a market expansion strategy by an SME, for example, is likely to have an impact on the organisation . sometimes changing it beyond recognition . Such 'creative destruction' is the hallmark of the Schumpeterian entrepreneur. (Thurow, 1999; Hamel, 2000; Gilbert, 2003)

According to Carson et al (1995), "*entrepreneurship and marketing are attitudes, ways of thinking and of behaving, ways of doing*" and as such both affect and influence the establishment and development of new ventures. This interface impact on the way people approach their jobs and responsibilities and how they acquire resources, manage the operation and promote their enterprise

and products. Thus, it could be argued that the issues facing firms as they grow are both entrepreneurial and marketing in nature. In this respect, the common denominator uniting both areas is the key need for change

From this perspective, there is clearly a linkage between marketing and entrepreneurship. If entrepreneurs lack business planning and marketing skills, two possible difficulties can arise. Firstly, they will not have access to capital without a sound business and marketing plan. Secondly, if they do not have knowledge about export markets, they are likely to be dependent on traders and brokers who obviously will not do anything to enhance the entrepreneurs' understanding of export marketing.

In a study of market orientation, entrepreneurship and learning orientation in China's emerging economy, Liu et al (2003) have found that China's state-owned enterprises (SOEs) *"to a rather large extent, have adopted both market and learning oriented strategies, with an emphasis on corporate entrepreneurship"*. Those enterprises with a higher level of market orientation tend to be more learning oriented, place greater emphasis on entrepreneurship and tend to achieve higher organizational performance than their counterparts with a lower level of market orientation.

At the functional levels, attempts have also been made to link entrepreneurship with the other components of the marketing mix, namely: pricing, distribution and marketing communications.

Teach et al (1994) have studied pricing issues for entrepreneurial firms and conclude that *"there are two almost universal problems facing entrepreneurial endeavours: the inadequacy of time and money"*. The problem of pricing is compounded by the fact that not all the costs are known until the product is completed and yet entrepreneurs do not have the time to establish a well-thought-out pricing policy. In addition, pricing is not a stand-alone decision and is affected by many other factors such as derived demand and relationship between the entrepreneur and his customers.

In marketing, the decision on pricing too is affected by both internal and external factors. While such factors need to be considered carefully, in the final analysis, the crucial issue is whether customers are willing to pay the price asked for in any given situation. There is no reason why the entrepreneur would not consider the factors in making pricing decisions. Both marketers and

entrepreneurs do not make pricing decisions in a vacuum but are affected by similar factors, either within or beyond his control.

The relationship between entrepreneurship and the sales function has been examined by Morris, et al (1994). Because turbulence in the external environment can create opportunities as well as threats for the firm, the sales function, by virtue of its constant interaction in the firm's external environment, is therefore in a unique position to recognize opportunities, especially those involving customers, their needs and buying processes.

Entrepreneurship involves both a way of thinking and a type of behaviour and has particular relevance as far as sales professionals are concerned. In terms of attitude, those in sales should think of themselves as entrepreneurs, which implies a willingness to be creative, to take calculated risks, and to be action oriented. In terms of behaviour, entrepreneurship involves a process. (Stevenson et al, 1989). In the selling process, sales professionals need to identify sales opportunities, develop innovative business solutions, assess and acquire the necessary resources and follow through with effective implementation.

It is fair to assume that in general entrepreneurs, like marketers, are interested in making sales that result in customer satisfaction and other predetermined goals that advance the firm's interest over the long-term. In that respect, it is in the interest of entrepreneurs to adopt marketing techniques to promote their products and services.

In addition, it would appear that there are similarities in characteristics between entrepreneurship and personal selling and these are listed as follows: *achievement-oriented; persuasive; assertive; take initiative; versatile; perceptive; energetic; self-confident; internal locus of control; independent; calculated risk taker; creative; resourceful; opportunity seeker; comfortable with ambiguity; hard worker; well organised.* (pp 193)

These qualities are consistent with the characteristics of entrepreneurs discussed in Section 2.4 of Chapter 2. Thus it would appear that salespeople are natural entrepreneurs in many ways and vice-versa. Apart from characteristics and traits, another approach is to identify the common activities of entrepreneurs and salespeople. Although there may be some linkages, there are areas where such linkages may be weak, particularly in some cases where salespeople resist change brought about by a shift to an entrepreneurial orientation. In monopolistic firms, salespeople are

less likely to be entrepreneurial and thus are more likely to resist any effort to introduce a more entrepreneurial approach in the sales operation. In other situations, salespeople may actually be in very comfortable positions due to the firm's strong brand image or first-mover advantage and will tend to resist any change. Furthermore, whether salespeople are entrepreneurial or not may also depend on the tone and example set by the firm's management.

In addition to the above, Morris et al (1994) advance 5 key problem areas that could limit the extent of entrepreneurship within the sales function:-

- *Strategy inconsistencies*
- *Unfocused efforts*
- *Unrealistic customer expectations*
- *Alienation of workers*
- *Cost of failure*

The overall balance between entrepreneurship and sales effort depend very much on the boundaries set by management as well as personal characteristics of the individual. Thus, both environmental as well as individual factors are crucial to the extent of entrepreneurial behaviour within the sales function.

✍ In addressing the issue of marketing communication in the marketing-entrepreneurship interface, Eighmcy et al (1994) define marketing communication as *"all selling and promotion efforts other than personal selling and the management of the sales force. Marketing communication is often divided into two major categories : advertising and public relations."*

One possible linkage is the need for entrepreneurs to use marketing communication quickly to achieve pre-determined goals. According to Eighney et al (1994), *"the role of marketing communication is to make things happen faster in the marketplace. For an entrepreneur, that objective is paramount."*

However, the marketing communications efforts of entrepreneurs are not always consistent. Often, such efforts are often hampered by several constraints: limited funds, limited staff to to perform marketing, advertising and public relations activities, and by the tendency to assign such functions to staff without the necessary training.

The extent to which marketing communications are interfaced with entrepreneurship depends heavily on many variables. The corporate entrepreneur may have a bigger budget allocated for marketing communication activities. The larger firm may be prepared to take a longer term view in terms of commercial results. On the other hand, the smaller firm is unlikely to have the kind of budget to invest in serious marketing communication activities or the luxury of a long-term perspective.

Slater and Narver (1995) have argued that *“a market orientation, with its focus on understanding latent needs, is inherently entrepreneurial.”* However, such entrepreneurial values must be made explicit. . They further add that *“coupling a market orientation with entrepreneurial values provides the necessary focus for the organization’s information processing efforts, while it also encourages frame-breaking action”*. This implies that marketing and entrepreneurship are both inherently interfaced in some aspects.

Whatever the extent of the marketing-entrepreneurship interface, it is clear, however, that marketing is of utmost importance to entrepreneurs. According to Lodish et al (2001):-

Marketing is of critical importance to the success of most entrepreneurial ventures. Compared to other business functions, marketing has been rated as much more important to the new venture's prosperity

Teach and Miles (1997) have suggested that while entrepreneurship has not become a primary field in the discipline of marketing, entrepreneurship is a growing and important area and should become incorporated fully into the domain of marketing. As pointed by McGowan and Durkin (2002), marketing and entrepreneurship are both about the practice of innovation and change, identifying opportunities in the marketplace with growth potential and marshaling the resources needed to exploit them. Innovative activity is thus at the heart of any understanding of the nature of the marketing-entrepreneurship interface. They further suggest that *“a core task for the marketer in an entrepreneurial enterprise therefore is to induce and monitor innovation within the firm.”* (McGowan and Durkin, 2002). These observations are reinforced by Collinson (2002) who suggests that marketing and entrepreneurship have much to offer to each other despite differences and overlap. Creativity is viewed as a key competency at the marketing-entrepreneurship interface, linked with related issues such as innovation, vision, leadership and motivation (Fillis, 2002). Even headmasters of primary schools have been at the forefront of the

marketing-entrepreneurship interface ever since attempts were made to introduce competitive market forces into the public education system in the UK.(Stokes, 2002) Indeed, the term entrepreneurial marketing has become increasingly used in contemporary discussions. Chaston (2000) has equated entrepreneurial marketing with gaining first mover advantage and adding value through challenging existing market paradigms with unconventional goods and services and / or unconventional use of any or all of the marketing mix.

The marketing-entrepreneurship interface is however not a static process but rather a dynamic one starting with the creative process. Nystrom (1998) suggests that there is a need to extend the paradigm and study it in a more dynamic context . This can be done using a creative management approach, which ties together economic, organizational, and psychological mechanisms to try and understand the dynamic marketing-entrepreneurship interface from a strategic management perspective.

3.7 Summary

Overall, it would appear that while there are linkages between marketing and entrepreneurship, such an interface does not fit tightly in all aspects. In many aspects, the interface is logical, while in some they are not (Murray, 1981; Morris and Paul, 1987; Miles and Arnold, 1991; Hills and LaForge, 1992; Ward, et al, 1992; Gartner, 1994; Hills, 1994; Hisrich, 1994; Morris, et al, 1994; Teach, et al, 1994; Eighey, et al, 1994; Carson, et al, 1995; Foxall and Minkes, 1996; Chaston, 1997). Indeed , such interface has led to entrepreneurial marketing being a subject of serious study. (Lodish, et al, 2001; Calvin, 2002; McGrath and MacMillan, 2002).

The marketing concept as a philosophy of business can be consistent with entrepreneurship since entrepreneurs must satisfy the needs of the marketplace to succeed. Entrepreneurs must be customer oriented to stay in business and cannot afford to neglect the changing needs of customers. Successful entrepreneurs are also more likely to sustain their competitive advantage and better co-ordinate and integrate the firm's various functions to meet their long-term goals.

The marketing-entrepreneurship interface is also quite obvious with regard to being innovative and opportunity-seeking. Successful marketing, like entrepreneurship, requires that firms not only introduce innovations regularly but also do so in innovative ways. In the same way, marketing-

oriented and entrepreneurial oriented firms not only see opportunities but seize opportunities faster and quicker than their competitors.

Both marketing and entrepreneurship respond to changes in the environment as well as create changes. Such firms recognise that changes are inevitable and are willing to subscribe to creative destruction as a necessary means to progress and advancement for the firm.

On the other hand, Carson et al (1995) suggest that there is a point in the organisation's growth where the marketing-entrepreneurship interface ceases:-

Differences between entrepreneurship and marketing practice begin to emerge when the new venture starts to build a profile in its market and shows results for all the entrepreneur's efforts... The enterprise that settles down and seeks to limit its growth and development has, for all intents and purposes, ceased to be entrepreneurial.

In this phase, management hierarchy is likely to be structured and new pressure will be exerted on the organisation as new employees are recruited, new products sought and new customers found, and new skills and resources are required. All these combine to affect decision-making, which is likely to become more structured and formalised. The early entrepreneurial culture will eventually decrease and fade as the founder-entrepreneur has to rely increasingly on specialised managerial and technical skills as well as systemization of operating mechanisms and controls.

The Marketing-Entrepreneurship interface has also been seen in emerging economies like China, where enterprises with a higher level of market orientation have been found to be more entrepreneurial and learning oriented. Such interface has also been found to be linked to higher organizational performance compared to enterprises with a lower level of market orientation. (Liu, et al, 2003)

At the functional level the interface may not be so clear in some other instances. Marketing practices tend to employ and manage the marketing mix of product, price, place and promotion management in a formalised manner to reach the target markets. Strategic marketing planning is likely to become a formal process within the organisation. In contrast, entrepreneurial decision-making is more likely to be based on the individual entrepreneur's knowledge of the market and his/her personal preferences and gut feelings.

In summary, while the marketing-entrepreneurship interface may be quite obvious in the early stages of an entrepreneurial firm's existence, such an interface tends to become less pronounced over time as the firm grows and develops into a professionally managed entity, where structured and formalised decision-making begin taking root.

Having established the nature and extent of the marketing-entrepreneurship interface, the next chapter will attempt to develop a theory and proposition on this interface.

Chapter 4

Marketing & Entrepreneurship : Theory and Proposition

4.1 Introduction

In Chapter 3, various issues relating to the marketing-entrepreneurship interface were discussed. It could be argued that at the philosophical level, the interface appears to be much more realistic while at the functional or operational level, the interface is not entirely clear. In the previous chapter, the marketing orientation – performance relationship was also discussed. While there is some consensus that marketing orientation does contribute to organizational performance in general, in some cases this relationship is subject to a variety of antecedents or moderators. It was also established in Chapter 3 that the marketing concept by itself is not the only perspective available to the firm and other perspectives may be just as valid and relevant. In Chapter 4, the argument will be made that the relationship between the marketing - entrepreneurship interface and organisational performance should be considered.

However, before developing the appropriate theory and proposition, the marketing and entrepreneurship interface will be placed in the appropriate context. The key argument is that the nature of such an interface is highly contextual and the relationship is contingent on other prevalent factors at a given time. Following a discussion on the context of the marketing-entrepreneurship interface, the theory and propositions will then follow..

Section 4.2 examines the impact of entrepreneurship within the context of different types of economies. It can be suggested that entrepreneurship in a command economy might differ significantly from that in a free economy where information is much more readily accessible for consumer decision making and where market competition is of greater significance. Furthermore, the level of competition inherent in the different types of economies could also result in entrepreneurship taking several types and forms. Economies which are mixed in nature, ie between the command and the totally free economies continuum, might also breed entrepreneurship of a different nature since the playing field in such economies differs from the other two extremes. Thus it can be suggested that the nature of the economic system is likely to affect the marketing-entrepreneurship relationship.

Section 4.2.1 focuses on entrepreneurship in a command economy with the view of determining the underlying characteristics of entrepreneurship under such conditions. Since the state in such economy owns all resources and allocates them centrally, the issue is whether entrepreneurship can flourish. The former Soviet Union and parts of Eastern Europe were countries in this category and entrepreneurship in those contexts will be explored.

Section 4.2.2 looks at entrepreneurship at the other end of the spectrum, i.e., the market economy. In this type of economy, market forces of supply and demand essentially dictate the state of the economy with the state playing a minimal role. Under such circumstances, entrepreneurs need to be much more competitive in order to succeed. This could possibly mean that the types of entrepreneurs and their motivations and activities could well differ from that of their counterparts in the command economy.

Section 4.3 addresses the role of marketing and entrepreneurship in economic development. It could be argued that the extent to which the marketing and entrepreneurship interface may be highly dependent on the stage of a country's economic development. It is possible that in poorer or developing countries, the relevance of marketing may be less crucial for successful entrepreneurship because of factors such as purchasing power and the level of excess demand and the level of competition.

Section 4.4 attempts to explain and expand on the various types of entrepreneurial activities under different socio-economic conditions at a given time. In command economies, entrepreneurial activities might be less sophisticated than those in the free economies. In the same manner, entrepreneurial activities in less developed economies are likely to be different to those in the developed economies.

Section 4.5 examines how the strategic orientation of entrepreneurs is also crucial in determining the types of entrepreneurial activities pursued. All these would mean different implications for marketing and thus ultimately affect the nature and extent of the marketing-entrepreneurship interface.

Section 4.6 proposes a model of the marketing-entrepreneurship interface. The model suggests that the extent of the marketing-entrepreneurship interface is highly contextual and depends on the interplay of several possible variables at any particular time period. The degree of the interface

depends very much on certain key factors prevalent at a given point time in a country. These factors would include the economic system in operation, the stage of economic development, the nature of the entrepreneurial activity and the strategic orientation of the entrepreneur or firm. Such an interface is dynamic and will evolve and change accordingly as these factors change over time.

Section 4.7 explains the key hypotheses based on the model developed. In proposing the hypotheses, two key issues are taken as given . The first is the economic system being taken as a market-based one. The second is the level of economic development as being relatively high. These hypotheses are therefore relevant to a particular context such as a particular country, type of economy, or level of economic development. Also, the relationships proposed in the hypotheses are likely to be moderated by the industry environment at any given point in time. Accordingly, Singapore will be selected as the proposed context .

4.2 Entrepreneurship in different types of economies

It could be argued that the type of economy might produce different types of entrepreneurs in terms of the different entrepreneurial ventures pursued, their behaviour and motivations and so on. For example, because of the nature of centrally planned economies , it could be said that entrepreneurs in such economies are confronted with far more constraints in terms of infrastructure, funding, information availability and so on compared with typical free market economies at the opposite end of the continuum. In free market economies, the free play of market forces are likely to mean that information and knowledge about the market and opportunities are far more readily available to entrepreneurs. On the other hand, competition may tend to be more severe and consumers tend to be faced with a wider array of choices. Since consumers also have access to information and can thus make informed choices, this could have an impact on entrepreneurs.

The problem with classifying the types of economies, however, is that it presents immediately two broad difficulties : first, is there a clear demarcation line separating the two extremes?; second, is one extreme necessary better than the other in promoting economic development and entrepreneurship?

Kronenwetter (1986) states that although the two dominant economic ideologies of our time are capitalism and socialism, these are terms commonly used by politicians and not preferred by economists.(pp.2)

Traditional economies are extremely rare in the modern-day context. Because of the tremendous changes to economic conditions over time, traditional economies are simply unable to function efficiently today. When we talk about capitalist economic systems, we are generally talking about market economies, where economic decisions are left to private individuals. When we refer to socialist economies, we are generally referring to various forms of command economies, where a central authority makes most of the important economic decisions. However, it is fairly reasonable to say that most economies in the world today might be classified as mixed economies in varying degrees.

This viewpoint is similar to that of Mabry, et al (1989):

Most economic systems use one or more of three basic methods to make economic decisions: tradition, command, and markets. And economic systems are classified into four broad categories, according to how most economic decisions are made. These are traditional, command, market, and mixed economies.(Pg. 37)

According to Mabry, et al (1989), the 'purely traditional economies are creatures of the past' and 'the economic system used in most countries lies between the two extremes of command and market economies'. Examples of these are illustrated in Figure 4.1:

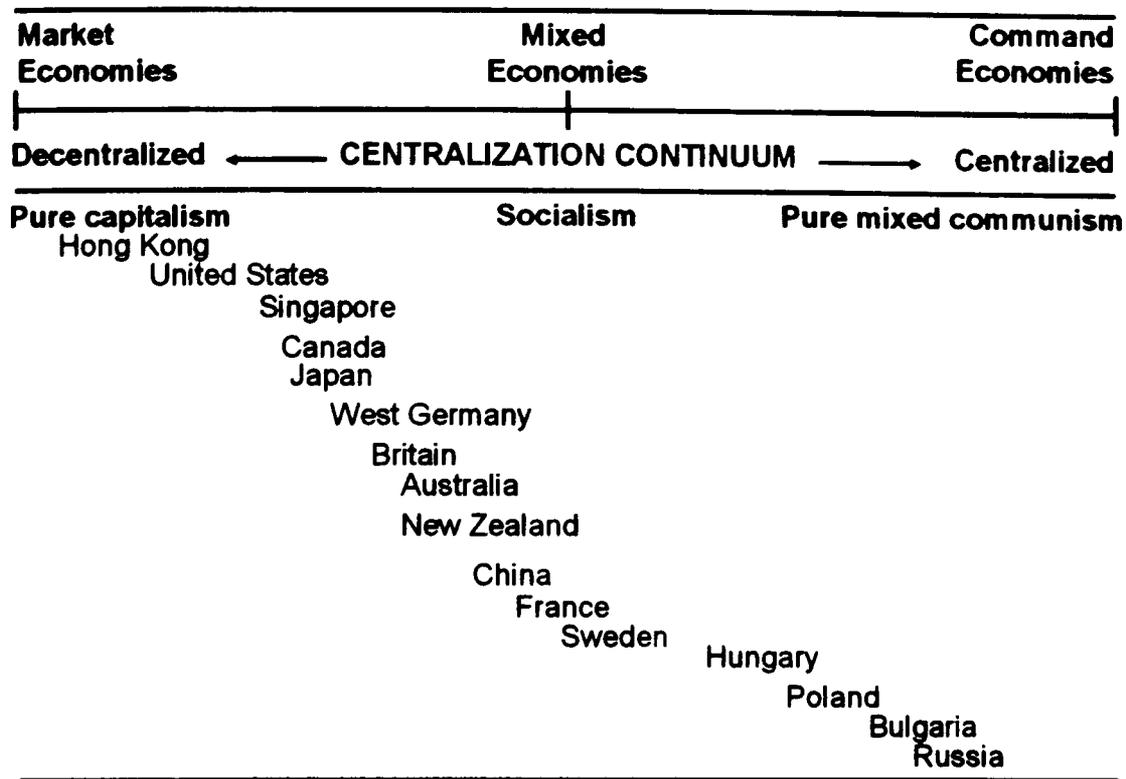


Figure 4.1 Economic Systems
 Adapted from Mabry, Rodney H., and Ulbrich, Holley H.(1989),
Introduction To Economic Principles; McGraw Hill Bok Company.

In reality, therefore , we can say that it is rare to find economies which are strictly command or free and that most economies would fall in-between somewhere along the continuum. Since a clear-cut categorization of economic systems is difficult, the two extremes of market and command economies will be used as a basis in formulating the theory and proposition.

The second inter-related issue is that even if the two completely different types of economies are discernable, is one somehow more suitable than the other in promoting economic development and thus marketing & entrepreneurship?

Sims (1989), writing on capitalism, states:

Capitalism was not invented but evolved slowly through time. It is not a fixed comprehensive theory of an economic process but, in practice, it is constantly changing and showing new aspects of itself. (Pg. 111)

In effect, throughout a country's economic development, resources might be taken from private hands and placed in the government's hands for distribution, eg, during war years. Even in peace times, it could be argued that the state welfare system practised in most free market economies like Germany, the UK and the United States could not be classified purely as capitalist. This viewpoint has also been similarly expressed by Kanth (1992).

The main arguments for this relate mainly to the failure of many command economies in Eastern Europe. Since then, many of the flaws of these centrally planned economies have been exposed. Under such circumstances, it appears that the capitalist economic system might be more appropriate in delivering economic development and allowing entrepreneurship & marketing to prevail.

On the other hand, Brenner (1991) is pessimistic that capitalism as commonly understood and practised may be doomed to failure in the future and states that "*...capitalism may be doomed and society destined to revert to poverty in spite of its technological capability to produce affluence for all.*" (pp. 275)

This is mainly due to the argument that the conditions for its continued survival are no longer readily apparent compared to the past, when the patterns of culture could remain intact despite the competitive environment. In today's capitalist societies, the intense and heightened competitive environment tend to destroy the fabric of the society's cultural make-up, leading to its self-destruction if left unchecked.

Handy (1994) points out to the paradox of capitalism:

Capitalism thrives on the first definition of distributive justice - those who achieve most should get most. But it will no longer be credible or tolerated if it ignores its opposite, that those who need most should have their needs met. (pp. 43)

The paradox is that the fundamental principle of inequality is evident. Since some will do better than others, the problem will arise when not all have the opportunity to redress the inequality.

While capitalism is the world's engine of growth, its very dynamism - its '*creative destruction*' - tends to produce great uncertainties. Unsuccessful firms are pushed aside to make way for new

and better firms. Unsuccessful individuals who become less economically productive – albeit through no fault of theirs- are also often tossed aside by the market. It is precisely because of these uncertainties that are the roots of demands for government intervention to protect the individual from the market's mercilessness. To make capitalism more democratic, financial institutions should be more democratised and made available to everyone with the aid of advanced technology.(Shiller, 2003)

It is reasonable then to state that neither of the two extremes in economic systems is perfect or static. Over the long-term the different types of economic systems will probably change continuously ,taking new shapes and forms as they evolve. Indeed, it is highly possible that any distinctive differences between systems will become increasingly blurred.

However, Pitelis (2002) argues that one can divide economics into two major camps; one focusing on efficient allocation of resources, often assumed to be scarce, while the other focusing on resource and wealth creation.

In this chapter, however, it is proposed that typical entrepreneurship in the two extreme types of economies - the command economy and the market economy - be examined to determine the extent to which the nature of entrepreneurship in these two different economies might differ or be similar. The main point to note here is that the market – command comparison is a continuum and the main purpose of the this discussion is to use the two extrmes as an illustration.

The main issue is not so much to do with which economic system provides the best system for the marketing-entrepreneurship interface but rather that under capitalism, marketing might be more likely and that entrepreneurship might take different forms in different economic systems. For example, entrepreneurship in the capitalist economy might be more marketing-oriented than entrepreneurship in the command economy. The very nature of the market economy is such that market forces often prevail and the most competitive will survive and thrive while the least competitive will not. This implies that in the market economy, both marketing and entrepreneurship will be the engines that drive efficiency. On the other hand, in a command economy, the very nature of the centrally planned economy means that priorities are completely different. Therefore in a command economy, marketing and entrepreneurship are less likely to thrive. (Kiser, 1989., Conner, 1991, Ennew, et al., 1993: Hooley, 1993., Sereghyova, 1993., Thomas, 1994, Kelemen and Hristov, 1998).

4. 2.1 Entrepreneurship in the Command Economy.

In a command economy, the state owns all productive resources, and state planners allocate them. The production mix and the distribution of income tend to reflect the values and the preferences of the ruling authorities. Since state officials have their own ideas of what goods are desirable or worthy, satisfaction of consumer demands may not have priority over other objectives such as rapid defence spending and so on. It is quite possible that in a command economy, the entrepreneur might be someone not entirely market-oriented since the economy is centrally planned in the first place and consumers' interest might not be sovereign. The element of consumer's choice might not be so evident, given that supplies are usually controlled and competition almost non-existent. The entrepreneur's priority in such a situation may be primarily that of procurement, ie, buying from other suppliers and reselling to the marketplace.

According to Ennew, et al (1993), the factors that act as constraints on the development of marketing in a command economy include : institutional and infrastructure barriers, uncompetitive market structures, experience barriers, demand barriers and managerial attitudes and orientation. In a study on the adoption of the marketing concept in the former soviet union, Ennew et al (1993) have pointed out that in such an economy, "*consumer preferences were largely irrelevant and there was no pressure on managers to ensure that their products met market needs.*" Because the system is driven by central planning rather than consumer sovereignty, demand is likely to exceed supply. In this type of economy, "*there is no need for enterprises to adopt the marketing concept to improve their business*" (Ennew, et al, 1993: 22). Another constraint has to do with monopolistic concerns. According to Ennew, et al (1993):

the continued dominance of many markets by large monopolistic concerns will inevitably constrain the extent to which enterprises can become marketing oriented, particularly where such enterprises continue to receive financial support from the government.(pg. 25)

However, in a study on Russian entrepreneurs, Green , et al (1996), have found that "*Russian first-generation entrepreneurs share characteristics of groups similarly labeled in research in capitalist western economies*". These include higher scores on internal locus of control, need for achievement, and some degree of Protestant work ethics. This could suggest that while

entrepreneurs might not seem to be market-oriented in the command economy, they nevertheless share some common characteristics with entrepreneurs in the market economy.

Hooley (1993) points out the constraints of the planned economy in central Europe.

Under the planned economies of the post-war period governments in the region largely dictated which products to be produced, and to what specification, how much should be produced, and what price should be charged. In addition, significant entry barriers were maintained to keep out products made elsewhere, thus ensuring a well-ordered economic society.(pg.10)

Thomas (1994) has also pointed out the complexity of the East European economies as these countries try to adopt the practices of the market economy. One difficulty with the adoption of marketing in such economies is that much of the marketing models are largely Anglo-Saxon in origin and application and therefore hardly suitable for adoption in such transition economies.

Kiser (1989), writing on communist entrepreneurs in Eastern Europe and the former Soviet Union comment:

.....it is obvious that the system has not made good use of its overabundant technical manpower. Lack of goods, poor quality, and inability to compete in Western markets bespeak not a lack of brainpower, but a system that has failed to provide incentives to produce high-quality goods and services.(Pg. 6)

Such a system lacks the discipline of a commercial and competitive marketplace. Consequently, product quality and performance are often driven by national security needs. Thus, the somewhat disorderly state of the economy means that entrepreneurs operating in such a system are less likely to be concerned with overall quality of the product or the service provided since the need for market discipline is not intense. This implies that the need for entrepreneurs to be fully customer or marketing oriented is non-existent. Entrepreneurs under such circumstances may not be required to undertake a careful study of customer needs before designing the product offering to meet these needs. Instead, the role of entrepreneurs might be limited to becoming traders or distribution of goods to customers. However, this may be particularly important in relation to the

acquisition of inputs, in which case the role of procurement is often identified with that of the entrepreneur

Making a similar observation is Sereghyova (1993). Writing on entrepreneurship in Central East Europe (ie Hungary and Poland, the Czech and the Slovak Republic), he comments:

Most industrial enterprises in Hungary, Poland and the CSFR (Czech and the Slovak Republic) were organized not only horizontally - covering a big share and sometimes even the whole domestic demand for a certain product - but also vertically. They were producing semiproducts for their own use though this usually prevented them to reach economies of scalethis destruction of competitive entrepreneurial structures went along with distorted macroeconomic structures (Pg. 6-7)

Kelemen and Hristov (1998) have observed that the planned economy does not encourage organisations to look at the market prior to defining their quality levels. They argue that “*in Bulgaria and Romania, where consumers faced a seller’s market with little or no choice of alternative supply sources, these competitive forces were essentially missing.*” In their study of the transition from a centrally planned culture to an entrepreneurial culture in these two countries, they note that the collapse of the central planning system had forced organisations into behaving entrepreneurially in order to survive. Such transition is a painful one and can be illustrated in the model they propose (Table 4.1):

Item	Planned Culture	Entrepreneurial Culture
Strategic orientation	Plan driven	Market driven
Organisational structure	Hierarchical and autocratic	Flatter but still hierarchical
Commitment to quality	Conformance to standards	Conformance to customer needs
Technological innovation	Underrated, not market driven	Major technological re-engineering, awareness of the need for continuous technological improvement
Control of resources	Budget driven planning	Market driven orientation to cost efficiency

Table 4.1 From Planned Economy Culture To Entrepreneurial Culture

Source: Kelemen, Michaela, and Hristov, Latchezar (1998); “From Planned Economy Culture to Entrepreneurial Culture: The Example of Bulgarian and Romanian Organisations”; Journal Of Enterprising Culture; Vol. 6, No. 2 (June 1998) pp 169

It would appear that while entrepreneurial talents may not really be lacking in the command economy, the roles of these entrepreneurs are likely to differ somewhat from their counterparts in the capitalist economy. Instead of operating in a highly competitive environment with consumers having a wide array of choices of products and services to meet their needs, the command entrepreneur operates in a highly-controlled environment. In such a situation, consumers are less likely to have much choices . Indeed, they may not have the access to information to even make informed buying choices. Choices are likely to be orchestrated for them.

Therefore, despite the absence of an orderly and well-informed marketplace, there is certainly no dearth of entrepreneurs in the command economy per se. In fact, the inherent weaknesses of such an economic system might actually encourage entrepreneurship. As pointed out by Green et al (1996), Russian experts believe in the existence of three different types of entrepreneurs , namely:-

- those coming from and involved in the privatization of state-owned property (“nomenclatura recruits”), who bring with them high status and financial capital, and the ability to exploit old personal networks;
- “independent” entrepreneurs, coming from nowhere and raising their own start-up capital through savings or loans; and
- “shadow dealers” from already existing black markets.

Kiser (1989) observes:

The positive side of deprivation is the stimulus to innovation it can provide. Necessity, goes the saying, is the mother of invention. The shortage of chemicals and modern research instruments certainly hinders research but also fosters a tremendous amount of ingenuity in Eastern bloc scientists, leading to an emphasis on very simple but effective solutions.(Pg. 15)

Since necessities are the mothers of inventions, the human spirit to survive will prevail in pressing circumstances. These tendencies are likely to include the seeking of opportunities to make ends meet or to get things done. This could include trading in basic convenience products within a village setting or setting up a small-scale food stall at home or by the road-side.

However, the motivations that drive such entrepreneurs might be different compared with their counterparts in the market economy. Because the flaunting of wealth is not generally condoned in such an economy, entrepreneurs are less likely to be motivated by huge profits.

According to Kiser (1989):

....the stubborn drive of Soviet bloc entrepreneurs seems to be powered by mysterious genetic forces to frutify the world. There is little material incentive in the economic environment to reward the struggle. Successful entrepreneurs in the Soviet Union and Eastern Europe can live well compared to their fellow citizens, but a pervasive ethic of economic egalitarianism makes undue display of wealth bad form. (Pg. 2-3)

These entrepreneurs were motivated not so much by money but by a combination of ego, idealism and upbringing. Consequently, they were prepared to lead simple lives and “*compared to their western counterparts, they live like paupers.*”(Kiser, 1989)

The preceding observations seem to suggest that entrepreneurship exists regardless of the economic system or the socio-economic conditions in a particular country. In fact, it can be argued that the nature of entrepreneurship is such that entrepreneurs can actually thrive and prosper under both adverse and favourable conditions.

Conner(1991), commenting on entrepreneurship in the Soviet Economy, writes:

Bureaucratic interference , a liability to predation by “protection” racketeers who flourish in the larger cities , the advisability of bribes to local officials, “voluntary” contributions above the taxes paid on corporate income to local government, cultural institutions , and the like - all indicate the continuing marginality of the new entrepreneurs in political, legal, and cultural senses. (pp. 206)

This implies the problems encountered by entrepreneurs in a command economy in its transition to market economy could be more intense than faced by their counterparts in a market economy. The fact that entrepreneurship flourishes inspite of such odds indicates the common characteristic often attributed to entrepreneurs in general : their fighting spirit, sheer determination and willingness to work hard to realise their goals. We could perhaps deduce from this that the characteristics of

entrepreneurs are generally alike even though applied to different problems wherever they are, regardless of the conditions under which they operate.

Green et al (1996) , in a study of Russian first-generation entrepreneurs, for example, found that these entrepreneurs *“share characteristics of groups similarly labelled in research in western capitalist economies ie. higher scores on internal locus of control, need for achievement, and Protestant work ethic.”*

While the characteristics and traits among entrepreneurs may be common to some extent across different types of economies, the actual behaviour of these entrepreneurs, however, may be contextual and highly dependent on the prevailing context of the economy. As discussed in this section, the limitations to marketing and entrepreneurship in the command economy are largely due to the characteristics of such economy putting constraints that limit the growth and practice of marketing and entrepreneurship.

The next section explores the issues of entrepreneurship in the context of the market economy.

4. 2.2 Entrepreneurship in the Market Economy.

In pure capitalism, which is the most decentralised type of economic system, individuals own all productive resources, which are allocated to different production activities using price mechanisms. However, in its pure state, such an economy does not really exist because there are elements of both public and private resource ownership as well as market and government influences in the allocation of resources. Thus, most economies in the so-called market economy are actually examples of mixed economies closest to the market end of the continuum illustrated in Figure 4. 1

The market economy is characterised by wider choices available to consumers, the competitive environment might be more intense, and the pressure to be profitable might be more urgent. Furthermore, in the absence of central planning by government, the free marketplace renders inefficient or ineffective competitors vulnerable to consumers' discontent and possible boycott. Consequently, consumers expect a certain level of service from companies and are able to exert consumers' rights if this is not forthcoming. In addition, the pricing of goods and services are

often determined on a 'willing buyer, willing seller' basis, ie, there is likelihood of the market-price for goods and services.

The extent to which entrepreneurship thrives in the market economy, however, is highly dependent on the environmental context. Behaviour patterns, motives, objectives, and success rates of entrepreneurs vary among persons, industries, nations and geographic regions. The important point to note is that business success depends largely on the ability to make beneficial exchanges with customers. In this respect, the successful entrepreneur has to be market-oriented.

Morris & Lewis (1995) suggest that "entrepreneurship is arguably the single most dynamic force operating in free market economies." According to them the environmental determinants influencing entrepreneurship can be grouped under three general categories, namely:

- the environmental infrastructure which characterizes a society.
- the degree of environmental turbulence present in a society; and
- the personal life experiences of a society's members.

These factors can be illustrated using the model in Figure 4.2:-

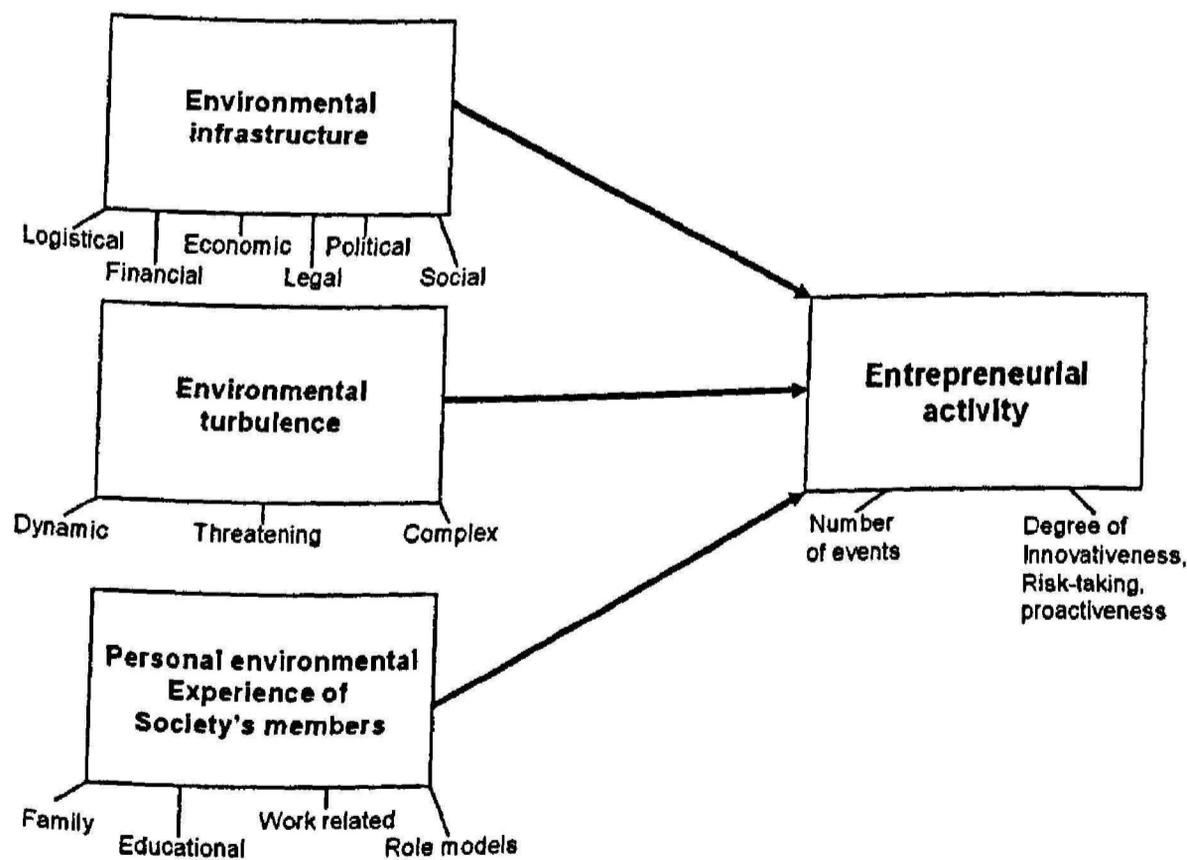


Figure 4.2 A Model of the Environmental Context of Entrepreneurship
 Source: Morris , Michael H. and Lewis, Pamela S., (1995); "The determinants of entrepreneurial activity : Implications for marketing", *European Journal Of Marketing*, Vol. 29 No. 7, 1995, pp 31-48.

Morris and Lewis (1995) suggest that the type of entrepreneurial activities vary even within the broad free market context. For example, it depends on the environmental infrastructure prevailing at a given time. Such infrastructure includes economic, political, legal, financial, logistical and social structures in a society. Certain structures might be more conducive to entrepreneurial activities. In a highly free-wheeling economy like Hong Kong, for example, entrepreneurship is known to thrive much more freely than in a highly-regulated environment like Singapore. (Siu and Martin, 1992; Ray, 1994). Politically, in countries where the political leadership encourages entrepreneurship through various means like tax incentives, grants and other such schemes, entrepreneurship can be revived and fostered. Legal instruments can also hinder or encourage entrepreneurship in terms of availability of legal protection of patents, copyrights, enforcement of contracts and other related aspects of entrepreneurship. Financial infrastructure that might influence entrepreneurship include availability of capital, interest rates on borrowings, stability of currency, ease of repatriation and so on. Logistical infrastructure would include those that would facilitate business efficiency such as transportation and communication. Efficient refrigerated transportation and storage, for example, is likely to mean that perishables might be of interest to entrepreneurs.

Environmental turbulence in a country at a given time can also affect the type of entrepreneurial activities. The nature of such turbulence is likely to produce threats for some entrepreneurial activities and opportunities for others. Thus, in a dynamic environment where rapid changes are taking place, entrepreneurs will respond with innovative products and services. In a stable environment, the need to respond creatively might be absent. Thus, the degree of entrepreneurial innovativeness is likely to match the environmental turbulence.

The personal environmental experiences of society's members influence the type of entrepreneurial activities in a number of ways. Various aspects of family upbringing and influences might encourage entrepreneurship. In family-run businesses, children could well be exposed to entrepreneurial practices at an early age. Educational background can also be a determinant of entrepreneurial activity as those with little education might consider they have nothing to lose by venturing out as entrepreneurs. Likewise, entrepreneurs who start high-technology ventures might be more likely to have the relevant background. Exposure to entrepreneurial role-models might also influence the eventual start of an entrepreneurial venture or career. Many entrepreneurs might actually have parents or loved ones who themselves are

entrepreneurs. Work-related experiences might actually also prompt entrepreneurs into self-employment. Retrenchments and job dissatisfactions are examples in such a category.

All these major categories of influences on entrepreneurial activities, however, are inter-related and likely to affect each other. These influences are not necessarily sequential or linear in nature. Instead, they tend to overlap each other and come about in no specific order or pattern.

This model has a number of implications for the marketing-entrepreneurship interface. Firstly, entrepreneurship and marketing are both environmentally-driven. As the environmental infrastructure becomes more developed, there is a likelihood of marketing becoming more sophisticated and competitive. Entrepreneurship contributes to this process by breeding competition among competitive firms and organizations to become more innovative. In terms of turbulence level, the marketing-entrepreneurship interface is affected to the extent that the turbulence level has an impact on the way firms compete. While a higher level of turbulence might present threats to all firms, entrepreneurs may take a more opportunistic approach. Morris and Lewis(1995) sum up their proposition as follow:-

In conclusion, both marketing and entrepreneurship are opportunity-driven, value-creating processes and can be applied in a wide variety of contexts. Both are not only products of environmental forces, but also agents of change in the environment.(pp. 43)

One aspect of entrepreneurship that is often not in the spotlight is found in the informal sector, particularly in the third-world economies. This sector generates levels of output which is difficult to quantify although it is estimated to contribute an amount equal to between 16% and 75% of gross domestic product in many of these countries. (Morris, Pitt and Berthon, 1996). One study conducted in Khayelitsha, a township south of Cape Town in South Africa, indicates that the majority of these entrepreneurs created their businesses out of economic necessity, principally because they were out of work or needed to supplement their incomes. However, 23% were driven by the recognition of an opportunity. Thus, while most informal businesses do little more than subsist, a subgroup exists which is relatively dynamic. The study also found that formal education level achieved and the skills-related training received by individuals are key factors in the degree of sophistication in their business operating practices. (Morris, Pitt and Berthon, 1996)

Thus, it can be argued that even within the market economy, entrepreneurship cannot be stereotyped but needs to be considered in a variety of contexts.

So far the contextual issues influencing entrepreneurship in terms of the command economy and the market economy have been discussed. The next context relating to the marketing-entrepreneurship interface pertains to the stage of economic development.

4.3 Marketing - Entrepreneurship and Economic Development

Defining economic development is not as simple as it seems. Narrow definitions are synonymous with economic growth. Yet economic growth and economic development are often considered complementary. Tan (1999) has suggested that narrow definitions are no longer acceptable and broader definitions emphasizing the nature of growth are more useful. After all, economic development entails more than just economic growth and there have been cases of "*growth without development*" (Tan, 1999: pp 5).

As discussed in Chapter 3, marketing per se might not be applicable in all circumstances. In situations where the role of the marketer and the producer are vested in the same person and conflicting goals result, the needs of the market would make way to the producer's needs. (Houston, 1986) Reddy and Campbell (1994) have questioned the effectiveness of marketing in a poor or developing economy because of several obstacles in such economies. Some of these obstacles include the following:-

- Poor Infrastructure
- Inadequate Aggregate Supply and Demand
- Poor Savings and Investment
- Scarcity Of Natural Resources
- The Vicious Circle Of Poverty
- The Debt Crisis
- Excessive Concern For Short-term Profit
- Lack Of Entrepreneurial Talent*
- Short Channels Of Distribution
- Low Degree Of Market Orientation*
- Regional Integration
- Trade Deficits
- Balance Of Payment Problems
- Negative Attitudes toward Marketing*
- Bribery and Corruption

Although it could be said that all these factors identified by Reddy and Campbell (1994) are inter-related, three might be considered especially useful in terms of the marketing-entrepreneurship interface within the context of this thesis. These are : lack of entrepreneurial talent, low degree of market orientation, and negative attitudes toward marketing*.

The lack of entrepreneurial talent in a poor or developing economy could imply that in such economic circumstances, people might be more concerned with satisfying their basic needs, there simply is no purchasing power, consumer information is not available and so on. On the other hand, it might also suggest that entrepreneurial talent may be less noticeable or it might be displayed in various other forms. Such forms may include less sophisticated types of trading like barter and small cottage businesses which are not organized.

In such circumstances, although it is possible that marketing may be a part of entrepreneurial success, it is not necessarily so.

A related issue is the relevance of marketing & entrepreneurship in the economy. Clearly, in a situation where there is excess demand over supply, the need for marketing may not be as critical as in the reverse situation. However, that is not to say that entrepreneurial talent is not required. Entrepreneurial efforts would still be required under such circumstances to co-ordinate resources and raise output, though these may not particularly be directed towards marketing.

In terms of the negative attitudes toward marketing, this would have much to do with a lack of marketing education in such economies as the pressing needs would be in the areas of agricultural or technical education. Also, in a poor and developing economy, the role of middlemen who buy and sell and offer credit facilities, often squeezing the poor customers unable to keep up with payments, probably give middlemen a bad name.

Marketing's role in the economic development of a country takes several forms. According to Reddy and Campbell (1994):

Marketing plays a vital role as an engine of economic development. One of the ways it plays that role is its fostering of the development of entrepreneurial and managerial skills (pp 21)

Marketing acts both as a catalyst for economic development and a response to it.....Marketing can prove a highly useful tool in inducing rapid economic development. (pp. 23)

A similar view was expressed by Ennew, et al (1993) , who point out that “*marketing has the potential not only to improve business performance but also to stimulate economic development and facilitate the process of economic reform.*” (pp. 24)

While this potential is there, exploiting it in an economy in transition can become problematic for various reasons. Many constraints exist which inhibit not only business development in general but marketing specifically. Examples would include poor infrastructure that inhibits distribution, poor communication and other support services. In addition to the tangibles, there are also problems with intangibles like changing management attitudes from a traditional production orientation to the marketing orientation.

In addition to these, the other critical issue is that of excess demand over supply making the real need for marketing less pronounced. In situations where supply exceeds demand, the need for marketing to satisfy consumer needs becomes more obvious in view of the more intense competition.

Thus marketing can be seen as playing a significant role in the economy by helping bring out the entrepreneurial spirit . However, the degree of such a marketing - entrepreneurship interface is very much dependent on socio-economic conditions prevailing at a given time. In an economy that is still developing, the conditions for marketing to be fully exploited are likely to exist. These could be tangible factors like infrastructure to improve distribution networks and communication and/or intangible factors like the level of education, literacy as well as management attitudes towards marketing.

This, in turn, appears to have a bearing on the extent to which entrepreneurial talent might be available or visible. Where customer needs are very basic and the purchasing power and other

economic and social circumstances are less sophisticated, entrepreneurial talents may not be more readily visible within the context of marketing. However, such entrepreneurial talents may be more likely to be channeled to other areas such as allocation of resources and other economic management activities as was the case in the former Soviet Union, where entrepreneurship was focused on the acquisition of resources. (Ennew, et al., 1993).

Mavondo (1999) has suggested that the degree of market orientation varies across countries at different stages of economic development. Using the contexts of Australia, being a developed economy and Zimbabwe, being a developing economy, Mavondo (1999) has studied the measurements of market orientation in these two countries and also tested the relationships between market orientations and the generic strategies pursued. Findings indicate that properties of market orientation construct differ in important aspects across these two countries. For example, Australian companies have higher levels of customer orientation and interfunctional coordination but competitor orientation was equal across countries. The association between the dimensions of market orientation and differentiation strategy were supported in both countries. However, these associations were much stronger in the Zimbabwe sample than the Australian sample. On the other hand, there were significant differences in the association of the dimension of market orientation and low cost strategy. All market orientation dimensions were positively related to low cost in the Australian sample and all were negatively related in the Zimbabwean sample. (Mavondo, 1999: pp 140)

We could argue that entrepreneurship is also about meeting the needs of the marketplace. In this connection, an understanding of the marketing-entrepreneurship interface is useful as it enables us to comprehend how both can contribute to overall business success. However, two related issues can arise from this observation: First, does entrepreneurship require marketing? ; second, does marketing require entrepreneurship?

The stage of economic development at a particular time can impact the marketing-entrepreneurship interface in a number of ways. When the economy is at its earliest stage of development, marketing may not be very sophisticated. Because economic infrastructures (eg transportation, financial institutions, communications, etc...) are not very developed in this early stage of economic development, marketing is less likely to be equally well developed. Furthermore, purchasing power is not likely to be very high and the types of needs to be fulfilled tend to relate to basic necessities.

Entrepreneurial efforts under such circumstances are likely to rely less on marketing but more on bringing to the market what is readily available to meet basic needs.

As the economy develops, the various economic infrastructures are likely to develop in tandem. These improvements can help entrepreneurs compete more effectively but could also indicate that the marketplace can become more competitive since other entrepreneurs are likely to surface too. By the same token, consumers are likely to have better access to information to enable to make better decisions. The increased consumer purchasing power that usually comes with economic development could also mean that entrepreneurs would require more marketing to meet consumer needs beyond the basic necessities. As an economy becomes more developed, it can be argued that entrepreneurs operating in the new circumstances would require more marketing.

It can be argued therefore that the entrepreneurship-marketing interface will be greater as the level of economic development increases.

Another contextual issue awith the marketing-entrepreneurship interface is the nature of entrepreneurial activities prevailing at a given time.

4. 4 Nature of entrepreneurial activity

The nature of entrepreneurial activity can be influenced by a number of factors as pointed by Morris & Lewis (1995). The three broad categories of influences include the environmental infrastructure, the level of the environmental turbulence and the personal environmental experiences of society's members. These have been discussed in some details earlier (Section 4.2.2).

At the macro level, socio-economic conditions might well produce different tpes of entrepreneurs. In a command economy, entrepreneurs are less likely to be marketing- oriented since the need might not be there because the economy is centrally planned and resources are centrally allocated. Under such circumstances, the common tag-line used in marketing , 'The Customer Is King', may not really apply. Indeed, entrepreneurs in such an environment might perform more of the procurement and supply function rather than the marketing function. Product quality and performance are also likely to be driven by the state's control rather than dictated by the marketplace (Kiser, 1989). The competitive element is also likely to be absent which in turn may

produce entrepreneurs with a different orientations and outlook. (Sereghyova, 1993). The lack of intense competition and intense rivalry might also mean that entrepreneurs need not have a high degree of customer and service orientation to remain in business. The motivation for a marketing-orientation may be non-existent.

On the other hand, in some cases, the deprivation of basic needs might trigger innovativeness on the part of some entrepreneurs. (Kiser,1989). That could well mean that such entrepreneurs who have an innovative outlook and a marketing orientation are likely to succeed compared to those who are not so.

Although several classifications of entrepreneurs / entrepreneurship have been discussed in Chapter 2, a synthesis of the typology offered by Binks and Vale (1990) has been adopted for this research. Binks and Vale (1990) have classified entrepreneurial behaviour into three broad categories namely catalytic entrepreneurship, allocating entrepreneurship and refining entrepreneurship. Catalytic entrepreneurship brings about drastic changes in several possible ways eg by introducing new products or processes or opening or creating new markets. Allocating entrepreneurship has more to do with exploiting new opportunities and gaps in the market. Thus allocating entrepreneurship has much to do with opportunistic behaviour. Refining entrepreneurship does not create new products or services but creates opportunities by applying changes in the use of resources or expertise. Therefore the refining entrepreneur may have little overlap with the allocating entrepreneur, who must be market-oriented. The overlap between marketing and entrepreneurship is likely to vary within these three types of entrepreneurial behaviour because the activities of each will require marketing in different degrees. The extent of the marketing-entrepreneurship interface therefore may vary within the typology of Binks and Vale (1990).

Furthermore, as pointed out by Morris and Lewis (1995), entrepreneurship might be fostered by the increasing turbulence of the environment. Entrepreneurship plays a key role in such an environment as *“it produces an opportunistic approach to environmental change and thus a steady stream of new products, services and processes.”* This is certainly very much the catalytic entrepreneur in action.(Binks and Vale, 1990) In such a situation, entrepreneurs effectively create new markets and customers are led rather than followed in what Hamel and Prahalad (1991) have described as *“expeditionary marketing”*.

Thus the issue of the entrepreneurial activity has a bearing on the extent of the marketing-entrepreneurship interface. In addition, the strategic orientation of the entrepreneur is also an important issue that is likely to influence the extent of the interface as well.

4.5 Strategic Orientation.

The terms 'strategic orientation' and 'competitive strategy' can be considered synonymous with each other. According to Manu and Sriram (1996) strategic orientation could be defined as "*how an organization uses strategy to adapt and/or change aspects of its environment for a more favourable alignment.*" However, a variety of other terms such as market-focused strategic flexibility, strategic vision, strategic fit, strategic stretch, strategic thrust, strategic intent, strategic predisposition, strategic imperative, and strategic choice have also been interchangeably used to refer to the same issue. (Ohmae, 1982; Chaffee, 1985; Hamel and Prahalad, 1985; Rowe, et al, 1994; Barney, 1997; Hills and Jones, 1998; Morgan and Strong, 1998; Hitt, et al, 1999; Johnson and Scholes, 2002, Johnson et al., 2003, David, 2003. Wheelen and Hunger, 2003). Indeed, as pointed out by Noble, et al. (2002), "*strategic orientations have been considered in both marketing and strategic management literature.*" (pp. 26)

Stevenson (1999) suggests that strategic orientation refers to the "*business dimension that describes the factors that drive the firm's formulation of strategy.*" He has proposed a typology comprising two broad categories of – the promoter and the trustee. A promoter is truly opportunity-driven whereas a trustee is resource-driven. Within these two poles, the administrator's approach recognizes the need to examine the environment for opportunities.

Miles & Arnold (1991) state:

An entrepreneurial orientation suggests that organizations must constantly seek to exploit the dynamics of their macroenvironment and task environment. Thus, an entrepreneurial orientation provides an excellent basis for the appropriate strategic response to organizational crises created by environmental turbulence.

As discussed in Chapter 3, Section 3.6, Miles and Arnold (1991) have conducted a study to evaluate the interrelationship between the marketing orientation construct and the entrepreneurial orientation construct. They found that the marketing orientation can exist independently of the

entrepreneurial orientation. However, the entrepreneurial orientation can be developed in an organization based on the dynamics of the environment. Faced with an increasingly competitive development in the environment, the marketing function tends to act in an entrepreneurial manner.

Morris and Paul (1987) define the entrepreneurial orientation as '*the propensity of a company's top management to take calculated risks, to be innovative, and to demonstrate proactiveness in their approach to strategic decision-making.*' In their study, they found that companies that score higher in terms of entrepreneurial orientation also tend to be more marketing oriented.

Entrepreneurship is often referred to as the pursuit of opportunities through innovative creation. (Dana, 1993). However, this broad construct has been analyzed from a variety of perspectives. In general, however, there appear to be 3 broad approaches in the literature, namely, the individual, the environment and the firm. (Lee and Peterson, 2000). A growing body of evidence suggests that an entrepreneurial orientation is essential for the survival and growth of companies as well as for the economic prosperity of nations. (Morris, 1998). According to Lumpkin and Dess (1996), there are five salient dimensions of an entrepreneurial orientation, namely, autonomy, innovativeness, risk-taking, proactiveness and competitive aggressiveness. Entrepreneurial orientation refers to the entrepreneurial process, ie, how entrepreneurship is undertaken – the methods, practices, and decision-making styles in acting entrepreneurially. Thus, a firm that acts independently (autonomy), encourages experimentation (innovativeness), take risks, take initiative (proactiveness) and aggressively compete in markets, have a stronger entrepreneurial orientation. Conversely, those that lack any of these have a weaker entrepreneurial orientation. (Lee and Peterson, 2000)

Thus, the marketing orientation and the entrepreneurial orientation might be similar in that both appear to represent strategic responses to the changing environment faced by firms.

These can be linked to the adaptive cycle construct proposed by Miles and Snow (1978) who suggest that organizational adaptation requires the simultaneous solution of three interlinked problems namely *entrepreneurial, engineering and administration*. Entrepreneurial problems would include the product/market domain, while engineering problems include those of production and distribution technologies and administration problems include those of the formalization of technological learning into organization structure and process as well as the articulation of organizational direction. According to Miles and Snow (1978), any adjustments of these three

areas in a given time period will in turn become part of future structure. At the same time, the adjustment cycle can be triggered in any of these three areas.(Figure 4.3):-

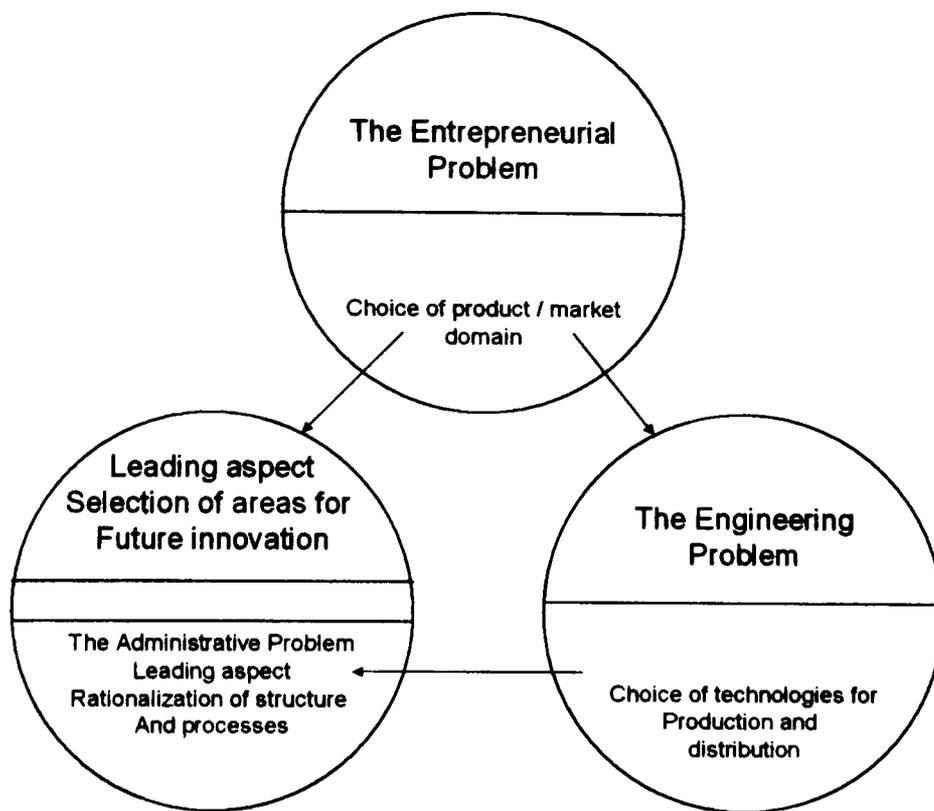


Figure 4.3 The Adaptive Cycle

Source: Miles, Raymond E., and Snow, Charles C. (1978); *Organization Strategy, Structure and Process*; Mc-Graw-Hill, Inc.

In this construct, there exists patterns in the way organizations might act to adapt themselves to the forces of change. Although the exact possible combinations of the three areas can be infinite, the patterns of behaviour which might emerge could suggest these can be reduced to several archetypes. Miles and Snow (1978) identify four such organization types, three of which they consider successful (ie defenders, prospectors , analyzers) and one which is the unsuccessful type (ie reactors)

Defenders are those who attempt to create a stable domain by developing a highly cost-efficient core technology . The aim of defenders is to corner a narrow segment of the total potential market. Such managers are highly expert in the business's limited scope and do not scan beyond the present domain for new opportunities. They prefer to grow through market penetration and over time retain a market niche which competitors might find difficult to penetrate.

Prospectors are proactive and tend to go for innovation over efficiency. They constantly search for new opportunities and experiment with developing trends. Often they are creators of change forcing competitors to respond to the changes they create. They are flexible and tend to opt for less formalities and more decentralized control .

Analyzers are followers who retain a core base of traditional products and customers. They tend to rely on stable technologies, more formalized structures and processes. At the same time, they are likely to attempt to seek and exploit new product and market opportunities using more flexible technologies and structures.

Reactors are those who can perceive changes and uncertainty in the environment but are unable to respond effectively to such forces. This could be due to a lack of a clear strategy or inflexible structure and processes which cannot be adapted to fit a new strategy in a changed environment.

What is clear from the Miles and Snow (1978) typology is that an entrepreneurial orientation can have strategic implications for the organization. It can be argued that the defenders, prospectors and analyzers in the organizations display both entrepreneurial and marketing orientations to some extent. They are entrepreneurial in the sense that they all have the tendency to seek new opportunities beyond their familiar domain. At the same time, they are conscious of the need for new products and markets to remain competitive and thus in that respect they all display a sense of marketing.

The notable exception to this entrepreneurial-marketing paradigm are the reactors who are caught in a situation in which they can exercise neither entrepreneurial nor the marketing outlook necessary for future renewal and survival of the organization. What this implies is that both the human element as well as the situation or context in which decisions are made are strong determinants of the entrepreneurial orientation and direction of the individuals at any given point in time.

Venkatraman (1989) proposes six traits of competitive strategy or strategic orientation namely: (a) aggressiveness, (b) analysis, (c) defensiveness, (d) futurity, (e) proactiveness, and (f) riskiness. Morgan and Strong (1998) have attempted to relate marketing orientation to these dimensions and found that firms' proactiveness, analysis and futurity in strategic orientation were all positive and significant in their association with market orientation. Market oriented activities and behaviours

are related to : a proactive search for marketplace opportunities; a problem solving, analytical approach to organizational learning; and long-term planning and future positioning considerations. Morgan and Strong (1988) conclude that *“firms that do not recognize the value of pursuing activities and behaviours commensurate with a market orientation may also be suffering from a poor outlook in competitive strategy terms by lacking a proactive spirit.”* (pp1067)

Beaver and Jennings (1995) suggest that the ways in which success and / or failure of small firms will be defined and measured are dependent upon the stakeholder’s orientation towards the enterprise and this can be expected to change over time. The reasons why stakeholders would want to see the firm succeed are personalized and this results in narrow, particular criteria for judging performance. Beaver and Jennings (1995) note that *“no one single set of criteria are , per se, any more or any less valid and important than any other set. Each is equally appropriate in the right circumstances.”* Examples of some typical stakeholder groupings, though not comprehensive, might include: Employees, Customers, Local authorities, Financial institutions, Suppliers and Government. By the same token, the success of small businesses might be due to factors such as demographic influences, psychological influences, environmental influences and sociological influences. Beaver and Jennings (1995) further argue that *“it is clear that suboptimal performance and potential business failure are closely correlated with a lack of attention to strategic management.”* Whether such strategic management is visible as a formal process or is ‘hidden’ in informal systems of decision making, the fundamental principles remain , ie, to achieve organisational fit with the environment to ensure long-term survival , growth and prosperity. This observation is much in line with those of Johnson and Scholes (2002) Wheelen & Hunger (2002), David (2003) who all argue that strategic management is as relevant to smaller firms as it is to large corporations.

The management process in SMEs is not only different from large organizations, but also unique and bear little or no resemblance to management processes found in large organizations. (Beaver, 1984; Beaver & Jennings, 1993, 1995, 1996; Beaver, 2002) . According to Beaver & Jennings (1995), the key skills and abilities needed to be utilised by entrepreneurs can be illustrated in the following diagram (Figure 4.4):-

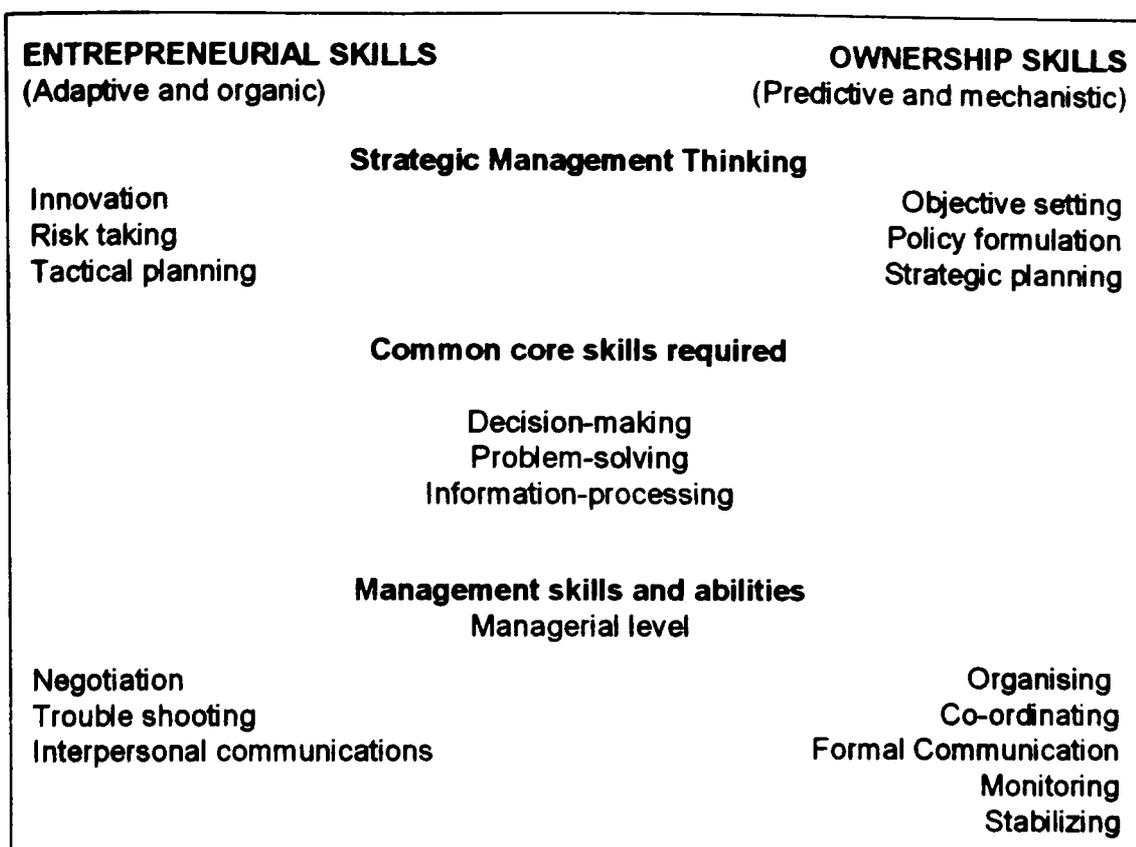


Figure 4. 4 The small firm management process

Sources : Jennings, Peter L and Beaver, Graham (1995), "The Managerial Dimension of Small Business Failure"; *Journal of Strategic Change*, Vol 4, August 1995: 185-200; Beaver, Graham (2002), *Small Business, Entrepreneurship and Enterprise Development*; Pearson Education Limited, UK.

Chaston (1997) has also studied the strategic orientation of small firms and observed that growth firms display a certain entrepreneurial style that is marketing-oriented. This study has confirmed that *"marketing in the smaller firm can be viewed as an integral part of entrepreneurial activities."* Chaston (1997) further found that *"small firms can enhance their overall performance by adopting an entrepreneurial marketing style"*. However, any implementation of such an orientation must not be done in isolation and *"any deliberations on entrepreneurial marketing must be accompanied by a careful review of the appropriateness of the current organizational structure."* (Chaston, 197: pp 829)

According to Morgan and Strong (1998), the concept of strategic orientation has been variously described as strategic fit, strategic predisposition, strategic thrust and strategic choice. They have summarized these various perspectives into three general categories of strategic orientations : narrative approaches, which are anchored in qualitative methodologies, and often result in unique case study-like characterizations; classificatory approaches, which attempt to group strategies on

the basis of preexisting or derived categories and comparative approaches, which identify combinations of traits and dimensions of strategy.

Noble et al (2002) have suggested that *“the concepts of market orientation, strategic orientation and culture are closely intertwined.”* In addition to the typology suggested by Morgan and Strong (1998), they have offered a fourth alternative perspective on strategic orientation as follows (Figure 4.5):

		Determinants	
		Internal Priorities and Processes	External actions
Descriptive Goals	Categorization	“Competitive Culture”	Classificatory
	Unique Characterizations	Narrative	Comparative

Figure 4.5 Perspectives on Strategic Orientation

Source: Noble, Charles H., Sinha, Rajiv K., and Kumar, Ajith (2002), “Market Orientation and Alternative Strategic Orientations: A Longitudinal Assessment of Performance Implications.”, *Journal of Marketing*, Vol. 66, October 2002: 26-39

Noble et al (2002) have defined this alternative perspective as competitive culture, which define as *“the dimension of organizational culture that provides the organization’s values and priorities in interactions with the marketplace – both customers and competitors – and influences more specific strategies and tactics.”* This view on strategic orientation suggests that there are deep-seated culture-driven characteristics within an organization that influence both the internal processes in that organization with regards to marketing and strategic thinking as well as the strategies that emerge from them.

Storey (1994) has suggested that although growth is not an objective for most small firms, those that set out to achieve enterprise development appear to share some common characteristics, one of which is that growing small firms have particular expertise in marketing when the business is started. Chandler (1962) has suggested a firm's evolution in four stages: (i) initial expansion and accumulation of resources, (ii) rationalization of the use of resources, (iii) expansion into new markets to ensure continued use of resources and (iv) development of new structures to ensure continuing mobilization of resources. Various other models representing the growth phases of firms have been identified in the literature. (Greiner, 1972; Churchill & Lewis, 1983; Hambrick & Crozier, 1985; Duck, 1993) According to Greiner (1972), organizations go through a life-cycle and experiences crises as it moves from the initialization or entrepreneurial phase to the bureaucratic phase, then to the divisional, product group and matrix phase. Thus, as firms grow, they are likely to reach a stage researchers refer to as "*hitting the growth wall*" (Hisrich & Peters (2002) Entrepreneurs must realize that as their firms grow a number of contradictory factors are at work egs, (i) bureaucratization vs decentralization, (ii) environment vs strategy, and (iii) strategic emphasis : quality vs cost vs innovation. (Kuratko & Hodgetts, 2001). Entrepreneurs must adopt a strategic orientation as their firms grow and implement measures which will allow them to move from the personal venture phase to a phase where managerial teams and group talents are mobilized. (Hambrick & Crozier, 1985; Duck, 1993; Kuratko & Hodgetts, 2001; Storey, 1994; Beaver, 2002)

All these observations appear to be in line with the situation among small and medium size enterprises (SMEs) in Singapore. To ascertain how Singapore's SMEs are adapting to the challenges after the Asian Financial Crisis ended in 2000, a survey conducted by the Singapore Management University(SMU) found SMEs to be adversely affected. However, to cope with future challenges , SMEs did adopt a variety of strategies such as making changes to financial management, technology, process & equipment , business / product lines, improving marketing and so on (Tan, 2002).

A study by the Singapore Institute of Management (SIM) has found that most are forward-looking and are capable of formulating goals and strategies to take advantage of the external environment. Most of the SMEs surveyed planned to expand or diversify their current business in the next five years. However, the study also found that these SMEs were unable to utilize their internal strengths or core competencies to capitalize on fresh opportunities. They also need to improve their capacity to acquire more resources, both people and funds. (Straits Times, 8 July 2003).

Thus it can be argued that the strategic orientation of entrepreneurial firms on the whole may be highly contextual and dependent on a variety of situational factors. These factors include the firm's posture in response to the changes, the traits or characteristics of respondents and even the characteristics of the organizational culture. However, regardless of the perspectives on strategic orientation, what is important is that firms, whether large or small, need to have a clear and appropriate strategic orientation in line with the changing trends in the environment.

Given the contextual nature of the marketing-entrepreneurship interface, a model representing the interface and the contextual issues will be developed in the next section.

4.6 Developing The Model

The extent of marketing-entrepreneurship interface depends on many variables in a given context at any point of time. Entrepreneurial success might depend on marketing in certain types of situations versus other situations in two different periods in the country's economic development. Other variables might include the strategic orientation of the firm, the economic system operating at the time, the stage of the economic development and the nature of the entrepreneurial activity.

These dimensions are represented in the following model (Figure 4.6):-

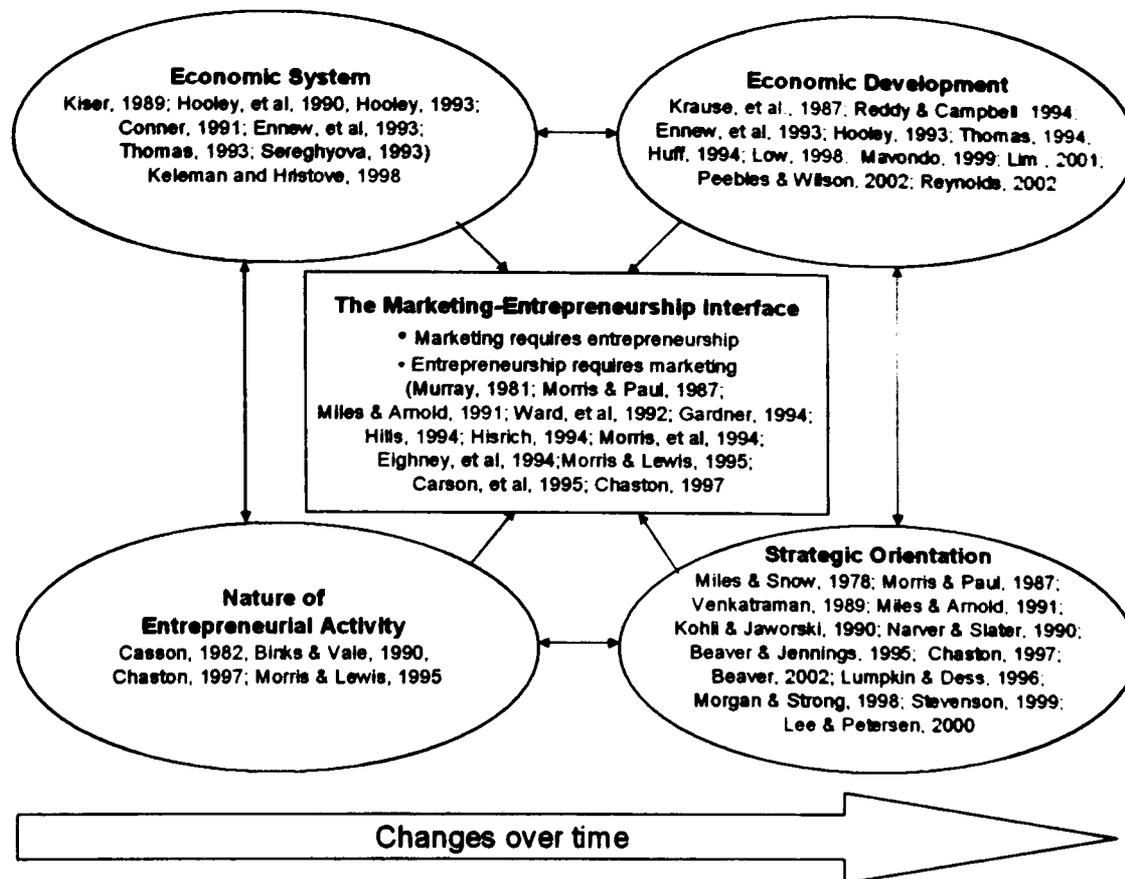


Figure 4.6 Model of Marketing-Entrepreneurship Interface

It is proposed that economic and other social conditions at a particular time in an economy could bring about different types of entrepreneurs. Although entrepreneurs need to be opportunistic in general, the way in which they exercise opportunistic behaviour may differ across different contexts. In a situation where demand exceeds supply, entrepreneurs might develop different priorities and approach opportunities from different perspectives. In such an economy, entrepreneurs might be interested only in the acquisition of resources. These entrepreneurs are likely to thrive in a situations of monopoly and are unlikely to see the need to be market oriented. The concept of customer sovereignty has no impact on the activities of such entrepreneurs. In such environment, consumers generally do not have wide choices and do not have the purchasing power or the necessary information to make reasonable decisions. Competition is also less likely to be intense and it can be argued that in such an environment, marketing might be less crucial.

On the other hand, entrepreneurs operating in a market economy are more likely to respect consumer sovereignty in the marketplace. In such situations, it makes sense for entrepreneurs to be market-orientred and to remain competitive and relevant to their customers. Market forces are merciless and only the most competitive and efficient will survive. Entrepreneurs in such an economy need to be more nimble and effective in gathering and using market intelligence. Left at the mercy of market forces, entrepreneurs who are most efficient and effective at meeting market

needs are more likely to succeed. This could imply that marketing is much more crucial in such an economy..

When a different set of economic and social conditions evolve in a different era, a new type of entrepreneurs may also emerge. For example, the entrepreneurs who thrive in a well-developed economy probably differ from those in an economy at its early stage of development. It can be argued that the same entrepreneurs who succeeded in the economy at its early stage of development with a particular orientation could not succeed as well in a later stage of development by adopting that same orientation.

In summary, the nature and extent of the marketing – entrepreneurship is highly contextual on a number of factors. These include the type of economy in which the entrepreneur operates, the stage of the country 's economic development , the entrepreneurial activities pursued and the strategic orientation of the entrepreneur or firm.(Fig. 4.6)

The next section will develop the key propositions based on these factors and the general model developed.

4.7 The Key Propositions

Before introducing the hypotheses , it should be stressed that the focus is essentially on a developed country context with a market economy. Therefore, it can be expected that there is significant overlap /interface between marketing and entrepreneurship and both will have an impact on performance. Accordingly, based on the model developed in the preceding section, (See Section 4.6, Figure 4.6) a number of key propositions are proposed as follow:-

- H1 : Marketing Orientation (MO) and Entrepreneurial Orientation (EO) are positively correlated.
- H2 : Marketing Orientation and Relative Performance of the firm are positively correlated.
- H3 : Entrepreneurial Orientation and Relative Performance of the firm are positively correlated

These hypotheses may be represented by the Figure 4.7 below:-

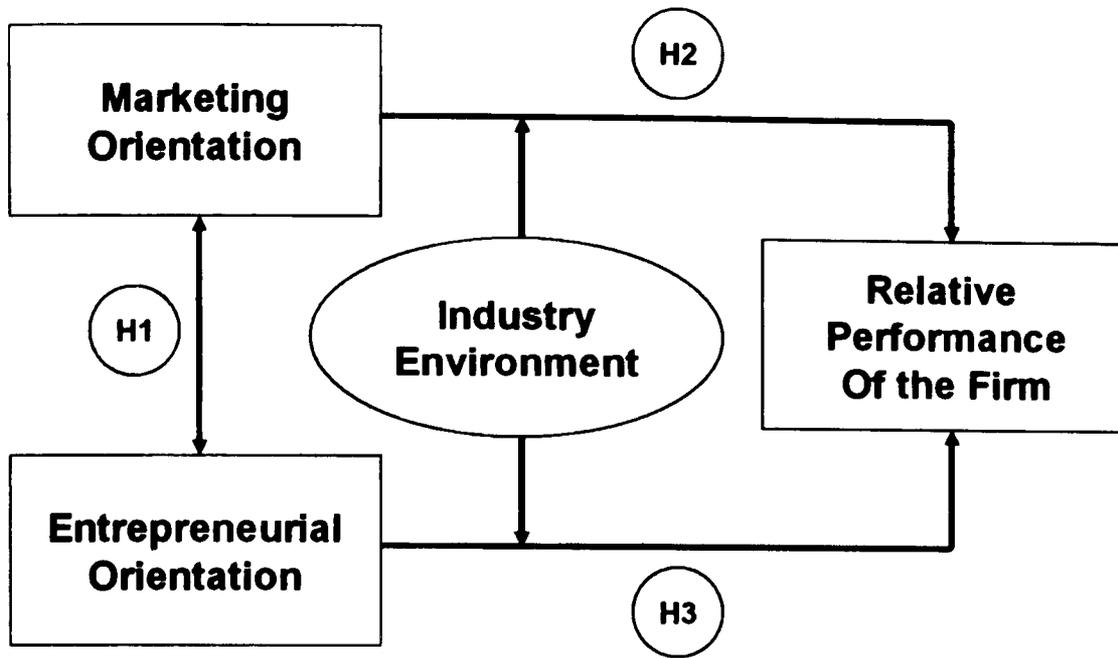


Figure 4. 7 Conceptual Model and Hypothesized Relationships

A number of key points need to be emphasized with regard to these hypotheses. It must be noted that these propositions relate specifically to a context and does not relate universally . Because of the dynamic nature of the various influences on the marketing-entrepreneurship interface and the firm’s performance, it would be difficult to evaluate the model on a universal basis. However, these propositions can be tested within a particular context, in this case, Singapore. Furthermore, only a part of the general model presented in Figure 4.6 is being tested. Since the context is that of a developed economy, some overlap between marketing orientation (MO) and entrepreneurial orientation (EO) can be expected. In addition, it can be expected that both these orientations might have an impact on the performance of the firm. In addition, we could test the impact of these relationships with regard to the various types of entrepreneurs. In this aspect, the typology proposed by Binks and Vale (1990) will be synthesized and used as the basis for testing the hypotheses against entrepreneur types. As discussed earlier in Section 4.4, these are: catalytic entrepreneur, allocating entrepreneur and refining entrepreneur. Each of these types of entrepreneurship may vary in their relationship to marketing orientation. Because each of these 3 types of entrepreneurs impact the market in different ways, it can be expected that the extent of their relationships with marketing orientation may differ. It should also be clarified that the extent of the overlaps will be affected by entrepreneurial orientation – that is, the refining entrepreneur

may have less overlap with marketing than the allocating entrepreneur or catalytic entrepreneur. Therefore, the Marketing – Entrepreneurship Interface will need to be examined not only at the aggregate level, but also at the level of the individual dimensions. (See Chapter 9)

The next chapter will discuss Singapore as the context for testing these hypotheses. Specifically, it will trace the phases of Singapore's economic development and growth from independence in 1965 to the present time.

4.8 Summary

In summary, factors prevailing at a given time are likely to influence the extent of the marketing - entrepreneurship interface. Over time, the extent of the interface will change in accordance with the changes taking place in these factors. Thus, the marketing-entrepreneurship interface may not be universal but contextual. Such contextual dimensions could be specific to the firm or environmental in nature. Firm-specific factors could refer to the different objectives of entrepreneurial behaviour, the forms of entrepreneurship and the nature of the marketing strategy. Environmental factors might relate to the type of economic system prevailing, the stage of economic development and the industry environment.

The key hypotheses proposed relate only to the extent of three specific relationships: the relationships between marketing and entrepreneurial orientation (H1), the relationship between marketing orientation and the relative performance of the firm (H2) and the relationship between entrepreneurial orientation and the relative performance of the firm (H3).

These hypotheses relate to a specific context and the next chapter will discuss Singapore as the context for testing these hypotheses.

Chapter 5
Singapore as the Context:
1960's to the Present

5.1 Introduction

Chapter 4 discussed the development of the marketing-entrepreneurship interface framework following the relevant literature reviews in Chapters 2 and 3. The framework suggests that the overlap between marketing and entrepreneurship and their impact on performance will be greater under certain conditions such as the economic system and stage of economic growth and depending on the strategic orientation adopted. Following this framework, 3 key hypotheses were proposed with regard to the relationships between: (a) marketing orientation and entrepreneurial orientation, (b) marketing orientation and performance, and (c) entrepreneurial orientation and performance. However, the extent of the marketing-entrepreneurship interface and their relationships to the firm's performance may be moderated by the environment. It must be emphasized that the hypotheses proposed do not relate to the effects of the economic system or stage of economic development. Instead, the hypotheses are based on a given context, that of a mixed economy in a highly developed country, ie, Singapore.

This chapter will demonstrate that Singapore fits well into the context of a mixed economic system and highly developed economy. It will discuss why Singapore is a suitable context for the testing of the hypotheses. It starts by broadly tracing the economic development of Singapore since her independence from Malaysia in 1965. It will also discuss how the different phases of economic development might produce different types of entrepreneurship. Compared to her neighbours, Singapore is an island nation without a hinterland or ample natural resources. Given these permanent constraints, it is obvious that the only resource available, ie, manpower resources, should be developed to the fullest. Developing an entrepreneurial culture is one aspect of this strategy. Much emphasis has been given to the issue of entrepreneurship in recent years. However, what is often overlooked is that entrepreneurship has always been evident in Singapore throughout the different phases of the country's development. As the economic landscape changes, different types of entrepreneurship have emerged.

Section 5.2 discusses the phases of economic growth in Singapore since its independence. A number of approaches may be taken in categorizing the stages of economic growth. One approach is to examine the economic growth indicators and separate the periods according to distinct discernable patterns. Another approach might be to look at historic or important events as markers. This chapter approaches Singapore's economic growth phases using the year of independence 1965 as a starting point and classifying them by broadly by decades, ie, the 1960s, the 1970s, the 1980s .1990s till the present time.

Section 5.3 discusses Singapore's brief existence as part of Malaysia when she joined the Federation in 1963. However, this union was short-lived due to serious differences and incompatibilities between the two sides. These include personality problems between the key political leaders, style of governance, racial politics, management of the economy and finance which finally led to Singapore's separation from Malaysia. On 9 August 1965, Singapore formally left Malaysia to become an independent island nation. As a new nation, the problems and challenges confronting Singapore were enormous and it was through strong and able political leadership that economic growth and prosperity were eventually achieved. In this phase, entrepreneurial activities were dictated by the limited economic opportunities present at that time. As demand exceeded supply and purchasing power as well as consumer awareness were low, entrepreneurship manifested itself in a different forms.

Section 5.4 discusses the economic development of Singapore in the 1970s. This decade was a period of rapid growth although it was not without problems. The oil crisis in the mid-1970s led to concerns of massive unemployment. The need for restructuring of the economy became obvious as rapid economic development saw an influx of low-skilled labour from outside the country. Wages were increasing at a rate unmatched by corresponding increase in skills and productivity. A corrective high-wage policy supported by skills training schemes was introduced. Incentives were initiated to attract high-technology and high value-add industries to invest in Singapore. The impact of the oil-crisis in the mid-1970s was thus short-lived and by the late 1970s, jobs were created at a pace which could not be met by the workforce. Political entrepreneurship became highly evident and local entrepreneurship tended to exist to support foreign investments and in response to calls from the political leadership.

Section 5.5 discusses the economic issues faced in the 1980s and the steps taken to address these issues. The biggest challenge facing the country in this decade was the economic recession in 1984-85 which was to become the turning point in the economic development and growth of Singapore. The double-digit growth since 1966 meant that Singaporeans had been able to enjoy a standard of living far higher than other developing countries. The 1984-85 recession threatened this comfortable status-quo. In response to this economic crisis, the government set up a committee to review the progress of the economy and to recommend future directions. The report by the committee made some drastic recommendations, many of which were accepted by the government and implemented. The economy recovered quickly from a decline in 1985 and rose by 1.8% in 1986, 8.8% in 1987 and 11% in 1988.

Section 5.6 brings the discussion up to date with the situation in the 1990s till the present time. By far the most serious economic problem encountered in the 1990s has been the regional economic turmoil engulfing much of Asia from 1997. This economic crisis started in Thailand in mid 1997, sending the Thai baht plummeting and soon spread to Indonesia, Malaysia, Korea and Japan. The situation in Indonesia led to the downfall of President Suharto who was forced to step down after massive riots and social disorder. The key difference between the recession in 1997-99 and the one a decade earlier in 1984-85 was that this time round the factors causing it were largely external. There were fears that the economic turmoil would be prolonged and could lead to a global economic slowdown. The Singapore government responded quickly with various measures. Other challenges to the economy included the terrorist attack in New York on September 11, 2001, the Iraqi war, The terrorist attacks in Bali in Oct 2002 and Marriot Hotel in Jakarta in August 2003, the war in Iraq in March 2003 and the loss of competitive advantage due to rising costs, have all dealt a huge blow to the economy. In the midst of these problems, entrepreneurship takes prominence as the central theme of the overall strategy to remake Singapore to deal with the many challenges ahead. To encourage entrepreneurship, there have been many calls for a change of attitude and mindset toward taking risks and tolerating failure (Business Times, 4 Nov. 1999). Commentators have been quick to blame the economic crises in South-east Asia generally on poor management by the respective governments and specifically on various aspects of Asian values giving rise to cronyism and nepotism. However, Singapore has often been cited as an exception to these ills. (Beckman, 1999; Mallet, 1999)

Section 5.7 concludes the chapter with a summary of how a young island nation without natural resources and a hinterland has survived and even excelled in economic growth over the last three decades. Once described as a basket-case, it is now an example of how political leadership and an entrepreneurial spirit can help overcome the difficult challenges facing the country since independence. The regional economic turmoil sweeping across Asia during the period 1997 – 2000 became the biggest challenge yet to the current political leadership which succeeded the old guard at the end of 1990. However, before the economies in the region could fully recover, the terrorist attack on the World Trade Center on 11 September 2001 added to the economic woes of many countries in S.E. Asia, including Singapore. The war in Iraq in March 2003 followed by the Severe Acute Respiratory Syndrome (SARS) outbreak added to the economic miseries of Singapore. The country's economic problems were further compounded by the terrorist attacks in Bali in October 2002 and the Marriot Hotel in Jakarta in August 2003.

5.2 Phases in the Singapore Economy : 1960s to the present.

Low (1993) suggests that the economic landscape of Singapore in the three decades from 1960 to 1990 can be categorized into sub-phases of development as follows (pp 30):-

- a. the pre-independence stage from 1959-1965
- b. export orientation and 'take-off' from 1966 to 1973
- c. domestic and external adversities from 1974 to 1978
- d. economic restructuring from 1979 to 1984
- e. from recession to the next lap, 1985 onwards

These stages can be aggregated to reflect the economic indicators as shown in Table 5.1:

	1960-69	1970-79	1980-90
Average growth (%)			
Real GDP	9.4	9.8	8.2
Employment	2.9	5.0	2.1
Industry contribution as % of GDP			
Agriculture & quarrying	3.4	1.9	0.9
Industry@	29.6	36.9	35.1
- Construction	8.2	8.1	7.8
- Manufacturing	19.6	26.9	25.4
Services +	67.0	61.2	64.0
Real average industry growth			
Agriculture & quarrying	4.5	3.1	-3.3
Industry@	13.3	11.0	7.0
- Construction	15.7	10.8	6.0
- Manufacturing	13.0	12.2	7.4
Services+	8.0	9.4	9.1
Employment as % of total (%)			
Agriculture & quarrying	7.1*	2.5	0.9
Industry@	23.1*	33.0	35.9
- Construction	5.7*	5.4	7.2
- Manufacturing	16.1*	26.4	28.0
Services+	69.8*	64.5	63.2
Average employment growth (%)			
Agriculture and quarrying	-11.7*	-4.4	-14.4
Industry@	8.1*	6.9	1.6
- Construction	6.7*	2.6	1.3
- Manufacturing	9.0*	8.0	1.7
Services	2.5*	4.5	2.6

* data for 1960-1966 only

@ comprises utilities, construction and manufacturing

+ comprises commerce, financial and business services, transport and communications and other services.

Sources: Singapore Department of Statistics, *Singapore National Accounts, 1987* and Ministry of Trade and Industry, *Economic Survey Of Singapore, 1990*; Low, 1993: 31

Table 5.1
Real GDP, industrial and employment by phase

Tan (1998) proposes that 4 distinct periods of economy growth may be identified in Singapore. The first period since independence (1966 – 75) marked the first phase of industrialisation and had the best economic performance, with GDP accelerating from 5.5% in 1960 – 65 to 12.7% in 1966 – 75. In the second period (1974 – 84) growth slowed to an average rate of 7.9% , but nonetheless remained buoyant by international standards. The third period (1985 –86) the Singapore economy went into recession and contracted by 1.6% in 1985, this being the first negative growth since the 1960s. The fourth period from 1987 -

1993 has shown an average GDP growth of 8.7%. These periods are shown in Table 5.2 below:

Years	GDP(%)	Inflation(%)
1960 – 65	5.5	1.0
1966 – 73	12.7	3.4
1974 – 84	7.9	5.4
1985 – 86	0.1	-0.5
1987 – 93	8.7	2.4

Sources: Department of Statistics, *Economic and Social Statistics* (1960 – 82); Yearbook of Statistics (1990); Ministry of Trade and Industry, *Economic Survey Of Singapore* (1993); Tan Kong Yam, 1993: 57.

Table 5.2
GDP Growth and Inflation in Singapore

From a practical perspective, it is proposed that the economic growth and performance of Singapore be discussed in four broad categories using each decade as markers. The first period, the 1960s, covers the period from 1965 the year of independence to 1970. This is the decade of rapid export-oriented industrialisation to create jobs and tackle problems of unemployment. The second period covers the 1970s, which is the decade of growth. The third period discusses the economic recession of 1980s and recovery. The 1990s covers the period when the new political leadership takes over the running of the government and how they manage the economy and respond to new problems up till the present time.

5.3 The 1960s - Merger and Independence

In a public referendum in 1962, the people of Singapore voted overwhelming in support of the government's proposal for merger with Malaysia. 71% of the electorate voted in favour of merger with only 25% heeding the opposition's call to return blank votes. Singapore thus formally became part of Malaysia on 16 September 1963. However, the merger was fraught with many problems and Singapore separated from the union on 9 August 1965 to become an independent nation. Before the merger was proposed and put forward to the people of Singapore in the public referendum, many arguments were put forth in support of Singapore joining Sabah, Sarawak and Malaya to become part of Malaysia. When the merger did not work and separation became inevitable, just as many

reasons were put forth for Singapore's separation; some of these reasons have continued to remain controversial today. These reasons include major differences in personality, politics, governance, ideologies, and culture. (George ,1992; Low Linda, 1993; Seagrave, 1995; Turnbull, 1995; Ong & Govindasamy-Ong, 1996; Han, et al.,1998; Lee K. Y. ,1998; Wanandi, 1999). At an interview at the World Economic Forum held at Davos on 29 January 1999, Senior Minister Lee Kuan Yew (Singapore's first Prime Minister) said Malaysia and Singapore "*would always have difficulties, given the incompatibilities between them, which had led to their break-up in 1965*" (The Straits Times, 30 January, 1999) . Lithgow (2000: pp 155) describes the partnership as "*an uncomfortable and incompatible relationship which ended in divorce.*" Singapore was thus established "*against all expectations and against the conventional wisdom of its ruling People Action Party. Indeed, its first Prime Minister, had pronounced that 'island nations are political jokes'.*" (Leifer, 1998)

According to Han et al (1998), the people of Singapore received the news of separation with mixed emotions. While many welcomed Singapore's separation from Malaysia and her beginning as an independent nation, it was clear that many challenges as well as difficult problems became obvious. One account by Mr. Ho Rih-Hwa, a prominent businessman and former diplomat recalls making plans to migrate to Canada when Singapore became part of Malaysia and changing his mind when Singapore became independent as it was now a proper country to which he could belong to. (Ho, 1991). Another former politician and diplomat, Mr. Lee Khoon Choy, recounted the problems of how as ambassador from the newly independent Singapore, he had to pay from his own pockets for certain expenses as no official guidelines were even available on such important aspects of ambassadorial duty (Lee, K.C. ,1993)

Immediately after separation, the then Prime Minister, Mr. Lee Kuan Yew began to get the people to prepare for the tasks ahead The following speeches in the first few months of independence were among the many he was to make to rally the people behind him in meeting the challenges of nation building:

So, small though we may be in Southeast Asia and with an independence thrust upon us, I say we grasp it firmly with hands and make sure that this is ours for all time. From here, we build. (George , 1992: pp 292)

Over 100 years ago, this was a mud-flat, swamp. Today, this is a modern city, Ten years from now, this will be a metropolis. Never fear! (Han et al., 1998: pp 311; Lianhe Zaobao, 2003)

And from now onwards, we start off from this basis, gentlemen: If the world does not owe us a living and the corollary is also true: that we do not owe the world a living. (Rodriguez, 2003: pp 142; Lianhe Zaobao, 2003)

George (1992) observes that such speeches had been typical of the numerous speeches delivered by Prime Minister Lee and his Cabinet colleagues regularly to exhort Singaporeans of their new situation. These public exhortations were backed by hard-nosed decisions by the political leadership to turn the economy from one that had been traditionally commercial and semi-industrial to a highly accelerated industrialised and competitively commercial one.

Loh, et al (2000) state that “...many people, within Singapore as well as foreign observers were skeptical that a small island without natural resources could remain economically viable. From the start the new Republic rose like a phoenix from the ashes.” (pp 154)

The government had to grapple with several colossal problems arising from the separation from Malaysia (and hence the loss of a potential hinterland and a dependable market). The impending withdrawal of the British forces (which came in 1968) was met with alarm as they accounted for 18% of the GDP for 1965 and some 20% of direct and indirect employment at that time. (Wong,1979; Low, 1993). In 1967 the British naval dockyard alone employed 8,000 workers, the installations generating 16% of total employment and 14% of GDP. (Buchanan,1972: 86-7; Dixon, 1991: 159). From 1957 to 1968, the estimated rate of unemployment had doubled from about 6% to 12%. (Buchanan, 1972: pp 229). The 1968 closure of the British military bases in Singapore caused two major concerns. One was the obvious economic vacuum left by the British bases in terms of GDP and employment. The other was the necessity for Singapore to build its own defence force from scratch. (Low, 1998: 43)

At the time of separation, Singapore's trade had consisted mainly of a flow of raw materials such as rubber, petroleum, pepper, copra, coffee, rattan, forest products etc.. from countries of S.E. Asia which were re-exported to other countries after processing, grading and re-packing. Singapore's

economy and prosperity had been largely dependent on trade (Singapore Yearbook 1965). From 1959 to 1965 the economic planning of Singapore had been based on the access to a larger domestic market. After separation from Malaysia, this domestic market was lost and the Singapore market by itself was too small. Economies of scale problems, which had already begun to emerge in production for the Malaysian market, became overwhelming in producing for Singapore alone. By the end of 1965, the Singapore Government, against the weight of external advice and in spite of its predilections, turned sharply toward exporting to solve its unemployment and balance of payments problems. (Hughes, 1993) . There was no choice but to pursue a new strategy emphasizing the export of labour intensive manufactures. Once an export strategy was chosen, the government, through the Economic Development Board (EDB), began to sell Singapore abroad. According to Hughes (1993), the EDB staff were *“the first developing country representatives to do so effectively, into a market seeking off-shore locations for export production.”* The main attractions offered to foreign investors were efficiency and freedom from corruption. This could imply that the political leadership was not only entrepreneurial in outlook but also had a great sense of marketing in this aspect of attracting investments to Singapore.

The pioneer document which actually heralded Singapore’s industrialisation was the report by Dr. Albert Winsemius on ‘A Proposed Industrialisation Programme for the State of Singapore’ under the United Nations Survey Mission appointed under the Programme of Technical Assistance dated 13 June 1961. The basic issues and recommendations from this United Nations team included those on markets, labour and manpower training and entrepreneurs. The report pointed out that entrepreneurs were not lacking in Singapore and that they were among the best in the world. However, like capital, they tended to be found in entrepot and commercial sectors. (Low, 1993) . Thus even in the 1960s, the spirit of entrepreneurship had been prevalent although it had not been fully exploited and harnessed in an organised manner. The government played a crucial role in channeling and steering this entrepreneurial spirit towards national goals.

The Winsemius Report recommended the setting up of the Economic Development board (EDB) which was to be non-political. This was quickly implemented and the EDB actively promoted Singapore and sought local and overseas investments in the four industries identified in the Winsemius Report, namely shipbuilding and repair, metal engineering, chemicals and electrical equipment and appliances. (Low, 1993:86). In addition, the EDB attempted to help some 2400 small local manufacturers to modernise and expand, seeded by United Nations funding for machinery and

equipment. Local enterprises in the 1960s grew by sheer market initiatives with little or minimal government direction and support. (Toh & Low, 1993: 195)

The post-1965 economic policy pursued by the government could be described as an export-oriented industrialisation strategy. (Rodan, 1987; Tan K.Y, 1994). Many schemes and incentives were introduced to foster and accelerate economic growth in this direction. In 1967, corporate taxes were reduced from 40% to 4% for approved manufacturers' export profits for up to 15 years. In 1968, amendments were made to employment legislation to provide more powers to employers to attract foreign investors with an inexpensive, disciplined and skilled labour force.(Rodan, 1987; Low, 1993). The then Prime Minister, Mr. Lee Kuan Yew, openly acknowledged this necessity when he stated, "*I passed the Employment Act and I passed the Industrial Relations Act. I changed the structure to make sure that unions were a complementary part of the production process, not a disruptive part.*" (Han et al., 1998, pp 110). The year 1968 also saw the establishment of the International Trading Company (INTRACO) by the government to trade with centrally-planned economies, to help develop overseas markets for Singapore-made products and to seek cheaper sources of raw materials for local industries through bulk purchasing. The same year also saw the creation of the Development Bank Of Singapore (DBS Bank), a public-listed company with majority government equity, to provide finance for industry at below market rates and to stimulate investments through equity participation. In 1969, a 100% government-equity public limited company, Neptune Orient Lines, was established to expedite foreign trade and ensure lower freight charges for Singapore-manufactured goods. (Rodan, 1987; Low, 1993). According to Low (1993), while all these events appeared independent, it demonstrated the momentum gathered by 1968 which "*reflected the decisive single-minded fervour of the PAP government to ensure the success of the crash anti-recession programme started also in 1968 to meet with the economic and political challenges.*"

Toh & Low (1993) observe that government involvement in industrial and commercial activities "*may be a reflection of the initial diffidence and a lack of capabilities of local enterprises such that the government felt the need to flex its entrepreneurial muscles*" (pp 200)

One reason for the setting of the DBS Bank by the government was the problem caused by entrepreneurs in Singapore then who were more concerned with trading and not sufficiently familiar

or willing to adopt modern management methods. In a speech at an annual dinner of the Singapore Employers' Federation on May 10, 1968, the then Prime Minister, Mr. Lee Kuan Yew, noted:

... we want forward-looking management. The old-family business is one of the problems of Singapore... ..They are accustomed to buying and selling. And business is kept in the family. They have done this for hundreds of years. And the idea of sinking money into an anonymous corporation run by professionals over whom they have no direct personal control is foreign to them. They are loathe to make this change .(Source: Han et al .,1998 : 119)

Scholars often describe typical Chinese entrepreneurial firms as having three distinctive evolutionary cycle. In the first stage, the business is started by the entrepreneur. Management is often autocratic manner. Key management positions are occupied by family members. The second phase, succession phase, occurs when the founder's sons take over the running of the business. Although the sons may inherit equal equity stakes, not all have them are equally competent or motivated. Authority often becomes fragmented and disputes can arise. The third stage occurs when the grandchildren assumes control of the business. They take prosperity for granted are not as motivated to sustain the business. This inevitable decline has been termed the 'Buddenbrooks' phenomenon. (Fukuyama, 1985: pp 77-78)

30 years later, this attitude of Asian entrepreneurs to keep their businesses within the family and the tendency to disregard adopting modern management methods continue to be prevalent. One venture capitalist, Chan Kok Fun, noted in a report dated 24 January 1999:

Entrepreneurs here have an Asian mentality of owning a company forever and passing it on to the next generation... ..One of the biggest hang-ups with locals is giving up control. They want to leave it to their children but they don't have enough funds to grow the company at the speed they want. "

(Source: The Sunday Times; *Sunday Plus*; 24 January 1999: 2)

Nevertheless, the intensive export-oriented industrialisation strategy in the 1960s was to prove highly effective evident by its remarkable and rapid success. Foreign investments in gross fixed assets in the manufacturing sector increased from S\$157 million in 1965 to

S\$995 million in 1970 and S\$3054 million in 1974. The value of direct exports by industry rose from S\$349 million in 1965 to S\$1523 million in 1970 and S\$7812 million by 1974. Consequently unemployment fell sharply from 8.7% in 1965 to 3.9% in 1974 as shown in table 5.3:

Year	Cumulative foreign Investment S\$ million	Domestic industrial Exports S\$ million	Unemployment Rate %
1965	157	349.2	8.7
1966	239	404.9	8.7
1967	303	208.2	8.1
1968	454	659.5	7.3
1969	600	1265.3	6.7
1970	995	1523.0	6.0
1971	1575	1954.7	4.8
1972	2283	2641.7	4.7
1973	2659	4269.8	4.5
1974	3054	7811.9	3.9
1975	3380	7200.7	4.6
1976	3739	9575.9	4.5
1977	4145	10969.4	3.9
1978	5245	12632.7	3.6

Sources: Economic Development Board, *Singapore Annual Report* (various years); Department of Statistics, Singapore, *Year Of Statistics Singapore* (various years); Rodan (1987); pp 156.

Table 5.3 Selected Economic Indicators, 1965 – 75

The intensive export-oriented industrialisation strategy pursued after independence had been so successful that the unemployment problem had been totally eradicated and replaced by overemployment in 1973. Many professionals and unskilled labour had to be imported to man labour-short factories and offices. By the early 1970s, Singapore had become the first country in Asia to attract temporary immigrants to relieve pressures on the labour market and the economy. (Hughes, 1993)

In one decade, Singapore had been transformed from an entreport economy to a diversified economy based on manufacturing, trade, finance and transportation. (Pang, 1981). This transformation is an

example of how excellent fundamentals, strong and able leadership, careful planning and great determination can do for a country with limited natural and human resources. (Owyang, 1998). How Singapore in trying circumstances in the 1960s – dismissed by many commentators as another basket case of the Third World – managed to make the economic transition to First World status in 30 years is the success story of the region, if not of the whole world. (Han et al , 1998)

In 1965, Singapore’s Gross Domestic Product stood at US\$970 million, the same as Jamaica’s. By 1990, the figure had ballooned to US\$34.5 billion, almost ten times that of Jamaica. (Han et al. 1998). Indeed, the progress made by Singapore as an independent nation from 1965 to 1990 had been most impressive, as evident from Table 5.4:

	1965	1990
Total land area	581.5 sq. km	626.4 sq. km
Estimated population	1.89 million	2.7 million
Per capita indigenous	S\$ 1 687	S\$ 17 910
Number of HDB flats	54 312	61 4949
Number of car park lots	1 056	61 554
Number of ATMs	0	898
Number of TV licences	62 921	590 000
Number of telephone lines	58 378	1.1 million
Number of fast food restaurants	0	115
Number of tourist arrivals	98 481	4.8 million
Number of hotels	16	65
Number of hotel rooms	1 134	22 937
Number of passengers passing through International Airport	705 483	14.1 million
Number of International Airlines operating out of Singapore	16	53
Number of POSB current accounts	0	204 997
Number of motor vehicles	189 408	509 885
Number of taxis	3206	10 652
Price of Mercedes Benz	Model 200 S\$ 12 950	Model 200 E(Auto) S\$ 172 000 (ARF)

Source: George (1992); pp 413-414

Table 5.4 Progress at a glance 1965 – 1990

Since the 1960s, and especially since independence, the Singapore economy had thus undergone substantial transformation. The structure of the economy has evolved from one highly dependent on entrepot trade to one with a dynamic manufacturing sector as well as a sophisticated services sector which involves finance, business, tourism, telecommunication and consultancy services.(Linda Low, 1993 pp 57; Tan K. Y., 1994)

The achievements of the 1960s were clearly the result of strong and able political leadership and determination to succeed in adverse circumstances. However, it can also be argued that these personalities in government are also astute political entrepreneurs who could effectively convince the people of an entire new nation to accept the many innovative schemes they introduced . Speaking in parliament during the debate on the White Paper on ministerial salaries on November 1, 1994, Senior Minister Lee Kuan Yew argued his case for pegging cabinet ministers' pay to top executives in the private sector:

.....Hon Sui Sen...built up a good team and from EDB (Economic Development Board) sprang TDB (Trade Development Board) , sprang DBS (Development Bank Of Singapore), because we had to build up the finances to help people start their industries. This is not administration, doing a job. This is entrepreneurship on the political stage, on a national scale.

But the most important entrepreneurship is really the structuring of Singapore.....If we didn't have the entrepreneurs, we would not be here. (Source: Han et al ., 1998: 340-341)

Singapore's post-1965 model of economic development was an example of how a new nation had to find its own way to development . When asked whether Singapore's leadership in 1965 had a model mind, the then Prime Minister, Mr. Lee Kuan Yew, had replied:-

No, we borrowed in an eclectic fashion: elements of what Hong Kong was doing, what Switzerland was doing, what Israel was doing, and we improvised. I also went down to Malta to see how they ran the dry docks(Source: Stern, 1990/91: 24)

In the 1960s the economic system was thus largely one in which the government played a central and crucial role. Although interventionist in nature, the willingness to learn from others, to adapt and to

keep an open mind, backed by a strong determination to succeed despite adverse circumstances, could be described as best epitomizing the true entrepreneurial spirit.

5.4 The 1970s – The Growth Years

By 1970, Singapore had weathered the difficult period of the previous decade, with the unemployment rate reduced to 6% and further reduced to 4.8% in 1971 and 4.5% in 1973. In the same period, Singapore also successfully ventured into the export-oriented phase of industrialisation. By 1976, 59% of the manufacturing output was in direct exports, the highest in ASEAN. In 1971, wholly foreign-owned firms accounted for 75% of total direct industrial exports and 63% of total industrial establishments in Singapore. In 1975, such foreign-owned firms, which accounted 17% of the total industrial establishments, still accounted for 49% of the industrial value-added, 67% of export sales and 36% of employment. By 1975, these foreign-owned firms together with joint ventures accounted for 91.1% of direct export sales with wholly local firms contributing only 8.9% (Wong, J,1979, pp 74-75).

The period 1960-72 saw the creation of over 250,000 new jobs through the policy of labour intensive industrialization. By 1972, Singapore had for the first time experienced near full employment. (Heyzer, 1983: 107)

While the decade of the 1970s might have been less traumatic than the 1960s, the challenges and problems facing Singapore were no less daunting. However, these challenges had more to do with rapid economic growth in a resource-scarce economy. (Low ,1993)

According to Loh, et al. (2000):-

The 1970s marked a new epoch in Singapore's economy. Economic development now depended less on staples and shifted increasingly towards the export of manufactured products. There was also a gradual shift towards higher value-added investments by foreign investors as more sophisticated technology was imported into Singapore. (pp 154)

The persistent efforts to woo and attract foreign and local investments continued to be effective throughout the 1970s as evident from Table 5.5 below:-

Year	Foreign	Local	Total
1972	156	38	195
1975	247	60	306
1980	1189	224	1414
1985	888	232	1120
1990	2218	267	2484
Growth (1972-1990 (%))	15.9	15.2	

*no published data before 1972; totals may not add up due to rounding
Sources: Singapore, Department of Statistics; *Singapore National Accounts, 1987* & Ministry Of Trade and Industry; *Economic Survey Of Singapore, 1990*; Low, Linda (1993); *From Entrepot to a Newly Industrialising Economy* : pp 45.

Table 5. 5 Net investment commitments, 1972 – 1990* (\$)

However, the successful economic experience facing Singapore in the late 1960s and early 1970s did not continue for long .The 1970s saw petroleum prices trebling and a sharp global recession in 1975. Market signals were difficult to read and anticipate. Wages increased without being matched by skills levels. Heavy industries such as steel, shipyards and chemical processing required economies of scale which could not be supported by the a small economy of Singapore. Furthermore, these industries contributed to pollution and were not sufficiently skilled-labour intensive to meet Singapore’s per capita income objectives. The reliance on such heavy industries was to be acknowledged as a mistake many years later in an interview by Mr. Lee Kuan Yew, the then Prime Minister:

“Mistakes here, mistakes there. Like trying to do shipbuilding when we didn’t have an iron and steel industry and we were buying steel plates from Japan and Korea at high cost.....And we couldn’t go into iron and steel because we’d pollute the whole of Singapore.this was the late 70s. So without iron and steel, how could we go into shipbuilding?”(Han et al , 1998: pp 122)

The need for restructuring of the economy began to be felt in the 1970s. There was no longer surplus labour and liberalisation of work permits for foreign workers had its limitations, both in perpetually labour intensive activities and socially from the immigration perspective. The government began to promote capital- and skill-intensive investments. Under the 1970 Economic Expansion Incentives (Amendments) Act, special incentives were introduced to encourage this policy. In the 1973 budget speech, Finance Minister Hon Sui Sen also outlined a ten-point programme to attract preferred

investments, including a S\$100 million Capital Assistance Scheme. This would meet half the required equity for the establishment of specialist support firms and in response to *“indications by capital that it would be prepared to exploit Singapore’s relatively sheltered labour force by engaging in processes rather than simple assembly”* (Rodan, 1987; pp 156) However, the 1974-1975 oil crisis overwhelmed the government with threats of possible massive unemployment that it decided to hold back economic restructuring thus giving the less sustainable industries a reprieve. Heavy job losses resulted as exports dropped and investments slowed. An estimated 17,000 people or 2% of the total workforce were retrenched between mid-1974 and mid-1975; 12,000 or 71% of these occurred in the manufacturing sector. Total unemployment rose to 4.6% in 1975 (refer Table 5.3). By the second half of 1974, about 20,000 workers lost their jobs due largely to retrenchments in the American electronic firms, the textile factories and the woodwork factories. (Heyzer, 1983: 110)

The government responded by going all out to attract investments regardless of its degree of technological sophistication. Labour costs were lowered to be comparable with Singapore’s competitors. Through the National Wages Council (NWC), wages were held down, a policy maintained till 1979.

A corrective high-wage policy in 1979 was instituted to bring about the belated economic restructuring. The Skills Development Fund (SDF) allowing for a percentage of the payroll, initially at 4%, to be contributed by employers into a common fund to be used for upgrading training of employees, was introduced. Other financial incentives were also offered to firms to encourage automation and become less reliant on labour.

According to Low (1993), by the end of the 1970s the international economic order was becoming less favourable as international financial crises, exchange rate alignments and other fiscal and monetary ailments hurt economic giants like the United States. The oil crisis had affected the industrial economies and threatened their competitiveness and to protect domestic jobs, they had resorted to becoming more prone to protectionism.

In the 1970s, creating employment and ensuring a growing export volume was no longer adequate. Increasing skills and the values added had become more crucial in order to beat competition from countries with lower living standards and lower labour costs (Hughes, 1993).

Singapore's industrial development by then had often been hailed as a phenomenal success, not only within the context of South-east Asia but also in a broader sense within the ranks of the developing world. (Wong, 1979).

By the mid-1970s, the Singapore economy had thus evolved from being one dependent on entrepot trade thriving on colonial trade and locational advantages to one that was more diversified. Entrepot trade had contributed from 15% to 18% of gross domestic product (GDP) in the 1960s before leveling off at 16.8% in 1973 (*Yearbook of Statistics*, 1973/74; Toh & Low , 1990).

Although the 1974-75 recession was severe for Singapore, its effects were short-lived. Domestic industrial exports dropped by 8% in 1975, but then rose by 33% in 1976 and a further 15% for both the next two years. Investment growth by international capital recovered, increasing by S\$1862 million from 1975 to 1978. By the end of 1978, unemployment had fallen to just 3.6% , the lowest at any time since self-government. (see table 7.3)

Loh, et al (2000) state that:-

In spite of the oil crisis of 1973 which led to sluggish industrial production, widespread retrenchment and even closures of local and medium local firms, the Singapore economy performed well throughout the 1970s, registering an average growth rate of 8.7% for the period 1973-1979. (pp 155)

By 1978, jobs were created at an average rate of about 40,000 per year, while the workforce was expanding at an average of about 30,000 to 32,000 per year (Rodan, 1987; pp 157). The over-reliance of foreign labour had become a cause of concern not only from an economics perspective but also from the social and political angles. By the end of the 1970s, policymakers were aware of the need to steer the economy away from low-skill , labour-intensive production in favour of higher-value-added activities. By then, there was a growing list of lower-wage regional competitors. Furthermore, sooner or later, Singapore would be classified as a developed country by the World Bank and stripped of General System of Preferences (GSP) advantages in various labour-intensive products.

Throughout 1979 and subsequently a wide range of policies were adopted by the government to expedite Singapore's advancement toward a "*qualitatively new phase of industrial sophistication*" (Rodan, 1987; pp 158) . These policies were designed to propel Singapore away from direct competition with lower-wage countries into the hierarchy of the new international division of labour, where science, technology, skills and knowledge, would form the basis of the new economy. This would be achieved primarily through the manufacturing sector which was expected to raise its share of gross domestic product (GDP) from 22% in 1979 to 31% by 1990. Singapore was also to become a financial supermarket, a regional centre for sophisticated financial services. According to Rodan (1987), "*Singapore's leaders had a clear idea of the sorts of industries and appropriate processes appropriate to this new phase*". The strategy to move into this new direction consisted of four major components: the 'corrective' wage policy; expansion and improvement of social and physical infrastructure; introduction of various selective fiscal and tax concessions and incentives; and changes to the institutional control of organised labour. (Rodan, 1987; pp 158).

Toh & Low (1993) suggest that up to the 1970s, local enterprises grew largely due to the growing economy. Between 1966 and 1973, when the economy was in double-digit growth , local enterprises boomed with the rest of the economy. However, in the 1970s, when the electronic industry became significant, concern was raised of the poor level of support received from local supporting industries. Thus, after the oil crisis of 1974/75, the EDB began to target the smaller and less efficient local enterprises in terms of labour utilisation for restructuring. Among other things, the Small Industry Finance Scheme was introduced in 1976.

Between 1960 and 1976, Singapore had a real annual growth rate in GNP averaging 7.5%. This rate was the second highest in the world after Japan with an annual average rate of 7.9%. (Lim, 1981: pp 136-137)

In the 1979 New Year message to the nation, the then Prime Minister, Mr. Lee Kuan Yew, said:

Singaporeans have had the opportunity since 1965 to organize themselves into a nation. Today, we have a self-disciplined society, cohesive and united despite differences in race, language and religion. (Source : Lim, 1981: pp 138)

During the period 1970-79, Singapore achieved an annual growth rate of 12.2 % for its gross national product (GNP) and an annual growth rate of 19.8% for its gross domestic capital formation. Its per capital income increased from S\$1330 in 1960 to S\$9293 (equivalent to US\$ 4425) in 1980. Its economy had been successfully transformed from that of an entrepot to a manufacturing-service economy. (Chen, Peter, 1983: 3)

5.5 The 1980s - Economic Recession and Recovery

Since 1979, the economic growth of Singapore had been impressive in several aspects. Foreign investments rose from S\$ 6349 million in 1979 to S\$ 11,123 million by 1983; the record year was 1980 which attracted S\$ 1171 million. Value-added per worker increased from S\$23, 992 in 1979 to S\$ 36, 645 in 1983. During this period, value-added per worker in wholly-owned foreign firms rose from S\$ 34,779 to S\$ 48,995 while that of wholly-locally owned companies rose from S\$16,676 to S\$24,381, thus reflecting the significant influence of international capital.(Department of Statistics, Singapore; *Report on the Census Of Industrial Production, 1979 and 1983* – see table 5.6):

Year	Domestic industrial export S\$ million	Manufacturing value-added per worker S\$	Total real GDP growth %	Cumulative Foreign Investment S\$ million	Unemployment Rate %
1979	16904	23992	9.4	6349	3.4
1980	19875	30027	10.3	7520	3.5
1981	22894	34681	9.9	8593	3.9
1982	22227	34218	6.3	9607	2.6
1983	22922	36645	7.9	11123	3.3
1984	25993	38881	8.2	n.a	2.7
1985	n.a	n.a	- 1.7	n.a	6.0

Sources: Department of Statistics, Singapore, *Yearbook of Statistics Singapore 1984/85*; Economic Development Board, Singapore, *Annual Report 1984/85*; Ministry of Trade & Industry, Economic Committee , Singapore (1986) *The Singapore Economy : New Directions.*; Rodan (1987); pp 162

Table 5. 6 Selected economic indicators, Singapore 1979 – 1985.

Economic restructuring would have begun earlier if not for the economic downturn in 1974 / 75 caused by the oil crisis then. Nevertheless, economic restructuring did begin in 1979. In response to the tighter domestic labour situation, a more aggressive drive for high-technology, more value-added and more export-oriented industries was pursued. According to Low (1993), "*the thrust of overseas investment promotion was to attract international companies which provide new products, new manufacturing skills and new technology, in line with the industrial restructuring programme.*" (pp

75). This reflects the continued entrepreneurial and marketing drive of the political leadership in the 1980s in anticipation of potential problems.

As a result of this restructuring, the percentage of direct exports to outputs for the manufacturing sector reached 63.1% as shown in Table 5.7. For all industries, except textile and fabricated metal, this export to output share exceeded 50% as shown in Table 5.8:

Year	Employment	Gross Output \$m	Value added \$m	Remuneration \$m	Total NFA \$m	NFA Land/Bldg \$m	Direct Export \$m
1961-69	52040	1382.2	402.4	148.9	266.1	104.9	445.9
1970-79	196699	12584.4	3373.6	1125.9	3209.1	1280.9	7478.3
1980-88	276565	40168.8	11502.0	3712.0	10957.6	3955.1	25328.3
Ratios	Output/Worker	VA/Worker \$	Renumeration/worker \$	NFA/Worker \$	Exports/output %		
1961-69	26560.3	7732.6	2862.1	5114.0	32.3		
1970-79	63978.0	17150.9	5723.9	16315.0	59.4		
1980-88	145241.8	41588.8	13421.7	39620.3	63.1		

NFA : net fixed assets

Source: Department of Statistics and Economic Development Board, *Census of Industrial Production*, various years; Low (1993) : 67

Table 5.7 Principal Statistics of Manufacturing Establishments (average annual)

	1961-69	1970-79	1980-88
Beverage	30.1	20.9	22.2
Industrial Chemicals	13.0	22.1	58.7
Electrical*	59.5	65.2	64.4
Electronics	0.0	90.8	86.7
Fabricated metal	28.5	25.7	27.8
Food	36.5	41.7	56.3
Instrument	16.4	84.8	91.5
Machinery	18.6	70.0	66.2
Paints, pharmaceuticals	51.4	54.2	71.0
Petroleum	32.3	69.9	64.3
Printing and publishing	15.7	18.3	18.1
Textile	55.7	56.7	41.3
Transport	37.7	45.7	56.3
Wearing apparel	65.6	72.4	76.6

*for the years 1961-1969, electrical includes both electrical & electronic industries; for 1971 onwards, electrical industry is classified as a group & electronics industry as another group.
Sources: Department of Statistics and Economic Development Board, *Census of Industrial Production*; various years; Low , 1993: 72

Table 5.8 Average annual direct exports to output of key industries (\$'000)

The economic recession of 1985 proved a turning point in the economic development and growth of Singapore. For two decades, “*Singapore enjoyed continuous growth, almost regardless of the state of the rest of the world...A bad year meant GDP growth of 5%. A boom year meant 15% growth.*” (The Singapore Economy: New Directions; 1986). From 1980 to 1984, real GDP growth averaged 8.5 % per annum and this has enabled Singaporeans to enjoy increases in living standards far higher than many other developing countries and even some developed countries in the world. However, the rate of real manufacturing growth was 6.1% compared with the overall growth rate of 8.5% , a clear indication that the manufacturing sector did not assume the prominence expected of it under the new strategy. Consequently, the relative contribution of the manufacturing to total GDP slipped from 23.7% in 1979 to 20.6% in 1984 (Department of Statistics, *Statistics Yearbook 1984/85* :78)

The government responded to the economic crisis by appointing a committee in 1985 to review the progress of the Singapore economy and to provide recommendations for future direction. In its landmark report, *The Singapore Economy : New Directions*, the committee identified the causes of the recession and provided wide-ranging recommendations to arrest the economic downturn and prepare for the future. Both external and internal causes were identified. Major external causes included: (a) the declining global demand conditions attributed to low petroleum prices, (b) the rapid slowdown in the US growth rate and (c) low and falling commodity prices affected the regional economies and these in turn impacted Singapore's economy. Internal causes included (a) loss of competitiveness due to rising operating costs, (b) the prevailing construction slump, (c) excessive allocation of savings and investments to commercial infrastructure and (d) rigidity in the economy. (Ministry of Trade & Industry; *The Singapore Economy : New Directions*: 4-7)

According to Toh & Low (1990), unlike previous cyclical downturns, the 1985 recession reflected domestic structural rigidities of past macroeconomic policies which had generated (a) high operating costs and reduced international competitiveness, (b) mismatch between savings and investments and (c) excessive public sector intervention. Low (1993: 105) points out that "*while the 1985 recession was attributed to uncompetitive wages and operating costs, one mistake made was that wages and other labour levies kept rising while manufacturing employment was leveling off.*"

During the 1985 recession, employment in the manufacturing sector fell drastically from 274,391 in 1984 to 253,510 in 1985. The following year, it recovered to 246,682. (Low, 1993: 78) The economy recovered convincingly from a 1.6% decline in 1985 to a growth of 1.8% in 1986, 8.8% in 1987 and 11% in 1988.

In 1985 the Small Enterprise Bureau of Singapore was introduced to help entrepreneurs. The Singapore government allocated S\$100 million to this end and the Small Enterprise Bureau was established as a Division of the Economic Development Board (EDB) with the aim of assisting promising entrepreneurs. (Dana, 1999: pp 142). The EDB played this role until 1995, when this role was transferred to the Productivity and Standards Board (PSB), now known as Spring Singapore.

By the end of the 1980s, the Singapore economy had been constantly upgraded and diversified in the key activities in manufacturing, trading and services. Entrepot trade now included more industrial commodities and countertrade. The manufacturing sector had been restructured to be more high-

technology, skill-intensive and service-related. The service sector had diversified into financial and business, transport, and communications and tourist activities. The decline in the primary sector and the increasing shares of manufacturing and new services, as in transport and communications, and finance and business services, are important features of the Singapore economy in the 1980s. (Toh & Low, 1990: pp 138-139). The contributions of the main sectors to the GDP are shown in Table 5.9:

	1960	1970	1980	1985	1988
Agriculture	3.5	2.3	1.3	0.8	0.4
Quarrying	0.3	0.3	0.3	0.3	0.1
Manufacturing	11.4	20.0	29.1	23.6	30.2
Utilities	2.3	2.6	2.2	2.0	2.4
Construction	3.4	6.8	6.4	10.7	5.7
Services	76.4	66.8	64.6	69.6	70.4
- Commerce	32.3	27.1	21.7	17.0	18.4
- Transport & Communications	13.3	10.6	14.0	13.5	13.4
- Finance & Business	13.8	16.2	19.6	27.1	27.3
- Others	17.2	12.0	9.2	12.0	10.9

Note: Percentages may add up to more than 100% as imputed bank charges have not been excluded from the GDP total.

Sources: Department of Statistics, *Singapore National Accounts, 1987* and *Yearbook of Statistics, 1988*;

Toh & Low, 1990 : 139.

Table 5.9
Percentage Contribution To GDP by Industry, selected years.
(Current Market Prices)

As a result of policies which reduced barriers to foreign professionals practising in Singapore, and the introduction of incentives, there was rapid expansion of areas new to Singapore. As a result, financial and business activities' share of service sector GDP rose from 39.7 % in 1960 to 68.7% in 1983. In terms of service employment, the share of finance and business increased from 6.7% in 1960 to 12.9% in 1983. (Dixon, 1991: 167)

Toh & Low (1993) suggest that although the EDB had increasingly given more attention to local firms to complement the industrial structure since 1985, the complaint remained that the EDB was being partial to the MNCs which brought in greater value and benefits for every dollar and manhour spent on investment promotion. Despite this, local industries apparently found some niches for

themselves particularly in food, printing, marine, electronics and defence industries. Although some of these had remained small, there had been some successful cases. Many of these enterprises had been established by entrepreneurs who had left their careers in MNCs. Others were family-owned businesses which had flourished. There were also local entrepreneurs who had formed joint-ventures with MNCs. The key characteristic of this new breed of entrepreneurs is that they were better educated and were professionals who had the expertise as well as the courage to start their own businesses. They also tended to move upmarket into more modern sophisticated products. Some had become original equipment manufacturers (OEMs) and some became MNCs themselves based in Singapore. (Toh and Low, 1993: 197)

Table 5.10 and Table 5.11 show the cumulative local investment in absolute terms and percentage shares respectively in the manufacturing sector by industry group over the period 1980 to 1989.

	1980	1985	1989	Average growth 1980-1989
Food, beverage & tobacco	366	723	1029	12.2
Textile	145	113	102	-3.8
Garment & footwear	161	265	418	11.2
Leather & rubber products	33	50	51	5.0
Wood product & furniture	262	318	282	0.8
Paper & paper products	272	664	903	14.3
Industrial chemicals	72	840	330	18.4
Other chemical products	53	188	96	6.8
Petroleum	43	75	72	5.9
Plastic products	162	401	439	11.7
Non-metal mineral products	155	406	362	9.9
Basic metal industry	123	265	307	10.7
Fabricated metal products	332	668	856	11.1
Machinery	227	380	521	9.7
Electrical / electronic	129	233	517	16.7
Transport equipment	829	1353	1471	6.6
Precision equipment & optical	47	21	39	-2.1
Other mfg.	59	134	227	16.2
Total	3472	7100	8023	9.8

Sources : Economic Development Board; Toh & Low (1993: 198)

Table 5. 10
Cumulative local investment in manufacturing by industry group,
1980-1989(\$ / %)

	1980	1985	1989
Food, beverage & tobacco	10.6	10.2	12.8
Textile	4.2	1.6	1.3
Garment & footwear	4.6	3.7	5.2
Leather & rubber products	1.0	0.7	0.6
Wood product & furniture	7.5	4.5	3.5
Paper & paper products	7.8	9.4	11.3
Industrial chemicals	2.1	11.8	4.1
Other chemical products	1.5	2.6	1.2
Petroleum	1.2	1.1	0.9
Plastic products	4.7	5.6	5.5
Non-metal mineral products	4.5	5.7	4.5
Basic metal industry	3.5	3.7	3.8
Fabricated metal products	9.6	9.4	10.7
Machinery	6.5	5.4	6.5
Electrical / electronic	3.7	3.3	6.4
Transport equipment	23.9	19.1	18.3
Precision equipment & optical	1.4	0.3	0.5
Other mfg.	1.7	1.9	2.8
Total	100.0	100.0	100.0

Sources: Department of Statistics and Economic Development Board, *Census of Industrial Production*; various years; Low , 1993: 72

Table 5. 11
Percentage distribution of cumulative local investment in manufacturing
by industry group, 1980-1989 (%)

The largest cumulative local investment in absolute terms in 1989 was in transportation equipment comprising mainly shipbuilding and repair, followed by food, beverage and tobacco and industrial chemicals. In growth percentage terms, local investments grew the most in industrial chemicals (30.7%), followed by electrical and electronics (15.3%) and paper products (13.5%) . This could suggest that while local entrepreneurs in this period had become more educated and sophisticated compared to their contemporaries, they were still primarily engaged in providing support activities to foreign investments.

Toh & Low (1993) observe that it was only after the report of the Economic Committee in 1986 and the privatisation programme of the public sector that the entrepreneurial role of the government was reduced considerably. However, they argue that such a role can be justified:

With weak local entrepreneurship , the Government-linked Companies (GLCs) can be even deemed to provide a basis of partnership with the MNCs, to the extent of reducing the

dominance and reliance on MNCs. The most successful local corporation, generating as much as 5% of the GDP in its peak, is a GLC, Singapore Airlines. (pp 200)

Despite evidence that local entrepreneurship continued to be active in the 1980s, local firms still contributed much less compared to foreign-owned firms. shows the shares of foreign versus local firms in output, value-added, employment and exports. These shares of local firms in the manufacturing sector, except in value added, fell in 1988 compared with 1975 (Table 5. 12):

	Gross Output	Value Added	Direct Exports	Employees' Remuneration	Employment
1975					
Wholly local	18.1	24.3	8.9	29.4	32.8
More than half local	10.7	13.0	7.0	15.6	15.2
Less than half local	15.0	15.3	18.0	20.5	20.5
Wholly foreign	56.2	47.4	66.1	34.5	31.5
Total	100.0	100.0	100.0	100.0	100.0
1980					
Wholly local	15.6	19.1	7.1	26.3	28.1
More than half local	10.7	13.5	8.2	15.2	13.4
Less than half local	15.0	13.3	13.2	17.6	18.5
Wholly foreign	58.7	54.1	71.5	40.9	39.9
Total	100.0	100.0	100.0	100.0	100.0
1985					
Wholly local	20.3	23.4	11.4	28.7	33.5
More than half local	9.3	11.8	6.4	14.0	13.1
Less than half local	15.9	9.9	16.5	11.7	11.8
Wholly foreign	54.5	54.9	65.7	45.6	41.6
Total	100.0	100.0	100.0	100.0	100.0
1988					
Wholly local	14.1	14.9	6.5	23.7	27.6
More than half local	10.9	13.4	7.4	14.5	12.9
Less than half local	13.9	9.8	13.5	10.6	10.5
Wholly foreign	61.1	61.9	72.6	51.2	49.0
Total	100.0	100.0	100.0	100.0	100.0

Sources: Department of Statistics and EDB, *Census of Industrial Production*, various years; Toh, 1993:139

Table 5.12

Foreign and local shares of output, value added, direct exports, remuneration and employment in manufacturing (%)

Toh & Low (1993) studied the statistics of local manufacturing establishments with 5 to 9 workers and observed that while the shares of such small establishments were over one-third (35.5%) in 1988, their shares of employment, output and value added were low, at 3.4%, 0.9% and 1.1% respectively. The only two industries in 1988 with share of value added exceeding 10% of the industry value added were footwear (26.5%) and glass (14.1%). But then these were labour-intensive industries, absorbing 64.2% and 57.9% respectively of total workers. In 1988, the share of

establishments for electrical machinery was 17.9% but their share of the industry value added was only 0.6%. In the case of electronics, their share of establishment was 7.7%, but their contribution to value added was negligible. These statistics are shown in Table 5.13:

	Nos. of Establishments	Nos. of Workers	Output \$'000	Value added \$'000
Food	230	1342	59696	19327
Beverage	5	32	1670	523
Textile	28	175	8758	3237
Wearing apparel	357	2012	67864	24361
Leather	24	126	5947	1475
Footwear	70	366	18438	4422
Sawn timber & wood	37	208	9721	4311
Furniture	166	862	45536	13009
Paper & paper products	18	102	5250	1434
Printing & publishing	183	1046	47076	20938
Industrial chemicals	5	33	1316	634
Paints, pharmaceuticals & other chems.	31	180	11197	3860
Petroleum	4	23	1548	349
Plastic products	43	233	13811	4257
Glass	11	58	3231	1043
Structural cement	5	25	1010	357
Non-metal mineral	15	92	4237	1982
Iron & non-ferrous	4	28	777	402
Fabricated metal	244	1377	68256	25683
Machinery, except electrical	277	1551	82968	35927
Electrical machinery	29	171	10861	4417
Electronic products & components	20	162	4375	2707
Transport equipment	72	407	27312	9415
Precision equipment	8	49	2019	1020
Others	84	516	20842	7914
Total	1970	11176	523716	193004

Source: EDB, *Census of Industrial Production*, 1988; Toh & Low, 1993: 202

Table 5.13
Manufacturing establishments with 5-9 workers , 1988

By 1989, small and medium size enterprises (SMEs) accounted for 77% (2822 establishments) of the manufacturing sector and contributed 32% of employment, 17% of value added and 9% of direct exports. Their productivity in terms of value added per worker improved 12% over 1988, twice the total manufacturing sector's average growth of 6%. This strong growth was led by SMEs in the following industries: machinery, transport equipment, fabricated metal products, printing and publishing.

The performance of the SMEs in the 1980s showed some improvements. According to Toh & Low (1993), there were 3400 SMEs in the manufacturing sector in 1987, 36,600 in the commerce sector in 1986, 23,400 in the service sector in 1985. These added up to a total of 63,500 SMEs over the period 1985 to 1987. They accounted for 90% of the total establishments, 44% of employment but only 24% of value added and 16% of direct exports. The bulk of the SMEs in the manufacturing sector (75%) and commerce and service sectors (91%) employed between 5 to 9 workers. Tables 5.14 , 5.15, 5.16, 5.17 and 5.18 show the performance of these sectors:

	1980	1987	1988
No. of establishments ('000)	2.7	2.7	2.8
No. of employees ('000)	114.5	99.1	106.3
Value added (\$ billion)	2.1	2.6	3.0
Direct exports (\$ '000)	2.5	2.8	3.2
Productivity (\$'000)	18.3	25.7	28.0
Net fixed assets per worker (\$'000)	12.3	19.1	19.1

Source: EDB, *Census of Industrial Production*, 1988; Toh & Low, 1993: 220

Table 5.14
SME performance in the manufacturing sector

	Petrochem.	Printing & Publishing	Food & beverages	Support Industries	Plastic
No. of establishments ('000)	86	135	248	602	113
No. of employees ('000)	2.8	5.2	6.9	28.3	2.8
Value added (\$ million)	140.3	207.8	239.9	783.9	75.8
Direct exports (\$ million)	195.4	67.3	351.2	317.4	92.1
Productivity (\$' 000)	50.9	40.3	34.7	27.7	27.3

Source: EDB, *Census of Industrial Production*, 1988; Toh & Low, 1993: 220

Table 5.15
The best performing SME subsectors in manufacturing, 1988

	1980	1987	1988
No. of establishments ('000)	22.2	19.9	26.3
No. of employees ('000)	86.7	77.9	101.2
Value added (\$ billion)	3.1	3.1	3.3
Productivity (\$'000)	38.8	40.0	32.8

Source: EDB, *Census of Services*, 1988; Toh & Low, 1993: 220

Table 5.16
SME performance in the service sector

	1982	1985	1988
No. of establishments ('000)	36.7	34.4	38.8
No. of employees ('000)	148.31	41.6	151.0
Value added (\$ billion)	3.2	2.3	2.8
Productivity (\$'000)	21.6	16.1	18.4

Source: EDB, *Census of Wholesale & Retail Trades, Restaurants & Hotels*, 1988; Toh & Low, 1993: 221

Table 5.17
SME performance in the commerce sector

	Wholesale	Retail	Restaurants	Hotels
No. of establishments ('000)	18.4	17.5	2.8	0.1
No. of employees ('000)	74.8	55.7	19.8	0.7
Value added (\$ million)	1831.0	749.0	194.0	9.6
Productivity (\$' 000)	24.5	13.4	9.8	13.4

Source: As in Table 5. 15

Table 5. 18
SME subsector performance in the commerce sector, 1988

The 1980s thus ended in a positive note. The recession of 1984/85 was a major challenge in that decade. Realising that the overly interventionist role it played in the labour market, particularly the high wage policy, the government moved swift to cut real wages by 12%. The result was an improvement in international competitiveness and a return of external inflow of direct foreign investments. The economy rebounded and growth resumed to 1.8% in 1986 and recovered to 9.4% in 1987 and averaged 8.7% till the early 1990s. By the end of 1990, Singapore had become a major regional business and financial hub. The end of 1990 also saw leadership renewal in government, with Mr. Goh Chok Tong succeeding Mr. Lee Kuan Yew as Prime Minister. (Tan, K.Y., 1994: pp 59; Lee K. Y, 2000: pp 745)

According to Huff (1994: pp 299), the rapid economic growth of Singapore between 1960 and 1990 was mostly due to trade being the engine of growth. The key argument is that Singapore's development during this period relied on a combination of external free trade and strong internal economic control. Five main features can be discerned. One is sustained, exceptionally high growth rates of output. Over the period, real GDP increased eleven-fold, doubling between 1960 and 1969, again between 1970 and 1979 and once more between 1980 and 1990. (Huff, 1994: 299, 301). Table 5.19 shows the key indicators for the period:

	1960-66	1966-69	1960-69	1970-79	1980-90
Annual real GDP growth rate	5.7	13.6	8.0	8.3	6.4
Annual inflation rate	1.1	1.0	1.1	5.8	1.8
Savings ratio	6.7	18.2	11.5	28.8	41.2
Investment ratio	17.5	24.8	20.7	40.5	41.9

Source: Huff (1994): pp 302

Table 5.19 Singapore Macroeconomic Indicators, 1960-1990

Senior Minister Lee Kuan Yew recalls the planned transition to new leadership after 31 years as Singapore's Prime Minister. He explains:

To have stayed on for another term would have proved nothing except that I was still fit and effective. On the other hand, if in the years that I had left, I was able to help my successor get a grip on his job and succeed, that would be my final contribution to Singapore. (Lee K.Y, 2000: pp 745)

5.6 Singapore at present : The Knowledge Economy & Entrepreneurship

By 1991, SMEs generally did not appear to have a problem with the awareness and acquisition of technology and technological expertise. Two key factors have been cited for this development. One had to do with the growing pool of local entrepreneurs who were better educated and trained to tap technological improvements in their particular fields. The other even more important factor was the Local Industry Upgrading Scheme (LIUP) introduced by the EDB. Under this tripartite partnership scheme, the MNCs and larger local companies provide focused assistance to their local suppliers to help them improve their operations and be more competitive. By the end of 1991, there were 25 partners among the MNCs and larger local companies and 133 local participants. The local LIUP participants made up 10% of the supporting industry, mostly in fabricated metal products (38.8%) and plastic products(22.4%). The effectiveness of this scheme was reflected in the improvements shown. LIUP participants improved their productivity by an average of 13.7% between 1986 and 1989. Total sales of these companies grew by an average of 42% over the same period compared with 26% for the whole sector. Their share of total sales to the whole supporting industry increased from 7.4% to 10.5% for the same period.(Toh & Low, 1993: 209)

Clearly, Singapore's economy has been well managed over the last 30 plus years. From 1960 to 1996 period, the manufacturing sector grew at an average annual rate of 9.9% in real terms, faster than the 8.4% GDP growth rate. Tables 5.20 and 5.21 illustrate this:

Year	Manufacturing Sector Output Growth rate (% p.a.)	Total GDP Growth rate (% p.a.)
1960 – 70	13.7	9.1
1970 – 80	10.9	9.0
1980 – 85	1.6	6.2
1985 – 90	12.5	8.1
1990 – 96	7.3	8.3
1960 – 96	9.9	8.4

Source: Department of Statistics, *Singapore Yearbook of Statistics*, various years; Wong P. K., 1998: 116

Table 5.20
Performance of Singapore's Manufacturing Sector, 1960 – 1995/6

Sector	% per annum				
	1960-70	1970-80	1980-85	1985-90	1990-96
Manufacturing	13.7	10.9	1.6	12.5	7.3
Construction	15.8	6.0	15.2	-6.1	15.8
Commerce	8.0	7.4	4.0	9.2	7.6
Transport & Communications	7.1	14.6	8.7	9.3	8.9
Finance & Business Services	11.3	11.1	12.5	7.0	9.0
Others	6.3	6.3	6.1	5.5	7.3
Total GDP	9.1	9.0	6.2	8.1	8.3

Source: Department of Statistics, *Singapore Yearbook of Statistics* (various years); Wong Poh Kam (1998): 142

Table 5.21 Sectoral Performance of Singapore's Economy, 1960-96

The strong growth in the service industries in the 1980s is obvious in contrast to the manufacturing sector. However, it would appear that the manufacturing sector remains an important sector of the economy, consistently accounting for over a quarter of GDP since the late 1980s as shown in Table 5.22:

Sector	% Composition						
	1960	1970	1980	1985	1990	1995	1996
Manufacturing	16.5	26.3	29.5	22.2	27.2	26.4	24.4
Construction	5.2	9.5	7.1	10.5	5.2	7.0	7.4
Commerce	24.5	22.0	18.9	16.9	17.9	17.3	17.4
Transport & Communications	8.7	7.3	12.0	11.5	12.2	12.4	10.4
Finance & Business Services	14.0	17.0	20.5	25.6	25.0	25.3	28.6
Others	25.0	19.3	14.9	13.4	12.4	11.6	11.7
Total GDP	100	100	100	100	100	100	100

Sources: Department of Statistics, *Singapore Yearbook of Statistics* (various years); Wong Poh Kam (1998): 142

Table 5.22 Sectoral Structure of Singapore's Economy, 1960 – 96

Even though the economy was performing well in the first half of the 1990s, the need to stay ahead and prepare for the future was clearly in the minds of the leadership. In Nov 1996, the Prime Minister, Mr. Goh Chok Tong announced that the government would do a thorough review of Singapore competitiveness over the next ten years. The Committee on Singapore's Competitiveness (CSC) was thus convened in May 1997. However, the regional economic crisis which began in July 1997 affected Singapore's economy significantly and the Committee expanded its scope to propose measures to help the economy cope with the crisis. (Committee on Singapore's Competitiveness, Nov. 1998) The Committee on Singapore's competitiveness released its much-awaited report on 11 November, 1998.

In its report, the Committee identified eight key strategies which will *“build upon and enhance Singapore's competitiveness, and if properly implemented, will enable Singapore to become an advanced and globally competitive knowledge economy within the next decade...”* These strategies are : (a) manufacturing and services as twin engines of growth, (b) strengthening the external wing, (c) building world-class companies, (d) strengthening the base of small and medium local enterprises, (e) human and intellectual capital as key competitive edge, (f) leveraging on science, technology and innovation, (g) optimising resource management, and (h) government as business facilitator. The vision envisaged by the CSC for Singapore is clearly outlined as follow:

We should be a knowledge economy where the basis for competitiveness will be the capabilities and intellectual capital to absorb, process and apply knowledge. We should have a strong technological capability and a vibrant entrepreneurial culture that thrives on creativity, nimbleness and good business sense.(Committee on Singapore Competitiveness ; pp 47)

The report suggested concrete measures to deal with the economic difficulties facing Singapore as a result of the regional economic crisis and also mapped out steps to turn Singapore into an advanced economy in the next century. It called for greater emphasis on science, technology and innovation to push the economy into the next league. Commenting on the report, Deputy Prime Minister Dr. Tony Tan said that the measures recommended by the committee are necessary if Singapore is to develop into a knowledge-based economy in the future:

So that come the 21st century, in addition to our present pillars of manufacturing and regional services, particularly financial services, we will have a third pillar of high-tech entrepreneurial businesses. (The Straits Times; 15 November 1998)

The CSC report was debated in parliament in November 1998 and at the end of the 3-day debate the government announced the setting up of a high-powered ministerial committee to give a boost to high-tech entrepreneurship and invite cutting-edge start-up companies to establish in Singapore. Called Technopreneur 21 Ministerial Committee (T21MC), it is chaired by Deputy Prime Minister Tony Tan with second Trade and Industry Minister George Yeo as deputy Chairman. (The Straits Times; 26 Nov. 1998). The following month, Dr Tony Tan announced that 2 working committees would be set up under T21MC. Mr. Sim Wong Woo, Chairman of Creative Technology, would lead the private sector working committee while Mr. Teo Meng Kian, Chairman of National Science and Technology Board, will lead the public sector committee. (The Business Times, 16 & 21 December, 1998; The Straits Times, 16 Dec. 1998).

Clearly, this approach reflects the importance of harnessing and mobilising entrepreneurial talents in both the private and public sector so that maximum results can be realised.

These news led to a flurry of articles written about technopreneurs as well as comments about this high-level organised effort to produce technopreneurs for the future. Not all comments, however,

have been positive. One writer cautioned that *"it would be a mistake to expect a certain output of high-tech entrepreneurs in a predictable, mechanistic manner, just because there has been so much investment, facilities and people put into the effort."* (The Business Times, 29 December 1999). One reader agreed with this observation and questioned whether Singapore policies support a risk-taking culture. According to him, it requires more than just an educational stance to induce a culture of entrepreneurship; what is needed is *"a whole baggage of policies that can support a risk-taking culture"* otherwise *"Singaporeans will prefer to be wage earners living off their Central Provident Fund wealth."* (The Business Times, January 1999). Another writer commented on the *"enormous hurdles the government will face in encouraging entrepreneurship in Singapore"* and related his own unpleasant experience with a certain government agency. (The Business Times; 30 March 1999). One commentator noted that "Singapore entrepreneur" is practically a contradiction in terms as *"for years Singapore has been known for its risk-averse citizens and its patriarchal government, which has meticulously tended to everyone's needs, including providing them with high-paying jobs."* (Asia 21; February 1999 : 28) Cheng (1999) suggests that a number of factors stifle the growth and nurture of entrepreneurship in Singapore including the government's emphasis on attracting Multinational Corporations, government involvement in businesses through government-linked companies and society's fear of failure. Siddique (1999) writes that part of the problem is due to a huge public sector that does a superb job of servicing the MNCs that locate here. Consequently, *"the public sector interfaces so efficiently with the multinational community that there is little space for the development of a local out-sourcing industry that is the natural feeding ground for small entrepreneurs."* (The Straits Times; 18 February 1999)

It is clear that the government is aware of the many barriers inherent in society. At the opening of a workshop organised by the National University of Singapore (NUS) and the Massachusetts Institute of Technology (MIT) on 12 January 1999, Dr. Tony Tan announced that the NUS would be starting undergraduate and graduate programmes in technopreneurship. It would also organise regular forums for prominent technopreneurs and venture capitalists to share their experiences, provide advice for new start-ups and hold an annual competition to encourage students and researchers to turn their ideas into saleable technologies. These are some of the activities the NUS Centre for Management of Innovation and Technopreneurship (CMIT) would be involved in to make NUS a vibrant hub for technopreneurship. After the workshop opening, Dr. Tan commented that cultivating a risk-taking attitude was going to be a major challenge. Specifically, he was reported to have said, *"We have to encourage in our society a culture which tolerates failure."* (The Straits Times, 13 January 1999).

In a bid to foster a more entrepreneurial climate in the universities here, Deputy Prime Minister Dr. Tony Tan announced on 3 April 1999 that a panel was being set up to study ways to give National University of Singapore (NUS) and Nanyang Technological University (NTU) more room to manage funds and recruit and reward staff. Speaking at a dinner held by the Stanford University Alumni here, Dr. Tan commented that Stanford was an example of a world-class university which contributed to the Silicon Valley technopreneurial hub. (The Sunday Times; 4 April 1999)

Lim (1998) also touches on the need for this issue when he writes on the constraints of manpower resources in Singapore:

We also need to nurture an environment that is more supportive of greater risk-taking and more tolerant of failures. Otherwise, we will be an economy of managers, not creators. (pp. 43)

The same theme on tolerating entrepreneurial failure was highlighted by Prime Minister Goh Chok Tong when he officially opened the new headquarters of Creative Technology on 2 Feb 1999. In his speech, Prime Minister Goh said that as a tiny nation in a competitive world, Singapore needs to embody the never-say-die spirit to survive of technology entrepreneurs like Mr. Sim Wong Woo, Chairman of Creative Technology. He conceded that it would not be easy to nurture an entrepreneurial spirit and spark bright ideas and innovations. Some people claim that this is not possible and yet the government must try. He commented that Singaporeans are seen as not willing to take risks because society has a low threshold for failure and such attitude must change:

We have to change our attitude towards entrepreneurs. Our society must be more tolerant of those who tried and failed. We may have to review bankruptcy laws to see how they can be more forgiving to those who failed in business and give them a second chance. (The Straits Times, 3 February 1999)

This issue was further reinforced the following day. In a dinner speech to more than 200 Asian captains of business and industry attending the President's Forum organised by Business Week magazine on 3 February 1999, Deputy Prime Minister and Chairman of Technopreneurship 21 Ministerial Committee (T21MC) Dr. Tony Tan, said that Singapore needs a climate conducive to

the sprouting of knowledge-based industries. (The Straits Times, 4 February 1999) Some of the ingredients include:-

- **Availability of foreign and local talents who are creative and entrepreneurial**
- **Easy and low-cost entry to business**
- **Ready and easy access to funding and markets**
- **Tolerance of failure and opportunity to start afresh**
- **High upside gains when businesses are successful**

Dr. Tan told the gathering that the T21MC will examine these areas and make its initial recommendations sometime in the middle of the year. He also said Singapore regarded the present economic crisis as an opportunity to accelerate the transition of its economy to a knowledge based economy that will produce products and services that have potential to reach beyond the regional markets into the developed markets in Europe and America. These indicate that the local pool of potential entrepreneurs is clearly too small and inadequate and proactive efforts are needed to attract foreign talents to take roots in Singapore.

Asked about Singapore's "less-than-stellar" private entrepreneurship compared to countries like Hong Kong and Taiwan during a dinner hosted by the EDB for global chief executives on 1 Feb 1999, Senior Minister Lee Kuan Yew commented that this was not due to a lack of government support but the quality of the entrepreneurs. Part of the problem was also due to Singapore's lack of critical mass of a population large enough to produce enough good entrepreneurs. He noted that Taiwan has a population of 15 to 20 million and each year sends up to 5,000 of its best people abroad to train as scientists and engineers, who return to develop products for their industries. Furthermore, these people capitalise on their links in the US to set up successful businesses when they return. (The Straits Times, February 3, 1999)

Indeed, the leading business press has commented that there is no lack of entrepreneurial zeal among Singaporeans since hundreds of people become bankrupt each year because of business failure. In 1998, reflecting the tougher times, the number shot up to 800. The editorial comments:-

But what's lacking in Singapore is a climate and culture that's conducive and supportive of entrepreneurship and risk-taking. This encompasses many things: creativity; a spirit of derring-do; even unorthodox approaches; and the willingness to accept failure. Too many parents still want their children to go to university only to go on to a safe, salaried job." (The Business Times. Editorial & opinion; 12 February 1999)

Entrepreneurship in the 1990s and beyond continue to require help from government agencies to be competitive. In January 1999, the EDB also unveiled an ambitious new economic blueprint to turn Singapore into a vibrant and robust knowledge-based economy in the 21st century. Called "Industry 21" or "I21", the plan envisions Singapore becoming a global hub of knowledge-driven industries which use knowledge and information, not just the traditional factors of production like land, labour and capital. The three major characteristics of such a knowledge-based economy are: (a) strong technological capability, (b) emphasis on intellectual property and (c) a vibrant entrepreneurial culture. The goals of the I21 vision are listed as:

- At least 40% of GDP to come from knowledge-driven manufacturing and exportable services
- Such activities to create 20,000 exciting jobs each year.
- Manufacturing to contribute 25% of GDP
- Knowledge workers to account for:-
- 2 out of 3 jobs in manufacturing
- 3 out of 4 jobs in services
- Singapore to become a hub of choice for international businesses

This bold new plan reflects a determined and strategic approach to anticipate challenges and problems and meeting them with fresh and innovative solutions. Giving details of the Industry 21 plan, EDB's managing director Liew Heng San said:

We need to do more than just continue with past policies. Many other economies are already copying our paradigm.....In the next phase of development, we must further unlock the good ideas, innovation, daring and latent potential of all our people. Then we can reap quantum benefits of 100% increases or better (The Business Times, 21 January 1999)

Earlier, the EDB also announced that from 1998, it would take short-term equity stakes of up to 30% in promising local enterprises to help them through the current economic crisis. Many local companies were becoming key suppliers to multi-national corporations and they needed more capital investment to expand without increasing bank loans. Once they succeed, EDB would exit. Through its investment arm, EDB had already committed nearly \$700 million in 1998 under its co-investment programme with Multi-national corporations. (The Straits Times, 19 January 1999)

Indeed, the importance of nurturing entrepreneurship in Singapore had been felt since the early 1990s. The Economic Development Board's (EDB) International Advisory Council was formed in 1994 to guide the EDB in its international and regional work. It comprises chief executives of multinational corporations from America, Japan and Europe. In its third meeting on 24 February 1997, the council met to discuss how to build world-class businesses in Singapore. The outgoing chairman of the council, former cabinet minister Mr. S. Dhanabalan, said at the press conference the following day that while Singapore already has what it takes for world-class businesses to thrive – a big presence of MNCs, good infrastructure and talented people – the council felt that it was also important to foster a climate of entrepreneurship. Mr. George Fisher, chairman and chief executive of Eastman Kodak, added that *“Singapore has paid more attention to attracting MNCs rather than promoting entrepreneurship, but it has the potential to produce many high-tech entrepreneurs as its economy matures.”* (The Business Times, 26 February 1997)

In 1995, the EDB started the Promising Local Enterprises (PLE) scheme by which the EDB helps to nurture selected local enterprises with financial assistance and resource support for higher growth. When these enterprises reach the \$100 million mark in sales, the EDB then helps them grow into Asian Multinationals with revenues of \$400 - \$500 million and a significant presence in at least four countries. By the end of 1997, the EDB was already working with about 300 PLEs with total revenues amounting to \$16 billion or about 3-4% of GDP. (The Business Times, 4 December 1997). It is the aim of EDB to build at least 50 such local world-class knowledge-based enterprises with world-class products, services or capabilities. (EDB press release; *EDB launches Economic Blueprint for 21st Century*; 20 January 1999). In 2000, the number of such Promising Local Enterprises (PLEs) with sales of at least S\$ 100 million had surged to 52 – an increase of more than 40% from 37 in 1999. By 2005, the EDB aims to groom 100 companies with annual turnover of S\$100 million and above. (Straits Times 23 Nov 2000)

In his speech titled *“What must Singapore do to prosper in the 21st Century”* delivered during a National Day Dinner organised by the Singapore Chinese Chamber Of Commerce and Industry (SCCI) on 16 August 1998, the Deputy Prime Minister, Dr. Tony Tan, announced that the government would consider changes in education, tax and stock market regulations to help entrepreneurs and nurture innovation:

We would also have to consider what fiscal policies would be appropriate and what changes would be required in, for example, our taxation and stock market regulations to ensure that rewards are commensurate with the risks that entrepreneurs have to take. (The Straits Times, 17 August 1998.)

Although Singapore has not been as badly hit as by the current regional economic crisis compared to the neighbouring countries, its economy has not totally escaped the effects of the crisis. Thus there is an urgent need for Singapore to strengthen its competitiveness by reducing business costs and improving its infrastructure. However, these steps would not be enough. School curriculum would need to be changed to foster creative thinking skills. The two universities (National University Of Singapore and Nanyang Technological University) must also do more in this direction. Although they have been effective in producing competent managers to support the growth of the economy, they need to do more in promoting entrepreneurship and innovation:

To become power houses for Singapore's economic growth in the 21st century, the two universities must go beyond depositories of knowledge and producers of competent manpower to become engines of entrepreneurship and innovation. (The Business Times 18 August 1998)

Initiatives to publicly recognise entrepreneurs have come from their own ranks since the late 1980s. Each year the Association of Small and Medium Enterprises (ASME) and the Rotary Club of Singapore jointly organize the Entrepreneur of the Year Award; the 1998 award is the 10th year this award has been given. As an extension of this, the ASME also organised the first annual Woman Entrepreneur Of The Year Award in 1998, with the first award ceremony held on 6 December 1998. The growing importance of the entrepreneurs' role in Singapore's economy was highlighted in the message delivered by the Minister for Trade & Industry, Mr. Lee Yock Suan during the earlier Entrepreneur Of The Year award ceremony in August 1998:

With the current economic slowdown, Singapore entrepreneurs should critically assess their strengths and weaknesses, stay trim and fit to ride out the storm and prepare for future growth. Wherever possible, they should cooperate to form larger units or groupings to strengthen themselves. (The Straits Times , 28 August 1998)

A few weeks later, Deputy Prime Minister Dr. Tony Tan, who also oversees the development of universities here, again touched on the theme of entrepreneurship during the National University of Singapore Alumnus Lecture on 5 September 1998. During the lecture he revealed that the government was wooing ten world class universities to either establish their own campuses here or team up with local institutions to offer specialist programmes. Explaining the rationale for this policy, Dr. Tan stated that the local universities tend to focus on teaching. Such tertiary institutions would be required to do more:

In addition to teaching well, they have to become engines of entrepreneurship and innovation. As innovation and entrepreneurship are fostered by competition, we will endeavor to build a cluster of world-class institutions in Singapore in order to raise intellectual standards and provide diversity and choice for students from Singapore and the region. (The Sunday Times, 6 September 1998)

This same theme on the importance of entrepreneurship to Singapore was brought out again to a much larger audience when Dr. Tan made the following points in a speech at the closing plenary of the World Economic Forum (WEF) on 14 October 1998:

Singapore believes that the future belongs to countries with high levels of skills and education, vibrant entrepreneurial culture and openness to ideas, information and technology.

Bratton (1999) suggests that Singapore's policy to encourage entrepreneurship is in the right direction and argues that "while it is true that the propensity of individuals to take significant risks cannot be taught, the reality is that business skills can be taught to reduce the risks of failure and to promote firm growth."

The National University of Singapore (NUS) , in an effort to introduce a more entrepreneurial outlook amongst its students, teamed up with the Massachusetts Institute of Technology (MIT) in what has been known as the Singapore-Massachusetts Institute of Technology Alliance(SMA) to produce technopreneurs. According to the head of the SMA, Prof. Hang Chang Chieh, SMA would follow the MIT model in incubating technopreneurs. In this partnership, MIT Professors will co-teach programmes at NUS regularly. Students will be involved in state-of-the art research and if they have a good idea, the SMA will help them develop further in their labs. According to Prof. Hang, the SMA should be able to produce technopreneurs in a few years:

All the right ingredients are there with the MIT tie-up. We have top faculty from MIT, the best and the brightest students from around the region, cutting-edge research and on top of that we will give staff and students all the encouragement and incentives to start up their own companies (The Sunday Times, 21 Feb 1999: pp 21)

Although the emphasis of late has been the development of a more entrepreneurial culture in Singapore, it is suggested that this does not mean the entrepreneurial spirit or tendency does not exist or has ceased. One reason why entrepreneurship has declined somewhat over the years is because the conditions have not been particularly conducive to the development of entrepreneurship. The success of the government economic policies resulted in double-digit economic growth for several years, generating full employment which in turn dampened any desire to venture out. The relatively high standards of living and a heavy dependence of most employees on their Central Provident Fund (CPF) savings to finance their home purchases further erode any desire to becoming self-employed as that would automatically remove the source of CPF contributions by employers. Furthermore, the aggressive activities of Government-linked companies to move into the traditional businesses of private-sector entrepreneurs plays a role in curtailing entrepreneurial tendencies. The various draconian legislations which heavily penalise business failures also discourage entrepreneurship as an alternative to salaried employment. Finally, the prevalent social culture which attaches a stigma to business failures tend to discourage well-paid employees to start entrepreneurial ventures.

Studies have also shown that in general Singaporeans do have an entrepreneurial outlook. A study by Kau, et al (1998) show that large majority (59.2%) of Singaporeans would act on an opportunity if they can identify one. More than half (57.6%) do not mind the high risks involved in taking such decisions if the likelihood of success is great. One – third (38.5%) consider themselves creative and

resourceful in solving problems, with the majority (54.8%) remaining neutral on the subject. However, they are equally divided on the question of whether they will fight or compromise on an issue, while 25.8% disagreed with this view. The remain neutral on this question. Table 5.23 shows the sample distribution of responses to the four questions on entrepreneurial spirit posed in the study.

	Disagree (%)	Neutral (%)	Agree (%)	N
1. If I spot an opportunity, I usually act on it	3.9	37.0	59.2	1,530
2. I don't mind taking high risks if the chances of success are good	8.3	34.2	57.6	1,525
3. I am creative and resourceful in solving problems	6.8	54.8	38.5	1,522
4. I would rather fight than compromise	25.8	47.3	26.9	1,517

Source: Kau, et al (1998); *7 Faces of Singaporeans*: 83

Table 5. 23 Attitude towards Entrepreneurial Spirit

At the business level, it would appear that local companies also continue to adopt an entrepreneurial outlook. A survey by the Ngee Ann Polytechnic and the Singapore Confederation of Industries in 1998 found that local entrepreneurs play a big part in expanding the businesses of SMEs overseas. 58% of those SMEs surveyed tapped both local and overseas markets, while another 14% focus only on markets outside Singapore. These firms also venture further beyond the region to Europe , the US and Canada. The survey report indicates that these entrepreneurial firms are not only regionalising but also attempting to globalise. (The Straits Times, 2 January 1999)

The importance of entrepreneurship in a tiny nation competing in the global environment has been brought into sharper focus by the dismal performance of the Singapore economy in 1998 compared to previous years. According to the EDB, overall manufacturing output contracted by 0.5% compared to 1997. The only strong performance came from the chemicals cluster which grew 15.3%, with increased contributions mainly from the pharmaceuticals and petrochemicals segments. Table 5. 24 illustrates the uneven growth:

Industry	% change in output over previous corresponding period		% change in 3-month moving average over previous corresponding period
	Dec 98	Jan-Dec 98	Dec 98
Total Manufacturing	2.7	-0.5	-2.7
Electronics	-3.4	-3.1	-2.6
Chemicals	59.4	15.3	17.6
Petroleum products	-12.6	-1.5	-11.8
Pharmaceuticals	470.5	70.8	142.7
Industrial /Specialty chemicals	-10.0	-9.1	-12.1
Petrochemicals	4.8	10.6	-0.6
Engineering	-12.0	-0.6	-9.4
Precision engineering	-12.6	-10.0	-16.0
Process engineering	-10.9	9.3	3.7
Transport engineering	-11.4	11.5	-2.6

Source : EDB; The Straits Times, January 29, 1999.

Table 5.24
Economic performance 1998

Singapore's trade in 1998 also slumped 7.5%, the worst annual fall in 25 years. The Trade Development Board (TDB) reported that trade not only suffered from weak demand from crisis-ridden economies in the region, but also beginning to see worrying slowing demand from the key export markets of the United States and Europe. Singapore's trade performance in 1998 reversed the healthy 5.7% growth rate recorded for 1997 and was the first decline since 1986, when trade shrank by 3.2%. In money terms, total trade for 1998 was \$354 billion, down from \$382 billion recorded in 1997. Table 5.24 shows the trade performance for 1998.

Singapore's official reserves rose only 4% in 1998, down from an average of about 13% in the preceding five years. Preliminary figures reported in January 1999 indicated that at end December 1998, reserves totaled \$124.6 billion. In US\$ terms, growth last year was about 5% to US\$ 75 billion. (The Business Times, 14 January 1999)

According to Lim (2001), the infamous Asian financial crisis took many people by surprise. This "Asian flu" started in Thailand and spread quickly to the other countries in the region. Stock markets tumbled to an all-time low, exchange rates were a mere fraction of their pre-crisis values, and banks were overwhelmed by non-performing loans. It has been said that "*the biggest contributor to the Asian financial crisis of 1997 is its gross misallocation of capital and human resources, combined with a fragrant disregard for the bottom line*" (Kim and Haque, 2002). However, the East Asian economies recovered fairly speedily from the crisis. By the second half of 1999, nearly all of

the crisis-hit countries had shown positive GDP growth. (Garran, 1998; Tan, 1999; Lim, 2001, Kim and Haque, 2002)

It is interesting to note the different ways the affected countries chose to respond to the crisis. Some countries, namely, Thailand, Indonesia, and South Korea, turned to the International Monetary Fund (IMF) for assistance. In return for IMF assistance, these countries had to implement structural reforms to revive their economies. Instead of going to the IMF, Malaysia chose to introduce selective capital controls. Although Singapore had very strong economic fundamentals, it was nevertheless affected by the crisis but chose to implement drastic cost-cutting measures.

With a small domestic demand, Singapore could not afford to pump up the economy through a budget deficit or a cheap money policy. As labour costs make up a significant cost of doing business in Singapore, a cut in wages and other costs were implemented to nurse the economy back to health. When the economy took a downturn and registered lower growth in second quarter, 1998, the Government decided to introduce off-budget measures. To counter the crisis, a S\$2 billion cost cutting and spending measures package was adopted.

In November 1998, a more comprehensive cost-cutting package was introduced. The largest share of the S\$10.5 billion package was devoted to the reduction of labour costs, which accounted to 72% of the package. Compulsory CPF contributions by employers were cut from 20% point to 10% point and a further cut was made in variable wage component by 5-8% of total wages. Non-wage costs like rentals, telecommunications and utility charges, transport charges and Government fees were also reduced. These cost-cutting measures must have contributed significantly to the recovery of the Singapore economy. (Lim, 2001: 322-324)

Singapore's dismal performance in 1998 is largely the result of its dependence on the global market and its free economy which does not allow for any insulation. The Heritage Foundation has consistently ranked Singapore as the second freest economy in the world after Hong Kong. However, Singapore only lost out to Hong Kong for the official pole position because the index was compiled before the Hong Kong government's HK\$118 billion (S\$ 25 billion) share market intervention in August 1998 to fend off speculators. Thus, despite Hong Kong's top position, Singapore is effectively the world's freest economy. (The Business Times, December 2, 1998; Business Times 17 January 2001)) Table 5.25 shows the index for 1999:-.

1999 RANKING	SCORE
Hong Kong	1.25
Singapore	1.30
Bahrain	1.70
New Zealand	1.75
Switzerland	1.85
United States	1.90
Ireland	1.95
Luxembourg	1.95
Taiwan	1.95
UK	1.95

Source: Heritage Foundation; 1999 Index of economic freedom; The Business Times Dec 2, 1998

Table 5. 25
Most free economies in the world

According to Ed Feulner, president of the Heritage Foundation, countries which have the most economic freedom tend to fare better in economic crises. Too many countries have reacted in the wrong manner to the global economic slowdown. Instead of imposing new restrictions on their economies, they should be eliminating existing restrictions on trade and investment and freeing their banking and currency systems. Praising Singapore's management of its economy during the crisis, Mr. Feulner said:

Singapore has stayed the course in the economic turmoil. While other Asian governments were reacting to the region's economic crisis by intervening in their economies, Singapore remained on the path of economic freedom. (The Business Times;3 December 1998).

These developments indicate that the issue of nurturing entrepreneurs in the 1990s continues to be a matter of concern to government and entrepreneurs. It shows that entrepreneurs can no longer remain comfortable competing in the domestic and regional economies but in the global marketplace within the context of Singapore as the freest economy in the world.

The responses of entrepreneurs towards adversities and difficult situations will determine their future survival. The test of good entrepreneurship is perhaps more discernable now under the present circumstances of the economic crisis and increasingly free economy. A study by British historian William Clarence-Smith from the School of Oriental and African Studies in London indicates that there are three types of reaction to economic recession and these were detectable as far back as the

recession in Singapore during the 1930s: some individuals and firms went bankrupt, others weathered the storm with reduced incomes, while yet others took advantage of the recession to expand and diversify their enterprises. According to Dr. Clarence-Smith: *"It is more likely, however, that it reflects an ability, common to all great entrepreneurial diasporas, to adapt quickly and effectively to recession."* (The Sunday Times, 6 Dec. 1998: pp 43).

In an interview with CNN International's 'This Morning' programme on 9 June 1999, Senior Minister Lee Kuan Yew commented that the challenge for Singapore was to try and encourage more of the young to be adventurous and start companies. Entrepreneurship has not been Singapore's strong point because of the way its history had developed where *"most of our best minds went into the professions, and not into business."* (Business Times, 10 June 1999)

The problems faced by entrepreneurs in starting up companies have been raised in the press and in parliament. Besides the difficulties in raising funds, other problems often cited include the pro-MNC but SME-unfriendly strategies of Singapore's economic promotion efforts. Although Singapore (2nd) has been ranked ahead of Taiwan (16th) in terms of competitiveness, the situation is reverse when it came to entrepreneurship ranking, with Singapore ranked 17th and Taiwan 3rd. The typical woes of SMEs include: (a) access to funds - banks are too conservative; local venture capitalists are dominated by big government-linked companies (GLCs) and foreign funds, with too many checks and balances; local enterprise finance scheme (LEFS) is difficult to apply for, and its interest rate of 6.25% is too high, (b) rules and regulations are too rigid : bankruptcy laws are too punitive and discourage high-risk, high-tech start-ups; (c) Domestic market is too small: SMEs need help to break into new markets and (d) crowded out by big boys: SMEs find it difficult to compete with bigger players who expand and take away their market share. Ideas proposed in parliament to promote entrepreneurship include (a) the setting up of an SME promotions agency of the stature of the Economic Development Board (EDB), (b) to focus in the next 10 to 15 years on turning smaller firms , especially knowledge-based companies, into an engine of future growth, (c) help local firms regionalise with new incentives to encourage mergers and acquisitions with viable companies, (d) allow those that keep part of their operations here to apply for incentive schemes which now benefit mainly foreign firms. (Straits Times, 12 March 1999).

In June 1999, announcements were made that rules on levying taxes on stock options and bankruptcy laws were among the rules being reviewed. Other issues being reviewed included education,

facilities and financing. (Straits Times, 28 June 1999). In the following month, it was announced that the home office scheme was introduced where many businesses were allowed to operate from homes. (The Business Times, 7 July 1999)

The 1990s ended with the realization and acceptance that the economic policies in the past were no longer adequate for the future. An Asian Wall Street Journal report stated:

"..many local executives complain that Singapore officials have created an environment that stifles local entrepreneurs, leaving the best and the brightest to gravitate to the government and the multinationals it courts. Foreign multinationals account for 70% of manufacturing output in Singapore, which has not produced a single local company on the list of Fortune 500 companies." (Asian Wall Street Journal; 27 September 1999)

In the new millenium, issues relating to the need for a culture that encourages risk-taking and tolerance of failures and the challenges of the new knowledge-based economy continue to be vigorously highlighted and exhorted. In his Chinese New Year dinner message at the Tanjong Pagar Community Club on 10 Feb 2000, Senior Minister Lee Kuan Yew argued that Singapore's strategy in the last 30 years of attracting multinational corporations was no longer enough as it left the risk-taking to these MNCs while Singapore provided the engineers, managers and skilled workers. In the new phase of economic development, *"it is the people with the imagination, the drive, the willingness to think big and take risks to bring their ideas into the commercial marketplace, who will make the economy grow, make themselves rich , and provide jobs for our people."* (Straits Times, 11 Feb 2000) . Opening Chartered Semiconductor's newest wafer plant at Woodlands on '8 Feb 2000, Prime Minister Goh Chok Tong said, *"At the next stage of our economic development, entrepreneurship will provide the engine of growth....Unless we encourage our innovators and companies to keep on trying, they can never find the pot of gold at the end of the rainbow."* (The New Paper 18 Feb 2000:pp 12)

On the whole, Asia's entrepreneurs, including those in Singapore, have suffered setbacks during the 'Asian meltdown' period towards the end of the 1990s and beginning of 2000. Whether it is financial difficulties or the threat from the internet, many have fallen. Yet despite these adversities, *"entrepreneurship remains firmly established and encouraged throughout Asia, even in the harshest conditions."* (Asian Business; March 2001)

Singapore has moved from the labour intensive to skill-intensive and now to the knowledge-based economy in the 30 plus years of its existence as an independent nation. In conventional economics, land , labour and capital are factors of production ; Singapore has limitations in all these areas and the knowledge-based economy in a way liberates Singapore since with knowledge one can generate far greater wealth and greater dividends. Prof. Lester Thurow of the Massachusetts Institute of Technology (MIT) quotes Bill Gates of Microsoft as an example: *“What does Bill Gates own? No land, no gold, no oil, no buildings, no machines. What he does is that he controls knowledge, which makes him the wealthiest person in the world.”* (The Business Times; 21 March 2000; Thurow, 2000: pp 84)

According to Thurow (1999), *“creativity cannot be organized. It is a product of disorganization. In very successful societies, creativity requires some chaos, but not so much chaos that there is not enough order to use what has been invited.”* Thurow argues that Singapore is an example of how too much order has destroyed creativity. Although Singapore has the world’s highest savings and investment rates and has managed to attract the world’s best technologies with its excellent infrastructure, this is not enough for the new economy:-

But will Singapore learn to make the breakthroughs in either technology or social organization that real economic leadership requires? That is the stage of development it has not yet mastered. To do so it will have to create a degree of chaos that will be difficult to introduce into what is perhaps the world's most well-ordered society. It knows what it must do. But can it be done? (Thurow, 1999: pp 231)

In the new economy, the traditional role of the middlemen has been eroded. Yet, at the same time, the digital revolution has created new types of middlemen who have pioneered new business-to-business (B2B) and business-to-consumer (B2C) models. Others have earned fees from transactions taking place in electronic hubs. In a speech at the Trade Development Board’s (TDB) international trade award 2000-2001 on 6 September 2000, Senior Minister Lee Kuan Yew said , *“New types of middlemen in trade financing and information brokering will emerge. The market reach of this new breed of middlemen is global, transcending national borders.”* (The Straits Times, 7 Sept 2000). Thus, it is clear that a new breed of entrepreneurs is required in the new economy.

Towards the end of 2000, efforts to entrepreneurship appeared to have borne some fruits. According to Lee, James (2000), *“with a proactive government pressing on with deregulation, expanding the external wing of its economy, wiring up the island and nurturing entrepreneurship, Singaporeans are facing up to the need to change their mindsets to take on the challenge of the new economy.”* There is now a breed of Singaporeans who *“are pushing back the entrepreneurial frontier: young game and internet-driven”*.

The Global Entrepreneurship Monitor (GEM), however, has ranked Singapore low in entrepreneurship compared to other countries. In its 2001 report, Singapore ranked 19th among 21 nations on the scale of Total Entrepreneurial Activity (TEA) index, with only 2.1% of its adults engaged in enterprise, only ahead of Japan and Ireland, both with TEA prevalence rates barely above 1%. Brazil was ranked 1st with 16% of its adults engaged in entrepreneurial activity, followed by South Korea (14%) and the United States (13%). Table 5.26 below provides an illustration of the ranking:

Country	GEM TEA Index (%)
Brazil	16
South Korea	14
United States	13
Australia	11
Norway	8
Canada	8
Argentina	8
India	6.5
Italy	5.5
United Kingdom	5
Germany	4.5
Denmark	4.5
Spain	4.5
Israel	4
Finland	4
Sweden	4
Belgium	2.5
France	2
Singapore	2
Japan	1
Ireland	1

Sources: Business Times, 17 Jan 2001 & Asian Entrepreneur, March-April 2001

Table 5. 26 Total Entrepreneurial Activity (TEA) Prevalence Rates

In its report, GEM states:

Despite higher-than average GDP growth, Singapore has one of the lowest rates of entrepreneurial activity. This could be explained by the high dependence of Singapore's economy on the external sector. (Business Times, 17 January 2001)

On the other hand, despite this low score in entrepreneurship, venture capitalists do not seem to have a problem finding promising star-ups to invest in. The GEM reports that in 1999, measured as a percentage of gross domestic product (GDP) risk money sunk into small young enterprises is relatively high in Singapore. Compared to the 19 nations covered in their report, Singapore ranks fifth in terms of the venture capital invested as a share of GDP. Singapore's venture capital investment amounted to 0.18 % of GDP in 1999. The USA was top, followed by Israel, Canada and South Korea., as illustrated by Table 5. 27 below:-

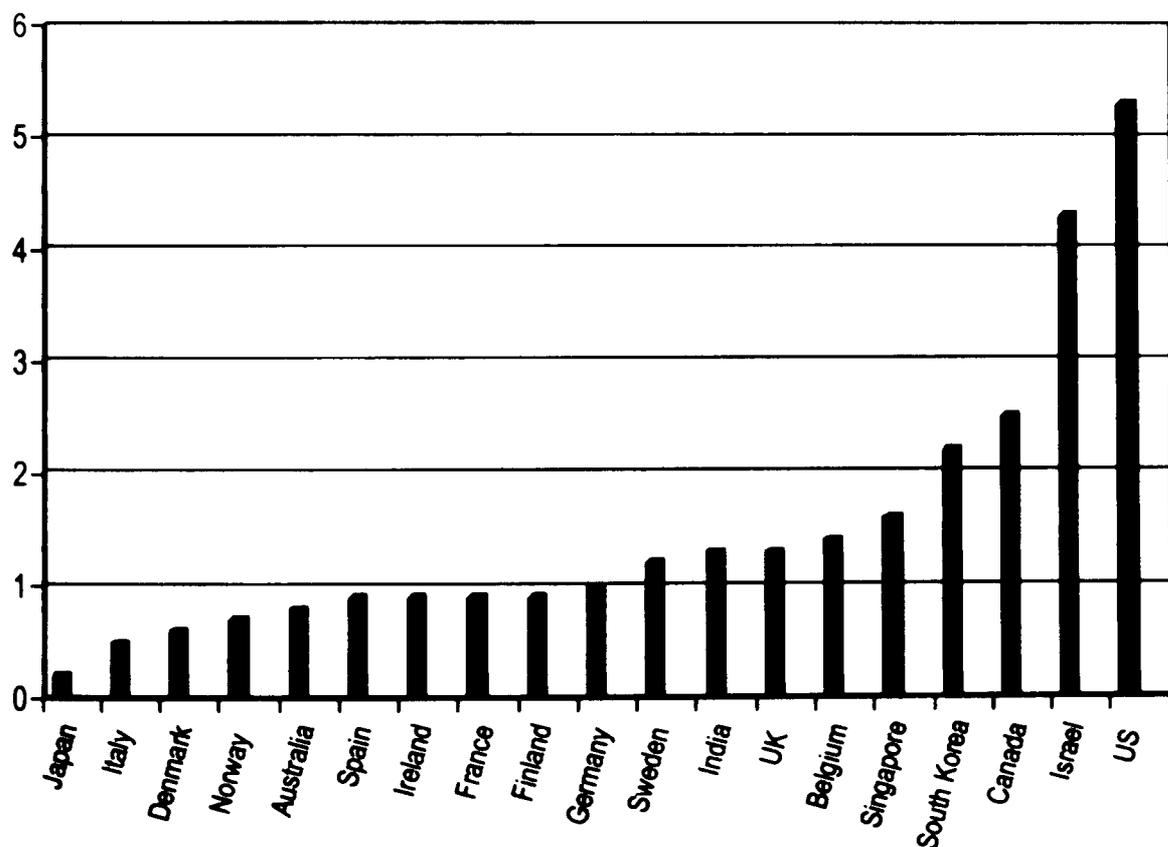


Fig. 5. 27 Ratio of Venture Capital Invested domestically to GDP in 1999
Source: Business Times, 17 January 2001

The Global Entrepreneurship Monitor 2002 report ranked the Singapore government's efforts to promote entrepreneurship as the most effective worldwide. Compared to 37 other countries, Singapore achieved the highest average score in "government programme effectiveness" - 3.41 out of a possible score of 5. The mean score for all 37 countries was 2.64. On the other hand, the entrepreneurship environment in Singapore ranked poorly in four major areas, namely (a) barriers to entry, (b) education and training, (c) social norms and (d) research and development transfer. The report suggests that *"due to the saturated local market, there is a need to go international, but there are many restrictions preventing entrepreneurs from venturing into overseas markets for the first time"* (The Business Times, 26 August 2003)

A new breed of entrepreneurs is thus required in the new knowledge-based economy. In order to build such entrepreneurs need to be creative in destroying the old or status quo. The Schumpeterian entrepreneur is therefore more suitable in the new era. This need for creative destruction extends to the government as well if it were to lead Singapore successfully into the new economy. With this in mind, the government announced in March 2000 that it was revamping its way of doing things, and tried-and-tested practices and models will be replaced with new ones. According to Deputy Prime Minister Dr. Tony Tan:

"Great uncertainties lie ahead, quite unlike the last 35 years of the old economy. Policies will have to take such uncertainty into account. The civil service must be prepared to experiment, and be quick to amend and revise policies and regulations to keep pace." (The Straits Times; 28 March 2000)

Dr. Tan noted that economic management so far had been focused on identifying fast-growing industries such as wafer fabrications and to attract multinational corporations to invest in Singapore or to grow its own companies in these areas. In the new economy, *"speed, flexibility and nimbleness in seizing market opportunities will be critical. So, too the presence of entrepreneurial talents and technological expertise."*

However, one problem facing Singapore is the paradox it finds itself in. Contrasting the adoption of on-line technologies by Ireland and Singapore, two academics, Sandra Suarez from Temple University and Mauro Guillen from the Wharton School, note:-

Conditions for entrepreneurship in Singapore have had paradoxical consequences. On the one hand, the country subscribes to the English corporate law tradition, keeps red tape to a bare minimum, and presents itself to the world as an excellent location for doing business. On the other, the Government participates heavily in the economy, and has always been a key entrepreneur in telecommunications and the internet. (Uren, 2001: pp 36)

Thus, while international companies have flourished in Singapore, local entrepreneurship has languished in part due to factors such as risk aversion, a highly regulated environment, and too much government involvement in key businesses.

However, the government has maintained that it must take the lead in developing entrepreneurship. In the race to develop and encourage local entrepreneurship, the government looks at strategies pursued by other countries like Ireland, Israel, Britain and the US. Deputy Prime Minister Tony Tan said, *"We are different from the United States and Taiwan. We can't copy them. We have to find out what works in our society."* Therefore, in the local context, what the government needs to do is lead and the private sector follows. Then, the government steps back. (The Straits Times, 26 July 2000)

Hamel (2000) notes in his book *"Leading the Revolution"*:

The goal is not a patent or a new ad campaign, but a radically new business concept. Here innovators are as likely to be college dropouts as PhD's and MBA's. They are neither scientists nor brand managers; they are entrepreneurs – individuals able to produce something out of nothing. They struggle not against Nature but against the hegemony of established practice. (pp 27)

The economic crisis in mid 1998 tested Prime Minister Goh Chok Tong government's ability and political will to take tough measures to overcome the difficulties. Senior Minister Lee Kuan Yew notes in his memoirs, *"From Third World To First -The Singapore Story:1965-2000"* :

A crisis tested Chok Tong and his team in mid-1998 when our currency went down in value, and stock and property prices fell by 40 per cent following the collapse of our neighbours' economies.....By the middle of 1999 the economy had revived. Their steady and competent management of the crisis won them the confidence of international fund managers and investors. (Lee K. Y., 2000: pp 746)

Senior Minister of State (Ministry of Trade and Industry) Tharman Shanmugaratnam said during the "Singapore 1000/SME 500" awards ceremony on 18 January 2002 that Singapore should leave more 'white space' in its economic structure to allow for firms or sectors which cannot be pre-identified as winners to thrive. In this respect, the government should make Singapore's tax system and other incentives "less targeted and more broad-based" so as to accommodate a greater degree of market experimentation. This will eventually help Singapore to move from a "managed economy" to a more market-based entrepreneurial economy" (Straits Times, 19 January 2002).

However, the quest for entrepreneurial talents for Singapore is not new. Since its independence, Singapore's political leadership has been bothered by the population's apparent lack of entrepreneurship. It has been well documented that Dr. Goh Keng Swee, former minister in the original cabinet, had been concerned about entrepreneurship throughout his career in government *"in turn praising Singaporeans for possessing such values, decrying Singaporeans for lacking them, and devising strategies promoting such values in either case."* (Doshi and Coclanis, 1999)

The economy weathered the 1997 Asian financial crisis with drastic domestic cost-cutting measures. However, other new challenges were to follow quickly one after another. The terrorist attack on the World Trade Center on 11 September 2001 (now infamously referred to as 911) resulted in another economic downturn. Subsequently in March 2003, the US and coalition forces attacked Iraq in "Operation Iraqi Freedom". Midway through this, the Severe Acute Respiratory Syndrome (SARS) outbreak caused a near epidemic which took its tolls on the economy further. Indeed, many have agreed that it is now a different world with these 3 major events unfolding before us. Many economists have revised the economic forecast downwards as the SARS outbreak have significantly affected tourist arrivals which in turn have caused a ripple effect through many other industries. Many businesses have expressed concern on the dramatic adverse impact the SARS outbreak will have on them. (The New Paper, 26 April 2003; Streets, 29 April 2003). SARS had severely disrupted the economy. It affected tourist spending but also domestic consumption. How these challenges

would be met remained to be seen. (Business Times, 9 , 28 , 30 April 2003; Straits Times, 30 April 2003). Thus far, the government has acted firmly and decisively with various measures which have been widely reported its efforts have been praised by international business leaders as well as the World Health Organisation (WHO) (Business Times, 30 April 2003; Straits Times, 1 May 2003)

In a speech delivered to the Economics Society of Singapore on 8 April, Deputy Prime Minister Lee Hsien Loong stated that while the government had always expected growth to slow down as the economy matured, it did not expect the transition to be "*so sudden and difficult*". Apart from the SARS situation, a variety of other factors also pose major challenges to the Singapore economy. These include the rise of China, the slowdown of the US economy and the growing threat of terrorism in the world and in Asia. Despite these, the country can secure a future for itself if it drew historical lessons from Japan, China, Britain and Singapore's own recent history in successfully remaking itself several times since independence. Among other things, Singapore must promote innovation, creativity and entrepreneurship, deregulate and liberalise the economy and encourage self-reliance complemented by community support. (Straits Times, 9 April 2003)

In the midst of the SARS outbreak, Prime Minister Goh Chok Tong made several key changes to his cabinet by promoting several junior ministers to full ministers to take charge of key ministries. (Straits Times, 29 and 30 April 2003; The Business Times, 29 April 2003; Today, 29 April 2003). The rationale is to ensure that the cabinet consists of a good mix of new and older ministers as part of the leadership renewal process.

The economic challenges facing the political leadership are immense. The Sept 11 , 2001 terrorist attack on the World Trade Centre in New York, the terrorist attack at Bali on 12 October 2002, the invasion of Iraq by US-led coalition forces in March 2003, and the terrorist attack at the Marriot Hotel in Jakarta on 5 August 2003 have all affected the troubled economy already weakened considerably by a loss of competitive advantage to lower-cost countries like Malaysia, India and China. Calls for reduction in costs became the rallying point, with political leaders sounding warnings of dire consequences if wage costs were not cut drastically. Speaking to some 1800 trade unionists in a conference on 23 July 2003, Senior Minister Lee Kuan Yew recalled the terrors of the Japanese occupation in 1942, the national anxiety when the British pulled out in 1968 and put at stake 80,000 jobs then and told them he understood their concerns over the unemployment situation and the daily news of retrenchments and wage cuts. Despite the adverse circumstances, he urged

them to dispel their unwarranted gloom about the future, *“In two, three years, if we make the right decisions now, we will see sunshine through the clouds”* (Straits Times, 24 July 2003). In a national day speech to his constituency on 15 August 2003, Senior Minister Lee Kuan Yew stated that Singapore would have to cut costs to stay competitive. Singapore would have to *“act immediately, to cut costs, cut taxes, especially company tax, fees, rents and wage costs”* while at the same time getting people to be retrained. He expressed the government’s concern, *“Our main worry now is unemployment , 85,000 people or 4.9 of the workforce are out of work, higher than the 2.2% in 1996”* (Weekend Today, 16-17 August, 2003). The cut will be painful *“but at most we’ll lose 10,000 to 15,000 jobs in the next six to nine months (as a result of downsizing) but we can pick up again”*. (Business Times, 16-17 August 2003) Rallying Singaporeans by recalling how they came together to battle the SARS virus, Senior Minister Lee ended his speech on this note, *“We are a young people, able to adjust, adapt and avoid becoming marginalized. Our best is yet to be.”* (Straits Times, 16 August 2003). The issue of cost-cutting to regain Singapore’s competitiveness was further emphasized by Prime Minister Goh Chok Tong his National Day Rally on 17 August 2003 during which he prepared Singaporeans for cuts in Central Provident Fund (CPF) contributions.

The issue of the wage cost burden was highlighted further by the release of a report showing in some aspects, Singapore’s wage costs might be higher than some of the developed economies like USA and Australia. On a scale of zero to 10, with zero being the lowest labour cost country , Singapore stood at 5.5 , the fourth highest among 14 countries surveyed as illustrated in Table 5.28:-

	Grade
Japan	8.5
South Korea	6
Hong Kong	5.56
Singapore	5.5
Taiwan	5.33
USA	5.07
Australia	4.8
Malaysia	3.9
Indonesia	3.33
Vietnam	3.33
Thailand	3
India	2.8
The Philippines	2.67
China	2

*Sources: Political and Economic Risk Consultancy (PERC):
Straits times, 27 August 2003*

Table 5.28 Labour Costs Among 14 Countries: 2003

The Prime Minister followed up on his National Day Rally speech on 17 August 2003 by announcing cuts to the CPF rates from the prevailing 36% to 33% effective 1 October 2003 as well as other major changes in Parliament on 28 August 2003. This 3% cut will help save business costs by S\$1.3 billion each year (Straits Times, 29 August 2003; Business Times, 29 August 2003) The following day, Deputy Prime Minister Lee Hsien Loong announced a slew of measures to further reduce business government fees and other business costs and measures to help those workers affected by the CPF cuts. (Business Times, 30 August 2003; Straits Times, 30 August 2003). These CPF cuts and other cost-cutting measures will send a strong signal to investors that Singapore will go all out to compete (Business Times, 3 Sept 2003)

The firm resolve of the political leadership to take hard-headed measures to restore the country's competitive advantage won praises from the business community. Despite the global economic slowdown and SARS, Singapore expects to get \$7.5 billion worth of manufacturing investments in 2003, just a little short of its target of \$8 billion. (Straits Times, 9 August 2003). Labour costs aside, the abundance of skilled workers still draw global players in the high-tech sector to locate their hubs in Singapore (Straits Times, 28 August 2003). Indeed, the World's Investment Report (WIR) 2003 prepared by the United Nations Conference on Trade and Development (UNCTAD) has indicated that Singapore's outlook for its high value-added sector is bright. According to Dr. James Zhan, of UNCTAD, *"a very dynamic change is taking place in Singapore's economy with leading brands divesting their investments in low-end sectors and re-investing in high value-added areas"*. The report indicates that Singapore ranks 6th in the UNCTAD Inward Foreign Direct Investment Performance Index during 1999-2001 and is rated as a *"front-runner"* among the 20 leading economies in FDI performance (Table 5.29):

Asia and the Pacific	2002 US\$	2001 US\$
China	52.7	46.8
Hong Kong	13.7	23.8
Singapore	7.7	10.9
India	3.4	3.4
Malaysia	3.2	0.6
Korea	2.0	3.5
Taiwan	1.4	4.1
Thailand	1.1	3.8

Sources: UNCTAD; Business Times, 5 Sept. 2003;
Straits Times, 6 Sept 2003

Table 5.29 UNCTAD FDI Report : FDI Inflows

Reports from ratings global agencies have rated Singapore as the best equipped for economic recovery despite its current economic problems. (Business Times, 25 August 2003). The Asian Development Bank expects some economic recovery in 2004 throughout Asia as shown in Table 5.30:

	1997	1998	1999	2000	2001	2002	2003*	2004f
China	8.8	7.8	7.0	7.6	7.3	8.0	7.5	7.5
Indonesia	4.7	-13.1	0.8	4.9	3.4	3.7	3.5	4.2
Korea	5.0	6.7	10.9	9.3	3.1	6.3	3.3	5.2
Malaysia	7.3	-7.4	6.1	8.5	0.3	4.1	3.9	5.1
Philippines	5.2	-0.6	3.4	4.4	4.5	4.4	3.8	4.2
Singapore	8.5	-0.9	6.4	9.4	-2.4	2.2	1.2	4.6
Thailand	-1.4	-10.5	4.4	4.6	1.9	5.3	4.5	5.0
Vietnam	8.2	4.4	4.7	6.1	5.8	6.4	6.9	7.3
East Asia	6.4	0.4	7.0	7.6	5.0	6.6	5.6	6.3
Asean	4.4	-6.7	4.1	6.2	1.9	4.1	3.6	4.8

* July 2003; f: forecast

Sources: ADB; World Bank; Business Times, 1 Sept 2003

Table 5.30 Annual GDP Growth Rates (%)

The United Nations Economic and Social Survey 2003 suggests that if SARS is contained, it expects growth in East Asia to improve in the second half of 2003 and into 2004. It expects Singapore's economy in particular to grow by 2.5% in 2003 and by 4.75% in 2004. (Straits Times, 30 June 2003). The World Economic Forum's (WEF) Asia Director, Mr. Frank-Jurgen Richter, has also voiced confidence in Singapore's economy, "*Singapore is one of the regions' most vibrant and dynamic financial centres and competitive economies.*" (Straits Times, 3 Sept 2003). Indeed, the International Labour Organisation (ILO) has reported that Singapore is performing impressively in terms of output person, which shot up to US\$ 43,156 in 2001. In Asia, Singapore is only second to Hong Kong, with US\$ 47,142. Among other Asian countries, Japan recorded US\$ 41, 649 per person, Taiwan US\$ 39,040, South Korea US\$ 32, 691 per person, and Malaysia US\$ 18,684 (ILO; Business Times, 2 Sept 2003). Indeed, even though the Singapore workforce may be losing jobs to low-cost locations like China, it is being sought-after by MNCs from developed countries who are setting up their high-end operations in Singapore.(Straits Times, 5 September 2003). The World Bank has also expected East Asia to be the fastest growing region in the world in 2003 and 2004. It has forecasted East

Asia's economic growth to rise to a robust 6.1% in 2003 and 6.7% in 2004. South Asia's growth is forecasted at 5.5%. (The Business Times, 5 September 2003). Singapore's improved 3rd quarter economic performance in 2003 has also shown robust recovery in 2004 is a strong possibility. (The Business Times, 4, 17 & 18 November 2003; The Edge Singapore, 10 & 24 November, 2003; The New Paper, 17 November 2003). Small businesses have been reported to be most upbeat about economic recovery. (The Business Times, 2 December 2003). Economists surveyed by the Monetary Authority of Singapore (MAS) have also indicated that they are more upbeat about economic recovery, forecasting economic growth for Singapore at 5.2% in 2004. (The Straits Times, 10 December 2003; Today, 22 December 2003). The Asian Development Bank (ADB) has also forecasted an economic recovery for Asia, and forecasted Singapore's economic growth for 2004 at 4.9%. (Today, 12 December 2003). Indeed, GDP probably grew 12% in 3rd quarter 2003 (Today, 30 December 2003) and all signs point to the economy gathering strength in 2004. (The Business Times, 30 December 2003).

In conclusion, Singapore's economic strategy to tackle the prevailing challenges appear to have been taken notice of by analysts and global investors, who generally feel that the country is on the right track. The five main thrusts of this strategy are:-

- Upgrade workforce - invest heavily in education and push continuous training and reskilling.
- Go global - sign more Free Trade Agreements (FTAs) and help more firms succeed overseas.
- Move up the value chain in manufacturing – upgrade industries and build up R&D capabilities.
- Expand services sector – beef up existing services like finance, Infocom technology (ICT, and logistics and grow new ones like education, healthcare, and creative industries.
- Nurture more entrepreneurs – not just start-ups and high-tech players, but others as well.

(Source: Business Times, 3 September 2003)

These strategies appear to be in line with commentators who note that high costs are eroding Singapore' competitive edge and the country must move up the value-added ladder into niche industries. (Business Times, 5 September 2003)

5.7 Summary

This Chapter has demonstrated that Singapore is a suitable context for the testing of the hypotheses proposed in Chapter 4. As pointed out by Mahbubani (2001), *“the socio-economic policies of Singapore fit neither the capitalist nor the socialist paradigm. Instead, a healthy pragmatic spirit and an open to innovation and experience characterize the approach of the government.”* (pp 183). Singapore is thus a good example of a mixed economy that has shown tremendous progress to become a relatively well developed economy within South East Asia. However, conditions have changed dramatically in the last 38 years ago. The challenges are more global in nature and a small open economy like Singapore’s is particularly vulnerable to changes in the global environment. However, what remains relatively unchanged appears to be the same hard headed approach by the political leadership to take remedial, though unpopular, measures like wage restraints and CPF cuts. This has been evident in various forms throughout the various phases of Singapore’s economic growth since independence. The other notable observation is the willingness to discard an unworkable or outmoded model of economic growth and to adopt alternative approaches where necessary. (The Straits Times, 29 August 2003; Business Times, 29 August 2003) The push to reduce government controls and to foster local and foreign entrepreneurship is an example of such a pragmatic approach and a change in mindset. All these factors add to the attractiveness of Singapore as a suitable and relevant context for testing the hypotheses proposed in Chapter 4.

Since independence in 1965, Singapore has survived as a nation against all odds. Without any hinterland to provide a huge domestic market or any natural resources, the leadership capitalised on the island nation’s geographical location and a hardworking population to propel the economy forward. Over the last three decades, the country has faced and overcome difficult problems. The problems of the 1960s had more to do with unemployment and an export-oriented industrialisation programme was mounted to create jobs immediately for the many unemployed. The 1970s were growth years which saw full employment and a heavy reliance on foreign labour to do the low-paying jobs and labour-intensive jobs that Singaporeans shun. The 1980s saw a major recession and restructuring of the economy to move up the technological ladder and create jobs with high-skills content. The 1990s saw a regional economic crisis which threatened to spread globally. Again the government responded by exhorting the population to move forward to a knowledge-based economy and to encourage technological entrepreneurship or technopreneurship. Measures to encourage a

more risk-taking culture and one that is more tolerant of business failures are continuously being considered and implemented.

Throughout the last three decades, political, public sector and private sector entrepreneurship have worked together to turn the country into one with one of the highest standard of living and per capita income in the world. This same organised and long-term strategic approach to meeting problems head-on and taking painful measures for longer-term gain could prove effective in the 1990s just as it did in the preceding three decades. (Hale , 1999; Lee T. Y, 1999)

It can be suggested that entrepreneurial responses in the 1990s would have to be different from those in the earlier decades. In the 1960s, the stage of economic development was such that the main government concerns were to increase output, to generate employment and generally to pursue an export strategy. In such an environment, entrepreneurial activities tended to be production-oriented and centred upon generating supplies to meet demand. Entrepreneurs tended to rely less on marketing as demand usually exceeded supply. Consumers had little choices and were also not well-informed.

In the 1990s, the environment is much more competitive with many more countries competing on the same basis as Singapore. Thus a situation has developed in which supply clearly exceeds demand and global customers have more choices than ever before. Efficient global telecommunications networks and breakthroughs in information technology mean that the speed in which information crosses boundaries poses major challenges to modern entrepreneurs in the way they respond and remain competitive. All these changes suggest that entrepreneurs need to be much more focused on the ever changing needs of customers and to constantly meet these needs on time, failing which they will be overtaken very quickly. The quality of entrepreneurship will need to be better and entrepreneurs need to be even more nimble and market-oriented in the 1990s rather than production-oriented as in the 1960s

The Asian financial crisis throughout 1997-1999, the terrorist attack on the World Trade Center in New York, US, on 11 September 2001, the Iraq war launched by the US and coalition forces in March 2003 and the outbreak of the Severe Acute Respiratory Syndrome (SARS) epidemic at the same time have brought tremendous economic challenges. According to Trade and Industry Minister, BG George Yeo, it is now a different world as a result of these 3 major events in recent

years (The Straits Times, 30 April 2003). The SARS scare has especially hit the airlines, travel agencies, hotels and restaurants very badly, with many estimates of up to 80% drop in occupancies and business transactions. (Carmichael, 2003; Chandler & Ellis, 2003). The terrorist bombings in Bali in October 2002 and Marriot Hotel at Jakarta in August 2003 have added to the woes.

The economic outlook for 2003 for Asia has been cut by the Asian Development Bank (ADB), The World Bank and the Organisation for Economic Cooperation and Development (OECD). Singapore and Hong Kong have been predicted to be most badly hit. (Business Times, 25 April 2003; Straits Times, 29 April 2003; Today, 29 April, 2003). The ADB puts Singapore's economic growth estimate for 2003 to be 2.3% (Straits Times, 29 April 2003). The World Bank's forecast for Singapore's economic growth are 2.3% for 2003, 1.7% for 2003 and 4.9% for 2004. (Business Times, 25 April 2003).

How the political leadership overcome these adversities and challenges will obviously have an impact on the country's future. In his 2003 May Day message to the unions, Prime Minister Goh Chok Tong stated that the character of Singaporeans was now being tested and whether confidence in the country can be restored is dependent on how they respond to these difficulties and the harsh measures taken by the Government to tackle these challenges. Praising workers for their contribution in keeping business costs down, he added, *"This has not gone unnoticed. Singaporeans' cooperative attitude and discipline are strong plus-points when the Economics Development Board sells Singapore to potential investors."* (Straits Times, 30 April 2003). Deputy Prime Minister Lee Hsien Loong's May Day message to the unions also braced the workers for possible further wage cuts and assured them that this would start from the top, with government leaders setting an example. (Today, 2 May 2003; Straits Times, 2 May 2003; Straits, 2 May 2003)

It appears that after 38 years of independence Singapore has come full circle. Once again, the economic, social and cultural landscapes of Singapore are undergoing dramatic and radical transformation. This time the challenges seem to be even more daunting given that Singapore's economy is inextricably linked with the regional and global economies.

Whether these difficult challenges will douse or further inflame the entrepreneurial mindset promoted by the government thus far will be seen in the years ahead.

Chapter 6

Research Methodology & Design

6.1 Introduction

In the previous chapter, the selection of Singapore as a context for testing the proposed hypotheses was discussed. Since her independence in 1965, Singapore has become the fastest growing economy in S.E. Asia, overtaking her neighbours. However, in the 1990s, the rapidly changing environment has brought about crucial challenges that require drastic changes to the prevailing economic growth model. It is no longer a low-cost destination for foreign MNCs as some of its competitive advantages have been replicated by its neighbours, making it less attractive for foreign investments in general. That means that the country must consciously re-invent itself to remain relevant in the global economy. Within the context of a mixed economy and as a highly developed economy within South East, Singapore's attempts to re-invent itself through the relaxation of government controls and the adoption of a more entrepreneurship-driven approach to economic development, make it an ideal context for testing the proposed hypotheses discussed in Chapter 4.

This chapter discusses the research methodology and design used to test the hypotheses in Singapore as a general context and more specifically among SMEs here.

Section 6.2 discusses the underlying research philosophy governing the research process as well as the research methodology and design. Essentially, the approach is to test the hypothesis by searching for empirical evidences to support them. This approach can be considered a hypothetico-deductive approach in the positivist paradigm where the hypothesis is first developed and then tested. The hypothesis-testing process involves a two stage process; firstly, by using in-depth interviews on a smaller sample and secondly, using mail questionnaires over a larger sample.

Section 6.3 discusses the first stage of the hypothesis-testing process involving the use of in-depth interviews to operationalise the hypotheses proposed in Chapter 4. The in-depth interviews will be the qualitative aspect of the research in which a small sample of entrepreneurs were interviewed. An aide-memoir was used as a guide for conducting these interviews. The purpose of this preliminary interview is to identify the extent of the marketing – entrepreneurship interface within their firms. Other questions were designed to test their understanding of the terms and questions which are to be

used in the survey questionnaire later. These interviews also serve as mini-case studies from which lessons may be drawn.

Section 6.4 outlines the development of the construct based on the literature reviewed in Chapters 2 and 3 and the development of the questionnaire based on the construct. As pointed out by Bearden and Netemeyer (1999), the construct is the theoretical base derived from a thorough review of existing literature. The literature review indicates that both marketing and entrepreneurial orientation may be determined by a number of key dimensions. The construct provides a framework for structuring the key concepts to be tested and include the types of questions relevant to each key concept that will be used in the survey questionnaire. A total of 5 sections were developed, namely, Marketing Orientation, Entrepreneurial Orientation, Relative Performance, Industry Environment and Classification of Data. The survey questionnaire was then developed based on the constructs on marketing orientation, entrepreneurial orientation and industry environment. These questions were designed to determine the extent to which respondents would link both the marketing and entrepreneurial orientation to the relative performance of their firms.

Section 6.5 discusses the second stage of the survey involving the use of the self-administered questionnaire as a survey instrument to test the hypothesis empirically over a larger sample. This is a form of survey research in which the questionnaire can be handed to the respondents personally or mailed to them. The advantages of using this research instrument are evaluated and the rationale for selecting this research instrument is justified.

Section 6.6 discusses the sampling issues involved in this research. Issues of population, type of sampling approach and selection of sampling frame are discussed . To derive the sample , it is essential that the sampling frame is representative of the defined population. A number of major sampling frames which are most suitable to the study are identified and evaluated ; these include the Enterprise 50 nominees, a list of selected entrepreneurs who qualify for the Enterprise 50 award. the Chinese Chamber Of Commerce and Industry (SCCI), the Singapore National Employers' Federation (SNEF) and the Association Of Small and Medium Enterprises (ASME) and others

Section 6.7 discusses the use of measurement scales to measures to rate the respondents' responses to the various questions in the survey questionnaire. The survey questionnaire consists of 5 sections, with each section serving a specific objective. Section A consists of questions which determine the

firm's essential characteristics and a combination of open and close questions were used. Section B (Marketing Orientation), Section C (Entrepreneurial Orientation), Section D (Relative Performance), and Section E (Industry Environment) use the Likert scale. Section F (Personal Details) relates to personal details of the respondent and therefore a combination of open and close questions are used.

Section 6.8 discusses the steps taken to improve the response rate for the survey questionnaires. A key measure undertaken was to ensure that the entire process is properly targeted. Instead of mailing out the survey forms en masse to entrepreneurs, careful sampling ensures that only those entrepreneurs who fit the description of the ideal candidates were identified and approached. Telephone calls were made to the respondents after the forms had been sent to them. In many cases, the forms were handed personally to the target respondents and collected personally from them after completion. These steps ensure that the response rate is enhanced and only qualified responses are used in the analysis.

Section 6.9 concludes the chapter with a summary of the key aspects of the approaches undertaken.

6.2 Research Philosophy, Methodology & Design

All research work is based on a certain vision of the world, adopts a methodology and proposes results aimed at predicting, prescribing, understanding or explaining. By recognizing these epistemological presuppositions, researchers can control their research approach, increase the validity of their results and ensure that the knowledge they produce is cumulative. Epistemological questioning is therefore vital to serious research. (Girod-Seville and Perret, 2001: pp 13)

Researchers can draw inspiration from three major paradigms representing the main epistemological streams, namely, positivist, interpretivist and constructivist. The term 'positivism' was first invented in the 19th century by the French social philosopher Auguste Comte, who chose the term because of its felicitous connotations (Chia, 2002). The positivist paradigm is dominant in organizational science and seeks to explain reality whereas interpretivism seeks, above all, to understand it and constructivism essentially constructs it. Interpretivism and constructivism share several assumptions about the nature of reality. However, they differ in the particular ideas they express about the process of creating knowledge and the criteria with which to validate research. (Girod-Seville and Perret, 2001: pp 13)

In its most basic form, positivism assumes that the researcher is a sort of ‘spectator’ of the object of enquiry (Chia, 2002). For positivists, reality exists in itself and has an objective essence which researchers seek to discover. The object (reality) and the subject that is observing or testing it are independent of each other.

On the other hand, in the rival interpretivist and constructivist paradigms, reality has a more precarious status. Reality remains unknowable because it is impossible to reach it directly. This reality will never be independent of the mind or consciousness of the person observing or testing it. Therefore the social world is made up of interpretations.(Easterly-Smith, et al., 1991; Girod-Seville and Perret, 2001; Chia, 2002). In the interpretivist paradigm, multiple realities exist in any given situation: the researcher, the individuals being researched and the reader or audience interpreting the research. The researcher’s role is therefore to explore these multiple realities and to report these realities by relying on the interpretations of informants. Qualitative research methods are generally preferred in this paradigm.

According to Easterby – Smith et al (1991), there are broadly two philosophical paradigms in research methodology. The formulation and testing of hypothesis is part of the positivist paradigm as illustrated in Table 6.1 below:

	Positivist paradigm	Phenomenological paradigm
Basic Beliefs	The world is external and objective Observer is independent Science is value-free	The world is socially constructed and subjective Observer is part of what observed Science is driven by human interests
Researcher should	Focus on facts Look for causality and fundamental laws Reduce phenomena to simplest elements Formulate hypotheses and then test them	Focus on meanings Try to understand what is happening Look at the totality of each situation Develop ideas through induction from data
Preferred methods include	Operationalising concepts so that they can be measured Taking large samples	Using multiple methods to establish different views of phenomena Small samples investigated in depth or over time

Source: Easterby-Smith, Mark , Thorpe, Richard, & Lowe, Andy; (1991), *Management Research – An Introduction*, Sage Publications Ltd.

Table 6 1 Key features of positivist and phenomenological paradigms

Neuman (2000), however, suggests that there are three approaches to research in social science, namely, positivism, interpretive social science, and critical social science. According to Neuman, *“positivism sees social science as an organized method for combining deductive logic with precise empirical observations of individual behaviour in order to discover and confirm a set of probabilistic causal laws that can be used to predict general patterns of human activity”* (Neuman, 2000: pp 66).

The hypothesis-testing approach adopted in the positivist paradigm has both advantages and disadvantages.

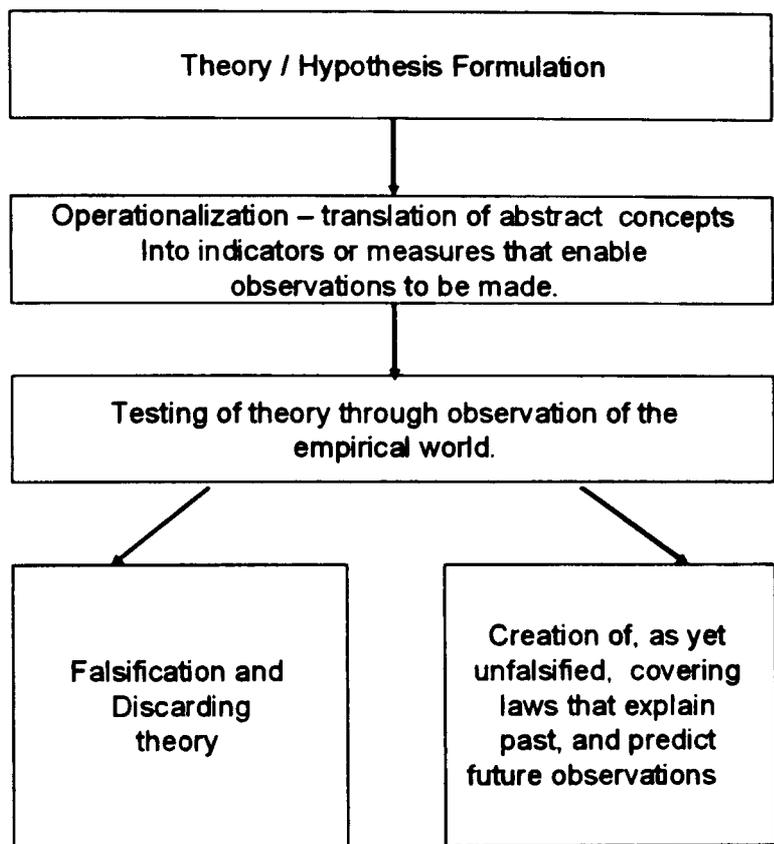
The key advantage is that there is clarity from the beginning on what is to be investigated; this enables information to be collected quickly and efficiently. This clarity in turn allows another researcher in future to replicate the study; thus enabling public scrutiny of the research.

The main disadvantage is that the its contribution might be quite insignificant and merely confirms what is already known. Furthermore, if the results are inconclusive, then the hypothesis-testing approach is of little help in explaining why.

Nevertheless, the hypothesis testing method has been widely used in the literature specifically to study market orientation (Kohli and Jaworski, 1990; Narver and Slater, 1990,1995; Diamantopoulos and Hart,1993; Deng and Dart,1994; Deshpande and Farley, 1996; Appiah-Adu, 1998) as well as the marketing-entrepreneurship interface. (Morris and Paul,1987; Miles and Arnold,1991; Morris and Lewis,1995) .The hypothesis in this research has been arrived at after a thorough review of the literature. The hypothesized concept has been operationalized using exploratory research in the form in-depth interviews .

Chia (2002) suggests that logical positivism, occasionally referred to as commonsense realism, provides the most widely held epistemological position within the natural and social sciences as it combines logic and rationality with empirical observation . Thus, although empirical observation is given a key role, it is rational analysis that rules in positivism.(Chia, 2002: pp7-8)

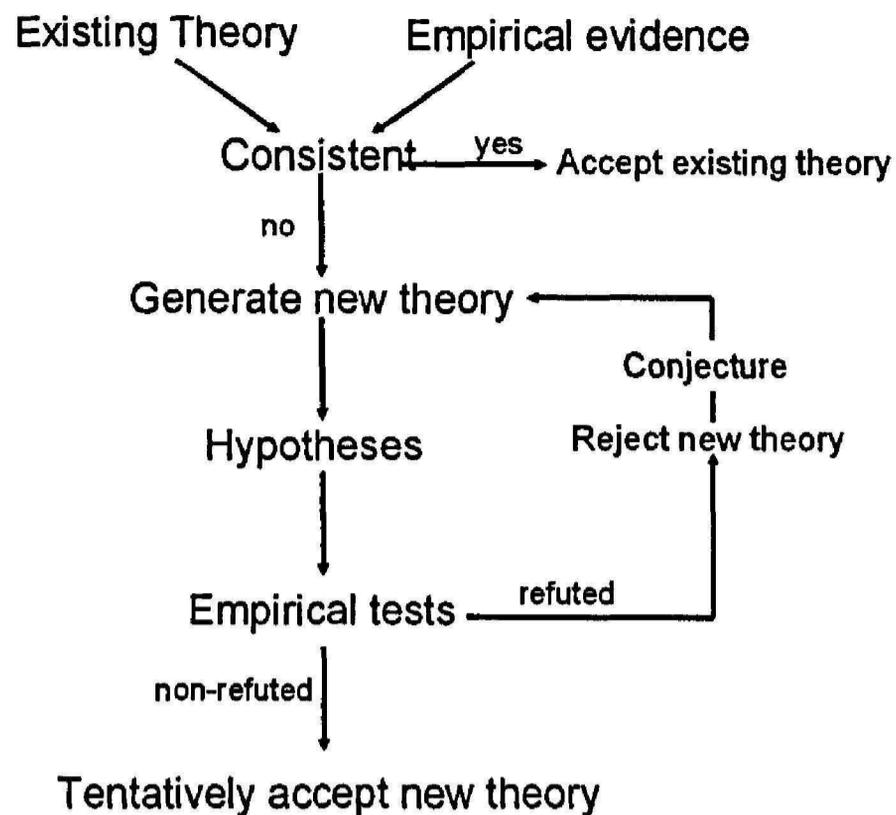
According to Gill and Johnson (1991), “ a deductive research method entails the development of a conceptual and theoretical structure prior to its testing through empirical observation ” This process of deduction may be illustrated as follows (Figure 6.2):-



Source: Gill, John., & Johnson, Phil . (1991); *Research Methods For Managers*; Paul Chapman Publishing Ltd; London.

Figure 6.2 The Process of Deduction

This hypothesis approach is also often referred to as ‘hypothetico-deduction method’ (Gill and Johnson,1991) in the positivism paradigm referred to in Figure 6.1.This is also similar to the hypothetico-deductive method approach suggested by Anderson (1983) shown in Figure 6.3:



Sources: Anderson, P.F. "Marketing, Scientific Progress and Scientific Method:", *Journal of Marketing*, Fall, 1983: 18-31; Charreire, Sandra and Durieux, Florence (2001), "Exploring and Testing", *Doing Management Research : A Comprehensive Guide*; Raymond-Alain Thietart, et al., Sage Publications, UK.

Figure 6.3 Hypothetico-deductive method applied to the testing of a theory.

However, while both the positivist and interpretivist approaches appear to be fundamentally different, in reality and in practice, it is quite possible for both paradigms to be bridged in actual research methodology (Neuman, 2000: pp. 26):

Although the basic beliefs may be quite incompatible, when one comes down to the actual research methods and techniques used by researchers the differences are by no means so clear cut and distinct. Increasingly, there is a move amongst management researchers to develop methods and approaches which provide a middle ground, and some bridging between the two extreme viewpoints.

This view is shared by Easterby-Smith et al (1991) who suggest that "one should attempt to mix methods to some extent, because it provides more perspectives on the phenomena being studied" (pp.31)

Accordingly, a 2-stage research design using a combination of both the qualitative approach (in-depth interviews) and the quantitative approach (survey questionnaire) were used for this study. This approach is similar to what Creswell (1994) has described as a “*dominant-less dominant*” design.(pp 177). The dominant part of this 2-stage research design is the quantitative mail survey instrument which was used to collect data to test the key hypotheses proposed based on the literature review of theories and insights from the in-depth interviews. The qualitative part of the research refers to the series of in-depth interviews with 16 entrepreneurs to gain insights from them on the various issues relevant to the research (Section 6.3).

The general research methodology adopted for this study is to test the hypotheses developed and discussed in detail in Chapter 4. The basic model developed on the marketing – entrepreneurship interface (see Figure 4.5, Chap 4) proposes that the extent to which entrepreneurial firms are marketing oriented or entrepreneurial oriented is contextual and highly dependent on a number of variables. Such variables might include the stage of economic development in the country at a given point, the types of economy prevalent, the strategic orientation of the firm and the nature of the entrepreneurial activity.

From this framework, a hypothetical model was then developed for a given context, namely a mixed economy and a highly developed economy. Chapter 5 discussed the choice of Singapore as this given context. 3 key hypotheses were proposed in Chapter 4. Hypothesis 1 (H1) proposes that Marketing Orientation (MO) and Entrepreneurial Orientation (EO) are positively correlated. Hypothesis 2 (H2) proposes that Marketing Orientation (MO) and the Relative Performance of the Firm is positively correlated. Hypothesis 3 (H3) proposes that Entrepreneurial Orientation (EO) and the Relative Performance of the Firm is positively correlated. The conceptual model representing these 3 hypotheses is illustrated in Figure 4.6 in Chapter 4.

The next section discusses the first stage of the research design involving in-depth interviews with 16 entrepreneurs.

6.3 Using in-depth interviews

To operationalize the hypothesis, in-depth personal interviews were conducted with a small sample of 16 entrepreneurs. Such in-depth personal interviews are useful to test ideas or methods and to explore their implications. One particular usefulness of the in-depth interview is that it can generate an understanding of the concepts and theories held by the people one is studying. It also helps the researcher by providing him with an understanding of the meaning that these phenomena and events hold for the people involved. (Maxwell,1998). Such a research approach can thus be a preliminary activity leading to a more descriptive or analytic study (Henry,1998).

Interviewing is a standard positivist methodology involving the use of a uniform questionnaire asking each respondent identical questions using the researcher's definition of the key terms. Such a method is useful as it can help in clarifying how to word a measure and define a concept before testing it empirically. (Rubin and Rubin,1995)

There are several advantages in using the in-depth interview as an exploratory research methodology. It is flexible and allows the research design to take shape gradually as the researcher listens and hears the meaning with the data. In this way, concerns that may appear in the beginning of the research might seem crucial later and what seemed unimportant may turn out vital. It is also interactive as it allows the researcher to refine or change the questions, or even change to a different set of interviewees as the process continues. The continuous nature of qualitative interviewing means that the questioning can be redesigned throughout the interview phase of the project, thus allowing the exploring of new topics while keeping the research organised and focused. The interview therefore allows the researcher to clarify issues and also probe for details. Face-to-face interviews also have the highest response rates and permit the use of long questionnaires. The researcher can observe surroundings and can use non-verbal communications and visual aids. A well-trained interviewer can ask complex and sensitive questions and also probe complex answers. (Neuman,1994; Rubin and Rubin,1995;Malhotra,1996; Zikmund,1997; Taylor and Bogdan,1998. Allard-Poesi, et al., 2001; Churchill and Iacobucci, 2002). In addition, these interviews serve as mini case-studies from which useful lessons may be drawn.

On the other hand, the in-depth interview also has some disadvantages. Respondents are not anonymous and they may be reluctant to provide certain information, particularly confidential ones.

to the interviewer. Differential interviewer techniques may also be a source of interviewer bias. Examples include rephrasing of a question, the interviewer's tone of voice, and the interviewer's appearance may influence the respondent's answer. (Zikmund, 1997; Allard-Poesi, et al., 2001)

According to Johnson and Harris (2002), qualitative research has at its core a strength that counterbalances one of the weaknesses of structured, quantitative research. It is capable of answering not only the questions asked, but if executed in a relatively unstructured fashion, answering those not originally asked. Issues in qualitative research have been discussed extensively in the literature. These include staying open to surprises, the large amounts of data that may surface and reliability and validity. However, steps can be taken to ensure that these issues are resolved. However, one must recognize that qualitative research is insightful and in many ways an intuitive process. (Johnson and Harris, 2002)

Bell (1999) has also suggested that *"whatever procedure for collecting data is selected, it should always be examined critically to assess to what extent it is likely to be reliable and valid"* (pp 103)

Silverman (1993) has suggested that the aim of interviews for positivists is to generate data which hold independently of both the research setting and the researcher or interviewer. One way of achieving this is by attempting standardised interviews. The key issues here have to do with *reliability* and *validity*.

The *reliability* of interviews can be overcome if *"each respondent understands the questions in the same way and that answers can be coded without the possibility of uncertainty."* (Silverman, 1993).

This can be achieved through the following:-

- thorough pre-testing of interview schedules
- thorough training of interviewers
- as much use as possible of fixed-choice answers
- inter-rater reliability checks on the coding of answers to open-ended questions

Silverman (1993) cautions that authenticity rather than reliability is often the issue in qualitative research: *"the aim is usually to gather an 'authentic' understanding of people's experiences and it is believed that 'open-ended' questions are the most effective route towards this end."*

It is important that we are not distracted by too much concentration on such matters as they tend to deflect attention away from the theoretical assumptions underlying the meaning that we attach to interviewees' answers. However, this does not mean that we can ignore conventional issues of reliability. To reinforce reliability of interview data, such interviews should therefore be audio-taped and / or video-taped and listened to or watched later. (Silverman,1993). A tape recorder allows the researcher to capture more than he or she could by relying on memory. (Taylor and Bogdan,1998) . However, as pointed out by Silverman, "*it is important that we do not delude ourselves into seeking a 'perfect' transcript. Transcripts can always be improved and the search for perfection is illusory and time-consuming.*"

The question of *validity* revolves around the question of truth and the possibility of errors. According to Silverman (1993), "*issue of validity is appropriate whatever one's theoretical orientation or use of quantitative or qualitative data.*" The criteria for assessing validity are then suggested as follows:-

- the impact of the researcher on the setting
- the values of the researcher
- the truth-status of a respondent's account

Silverman (1993) propose two forms of validation which might be appropriate to the logic of qualitative research:-

- i. Comparing different kinds of data (eg. quantitative and qualitative) and different methods (eg observation and interviews) to see whether they collaborate with one another. This is called *triangulation*.
- ii. Taking one's findings back to the subjects being studied. Where these people verify one's findings, it is argued, one can be more confident of their validity. This is called *respondent validation*.

During the exploratory research phase to operationalize the hypothesis , a total of 16 in-depth interviews were used. This in-depth interview method has also been used in other studies on the market orientation (Kohli and Jaworski,1990; Diamantopoulos and Hart,1993). To ensure validity, a

combination of data will be compared . Several documentation methods have been discussed in the literature to record interviews. (Allard-Poesi, et al., 2001). Accordingly, the interviews with these entrepreneurs were conducted with the help of an 'aide- memoire' (refer Appendix I) and recorded on audio tapes. Transcripts of both the written notes and audio tapes were used in the analysis. These methods can help *“avoid data reliability problems, as the researcher does not intervene in the data-production process.”* (Allard-Poesi, et al., 2001) Secondary data from the 1990s will be also be used. Further details and findings regarding the in-depth interviews (refer Appendix II) are discussed in the next chapter.

During the empirical testing phase, a survey research using mail questionnaires on a larger sample will also be administered. Both quantitative and qualitative data will be analysed.

Thus, a triangulation method will be employed throughout this research to ensure reliability and validity.

Bell (1999) states that *“if possible, efforts should be made to cross-check findings, and in a more extensive study, to use more than one method of data-collecting. This multi-method approach is known as triangulation.”* (pp 102) Triangulation is also described in an Open University course as:-

Cross-checking the existence of certain phenomena and the veracity of individual accounts by gathering data from a number of informants and a number of sources and subsequently comparing and contrasting one account with another in order to produce as full and balanced a study as possible. (Bell, 1999: pp 102)

The first stage of the research using in-depth interviews allowed many issues to be probed and clarified. It also allows the research to pilot-test the proposed survey questionnaire so that questions may be fine-tuned to reflect the clear understanding of the interviewees during the in-depth interviews and by extension the respondents in the second stage of the research involving the empirical survey. Finally, it also allows the clarification of the constructs on which the survey questionnaire used in the empirical survey will be based. The next section therefore discusses the constructs that will be adopted for the empirical survey.

The use of an aide-memoire and tape-recording allow the interviews to be properly recorded.

6.4 Developing the construct and survey questionnaire

According to Bearden and Netemeyer (1999), a construct is the definition and / or theoretical base which is being relied upon. Constructs (or concepts) are therefore building blocks necessary to translate conceptualization of reality into abstract ideas. (Zikmund, 1997) The key constructs in the context of this research relate mainly to marketing orientation and entrepreneurial orientation.

Vaus (1991) suggests that it is crucial to think ahead and anticipate what information will be needed to ensure that the relevant questions are asked. First, the research problem will affect which concepts need to be measured. Second, the indicators we devise for these concepts are crucial in determining which questions to ask. Third, our hunches about the mechanisms by which variables are linked or about factors which might explain relationships will require that certain questions be included. Vaus (1991) further suggests a checklist to ensure that the question content is objective and does not give rise to potential misinterpretation.

Nachmias and Nachmias (1996) suggest that the design of a mail questionnaire involve a number of considerations : typography, colour, and length and type of cover letter. The cover letter must succeed in convincing the respondents to complete the questionnaire and mail it back. However, this by itself may not always work as some respondents may not like to respond to people they do not know or if they do not see any benefits for themselves. (Cavusgil and Elvey-Kirk, 1998)

Bell (1999) suggests a questionnaire checklist in drafting the questions to ensure content and wording are suitable and not biased. (pp 118)

Accordingly, the questionnaire was divided into several categories reflecting the constructs and the data and information required to be collected for analysis. Questions and statements were drafted based on the preliminary in-depth interviews discussed in Section 6.3.

Section 'A' in the questionnaire concerns details about the respondent's organization. A total of 8 questions were developed to obtain data on the name of the firm, the status of the respondent in the firm, the year firm was established, the business of the firm, the industry sector it operates in, the number of employees, the annual turnover, and the firm's customer mix. Data collected would be helpful for descriptive analysis.

6.4.1 Marketing Orientation

Section 'B' attempts to collect information on the extent of market orientation of the firm.

As discussed in the literature review in Chapter 3, hypotheses with regard to marketing orientation have been developed by various researchers. (Kohli & Jaworski, 1990, Narver & Slater, 1990, Deng & Dart, 1994, Kotler 1997; Gray, et al.,1998, Hooley, et al.,1998, Day,1999, Matsuno, Mentzer and Ozsomer,2002 ;Noble, Sinha and Kumar,2002). The various constructs to determine and measure market orientation are summarized in the following table (Table 6.2):

Sources	Constructs
Kohli & Jaworski (1990)	Intelligence generation, intelligence dissemination, responsiveness
Narver & Slater (1990)	Customer orientation, competitor orientation, interfunctional co-ordination, long-term horizon, profit emphasis
Diamantopoulos & Hart (1993)	Intelligence generation, intelligence dissemination, responsiveness.
Deng & Dart (1994)	Customer orientation, competitor orientation, interfunctional co-ordination, profit orientation
Gray, et al (1998)	Customer orientation, competitor orientation, interfunctional co-ordination, profit orientation, intelligence dissemination
Appiah-Adu (1998)	Market orientation, market dynamism, competitive intensity
Han, Kim & Srivasta (1998)	Customer orientation, competitor orientation, interfunctional co-ordination
Hooley, Saunders & Piercy (1998)	Customer orientation, competitor orientation, long-term perspectives, interfunctional co-ordination, organisational culture.
Day (1999)	External-oriented culture, Distinctive capabilities, superior configuration.
Mavondo (1999)	Customer orientation, competitor orientation, interfunctional co-ordination
Matsuno & Mentzer (2000)	Intelligence generation, intelligence dissemination, responsiveness
Harris (2002)	Customer orientation, competitor orientation, interfunctional co-ordination
Noble, Sinha & Kumar (2002)	Customer orientation, competitor orientation, interfunctional co-ordination, long-term horizon, profit emphasis, private label brand focus, national brand focus.

Table 6.2 Summary of Marketing Orientation Constructs

Following the above, the key criteria distilled that best represent market orientation in the context of SMEs and Singapore were considered to be:

- Customer orientation
- Competitor orientation
- Information generation and dissemination
- Interfunctional co-ordination
- Long-term goals

These criteria represent a synthesis of the various criteria presented in Table 6.2, largely from the works of Kohli & Jaworski (1990) and Narver & Slater (1990); these are most suitable in the context of SMEs in Singapore. Organisational culture has not been adopted as a criterion as it is usual for SMEs to operate as family businesses, thus reflecting a fairly common organizational culture.

Specific questions and statements to determine these criteria were developed as follow. These questions were reviewed and revised following feedback obtained from the in-depth interviews discussed in Section 6.3.

Customer Orientation:

- B2: Our corporate objectives and policies are aimed directly at creating satisfied customers.
- B3: Levels of customer satisfaction are regularly assessed
- B4: We put major efforts into building stronger relationships with customers
- B5: We adapt our product offerings accordingly to satisfy distinct market segments.

Competitor Orientation:

- B7: We conduct regular benchmarking against major competitor product offerings
- B8: We respond rapidly to major competitor actions
- B9: We put major emphasis on differentiating ourselves from the competition on factors important to our customers.

Information generation and dissemination:

- B1: Information about customer needs are collected regularly
- B6: Information about competitor activities are collected regularly
- B13: Information about customers are widely circulated and communicated throughout the organisation

Interfunctional co-ordination:

B14: The different departments in the organisation work effectively together to serve customer needs

B15: Tensions and rivalries between departments are not allowed to get in the way of serving customers

Long-term goals:

B10: Short term profits are more important than market share

B12: Our decisions are guided by long-term considerations rather than short-term profit expediency

6.4.2 Entrepreneurial Orientation

The literature on entrepreneurial orientation has been reviewed in Chapter 3. Morris & Paul (1987) have defined entrepreneurial orientation as the “*propensity of a company’s top management to take calculated risks, to be innovative and to demonstrate pro-activeness in their approach to strategic decision-making*”

Morris and Paul (1987) have developed a 13-item scale to measure the extent of entrepreneurial orientation, namely:-

- Rate of new products / service introduction
- Changes in methods of production or delivery
- Seizing chancy growth opportunities
- Aggressiveness in dealing with competitors
- Seeking unusual or novel solutions to problems
- Emphasis on R & D, technical leadership, and innovation
- Active search for big opportunities
- Bold decisions despite uncertainties
- Rapid growth as dominant goal
- Cautious, pragmatic adjustments to problems
- Decisions as compromises of conflicting demands
- Steady growth and stability
- A charismatic leader at the top.

Binks & Vale (1990) observe that the entrepreneurial orientation may be further categorized into 4 main perspectives, namely:-

- **Catalytic Entrepreneur**
- **Allocating Entrepreneur**
- **Refining Entrepreneur**
- **Omega Entrepreneur (sub-group of refining entrepreneur; temporary)**

Miles & Snow (1978) suggest that the strategic orientation of a firm may be categorized into 4 possible approaches , namely:-

- **Prospector**
- **Defender**
- **Analyser**
- **Reactor**

Matsuno and Mentzer (2000) have studied the role of business strategy type as a potential moderator of the market orientation – performance relationship. Specifically, they have used the Mile and Snow (1978) typology of Defenders, Prospectors, Analyzers and Reactors as business strategy types.

Following the above, questions relating to the extent of strategic and entrepreneurial orientation were developed to reflect the 4 key criteria for measuring entrepreneurial orientation and entrepreneurial activity namely:-

Strategic Entrepreneur

C9: We tend to find a niche in the market and defend it.

C10: Our strategy is to be fast in following competitive trends.

C11: We tend to react to opportunities as and when they present themselves

Catalytic Entrepreneur

C1: We frequently introduce new ideas to the market.

C2: Our approach is to look for new and innovative ways to supply existing products / services to the market

C3: We spend much time, effort and money to generate and develop new ideas.

Allocating Entrepreneur

C4: We spot opportunities by seeing products / services available in other countries and offering them here.

C5: We identify products/services available elsewhere and modify them to suit the market here

Refining Entrepreneur

C6: Our competitive advantage is based on effective internal cost controls.

C7: We place emphasis on improving internal organisation systems to be competitive.

C8: Our strategy is focused on being first in the market with a product / service.

6.4.3 Relative performance

Section 'D' attempts to collect information on the relative performance of the firm .Based on the construct discussed earlier in Section 5.3 , questions and statements were developed to reflect the

Chandler and Hanks (1993) have suggested a number of possible approaches to measuring the firm's performance: (a) measuring firm's performance in broadly defined categories, (b) the use of subjective measures of executive or owner satisfaction and (c) the use of subjective measures of the firm's performance relative to competitors. However, their studies have indicated that the two dimensions of a venture's performance most favoured are growth and business volume as these are most relevant to business decision-making.

Chandler and Hanks (1993) have studied the measures of performance particularly of small businesses and found evidence of four separate dimensions : (a) satisfaction with performance, (b) growth, (c) business volume and (d) performance relative to competitors. However, they also found "*some indication of commonalities among the measures and (this) indicates the personal success and competitive success are intertwined in the minds of the founders.*" (Chandler & Hanks, 1993: pp 402)

For the purpose of this research, addition criteria have been included. Accordingly, questions and statements pertaining to 5 key criteria are incorporated into the survey questionnaire, namely:

- D1: Relative profitability**
- D2: Relative business growth rate**
- D3: Relative number of employees**
- D4: Relative investments into the business**
- D5: Relative expenditure on employees training**

6.4.4 Industry environment

The literature on industry environment has been extensively covered . According to Porter (1985) whether an industry is competitive or attractive is dependent on a number of key driving forces such as threat of new entrants, threat of substitutes, the bargaining power of buyers and sellers and the inter-firm rivalry within the industry.

Section 'E' attempts to collect information on the industry environment in which the firm operates Porter (1985, 1998) have suggested that there are five key driving forces that determine the structural attractiveness and profitability of an industry. These are threats of potential entrants, bargaining power of buyers, bargaining power of suppliers, threat of substitutes, and the degree of rivalry within the industry. Following this, questions and statements were developed to reflect the 7 key criteria for determining the characteristics of the industry environment :

- E1 : Competition from substitute product or service**
- E2 : Threat of new entrants into the industry**
- E3 : Relative ease to exit industry**
- E4 : Bargaining power of few large buyers**
- E5 : Bargaining power of a small group of suppliers**
- E6 : Volatility of demand conditions**
- E7 : Constraint of government regulations**

6.4.5 Respondents' Personal Details

Section 'F' attempts to collect information on the respondent's personal details that will be useful for descriptive analysis. Questions were developed to collect data on the respondent's age, gender,

highest level of education, degree specialization (if applicable), and sources of marketing background (if applicable)

Considerable attention was given to the wording of the questions to ensure that they were clear, unambiguous and useful. A checklist of 16 questions as recommended by Vaus (1991: pp 83-86) was used to achieve these objectives. The question content was also borne in mind in drafting the questionnaire, particularly concerning the four distinct types of question content, namely, behaviour, beliefs, attitudes, and attributes. (Vaus, 1991: pp 81.) To further ensure that the intent and meaning of these questions are clearly understood by respondents, a draft copy of the questionnaire was tested with the 16 entrepreneurs during the personal in-depth interviews discussed in Section 6.3. Following this testing, some questions were rephrased or reworded to ensure complete understanding and avoid potential misinterpretation.

6.5 Empirical Survey Instrument

This study concerns the development of 3 key hypotheses which are then tested and validated empirically in the context of Singapore. The self-administered questionnaire has been selected as the most appropriate survey instrument after weighing the advantages and disadvantages and evaluating its use in similar research in the literature (Mangione, 1998; Neuman,2000):

- i. The survey questionnaire can be given directly to the respondents or mailed to them. In the context of the culture in Singapore, respondents are less likely to respond to survey questionnaires sent through the mail by people they do not know. By handing questionnaires directly to qualified respondents the problem of poor response rate can be reduced.
- ii. It is by far the most inexpensive form of survey as many can be mailed out simultaneously to the sample. The postal and address systems in Singapore are highly sophisticated and the mail survey can be targeted effectively as non-receipt is very unlikely.
- ii. It allows for anonymity. This is relevant in Singapore as some respondents do not like to be interviewed in person and prefer to record their views without the presence of the researcher.

- iii. It permits time for the respondents to answer the questionnaires. The respondent can complete the questionnaire when it is convenient and can check personal records look up information if necessary. This is especially relevant as entrepreneurs are typically busy people.
- iv. They are effective and response rate can be high for a targeted sample who are well-educated, understand the purpose of the research and are willing to co-operate.
- v. Compared to interviews, it allows for greater uniformity in measurement as each respondent responds to the same question in the same order; this aids analysis and interpretation of data collected.
- vi. Mail questionnaires are a good choice when the researcher has limited human resources to help in the study.

The use of self-administered questionnaires has also been evident in other studies on market orientation (Deng and Dart,1994; Appiah-adu,1998; Matsuno, Mentzer and Ozsomer, 2002) and marketing - entrepreneurial interface (Morris and Paul,1987; Miles and Arnold,1991; Ray,1994)

However, to improve the response rates, a number of measures must be undertaken. One such measure is to ensure that the sampling is as representative as possible. The next section discusses issues relating to sampling.

6.6 Sampling issues

The issue of sampling revolves around the choice of using a large number of subjects/respondents/situations or focus on a small number of subjects/ respondents/situations to investigate them over the two time periods selected. According to Easterby-Smith et. al. (1991), this is essentially a choice between *cross-sectional* and *longitudinal* design.

Cross-sectional designs usually involve the selection of different subjects/situations in different contexts and investigating how other factors vary across these subjects/situations. Easterby-Smith, et al. (1991) suggest that although cross-sectional designs have some limitations, they can be useful:-

Cross-sectional designs, particularly where they use questionnaires and survey techniques, have the ability to describe economically features of large numbers of people or organisations.

The use of a cross-sectional research design is more suitable in this research as the objective is to study the experiences and opinions of a cross-section of entrepreneurs currently operating in the context of Singapore. Longitudinal studies involve the study of a small sample over a long period of time is not relevant to this research.

Neuman (2000) suggests that the elements of sampling should include : (a) defining the population; (b) decide on type of sample; (c) develop sampling frame; (d) decide on sample size and (e) select sample. This approach is generally highly recommended in the literature. (Zikmund, 1997; Royer and Zorlowski, 2001; Andreasen, 2002; Churchill and Iacobucci, 2002; Hair, Bush and Ortinau, 2003; Bush and Burns, 2003)

The first step in the sampling procedure is to define the population or universe, which is a complete group of entities sharing some common set of characteristics. (Zikmund, 1997; Royer and Zarlowski, 2001).The target population refers not only to the people, but also firms and institutions which comprise the *“totality of cases that conform to some designated specifications. The specifications define the elements that belong to the target group and those that are to be excluded”* (Churchill and Iacobucci, 2002)

The population in this study consists of entrepreneurs who currently operate businesses either on their own or in partnership with others as small and medium size enterprises (SMEs) Singapore. As discussed in Chapter 2, there is no consensus on a universal definition of the entrepreneur in the literature, with many different perspectives available .The population in this study is thus based on the working definition of the entrepreneur developed at the end of Chapter 2. There is also no universal definition of small and medium size enterprises (SMEs) with various countries adopting different variables . (Chittenden, et al. [eds], 1993; Burns and Dewhurst [eds], 1996; Bridge, et al . 1998; Beaver, 2002; Schaper & Volery, 2002). The European commission has adopted a common definition of SMEs which emphasizes the numbers of employees, with 3 categories, namely (a) micro-enterprises (employing less than 10 people; (b) small enterprises (with 10-99 people) and (c) medium enterprises (with 100-499 people). According to Beaver (2002), this definition has the major

advantage of “not using any criteria other than employment and it does not vary its definition according to the sector of the enterprise”. In the Asia-Pacific region, definitions vary from country to country (Schaper & Volery, 2002). In the Singapore context, SMEs are defined as firms with fixed productive assets (defined as net book value of factory building , machinery and equipment) not exceeding S\$15 million, with no more than 200 employees in services or non-manufacturing companies.(Schaper & Volery, 2002; SPRING Singapore (on-line access: www. spring.gov.sg). SMEs are a vital part of the Singapore economy as they make up 92% of establishments and account for 51% of employment. Yet they contribute to only 34% of total value-added and have only half the productivity of non-SME establishments. (SME 21 ;www. spring.gov.sg). For this reason, it is important to focus the research on entrepreneurs running SMEs.

Many possible sampling methods have been discussed extensively in the literature. Broadly, sampling may be divided into 2 categories: Probability and non-probability sampling. With probability sampling, each population element has a known, nonzero chance of being included in the sample. On the other hand, with non-probability sampling, there is no way of estimating the probability that any population element will be included in the sample (Zikmund, 1997; Royer and Zarlowski, 2001; Churchill and Iabucchi, 2002; Andreasen, 2002; Burns and Bush, 2003; Hair, Bush and Ortinau, 2003). The various types of sampling within these two broad categories are shown in Table 6.2.

Probability Sampling	Non-probability Sampling
Simple Random Sampling	Convenience Sampling
Systematic Random Sampling	Judgment Sampling
Stratified Random Sampling	Quota Sampling
Cluster Sampling	Snowball Sampling

Source: Hair, Bush and Ortinau, 2003

Table 6.3 Two Main Categories of Sampling Methods

In addition to the above, Andreasen (2002) has suggested the use of network sampling, which exploits the advantages of interpersonal networks, It is “based on the notion that individuals are involved in networks of other individuals who are like themselves in important ways” (Andreasen, 2002:pp 173) The researcher begins with a few respondents who possess the characteristics of

interest and then asks them for names of others with the same characteristics within a defined network.

The type of sample selected is probability sampling, which is more reliable as it allows the researcher to say precise things about the sampling; non-probability sampling is often used out of ignorance because of lack of time or in special situations.

In the exploratory research stage, a small sample of 16 entrepreneurs were interviewed and the preliminary analysis will be discussed in Chapter 7

However, in the empirical phase of the research, a larger sample will be selected from the appropriate sampling frame. The sampling frame is essentially a list or source of possible respondents that closely approximates all the elements in the population. (Zikmund, 1997; Royer and Zarlowski, 2001; Churchill and Iabucci, 2002; Andreasen, 2002; Burns and Bush, 2003; Hair, Bush and Ortinau, 2003) Because the population is an abstract concept it needs an operational definition and the sampling frame serves this purpose. Samples in the sampling frame can thus be considered as a model or sub-set of the population. A good sample produces good information about the population as the respondents in the sample are supposed to be representative of the population. A mismatch between the sampling frame and the conceptually defined population can thus be a major source of error and result in sampling. (Henry, 1998; Neuman, 2000). Unfortunately, no standards exist for labeling samples as representative. (Henry, 1998).

In the Singapore context, a number of possible sampling frames can be considered relevant to this research. A local Chamber of Commerce might be a good place to start. In this respect, the Singapore Chinese Chamber of Commerce and Industry (SCCI) appears to be ideal. It was started in 1906 in Singapore and has had a long history in Singapore. It also has a large membership of some 4000 local Chinese entrepreneurs representing various industries. Some of its members are leading influential figures in the local business scene and Chinese community.

On the other hand, the Chamber is steeped in Chinese tradition and its members are generally traditional and conservative in their personal and business dealings. They are largely suspicious of any external surveys which they consider as probing into their affairs or efforts to collect competitive intelligence. Thus, they are most unlikely to participate in any surveys from an external source unless

these are clearly sponsored or supported by the authorities. A very closed organization, most of its membership consist of an older generation of entrepreneurs, mostly Chinese-educated and highly resistant to most 'western' ideals and practices. At the extreme, many of them can be chauvinistic, closed to western management or marketing concepts and thus most unlikely to co-operate with this research.

Another possibility is the Singapore National Employers Federation (SNEF). This national organisation represents 1600 employers in the National Tripartite Council comprising representatives from the government , employers and the union movement. As a sampling frame, they would be ideal as members are generally more open and exposed to western management concepts. They are also well-versed in the English language and are generally articulate and forceful in expressing their viewpoints in public forums. Because they are generally receptive to new ideas they are more likely to participate in a survey . On the other hand, SNEF is a body of corporate members only and its membership consists of companies owned by both local entrepreneurs as well as foreign corporations. Although it is ideal as a sampling frame in terms of the likelihood of response, the perspectives of local entrepreneurs and small and medium size enterprises may not be obtained

The third possibility is the Association of Small and Medium Enterprises (ASME). The members are also entrepreneurs but they tend to be people running much smaller businesses. The grouping is the smallest of the three and the least effective in articulating their viewpoints although in recent years they have begun to adopt a higher profile by organising the annual 'entrepreneur of the year' award and other events. In addition, it has become more vocal in raising issues relating to SMEs with government. Their current membership is smaller than the other bodies and thus may not be representative of the population identified in this research. However, they are growing in membership and have made concerted efforts in recent years to bring more entrepreneurs into their membership.

Other sampling frames include: (i) directories such as SME 500 which ranks Singapore's most powerful small and medium enterprises, Singapore 1000, which ranks Singapore's most powerful corporations, (ii) past candidates and winners of Enterprise 50 award and International Enterprise (IE) Singapore award and (iii) entrepreneurs who have been featured in press reports and other magazines . These samples are attractive as the entrepreneurs represent successful small and medium

size enterprises and are most likely to represent the ideal target segment of respondents for the purpose of this research

To assess whether the sample selected is representative of the population, Henry (1998) proposes that three key issues be addressed by the researcher:

- i Is the population from which the sample is drawn consistent with the population of interest for the study?
- iii. Have the methods for selecting subjects or units biased the sample?
- iv. Are the estimates or sample statistics sufficiently precise for the study purpose?

Based on these questions, it would appear that all these sampling frames are suitable as they all have a cross section of different types of entrepreneurs representing a variety of industry sectors.

Churchill, Jr. and Iacobucci (2002) have suggested a combination of samples may be used. In the context of this research, entrepreneurs within the target population may or may not belong to any of the sampling frames discussed. Some may have overlapping memberships in the various sampling frames identified. Yet others who are ideal as samples may simply refuse to participate in the survey unless they know the researcher either personally or professionally or through overlapping networks. Accordingly, a combination of sampling methods were used in this research.

Andreasen (2002) has suggested the use of snowball and network sampling as an effective sampling method. This technique is based on the notion that individuals are involved in networks of other individuals through their professional and personal lives who are like themselves in many ways. Accordingly, qualified entrepreneurs were also targeted and approached in this manner.

According to Vaus (1991), the required sampling size depends on two key factors: the degree of accuracy we require for the sample and the extent to which there is variation in the population in regard to the key characteristics of the study. Furthermore, the sample size may be much smaller for more homogenous samples. In addition, desired accuracy is not the only factor in working out the sample size: cost and time are also key factors. . The final sample size should be a compromise between cost, accuracy and ensuring sufficient numbers for meaningful sub-group analysis. As a rule of thumb, Vaus (1991) suggests that the smallest sub-group should have at least 50-100 cases.

A total of 300 potential target respondents from the various sampling frames discussed earlier were eventually identified and targeted for the survey. Care was taken to ensure that these potential respondents are actual first-generation entrepreneurs themselves who run Small and Medium Enterprises and not managers employed by corporations. A total of 118 completed surveys were received, representing a response rate of 39%. Measures undertaken to achieve this response rate will be discussed in Section 6.8.

6.7 Types of Measurement Scales

Another aspect of questionnaire construction is the use of response format. Broadly speaking, two alternative formats are possible: the use of close or open questions.

A closed or forced –choice format question is one in which a number of answers are provided and the respondent is required to select one or more. An open-ended question is one in which the respondent is required to formulate his own answer. From a researcher’s viewpoint, forced-choice questions are easy to code. It also does not discriminate against the less talkative and inarticulate respondents. (Vaus, 1991)

On the other hand, open questions are often less easy to code compared to closed questions. While closed questions allow the respondent to effectively classify himself, open questions may result in answers which are not possible to code. Researchers may also misinterpret the answers and misclassify responses. (Vaus, 1991)

The choice of open or closed format is dependent on several factors such as question content, respondent motivation, method of administration, type of respondents, access to skilled coders to code open-ended responses and the amount of time available to develop a good set of unbiased responses.

However, there is no right or wrong approach and it is wise to adopt a combination approach as suggested by Vaus (1991):

- a closed question to see if the respondent has thought about or is aware of the issue.
- an open question to get a general feeling on the matter.
- a closed question to get at specific aspects of the issue.
- an open or closed question to find out respondents' reasons for their opinions.
- closed questions to find out how strongly the opinion is held.

Several widely-used approaches are available to provide responses to forced-choice questions, namely, the Likert scale rating scales, semantic differential formats, checklists, ranking formats, attitude choices, and so on (Vaus, 1991; Churchill, 1995; Malhotra, 1996; Zikmund, 1997; McDaniel, Jr. and Gates, 1998; Kent, 1999; Kotler, 2000; Churchill and Iacobucci, 2002; Andreasen, 2002; Burns and Bush, 2003; Hair, Bush and Ortinau, 2003)

A combination approach has been undertaken in determining the format for the questionnaire. Both closed and open questions are used in the survey questionnaire. In Section 'A' both closed and open questions are used to determine 8 responses on the organization's or firm's characteristics. The Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) is used in Section 'B' (Marketing Orientation), Section 'C' (Entrepreneurial Orientation, Section D (Relative Performance of the Firm) and Section 'E' (The Industry Environment).

Section 'B' concerns the extent of marketing orientation in the firm and a series of 16 statements are listed. These questions are adopted from those criteria used to measure marketing orientation as discussed in Section 6.4.1 (Refer Table 6.1). In particular, the scales used reflect those used by Narver and Slater (1990), Deng and Dart (1994), Gray et al (1998) and Hooley et al (1998).

Section 'C' concerns the extent of entrepreneurial orientation and 12 statements are listed. As explained in Section 6.4.2, these questions were derived from literature review. The scales adopted were adapted from Morris and Paul (1997).

Section 'D' lists 5 statements with regard to the relative performance of the firm and Section 'E' lists 7 statements relating to the Industry Environment. Section 'E' concerns the respondent's details and a combination of closed and open questions were used.

6.8 Improving the response rate

Nachmias and Nachmias (1996) suggest various procedures for improving the response rate from mail survey questionnaires

However, McAuley (1998) suggests that *“the ongoing search for methodological rigour is perhaps a distraction from what the central focus should be, namely the research journey itself and its outcomes.”* Studies are emerging in the entrepreneurial field which are based on narrative either as a result of story –telling or a more formal case-study approach. According to McAuley (1998), *“Better one story of a business venture told well than a mail survey of 5000 respondents wrapped up and packaged along the lines of the traditional academic article.”* (pp 729)

Cavusgil and Elvey-Kirk (1998) suggest that mail survey response behaviour is really a form or subfield of human behaviour, in particular co-operative behaviour. They argue that inherent motivators of human behaviour are also applicable to explain survey behaviour. Various motivators that might affect response to surveys might include net individual benefit, social outcome, commitment, novelty, convenience and expertise. Their study indicates that researchers can influence mail survey response behaviour (ie increase response rates) without incurring additional costs through varying source and appeal.

Cavusgil and Elvey-Kirk (1998) confirm in their empirical study that *“researchers can influence mail survey response (ie increase response rates) without incurring additional costs through varying source and appeal”* (pp 1187). For research conducted through a university, the use of “social utility” tend to maximise response rates. When the sponsor is a commercial firm, the “egoistic” appeal seems more appropriate. Overall, the “help-the-sponsor” appeal is a poor motivator.

According to Cavusgil and Elvey-Kirk (1998), net individual benefits in responding to survey questionnaires might include enhanced image through participation in important studies, gaining a feeling of importance that one’s opinions are significant, and so on. Successful entrepreneurs are usually busy people and very often possess fairly large egos .To encourage such qualified respondents to participate in a survey is not an easy task. Unless they can see some real and tangible benefits for themselves, they are likely to reject any request for interviews or to complete any survey questionnaires personally. Given the Confucian and highly conservative culture in Singapore, the

'social utility' effect as suggested by Cavusgil and Elvey-Kirk (1998) in a university-sponsored survey may work in Singapore if it is supported directly or indirectly by government agencies. Even so, this may only work for surveys undertaken by the local state-owned universities. Private institutions or foreign universities are less likely to attract willing and committed participation from the targeted samples for the benefit of "social utility". Although the literacy rate is relatively high, businesses here are highly competitive in the city-state and entrepreneurs in SMEs are reluctant to participate in any surveys; they are often suspicious that such surveys are a guise by their competition to collect intelligence.

To overcome these difficulties, personal efforts were made to reassure qualified respondents and to make it easy for them to respond to the survey questionnaire.

One idea used was to offer those selected entrepreneurs who completed the questionnaire the opportunity to be featured in a book to be published by a reputable publishing company. To enhance prestige to the book project, the book featured only 50 of the selected entrepreneurs and the foreword to the book was written by the Minister for Trade and Industry who was championing the promotion of entrepreneurship in Singapore at that time. The final result was the publication "Singapore Savvy – 50 Entrepreneurs of Tomorrow" which was published in 2000 by PHP International (a publishing and education arm of the Matsushita Corporation of Japan) and launched at the World's Association of Small and Medium Enterprises (WASME) held in Singapore on 29 March 2000.

This additional measure to enhance responses to mail surveys is in line with the principle of an exchange relationship in which two types of benefits can be derived from this logic, "*the benefit of enhancing your ego and the implicit future 'promise' of someone helping you with something you consider important.*" (Cavusgil and Elvey-Kirk, 1998). In this instance, the publication of the book satisfies all the parties involved – publishers, the project consultant, the editors and the entrepreneurs featured. It could be argued that the national interest was also served as readers might be encouraged by the stories of the featured entrepreneurs and opt for an entrepreneurial career.

This also illustrates the principle of 'guanxi' at work in a predominantly Confucian culture. Parnell et. al. (2003) have described 'guanxi' as "*perhaps the most widely known management-related distinction of Chinese culture in the west.*" Built on informal relationships, Chinese entrepreneurs endeavour to establish ties of friendship and trust across the wider society in order to build networks

of social and commercial cooperation. This system of 'guanxi', or personalized relationships, is not known by an institutionalized hierarchy of officers or roles, but a socially accepted and adhered to set of behaviours and social processes arising from traditions and Confucian philosophy. (Lee & Low, 1990; Haley et al , 1998; Chen, 2001; Yen, 2002; Reynolds, 2002; Yao, 2002) Pye (1992) has expanded the definition to suggest a friendship between parties with implications of continued exchange of favours. As pointed out by Bjorkman and Kock (1995), 'guanxi' is the lubricant which enables Chinese and foreign individuals to work together effectively and transact business. Indeed, without 'guanxi', foreign companies are not as likely to succeed in their business efforts as those who practise it. (Ambler, 1994; Tsang, 1998). Many Chinese entrepreneurial firms are family-oriented with organizational structures resembling the family structure (Wah, 2001). In this type of situation, 'guanxi' inevitably becomes a crucial ingredient in gaining access to the entrepreneur himself. The concept of 'guanxi' is thus an important element in getting things done more smoothly and effectively not only between the Chinese and their foreign partners or friends but also among the Chinese themselves (Yao, 2002). In the context of this research, 'guanxi' has played a crucial role in enhancing the response rate for the mail survey. Without 'guanxi', access to these targeted respondents and the idea of publication of the book featuring these entrepreneurs would not have been possible.. Strong business networking is therefore an important characteristic of ethnic Chinese businesses. (Lee & Low, 1990; Haley, et al, 1998; Chen, 2001; Yen, 2002; Reynolds, 2002; Yao, 2002). However, it is also useful to note that apart from 'guanxi' the other important concepts in modern ethnic Chinese business ideology are 'harmony', 'reciprocity', 'hierarchy and paternalism', 'innovation' and 'progress' Furthermore, many Chinese entrepreneurs still adhere to some extent the Confucian values enshrined in what is known as the five basic relationships between : ruler and subject; father and son; husband and wife; elder son and younger son; elder person and younger person. An understanding of these values and alignment with them when dealing with Chinese entrepreneurs can help smooth the research process. The relevance of these values in business have been well documented. (Chu, 1991, 1995; Pye, 1992; Seagrave, 1995; Hamlin, 1998; Tsang, 1998; Backman, 1999; Dayao, 2000; Chen , 2001; Yen, 2002; Reynolds, 2002; Parnell, et. al, 2003)

6.9 Summary

The research philosophy, methodology and design discussed in this chapter have taken into consideration a number of key requirements to ensure the success of the empirical survey.

The central theme has been to ensure that effective triangulation was achieved. First, the empirical survey was preceded by in-depth interviews with 16 selected entrepreneurs who are representative of the population to be surveyed. These interviews allow for: (i) key issues relevant to the hypotheses developed to be explored and (ii) the survey questionnaire to be tested for its effectiveness in terms of understanding by respondents.

Another issue was the selection of entrepreneurs who are representative of the targeted population. Obtaining the participation of these successful and busy entrepreneurs was a major challenge. Although the unwillingness to disclose information has been found to be a problem when interviewing entrepreneurs starting new ventures, (Chandler and Hanks, 1993), this problem is even more acute in a society like Singapore where the social culture is relatively conservative and Confucian values are well entrenched. In such circumstances, business people are particularly wary of mail surveys unless these are officially sponsored by the relevant government authorities. Although the culture appears westernized on the surface, beneath the veneer, people tend to respond better to people they know or who are highly referred to by their networks of friends or business associates. Understanding such a seemingly contradictory culture is crucial when conducting a survey.

To enhance the success of the mail survey, social and business networking was used effectively to obtain the participation of targeted respondents. In recognition of their participation, a book featuring a selection of these entrepreneurs was published. The foreword to the book was written by a senior government minister and the book was launched during an international SME event.

One important lesson from this survey has been the need to clearly understand the local culture of the targeted respondents and to make adjustments to one's approach in order to obtain their willing participation and to enhance the response rate.

The next chapter will discuss the analysis of the preliminary in-depth interviews.

Chapter 7

Analysis of In-depth Interviews

7.1 Introduction

The previous chapter described the research philosophy, methodology and design adopted for the empirical test of the proposed hypotheses. The methodology includes the use of preliminary exploratory research in the form of personal in-depth interviews with 16 of local entrepreneurs from different industries. As a research methodology, personal interview has a number of disadvantages such as higher cost, more time-consuming, possible interviewer bias, and lack of anonymity. On the other hand, it also offers many advantages which include: flexibility, control of the interview situation, high response rate and potential for collecting supplementary information. These pros and cons are well covered in the literature. (McDaniel and Gates, 1995; Churchill, 1996; Malhotra, 1996; Nachmias and Nachmias, 1996; Mutchnick and Berg, 1996; Zikmund, 1997; Kent, 1999; Kotler, 2000; Andreasen, 2002; Churchill & Iacobucci, 2002; Hair, Bush & Ortinau, 2003; Burns & Bush, 2003)

Exploratory research is a useful preliminary step as it helps ensure that the empirical survey will begin with a stronger insight and understanding of the nature of the issues being studied. In addition, it helps to crystallize these issues without the requirements of providing precise measurement or quantification. Specifically, fieldwork involving in-depth interviews as a form of exploratory research allows the researcher to probe the respondent for details or elaboration or seek clarifications. If the respondents are carefully selected based on their credibility, experience and suitability as a sample, the in-depth interview can be a highly useful instrument to provide the background for the empirical survey stage of the research.

The in-depth interviews are not meant to be the basis of arriving at conclusions. Rather they are devices used to generate insights, anomalies and paradoxes which can be later tested by a more empirical survey. The strengths of qualitative data are many and have been well discussed in the literature (Silverman, 1993; Bryman and Burgess, 1994; Creswell, 1994; Miles and Huberman, 1994; Neuman, 1994). In addition qualitative data can be used for three additional purposes: developing hypotheses, testing hypothesis and supplementing, validating, explaining, illuminating or

reinterpreting quantitative data gathered from the same setting. (Miles and Huberman, 1994)

The useful link between qualitative and quantitative data analysis has also been demonstrated in many other research projects in social science. (Creswell, 1994; Mason, 1994) Furthermore, the use of such qualitative and quantitative approaches in a single study will allow for triangulation, a term borrowed from navigation and military strategy, to argue for the combination of methodologies in the study of the same phenomenon. As discussed in Chapter 6, the process of triangulation is *"based on the assumption that any bias inherent in particular data sources, investigator and method would be neutralized when used in conjunction with other data sources, investigators and methods"* (Creswell, 1994). Triangulation or 'multi-methods' , according to Gill and Johnson (1991), may be especially appropriate *"for students undertaking extended pieces of work such as research degrees...."* Triangulation is thus a way of getting to the finding by seeing or hearing multiple *instances* of it from different *sources* by using different *methods* and by squaring the finding with others it needs to be squared with. (Miles and Huberman, 1994). The essence of triangulation is thus the use of two or more methods of data collection to test hypotheses and measure variables. If the findings yielded by these different methods are consistent, the validity of these findings will be increased. The use of in-depth interviewing to supplement a structured questionnaire survey is therefore a form of triangulation .(Nachmias and Nachmias, 1996)

This Chapter discusses the approach taken to generate qualitative data through the conduct of in-depth interviews as well as provides an analysis of the findings.

Section 7.2 explains the selection of the entrepreneurs as subjects for the in-depth interviews . All the entrepreneurs selected operate successful businesses which they either create from scratch or salvage from poor or mediocre condition and nurture to financial health. A total of 16 entrepreneurs were interviewed and they represent a cross-section of individual men and women with different background and qualifications. All of them operate their businesses out of Singapore and have had the experience of facing odds and difficulties in the evolution of their businesses.

Section 7.3 discusses the planning and implementation of the in-depth interviews. The interviews were conducted over a period of several months from December 1996 to August 1997 at the offices of these entrepreneurs, each interview lasting between 1 to 1½ hours. To enhance reliability and validity, a standardised aide-memoire was used as a guide, notes were taken and a tape-recorder was

used to record the interviews for further analysis.

Section 7.4 discusses the aide-memoire that was used to guide the interview. The questions in this standardised list were designed to allow the respondents to express in their own words their thoughts and comments on the various issues relevant to the study. The use of predominantly open questions also allows the researcher to probe for further clarifications where necessary. A specimen of the aide-memoire was sent for independent expert comments like the editor of *Asia 21* who assisted by discussing the contents with a small group of selected entrepreneurs from various backgrounds and providing feedback. The aide-memoire was then fine-tuned before being used.

Section 7.5 provides a preliminary analysis of the findings. Qualitative analysis can be conducted in several ways. The key elements of good analysis include the coding or indexing of categories for analysis relevant to the issues to be studied and the interpretation of the findings. The analysis includes studying the transcripts of the interviews and notes taken as well as review of the audio tapes of the interviews. Relevant data and information are then extracted from these materials and presented in a summary matrix for analysis. This matrix consists of the respondents on one dimension and the key themes for analysis on the other.

Section 7.6 concludes the chapter with a summary of the key findings and their implications. The ages of the entrepreneurs range from those in their twenties to those in their forties. Almost all the entrepreneurs interviewed were previously employed in companies and organisations before venturing out to start businesses on their own. A small number took over family businesses and developed them further to greater heights. While many of these entrepreneurs understood the need for marketing, their interpretation of marketing varied. These entrepreneurs generally feel that marketing and entrepreneurship are equally crucial to business success.

7.2 Selection of sample for in-depth interviews

As discussed in Chapter 6, sampling generally can be based on either probability or non-probability methods. While probability sampling is based on the principles of randomness and allows the researcher to say precise things about the sampling, non-probability sampling is more limited. Non-probability sampling is a useful approach for in-depth interviews can be undertaken in a number of ways (Neuman, 1994; Churchill, 1995; McDaniel and Gates, 1995; Malhotra, 1996; Nachmias and

Nachmias, 1996; Churchill, 1996; Malhotra, 1996; Nachmias and Nachmias, 1996; Mutchnick and Berg, 1996; Zikmund, 1997; Henry, 1998; McDaniel, Jr & Gates, 1998; Kent, 1999; Kotler, 2000; Andreasen, 2002; Churchill & Iacobucci, 2002; Hair, Bush & Ortinau, 2003; Burns & Bush, 2003).

One simple approach is the use of haphazard, accidental or convenience sampling in which subjects are selected based on the convenience of the researcher. However, this can be ineffective as the researcher might end up with a sample that seriously misrepresents the population. The quota sample is an improvement over convenience sampling. In this approach, the researcher first identifies categories of people, then decides how many to get in each category. This approach is an improvement because the researcher can ensure that some population differences are in the sample. However, it can also result in misrepresentation as haphazard sampling is still used within the categories. Another type of non-probability sampling is snowball sampling, also known as network, chain referral or reputational sampling. This approach is a multistage technique which begins with one or few people and spreads out on the basis of links to the initial respondents. The final type of non-probability sampling is purposeful or judgmental sampling, in which the researcher uses his judgment or the judgment of an expert to select respondents with a specific purpose in mind. According to Neuman (1994), purposeful sampling is an acceptable kind of sampling for special situations and may be used in exploratory research or in field research. Such a sampling approach is appropriate in three kinds of situations (Neuman, 1994):-

1. The researcher uses it to select unique cases that are especially informative.
2. The researcher uses it to select and reach difficult-to-reach subjects
3. The researcher wants to identify particular types of subjects for in-depth investigation.

Purposeful or judgmental sampling is most ideal for this exploratory research phase of the study as all the three conditions above are present in this phase.

First, the entrepreneurs selected for the in-depth interviews need to be informative in several areas. They must have the necessary in-depth knowledge of the general business situation and the specific details to contribute to a meaningful interview. They must also understand the questions posed to them and be able to communicate well in English. The need for translation must be reduced as in the process of translation, meanings may be lost; in some cases, no accurate translations may be

available for certain words or phrases into Chinese.

Second, successful entrepreneurs are difficult to reach as they do not generally respond to interviews with people they do not know, especially when they cannot extract any mileage for themselves. This is especially so among Chinese entrepreneurs who are unlikely to divulge any information or opinions to people they are not uncomfortable with or who they can trust. Perhaps, that is why Chinese businessmen have been called the 'Jews of the East" in many commentaries (Pan, 1990). In general, many local entrepreneurs are not willing to participate in any in-depth interviews unless they can obtain some mileage from them. In-depth interviews or surveys for academic research purposes are most unlikely to be at the top of their priorities. To improve the response rate, incentives were offered to the entrepreneurs by way of articles about them to be published in a monthly magazine, *Asia 21* , which is distributed internationally and widely read in the region. This approach is also consistent with the principles of good interviewing. (Nachmias and Nachmias, 1996; Cavusgil and Elvey-Kirk, 1998)

Third, the particular entrepreneurs that best represent the population defined can only be identified by purposeful sampling. In this way, those entrepreneurs who do not represent the population can be screened out. In this respect, only entrepreneurs who have run their businesses for several years and have some depth in their experiences are selected. The offer of a write-up in a magazine for those entrepreneurs selected helped to provide some leverage for the researcher in selecting only entrepreneurs who satisfy the intended purpose of the research.

A total of 16 entrepreneurs were interviewed (Appendix I). These entrepreneurs represent a cross-section of industries and have experiences which span several years. They had also demonstrated entrepreneurial skills in assessing and seizing business opportunities and navigating their enterprises through difficult times. In addition, they understand the concept of marketing and have clear ideas and opinions about the issues relating to the subject of the research.

7.3 Conducting the interviews

These 16 interviews were conducted in the offices of the selected entrepreneurs and each interview lasted from 1 to 1½ hours. These interviews were spread a period of 9 months as these entrepreneurs had very busy schedules and getting them to agree to an appointment was extremely difficult.

Research interviewing is a specialised form of interviewing and differs from ordinary conversations. In research interviewing, the goal is to obtain accurate information from the person being interviewed. Such an interview is a social relationship and thus involves social roles, norms and expectations. The interviewer's role is difficult as he would need to obtain co-operation, build rapport and yet remain neutral and objective at the same time. The role of the interviewer is to help define the situation and ensure that respondents have the information sought, understand what is expected, give relevant answers, are motivated to co-operate and give serious answers.(Neuman, 1994; Nachmias and Nachmias, 1996)

The interviews generally proceeded through three key stages. In the beginning stage, the interviewer introduced himself, explained the objectives and scope of the interview, reassured the interviewee and secured his/her co-operation. Permission from the respondent was sought for the interview to be tape-recorded.

The second stage of the interview is the main part when the interviewer asked questions and recorded the answers. Efforts were made to ensure that answers were accurately recorded. This was easy for closed-ended questions. However, for open-ended questions, it is important to listen carefully, write answers in legible handwriting and record what is said verbatim without correcting grammar or slang. A tape recorder would be a useful device to enhance this. The in-depth interview is useful as further questions may be used to request or clarify any ambiguous answer, to complete an incomplete answer or to obtain a relevant response (Easterby-Smith et al., 1991; Neuman, 1994)

To ensure overall reliability and validity of the interviews, the following measures were also taken

1. An aide-memoire containing standardised questions pertinent to the research was used as an interview guide.
2. Extensive notes were taken
3. The interviews were recorded on a tape-recorder

These measures are consistent with suggestions in the literature. (Easterby-Smith et al., 1991; Silverman, 1993; Creswell, 1994; Nachmias and Nachmias, 1996 ; Mutchnick and Berg, 1996)

To further enhance reliability, a standardised protocol was also maintained during the actual interviews. The questions were asked precisely as they were worded and in the same order as they appeared in the aide-memoire. The researcher maintained a professional attitude throughout the interview and did not show any signs of surprise or disapproval of an answer. In addition, no attempt was made to offer impromptu explanations of questions, suggest possible replies or bypass certain questions. (Silverman, 1993; Neuman, 1994; Nachmias and Nachmias, 1996; Zikmund, 1997 ; Bok van Kammen and Stouthamer-Loeber, 1998) It is important not only to ask the right questions to ask them in the right manner (Mason, 1996).

The third stage of the interview is the exit when the researcher thanked the respondent and left. This includes the post-interview period when the field notes are edited and other details recorded when they were fresh in the memory of the researcher. The audio tape of the interview was played back and further notes made which may facilitate further analysis.

7.4 The aide-memoire

Before conducting the actual interview, it is crucial that some planning with regards to data recording be undertaken. The two critical concerns to be addressed are: What is to be recorded? How will it be recorded? To resolve these concerns, it is highly recommended that a standard protocol be used in conducting interviews. (Creswell, 1994). Such interviews should also be based on a carefully prepared set of questions piloted and refined until the researcher is convinced of their 'validity' (Easterby-Smith, 1991; Nachmias and Nachmias, 1996). An aide-memoire containing questions which have been carefully formulated and discussed with independent advice is thus adopted as standard protocol for the interviews.

The questions and issues to be addressed are structured in 6 parts in an aide-memoire (Appendix I).

Part 1 consists of questions relating to the individual entrepreneur like name, age, date the venture started and occupation prior to the interviewee becoming an entrepreneur. These questions allow the entrepreneur to talk about a personal topic of great self-interest thus creating a relaxed atmosphere for a more in-depth interview.

Part 2 consists of questions relating to the name of the venture and the nature of the entrepreneurial activities. The entrepreneur is also asked if he/she has any long-term goals for the venture and if so, what these are. Probing questions are used to obtain clarifications and elaboration.

Part 3 consists of questions about the background of how the venture started. The circumstances giving rise to the venture will be probed to try and obtain the motivations for the entrepreneurial venture. Some of these motivations might be internal and others might be more external in nature and an understanding of this will be helpful in studying the factors triggering the desire to become an entrepreneur.

Part 4 deals with the low points and the high points of the entrepreneur's experiences so far. The difficulties faced by the entrepreneur and how these were overcome were discussed. The entrepreneur is also asked about the satisfaction he/she derives in the particular venture. The answers to these questions will help explain the approach taken these entrepreneurs when faced with adversities.

Part 5 addresses the key issues on the extent to which the particular entrepreneurial activity and its success are determined by different factors. These factors might include: (a) the economic system practised in Singapore; (b) the current stage of economic development in Singapore; (c) the entrepreneur's own strategic orientation; (d) the particular entrepreneurial activity in question; (e) others. The answers to these questions will help determine the key factors contributing to the success of the venture so far. These factors are inherent in the model and proposition discussed in Chapter 4

Part 6 deals with the entrepreneur's understanding of marketing and how he /she interprets and uses marketing in the context of the venture. The extent to which marketing is essential to the success of the venture is discussed. The entrepreneur is also asked to comment on the extent of the marketing-

entrepreneurship interface in the venture. Answers to these questions will help to clarify and fine-tune issues central to the study.

Well-collected qualitative data with the help of the aide-memoire provide many advantages. According to Miles and Huberman (1994), *“one major feature is that they focus on naturally occurring, ordinary events in natural settings.”* Another advantage is that of “local groundedness”, that is the data are collected in close proximity to a specific situation, rather than through the mail or the telephone. In such a setting, *“the possibility for understanding latent, underlying or nonobvious issues is strong”* (Miles and Huberman, 1994).

Qualitative data are noted for their richness and holism, with strong potential for revealing complexity. Furthermore, the fact that data are collected over a sustained period of time makes them powerful for studying any process and allows for not only understanding the “What?” and “How many” but also the causality. The inherent flexibility of qualitative data is also an advantage as data collection times and methods can be varied as the study proceeds. In addition, qualitative data are particularly suited for locating the meanings people place on events, processes, and structures of their lives. Finally, qualitative data are useful when *“one needs to supplement, validate, explain, illuminate or reinterpret quantitative data gathered from the same setting.”* (Miles and Huberman, 1994)

7.5 Qualitative analysis of interview data

Ritchie and Spencer (1994) suggest that since material collected through qualitative methods is invariably unstructured and unwieldy, the researcher has to *“provide some coherence and structure to this cumbersome data while retaining a hold of the original accounts and observations from which it is derived.”* Therefore, qualitative analysis should entail defining, categorizing, theorizing, explaining, exploring and mapping. In qualitative analysis, there is no necessity to choose between describing specifics and verifying universal laws. Instead, the researcher may develop explanations or generalisations that are close to concrete data and contexts but are more than simple descriptions. In qualitative analysis, data is organised into categories on the basis of themes, concepts or similar features. The researcher develops new concepts, formulates conceptual definitions and examines the relationships among concepts. Qualitative coding is thus an integral part of qualitative analysis (Nueman, 1994; Miles and Huberman, 1994)

Easterby-Smith et al (1991) suggest that the analysis of qualitative data analysis involves seven key stages:-

- 1. Familiarisation**
- 2 Reflection**
- 3 Conceptualisation**
- 4 Cataloguing concepts**
- 5 Recoding**
- 6 Linking**
- 7 Re-evaluation**

Ritchie and Spencer (1994) propose a fairly similar approach to analyzing qualitative data involving 5 key stages:-

- 1. Familiarization**
- 2 Identifying a thematic framework**
- 3 Indexing**
- 4 Charting**
- 5 Mapping and interpretation**

Miles and Huberman (1994) suggest a classic set of analytic moves which may be used across different qualitative research types:-

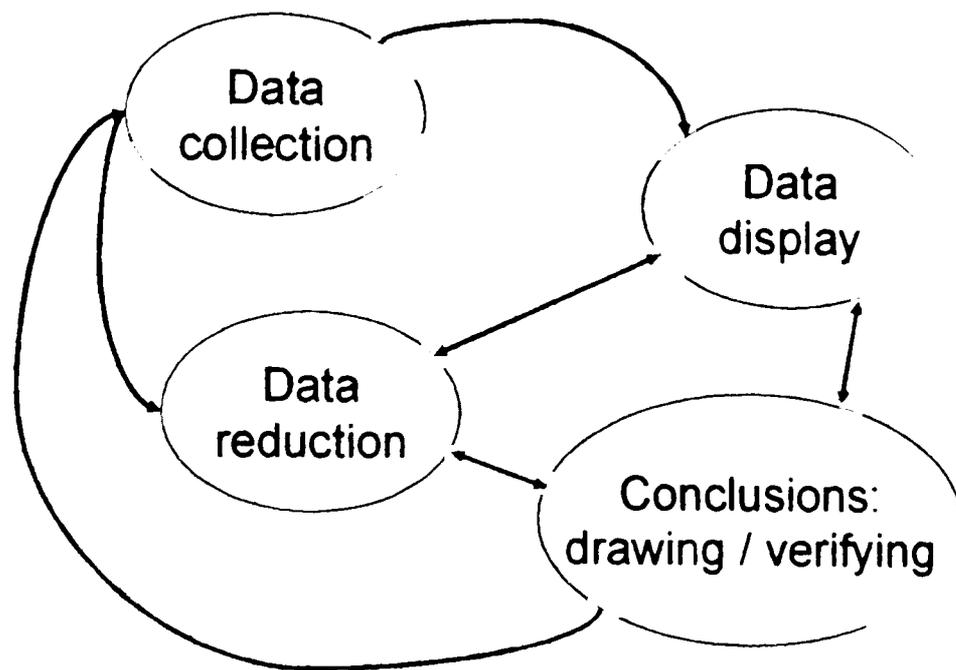
- 1. Affixing codes to a set of field notes drawn from observation or interviews**
- 2 Noting reflections or other remarks in the margin**
- 3 Sorting and shifting through these materials to identify similar phrases, relationships between variables, patterns, themes, distinct differences between subgroups, and common sequences.**
- 4 Isolating these patterns and processes, commonalities and differences, and taking them out to the field in the next of data collection**
- 5 Gradually elaborating a small set of generalizations that cover the consistencies discerned in the database**
- 6 Confronting those generalizations with a formalized body of knowledge in the form of constructs or theories**

Mason (1994, 1996) suggests that before analysis of qualitative data proceeds, it is essential that the data should first be made manageable by developing an indexing and retrieval system to handle the data. This involves the identification and indexing or coding of descriptive categories so that the data can be meaningfully organised. Analysis of these data is then based on trying to answer these three questions:

1. Data on what? : What these data reveal or do not reveal
2. Strength of claim: How well do these data inform or reveal.
3. Integration of data: How various forms of qualitative data can be integrated to make sense.

However, as pointed out by Ritchie and Spencer (1994), even though a framework may be presented in a particular order - and some stages do logically precede others – it should not be taken as a mechanical process. On the contrary, it should rely on the creative and conceptual ability of the analyst to determine meaning, salience and connections. The idea of using a framework is that *"by following a well-defined procedure, it is possible to reconsider and rework ideas precisely because the analytical process has been documented and is therefore accessible."*

Qualitative data analysis is therefore really an interactive process consisting of three concurrent flows of activity : data reduction, data display, and conclusion drawing / verification. In this view, the three types of activities form a cyclical process, in which the researcher moves steadily among the four 'nodes' of activities during data collection and then shuttles among reduction, display and conclusion drawing / verification. This interactive process can be illustrated as follows (Table 7.1):



Source: Miles, Matthew B. and Huberman, A. Michael (1994), *Qualitative Data Analysis*, 2nd ed., Sage Publications, USA : pp 12

Figure: 7.1 Components of Data Analysis: Interactive Model

In this model, analysis is viewed as consisting of three concurrent flows of activity: data reduction, data display and conclusion drawing / verification. In this view, the three types of analysis activity form an interactive cyclical process. The researcher steadily moves among these four 'nodes' during data collection and then shuttles among reduction , display and conclusion drawing/verification for the remainder of the study.

Data reduction refers to the process of selecting, focusing, simplifying, abstracting and transforming the data obtained in written-up field notes or transcriptions. This is a continuous process throughout the life of the research project. Even before the data are actually collected, anticipatory data reduction is already occurring as the researcher decides (often without full awareness) which conceptual framework, which cases, which research questions, and which data collection approaches to choose. However, data reduction does not necessarily mean quantification. Qualitative data can be reduced and transformed in many ways : through selection, through summary or paraphrase, through being subsumed in a larger pattern and so on. (Miles and Huberman, 1994)

The second activity is data display, which refers to the organisation, compression and assembly of

information that permits conclusion drawing. Displays help us understand what is happening and to do something - either analyse further or take action – based on that understanding. The most frequent form of display has been the extended text, consisting of field notes. However, Miles and Huberman (1994) have suggested that this is *“cumbersome. It is dispersed, sequential rather than simultaneous, poorly structured and extremely bulky”*. Furthermore, *“Using only extended text, a researcher may find it easy to jump to hasty, partial, unfounded conclusions”*. Displays are thus a major avenue to valid qualitative analysis and can take many forms such as matrices, graphs, charts, and networks. The important thing is that displays should be designed to assemble organised information into an immediately accessible, compact form so that the analyst can see what is happening and either draw justified conclusions or move on to the next step of analysis that the display suggests may be useful. Therefore, the creation and use of displays is not separate from analysis, but rather part of analysis. Designing a display – deciding on the rows and columns of a matrix for qualitative data and deciding which data, in which form, should be entered in the cells – are analytic activities. (Miles and Huberman, 1994)

The third stream of analysis activity is conclusion drawing and verification. According to Miles and Huberman (1994), from the start of data collection, the researcher should already be deciding what things mean by *“noting regularities, patterns, explanations, possible configurations, causal flows and propositions.”* These conclusions are then held lightly, with openness and skepticism. Initially, they are inchoate and vague, but then become increasingly explicit and grounded. Final conclusions may not appear until data collection is over, depending on the size of field notes; the coding, storage, and retrieval methods used and so on. Conclusion should also be verified as the analyst proceeds. This may be as *“brief as a fleeting second thought crossing the analyst’s mind during writing, with a short excursion back to the filed notes, or it may be thorough and elaborate.”* (Miles and Huberman, 1994)

Following Miles and Huberman (1994), a tabulated display was designed to permit a viewing of the full data set in the same location. The tabulation has been arranged systematically to answer the research questions at hand. This two-dimension tabulation lists the key themes as one dimension and the responses of the interviewees as another as shown in Table 7.1:

Entrepreneur	Entrepreneurial activity	Factors attributed to the success of the venture	Orientation towards Marketing	Orientation towards Entrepreneurship
1				
2				
3....n				

Table 7.1 Specimen of Tabulation

On the horizontal axis, the key dimensions relate to the interviewee's responses on the following categories:

- i. The main entrepreneurial activity (E-ACT) ;
- i. The extent to which the success of the venture can be attributed to the given factors like prevailing economic system (E-SYS), the current stage of economic development in the country (E-DEV), the strategic orientation or direction of the entrepreneur (S-ORI), the entrepreneurial activity itself (E-ACT) and other possible factors (OTH).
- ii. The extent that a market orientation (MKT-O) is essential. Examples of how marketing is understood and interpreted in the company.
- iii. The extent to which an entrepreneurial orientation (ENT-O) is essential. Examples of how this orientation is understood and interpreted.
- vi. The extent to which marketing is important to entrepreneurship and vice-versa.

On the vertical axis are the entrepreneurs listed in numerical order with 1 representing the first entrepreneur interviewed and the 16 representing the 16th and final entrepreneur interviewed as per the list in Appendix II

Following Miles and Huberman (1994), the data display has been designed and organised in a final tabulation.(Appendix III)

7.5.1 The Findings

The entrepreneurs are in various businesses ranging from food retail, printing and trading, industrial equipment, hospitality services, computer software, human resource consulting services, telecommunication equipment retail, and fish farming and export.

These entrepreneurs are all successful in their chosen fields and have won some measure of recognition in terms of write-ups in the press, selection by the Enterprise 50 panel, appearance on TV programmes or successful public listing of their firms.

Different educational backgrounds are represented – from those with non-tertiary education to those with post-graduate degrees. All of these entrepreneurs have gone through major difficulties with their ventures at some point and have managed to overcome them.

7.5.2 Factors affecting the success of the venture

Some entrepreneurs feel that the economic system of Singapore (E-SYS) is a key factor affecting the success of the ventures while others feel otherwise. Those who agree with this suggest that the economic system offers opportunities and choices:

The current economic system allows freedom of choices for entrepreneurs and consumers alike. (Entrepreneurs 1,2, 5,6, 7,8,10,13& 15)

Some felt that the economic system has encouraged them because of the grants that have been made available to them by government agencies. However, these entrepreneurs tend to be those in high-technology or research and development:

After spending 12 years in the US doing research work in bio-technology, I heard about the grant schemes offered by the Singapore government to encourage research. I was attracted to the opportunities this would open. (Entrepreneur 10)

We managed to get some special grants from the government to do develop highly sophisticated and specialised software; this has helped us a great deal. (Entrepreneur 5)

On the other hand, some interviewees felt that the system can be stifling at times and tends to favour the bigger firms who are established as well as Multi-national Corporations. Small start-up firms face great difficulties in a system which breeds intense competition:

Initially when I started, I felt the system very stifling; eg when the COE scheme was introduced. and we had agreed to buy a van one day and on the next day when the new rule was implemented without any advance warning, I refused to pay the extra amount. But my partner convinced me to pay up, forget about the inconvenience and move on with the business. Now I think he's right. (Entrepreneur 4)

The economic system actually stifles entrepreneurship because it favours big businesses over the small and medium enterprises. People are also less inclined to take risks and become entrepreneurs. (Entrepreneur 9)

When we started out, we found it difficult to win big projects. The bigger Japanese and Korean contractors often outbid us. Clients, especially government agencies, and architects seemed to view these big contractors more favourably. (Entrepreneur 14)

With regard to the stage of economic development (E-DEV), the entrepreneurs interviewed generally felt that this was a major factor contributing to the success of their ventures. The common reasons given relate to the increase in consumer affluence and awareness leading to changing tastes and higher expectations.

One entrepreneur explained that he chose the particular venture because it is a basic necessity and is relatively unaffected by any economic change:

I picked the food business because I think people need to eat no matter what the economy or their financial situation. (Entrepreneur 8)

However, this can sometimes be a problem as it can lead to increased competition as their success in turn attracts new entrants to the business. One entrepreneur feels that at this stage of economic development, we are witnessing a dangerous trend, ie, children becoming less creative and adventurous because of protective parents and heavy emphasis on academic achievement in schools:-

When I try to demonstrate my sand castle moulds to children at the beach, I find that although the children are enthusiastic, it is their parents who are apprehensive. They prefer safe indoor toys without children making too much effort. (Entrepreneur 9)

In terms of their strategic orientation (S-ORI), interviewees were asked about the businesses they selected to go into and the types of entrepreneurial activities they were pursuing, the influences on the selection of these activities and their thought on their future strategies. Generally, the entrepreneurs interviewed stated that they were influenced both from internal and external factors. In some cases the strategic orientation of the entrepreneur is partly influenced by the family in the sense that the core business started by their parents remained, even though they played a key role in expanding the business or diversifying into other areas:-

The hotel started by my father (Bencoolen Hotel) has already been well established and managed by a brother and a sister. So we made a decision that not every member should work in the hotel. I eventually went into the ice-cream business after a visit to Australia where I saw a successful ice-cream kiosk and went to look for the owner. One younger brother eventually went into the steak restaurant business. (Entrepreneur 1)

The contracting business was becoming extremely competitive and we could not stand a chance against the big Japanese and Korean contractors who could easily undercut us on pricing. At that time, this piece of land was zoned for hotel and put on tender. It was not attractive to others because this was not the traditional location for hotels. We decided to go for it anyway and that's how we moved away from contracting. (Entrepreneur 14)

When I returned from studies in the US, the family felt that I was the most qualified person to manage the farm. After observing the operation, I decided to introduce new methods to improve the operation and the marketing of the farm's products. One major decision was to go for global markets. (Entrepreneur 15)

The entrepreneurial activity (E-ACT) itself is also recognized as a major factor ensuring the success of the venture. Most of these entrepreneurs believe that one reason their businesses are successful is because they have chosen to stay within the industry they are most familiar and comfortable with. One entrepreneur decided to continue with the particular business when the company he worked for

retrenched him. (Entrepreneur 4)

A number selected the particular entrepreneurial activity because they saw the concept at work elsewhere outside Singapore and decided to pursue these on their return:

When I was a student in Seattle, these cafes were quite common. I used to visit these cafes with friends quite regularly and I found the experiences to be pleasant. When I returned to Singapore after my studies, I could not find such a café to visit and decided to explore the possibility of starting one. (Entrepreneur 2)

On one of my visits to Australia I saw a small ice-cream kiosk which was very compact and attractive and seemed to draw the crowds. I talked to the person managing the outlet and found that it was a franchised business. Eventually I traced the main franchisor and talked to him about bringing the concept to Singapore. (Entrepreneur 1)

In addition to all these factors, some respondents feel that other factors (OTH) also contribute to the success of their ventures. Some attribute their education overseas as being a contributing factor while others feel that adversities have strengthened them so that they become more determined to succeed:

My studies overseas not only gave me some basic business foundation and concepts but also a certain level of confidence. (Entrepreneur 1 and 2)

I studied marketing in university in the US and that has been helpful. Also, the difficulties and adversities experienced by my family made me more determined not to give up; for example, when heavy rain flooded our farm and all our fishes were washed away. We had to start all over again. (Entrepreneur 15)

The nature of entrepreneurial activity selected might have implications on whether the interviewee is a catalytic entrepreneur, allocating entrepreneur or refining entrepreneur as suggested in the typology proposed by Binks and Vale (1990)

7.5.3 Orientation towards Marketing and Entrepreneurship

All the respondents believe in the importance of marketing although the manner in which they interpret marketing may vary. Some entrepreneurs have studied marketing in their undergraduate and postgraduate courses and attempt to apply the concept in ways most practical in their given situations:

I studied engineering at university in Canada. When I got into business on my own, I took up the MBA so that I can learn some useful business and marketing concepts which I can use. For example, I do regular blind testing to see how consumers perceive my ice-cream compared to competitors. We prepare our cones at the kiosk itself so that the nice fragrance would attract customers to the kiosk. (Entrepreneur 1)

We try to be very customer focused. For example, we encourage customers to doodle or draw on our paper 'table cloth' and this has been very successful and has become a major attraction to our younger diners. Also members of our crew are selected based on their age and friendliness. (Entrepreneur 2)

Others such as entrepreneur No. 3 who is in the import-export trade believes in establishing long-term friendships with customers all over and maintaining an effective network with all possible clients. In this way, the friendships become part of the total relationships and can stay as ballast in the ups and downs of business cycles thus sustaining business relationships over the long haul.

For some others, marketing involves efforts to create awareness of their products and services through public education and promotions. Entrepreneur No. 6, who distributes her own label of health food supplements, makes ongoing efforts to educate the public on the merits of consuming organic food. Entrepreneur No. 7 who produces video programmes for public health clinics, involves the customers in the packaging of her services. Entrepreneur No. 9 who sells a range of plastic moulds of different shapes for making sand castles at the beach, constantly does promotions at beach events to interest families in sand castle activities and tries to show the endless possibilities that are possible with his products. At the same time, he continuously educates other agencies like community clubs, schools and kindergartens on the merits of such activities for children. Entrepreneur No. 11 uses a modern showroom with attractive displays and promotions supported by

trained customer services personnel to make customers feel welcome and comfortable.

Brand image and packaging are also aspects of marketing implemented by some of these entrepreneurs. Entrepreneur No. 10, for example, believes in using a strong brand image to drive the sale of her product which is based on an age-old idea but given a modern approach. Her product, "linzhi" (a mushroom extract) is clinically produced and packaged in capsules and attractive boxes to give customers the confidence in using the product. As an added boost to gaining confidence, she has managed to negotiate the rights to use the national emblem, the *merlion*, on the packaging.

In terms of entrepreneurship, most respondents feel it is equally essential to modern day business. Entrepreneurship is often associated with courage to take some risks, ability to face difficulties or even failure, and being innovative. It is also associated with working hard to achieve one's goals:

*Having the courage to take the risk and persevere no matter how difficult the circumstances.
(Entrepreneur 2)*

The need to introduce innovative products which customers can afford (Entrepreneur 4)

I see myself as a technical entrepreneur with a set of skills and expertise that industry happen to require (Entrepreneur 5)

We need to be more entrepreneurial in seeking new businesses elsewhere (Entrepreneur 7)

*It's about having the gut feel to spot opportunities and working very hard to realize them
(Entrepreneur 8)*

Most of these entrepreneurs are also of the opinion that both marketing and entrepreneurship are inter-related and one without the other is not adequate in modern business:

There are some linkages between the two and one cannot do without the other in today's competitive business environment. (Entrepreneur 5)

Entrepreneurship was a lot easier in the old days but now marketing is necessary for entrepreneurship. Both need to go together for greater success. (Entrepreneur 6)

Both have a lot in common. Entrepreneurship allows you to spot opportunities but it is marketing that helps in things right proper planning, branding, distribution etc... (Entrepreneur 9)

Others feel that formal marketing is not as important as entrepreneurship. Developing the instinct for opportunities must come first before marketing can proceed:

Formal marketing is not as important as entrepreneurship. You need first have that entrepreneurial instinct to spot opportunities an after that, you can develop and implement all sorts of marketing ideas. (Entrepreneur 3)

In some cases marketing bring more problems eg brand imitation and you need to be innovative in solving this kind of problem and that comes from being entrepreneurial (Entrepreneur 4)

It is interesting to note that although these views may not reflect formal marketing as commonly understood, they are nevertheless element of a marketing orientation.

7.6 Summary

The analysis of the personal interviews reveals some insights into how entrepreneurs think on a number of key issues.

As mini case-studies, these 16 interviews provide useful lessons. In terms of personal characteristics, these entrepreneurs demonstrate the capacity for working very hard to achieve their goals. They possess the courage to take calculated risks when starting a venture and tenacity when facing difficulties and adversities. They are also innovative in the way they approach their markets.

Entrepreneurs are also quick to make changes and adjust to new circumstances by bringing in products and services relevant to the needs of the marketplace. They recognise that marketing is an essential and integral part of modern business and that being entrepreneurial alone is not sufficient. While their interpretation of what marketing means may vary from person to person, most of them accept that marketing and entrepreneurship go hand in hand in ensuring success.

Most of the entrepreneurs generally feel that their success are more or less attributed to the country's economic system, the stage of economic development, their own strategic direction and the particular entrepreneurial activity itself.

These conclusions thus support the basic model proposed in Chapter 4 that the marketing-entrepreneurship interface is highly contextual in nature.

Chapter 8

Descriptive Data Analysis

8.1 Introduction

This chapter analyses the findings of the data collected in the survey conducted with entrepreneurs to examine the extent to which (a) marketing orientation and entrepreneurial orientation are correlated, (b) marketing orientation is correlated with performance and (c) entrepreneurial orientation is correlated with performance. The survey design was discussed in Chapter 6.

Data collected by whatever methods mean very little until they are analysed and evaluated. Care must also be taken *“not to claim more for results than is warranted, and equal care has to be taken not to attempt generalizations based on insufficient data”* (Bell, 1999)

Hence, this chapter deals with the analyses of the findings of the empirical survey, starting with a discussion of the descriptive statistics, followed by inferential statistics. According to Keller and Warrick (1997), descriptive statistics *“involves arranging, summarizing and presenting a set of data in such a way that the meaningful essentials of the data can be extracted and interpreted easily.”* Descriptive statistics, therefore, requires that the sample data be presented in a simplified and informative manner (Gravetter and Wallnau, 1999; Lind, Mason and Marchal, 2000 ; Burns, 2000; Johnson and Kuby, 2000).

Inferential statistics, also called statistical inference and inductive statistics, consists of procedures for making generalisations about characteristics of a population based on information obtained from sample taken from the population (Burns, 2000; Gravetter and Wallnau, 1999; Lind, Mason and Marchal, 2000). Thus, inferential statistics refers to the techniques of interpreting the values resulting from the descriptive statistics and making decisions or conclusions about the population and about relationship in that population (Johnson and Kuby, 2000).

Besides undertaking descriptive and inferential statistics, this chapter also presents the findings using other statistical methods on the data gathered from the survey questionnaire. Factor analysis is also used. Its purpose is to *“summarize the information contained in a large number of variables into a smaller number of factors”* (Zikmund, 1997). As an “analysis of interdependence” technique, it allows the researcher to achieve “data reduction” by taking

advantage of the overlapping information contained in the correlations in variables, extracting the core information down to just a few “factors” (Hair, et al., 1995; Mbengue and Vandangeon-Derumez, 2001; Churchill and Iacobucci, 2002; Andreasen, 2002; Burns and Bush, 2003; Hair, Bush and Ortinau, 2003) Accordingly, factor analyses of the respective sections and categories in the survey questionnaire were undertaken: section B - *Marketing Orientation*, section C - *Entrepreneurial Orientation*, section D – *Relative Performance of the Firm* and section E – *The Industry Environment*. These categories correspond to the components in the theoretical model proposed and discussed in Chapter 4. Correlations between these categories are also analysed to validate the interrelationships between the components in the model.

The chapter is divided into 2 main sections.

Section 8.2 deals with the basic summary of the descriptive statistics relating to the respondents' firms and personal profiles as captured in section A – *Organization Background* and section F – *Respondent Personal Details* of the survey questionnaire. The general characteristics of the respondents are discussed. An understanding of these characteristics provides an overall picture of the respondents. Appropriate cross-tabulations of variables are also undertaken to determine the relationships between selected variables. Means between various factors such as organisation size and industry type are compared and discussed. These undertakings provide a preliminary understanding of the data collected before further statistical analyses.

Section 8.3 undertakes a factor analysis of the questions in the four research areas, namely, section B – *Marketing Orientation*, section C – *Entrepreneurial Orientation*, section D – *Relative Performance of the Firm* and section E – *Industry Environment*. Reliability analyses are next performed for questions in each of these areas to weed out questions with low statistical relevance. A discussion of the factor scale scoring method is next undertaken to deliberate on how the questions in each of these four research areas would be computed in subsequent statistical analyses in the next chapter.

8.2 Respondents' Profiles

The general characteristics of the respondents such as age, gender, educational levels, marketing background, business sector, organisation size, etc... are discussed below. An understanding of these general characteristics will provide an overall picture of the profile of entrepreneurs and business sectors represented in this survey. Means and frequency tables will be used to show key observations. A total of 118 returns were collected. As discussed in Chapter 6, this represents a

response rate of 39% as 300 of the survey questionnaires were mailed or handed to the sampling frames.

8.2.1 Age of Respondents and Firms

Of the 118 respondents, 114 indicated their ages and 4 declined. The minimum age was 26 years and the maximum 63 years with the means at 41 years.

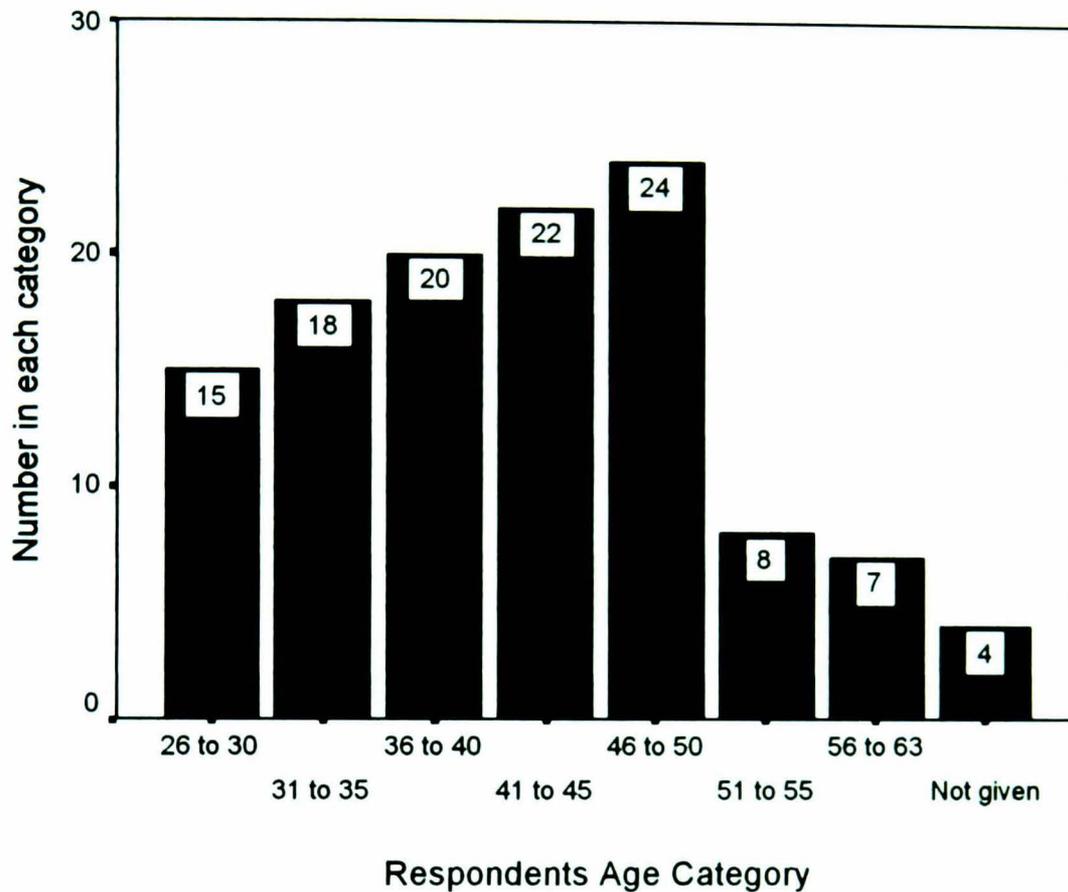


Figure 8.1 Age profile of respondents

The number of respondents for each age category increases somewhat in a linear manner till 50 years old. Thereafter there is a sharp drop in the number of respondents for each age category. This could be attributed to the retirement age and the possible handling over of businesses to successors.

For respondents' firms establishment, close to a third (30.5% or 36 respondents) are in the 6 to 10 years category. Only one seventh (12.7% or 15 respondents) are young firms in the 1 to 5 years category. More than half of the firms (56.78% or 67 respondents) are in business for more than 10 years. This indicates that a majority of the firms have a fair level of experience in their respective industries.

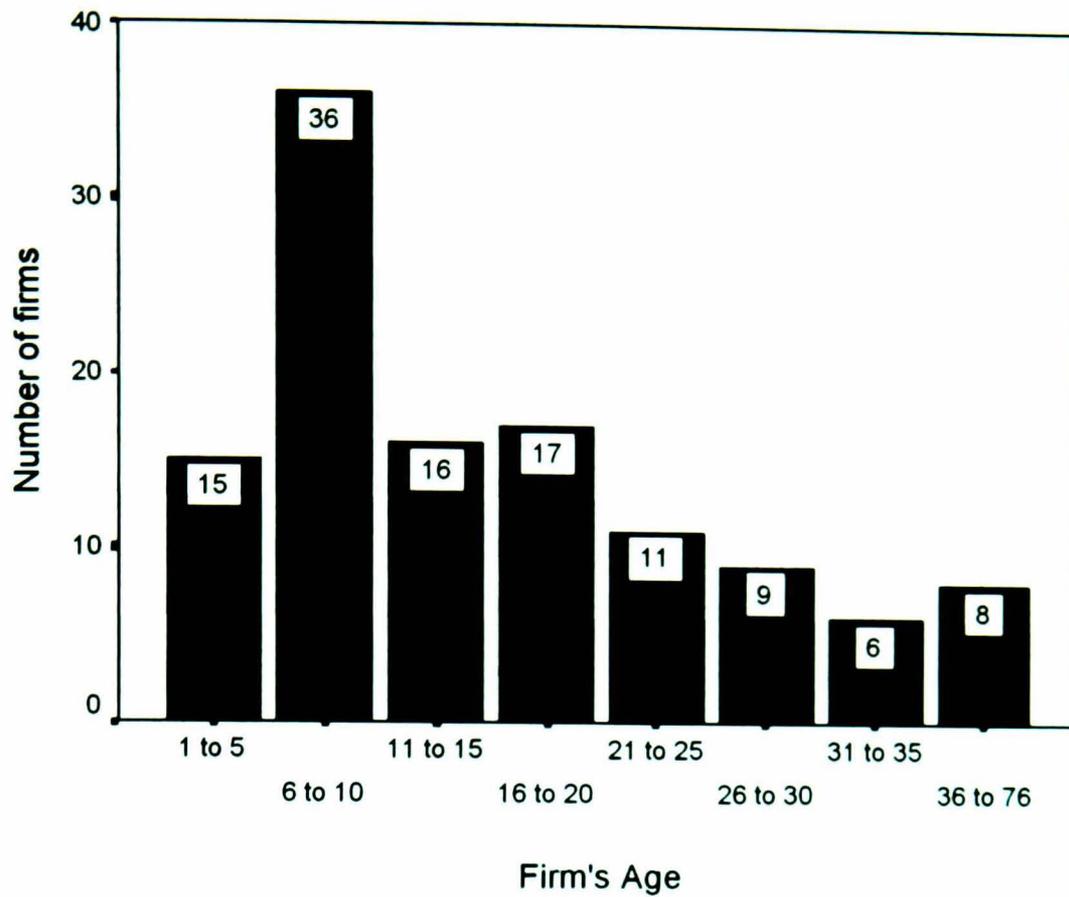


Figure 8.2 Establishment age of respondents firms

A further cross tabulation of the respondents and their firms age reveal the following (Table 8.1):

		Age of Firm (years)							Total %	
		1 to 5	6 to 10	11 to 15	16 to 20	21 to 25	26 to 30	31 to 35		36 to 76
Age of Respondents (years)	26 to 30	3	5		1	3	2	1	++	12.7
	31 to 35	5	9		1		1	2		15.3
	36 to 40		6	5	3	3			3	16.9
	41 to 45	3	10	3	3		1	1	1	18.6
	46 to 50	3	6	8	3	2		1	1	20.3
	51 to 55				4	2	1		1	6.8
	56 to 63				2	1	2		2	5.9
	Not given	1					2	1		3.4
Total %		12.7	30.5	13.6	14.4	9.3	7.6	5.1	6.8	100% (n=118)

Table 8.1 Cross tabulation of Respondents and Firms Age

++ The legal age is 21 years old in Singapore. The lighter shaded region excludes the possibility of respondents starting their firms from scratch since these firms' age are greater than the respondents' age (taking into consideration the legal age of 21 for ownership of firms). These respondents could have inherited the firms from predecessors or through direct buy-in. The unshaded region represents possibility of respondents starting their firms from scratch ie first generation entrepreneurs. The darker shaded diagonal region is indeterminate with respect to respondents starting their firms from scratch.

From the above table a third of the respondents (34.75% or 41 respondents) are below 45 years old and their firms are established less than 10 years ago. Approximately three quarter of the respondents (74.6%) indicated they are ‘owner-mangers’ of their firms. In conjunction with the above table the survey data suggests that a significant percentage of the respondents are entrepreneurs who started the firms themselves.

8.2.2 Gender of respondents

A majority of the respondents - 76% (or 88) are male. Only a quarter – 24% (or 28) are female. This could imply that the society is still male-dominated in the area of entrepreneurship. While there have always been women entrepreneurs and many have made their mark, they are still outnumbered by male.

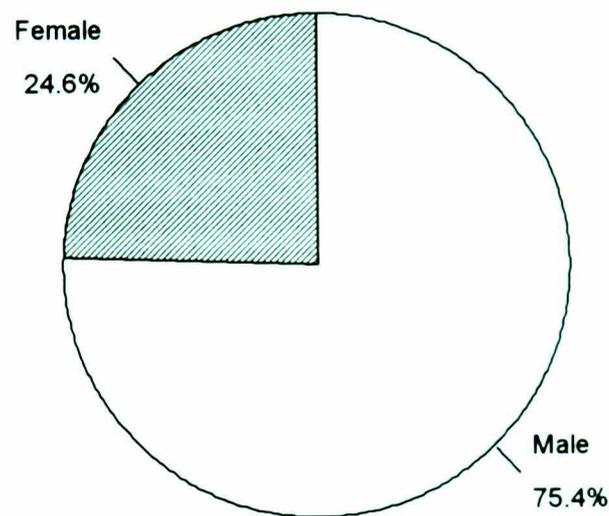


Figure 8.3 Gender of Respondents

8.2.3 Educational qualifications

All except 3 of the 118 respondents stated their educational qualification. Only a small number of respondents (2.6% or 3 respondents) have had only a primary education. One fifth of the respondents (20%) have had only a secondary education level. A further quarter (24.35%) have had polytechnic education. A majority (53.04%) possess undergraduate or post graduate qualifications. The latter indicates that the typical entrepreneur of today is better educated and may opt for an entrepreneur career by choice instead of being forced into it by circumstances or “displacement”. (Kuratko and Hodgetts, 2001). Figure 8.3 illustrates these:

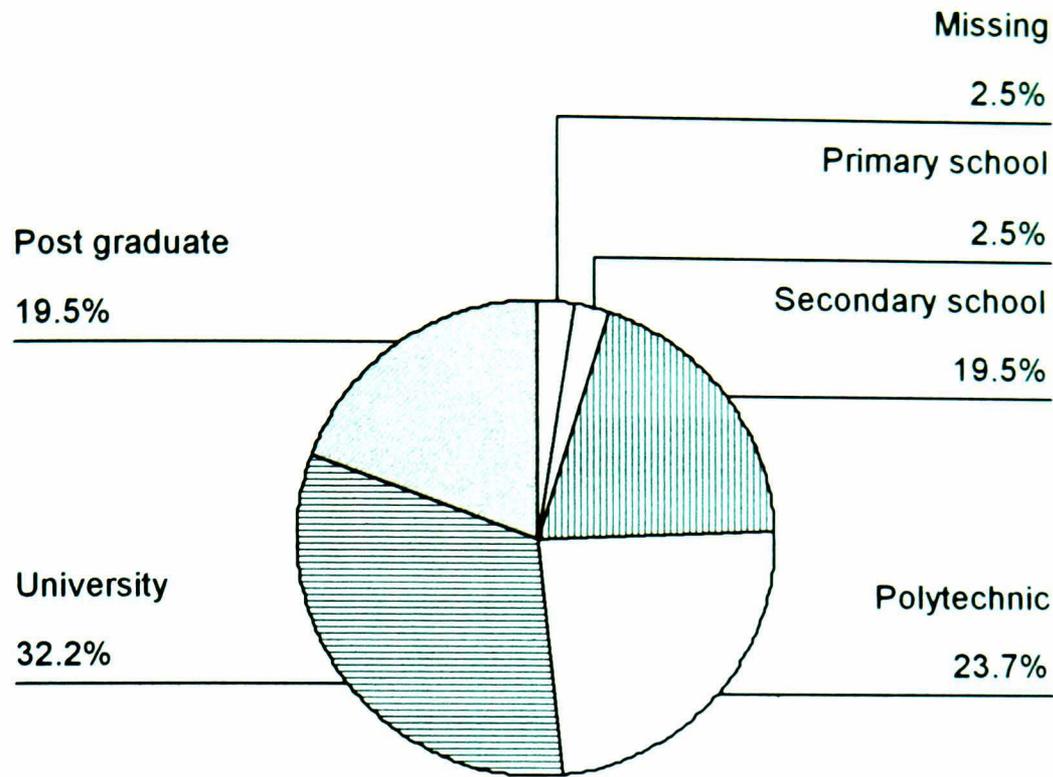


Figure 8.3 Respondents highest educational level

Of those respondents who are university graduates, two third (67.8%) majored in Arts & Humanities and Business Management. Only a third (32.2%) majored in the hard sciences - science, information technology or computer studies. Most of the entrepreneurs thus have some educational background in the marketing and business management in general (Figure 8.4).

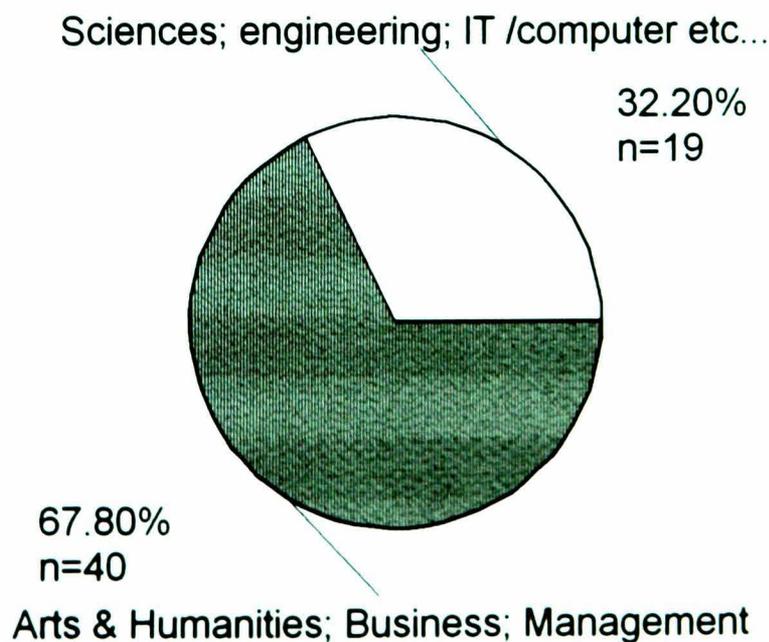


Figure 8.4 Major of Respondents with university degrees

8.2.4 Marketing background

An overwhelming majority of the respondents (95.76% or 113) have some background or understanding of marketing by training or education (Figure 8.5).

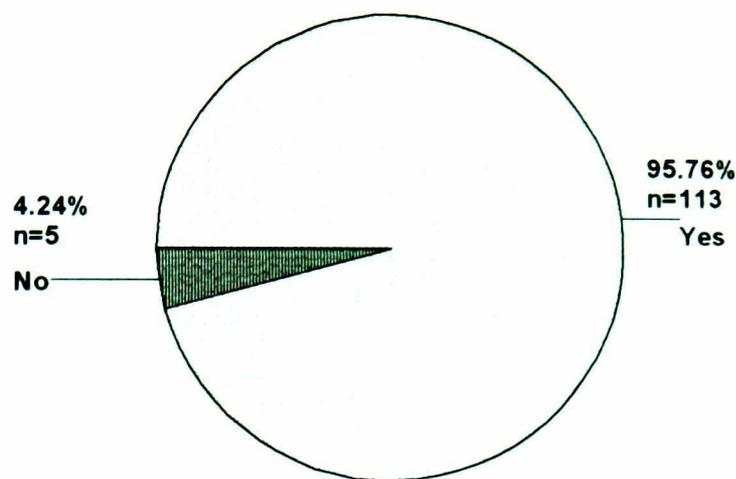


Figure 8.5 Respondents with Marketing background

The sources of their marketing knowledge vary from Formal Study – 73 respondents (64.6%), Practical Experience – 43 respondents (38.1%), Self Study – 78 respondents (69%), Attending Seminars – 79 respondents (69.9%), Attending Training Courses – 86 respondents (76.1%) and Others – 108 respondents (95.6%). The last source could indicate that entrepreneurs here are keen to improve themselves and seek marketing know-how from other non-traditional avenues. These sources provide both knowledge and motivation if they decide to adopt a marketing-oriented approach in running their businesses (Figure 8.6).

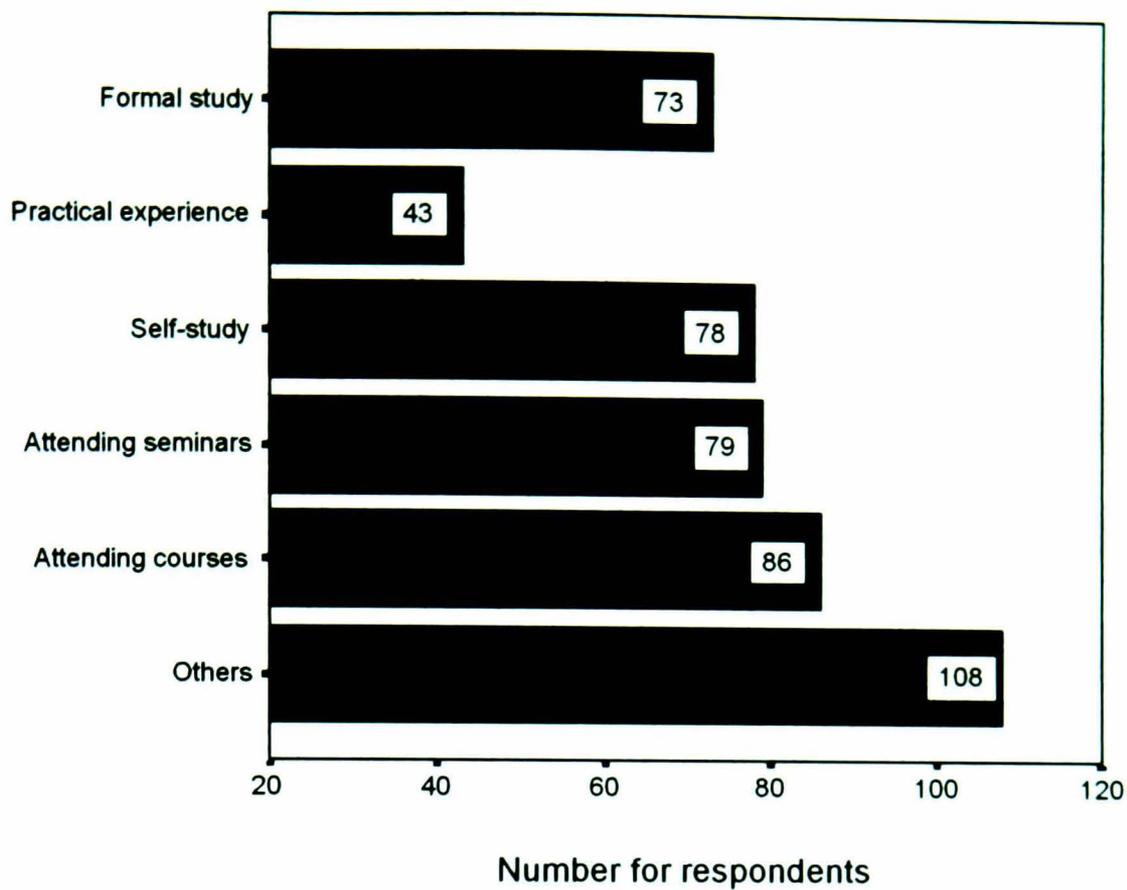


Figure 8.6 Respondents Sources of marketing knowledge

8.2.5 Number of employees and Age of firm

Firms employ as few as 2 employees to as many as 2350 employees. As shown in Figure 8.7, a majority of the firms (52.54% or 65 firms) employ between 1 to 50 staff. Over three quarter (78.81% or 93 firms) employ less than 200 staff¹. Only a handful of them (6 firms) employ more than 500 staff

A further cross tabulation with the age of the firm yields Table 8.2. The concentration of firms lies in the shaded upper left hand corner of the table - close to one third (31.3% or 37 firms) are firms with less than 10 years of age and employ less than 100 staff. Further, there is no relationship between firms' age and the number of staff employed. From Table 8.2, only firms in the 6 to 10 years age category are represented by respondents from the various firm employee size categories. Results from subsequent statistical analyses therefore have to be understood as being influenced by these smaller employee size and younger age firms².

¹ According to the Standards, Productivity & Innovation Singapore (SPRING Singapore) a SME is defined as one with 30% local equity and fixed assets at net book value not exceeding S\$15 million. In addition, the number of employees must not exceed 200 staff for Service/Commerce or non-manufacturing firms. For manufacturing firms the employee number restriction is not applicable (Schaper & Volery, 2002).

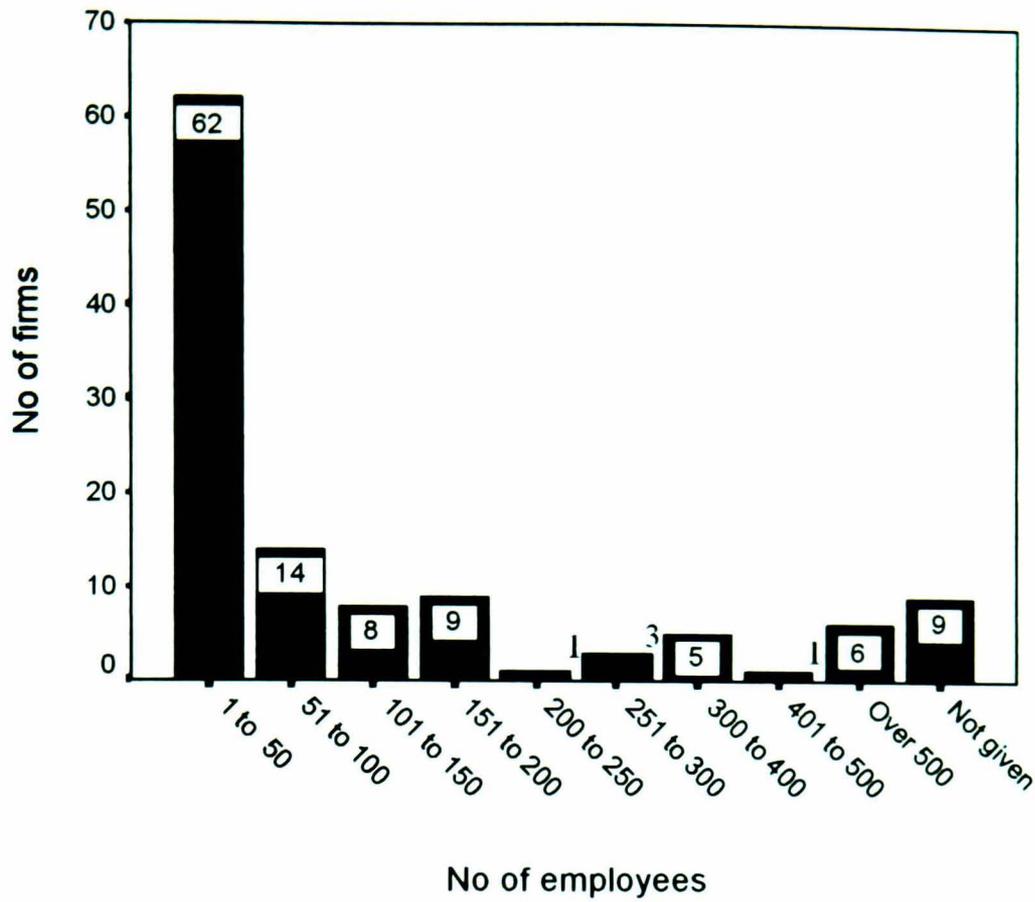


Figure 8.7 No of employees in respondents firms

		Age of Firm (years)							Total %	
		1 to 5	6 to 10	11 to 15	16 to 20	21 to 25	26 to 30	31 to 35		36 to 76
No of employees	1 to 50	9.3%	17.8%	5.9%	7.6%	5.1%	5.1%	0.8%	0.8%	52.5%
	51 to 100	0.8%	3.4%	1.7%	0.8%	1.7%		1.7%	1.7%	11.9%
	101 to 150	1.7%	0.8%			0.8%	0.8%	0.8%	1.7%	6.8%
	151 to 200		1.7%	2.5%	2.5%			0.8%		7.6%
	200 to 250		0.8%							0.8%
	251 to 300		0.8%	0.8%		0.8%				2.5%
	300 to 400	0.8%	0.8%	0.8%	0.8%		0.8%			4.2%
	401 to 500		0.8%							0.8%
	Over 500		0.8%	0.8%		0.8%	0.8%		1.7%	5.1%
	Not given		2.5%	0.8%	2.5%			0.8%	0.8%	7.6%
Total %		12.7%	30.5%	13.6%	14.4%	9.3%	7.6%	5.1%	6.8%	100% (n=118)

Table 8.2 Cross tabulation of Firms Size and Age

² Smaller employee size and younger age firms might account for the inclination of these firms in terms of *Marketing Orientation, Entrepreneurial Orientation, Relative Performance of the Firm and Industry Environment.*

8.2.6 Firm size and sales turnover

In terms of firm's turnover, Figure 8.8 below shows that over two fifth (42.37% or 50 firms) of the respondents indicated that their turnover was under \$10 million. Over three quarter (78.81% or 93 firms) reported turnover of below \$40 million.

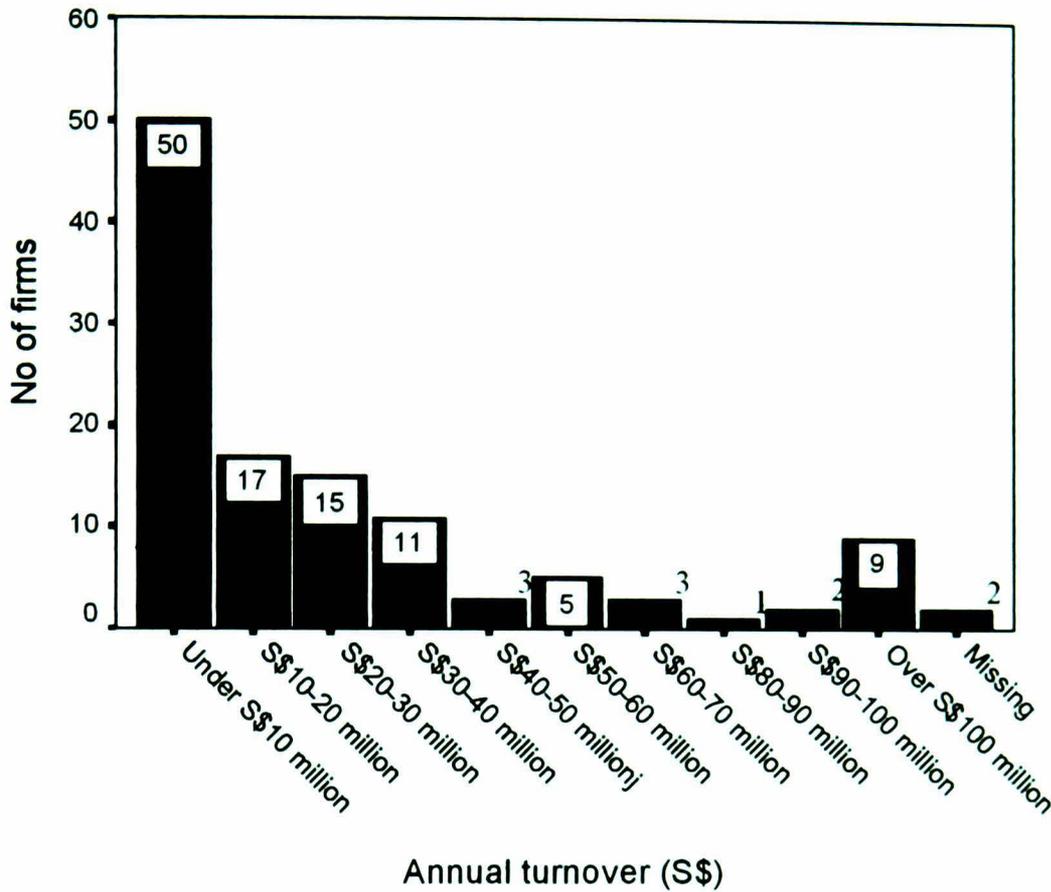


Figure 8.8 Firms' annual turnover

Cross tabulating the turnover with the firm's size yields Table 8.3. The concentration of firms lies in the shaded upper left hand corner of the table - over two third (66.6% or 79 firms) of the respondent firms with less than 200 employees have turnover below S\$40 million. Firms in the 1 to 50 employee size category feature prominently, with over half (51.7% or 60 firms) of the respondents. In particular, firms with 1 to 50 employees and under \$10 million turnover forms over one third (34.5% or 40 firms) of the respondents. In conjunction with the observation from the preceding Table 8.2, a significant proportion of the questionnaire survey feedback was obtained from respondents from firms with small employee size & turnover – 1 to 50, with turnover of less than \$10 million, and having being in existence for less than 10 years. Such profiles would have an influence on the subsequent statistical analyses of *Marketing Orientation*, *Entrepreneurial Orientation*, *Relative Performance of the Firm* and *Industry Environment*.

		Annual Turnover										Total %
		Under S\$10 million	S\$10-20 million	S\$20-30 million	S\$30-40 million	S\$40-50 million	S\$50-60 million	S\$60-70 million	S\$80-90 million	S\$90-100 million	Over S\$100 million	
No of employees	1 to 50	33.9%	8.5%	2.5%	2.5%		1.7%	1.7%				51.7%
	51 to 100	2.5%	2.5%	3.4%	0.8%	1.7%	0.8%					12.1%
	101 to 150	0.8%		2.5%	0.8%		0.8%			0.8%	0.8%	6.9%
	151 to 200	1.7%	1.7%	0.8%	1.7%						1.7%	7.6%
	200 to 250			0.8%								0.9%
	251 to 300		0.8%	0.8%	0.8%							2.6%
	300 to 400	0.8%				0.8%		0.8%	0.8%		0.8%	4.3%
	401 to 500			0.8%								0.9%
	Over 500				0.8%					0.8%	3.4%	5.2%
	Not given	2.5%	0.8%	0.8%	1.7%		0.8%				0.8%	7.8%
Total %		43.1%	14.7%	12.9%	9.3%	2.6%	4.3%	2.6%	0.9%	1.7%	7.8%	100% (n=116)

Table 8.3 Firms annual turnover and size

As discussed in Chapter 6, the target population of this research are local entrepreneurs in the context of Singapore who operate their own businesses as Small and Medium Size Enterprises (SMEs.). The above summary survey data indicate that a majority of the respondent's are entrepreneurs running SMEs.

8.2.7 Industry & business sectors

In terms of industry sectors, the firms were classified into 2 broad categories – Goods and Services industry³. Figure 8.9 indicates that a majority of the respondents (53%) are from the service industry.

³ Goods industries comprises of : Manufacturing, Construction, Utilities. Services industries comprises of : Wholesale & retail trade, Financial services, Business Services, Transport & communications , Hotels & restaurants.

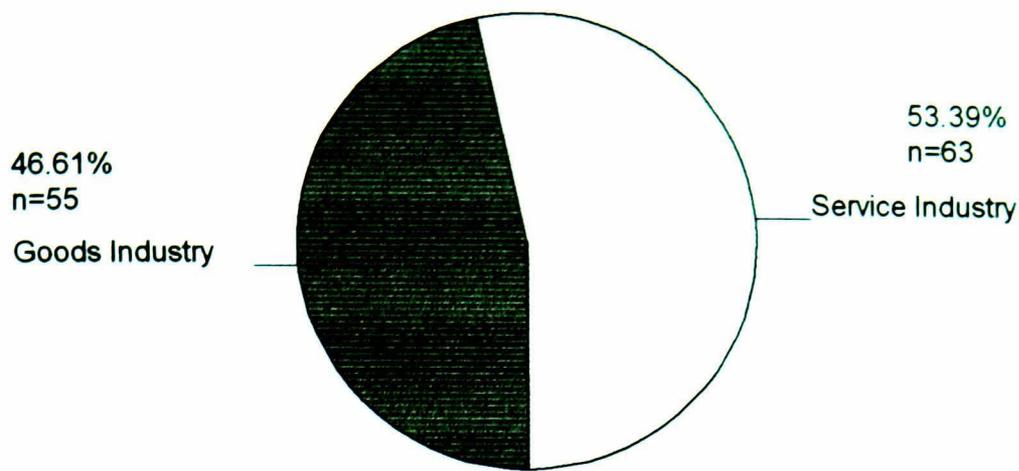


Figure 8.9 Firms by industry

However, by business sector, the largest group of respondents are from the manufacturing sector (30.5% or 36 firms) – which is within the goods industry, followed by wholesale and retail trade (17.8% or 21 firms) – which is within the services industry (Figure 8.10).

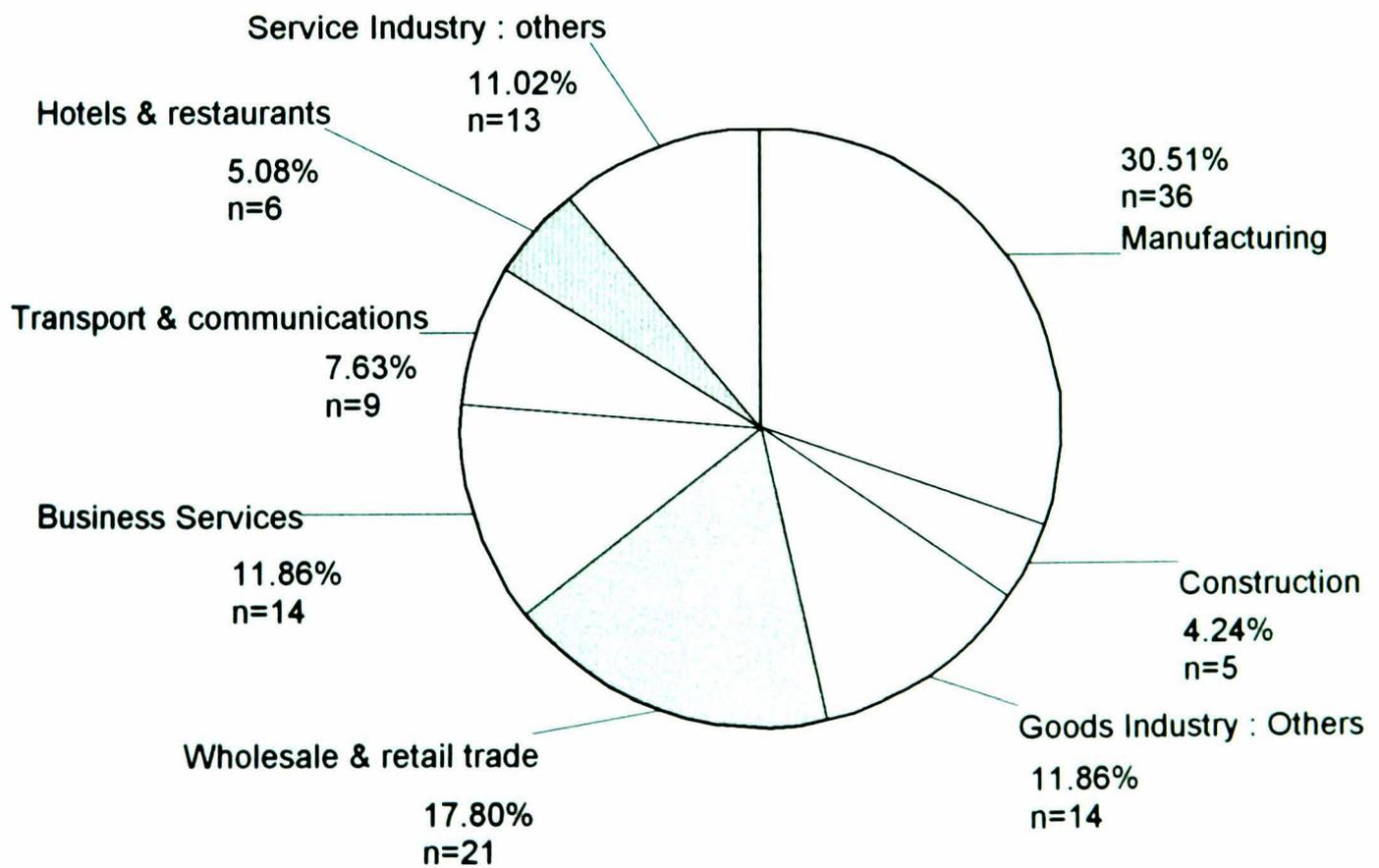


Figure 8.10 Firms by business sector

8.2.8 The extent of marketing orientation

Respondents were presented with a list of questions on marketing orientation ranked 1 to 5⁴, with 5 being a high level of agreement. From the tabulated responses in Table 8.4 below, respondents indicated a high degree of marketing orientation of their firms with a lowest Mean of 3.33 and with Median and Mode predominantly ranked 4 or 5.

		No of respondents	Mean	Median	Mode
1	Information about customer needs are collected regularly	118	4.30	4	5
2	Our corporate objectives and policies are aimed directly at creating satisfied customers	118	4.65	5	5
3	Levels of customer satisfaction are regularly assessed	118	4.32	4	5
4	We put major efforts into building stronger relationships with key customers	118	4.60	5	5
5	We adapt our product offerings accordingly to satisfy distinct market segments	118	4.26	4	5
6	Information about competitor activities are collected regularly	117	3.99	4	4
7	We conduct regular benchmarking against major competitor product offerings	117	3.85	4	4
8	We respond rapidly to major competitor actions	117	3.92	4	5
9	We put major emphasis on differentiating ourselves from the competition on factors important to our customers	117	4.42	5	5
10	Short-term profits are more important than market share	118	2.49 ⁵	2	1
11	Controlling internal costs is more important than responding to customers' needs	117	2.67	3	3
12	Our decisions are guided by long-term considerations rather than short-term expediency	116	4.15	4	5
13	Information about customers are widely circulated throughout the organisation	118	3.61	4	4
14	The different departments in the organisation work effectively together to serve customer needs	118	4.36	5	5
15	Tensions and rivalries between departments are not allowed to get in the way of serving customers effectively	118	4.44	5	5
16	Our organisation is not constrained by a hierarchical structure	118	4.08	4	5

Table 8.4 Marketing Orientation

⁴ Response to each of the questions on marketing orientation are given as : Strongly Disagree(1), Moderately Disagree(2), Neither Agree or Disagree(3), Moderately Agree(4) and Strongly Agree(5).

⁵ Question 10 and 11 are phrased in contrary manner. A lower score indicates a higher degree of marketing orientation. The reverse scores should be : (3.51, 4 , 5) and (3.33, 3, 3) for the Mean, Median and Mode for Question 10 and 11 respectively.

8.2.9 The extent of entrepreneurial orientation

Respondents were presented with a list of questions on entrepreneurial orientation ranked 1 to 5⁶, with 5 being a high level of agreement. From the tabulated responses in Table 8.5 below, respondents indicated a high degree of entrepreneurial orientation with a lowest Mean of 3.59 and with Median and Mode either ranked 4 or 5. It is interesting to note that the mean score for the question “*A successful entrepreneur has to be good at marketing*” is high at 4.45 (moderately agree to strongly agree). Respondents thus appear to understand the importance of marketing for entrepreneurial success.

		No of respondents	Mean	Median	Mode
1	We frequently introduce new ideas to the market	118	4.15	4	5
2	Our approach is to look for new and innovative ways to supply existing products/services to the market	118	4.31	5	5
3	We spend much time, effort and money to generate and develop new ideas	118	4.06	4	5
4	We spot opportunities by seeing products/services available in other countries and offering them here	116	3.83	4	4
5	We identify products/services available elsewhere and modify them to suit the market here	117	3.92	4	4
6	Our competitive advantage is based on effective internal cost controls	118	3.59	4	4
7	We place emphasis on improving our organisational systems to be competitive	118	4.17	4	4
8	Our strategy is focused on being first in then market with a product / service	118	4.00	4	5
9	We tend to find a niche in the market and defend it	118	4.18	4	5
10	Our strategy is to be fast in following competitive trends	118	4.13	4	5
11	We tend to react to opportunities as and when they present themselves	118	4.09	4	4
12	A successful entrepreneur has to be good at marketing	118	4.45	5	5

Table 8.5 Entrepreneurial orientation

⁶ Response to each of the questions on entrepreneurial orientation are given as : Strongly Disagree(1), Moderately Disagree(2), Neither Agree or Disagree(3), Moderately Agree(4) and Strongly Agree(5).

8.2.10 Relative performance of the firm

Respondents were presented with a list of questions on relative performance of their firm ranked 1 to 5⁷, with 5 being well above the competition. From the tabulated responses in Table 8.6 below, respondents indicated their firms performed better than their competitors with a lowest Mean of 3.14 and with Median and Mode either ranked 3 or 4. When compared to their competitors, respondents deemed their weakest area to in terms of the number of employees (3.14) they employ. This could suggest that they either may not have the qualities to attract suitable employees or are unable to afford the desired number of employees as expected. These suggestions appear to be supported by the mean rating of 3.58 for expenditure on employees training and the highest mean rating of 3.90 for their firms' growth rate respectively.

From the above observation, **the survey data were obtained from and limited to respondents whose firms had performed better than their competitors**⁸. This might have a bearing on their responses to questions regarding *Marketing Orientation*, *Entrepreneurial Orientation* and *Industry Environment*. The responses of non-respondents to questions in these areas could have been different. Subsequent statistical analyses on the data would have to be interpreted with this limitation in mind.

	The relative performance of our firm compared to our competition in the following areas can best be described as :	No of respondents	Mean	Median	Mode
1	Profitability	117	3.77	4	4
2	Growth rate	116	3.90	4	4
3	No of employees	118	3.14	3	3
4	Investments for future growth	117	3.89	4	5
5	Expenditure on employees training	117	3.58	4	4

Table 8.6 Relative performance of firm

For each of these 5 questions the actual responses and percentages are further tabulated in Table 8.7 below:

⁷ Response to each of the questions on performance of firm are given as : Well Below the Competition(1), Slightly Below the Competition(2), The Same as the Competition(3), Slightly Above the Competition(4) and Well Above the Competition(5).

⁸ Respondents who did not perform better than their competitors could have wound up their operations and are therefore not available to answer the questionnaire. Alternatively, forthcoming respondents to the survey are those who are successful and therefore eager to share their success.

	The relative performance of our firm compared to our competition in the following areas can best be described as :	Profitability		Growth rate		No of employees		Investments for future growth		Expenditure on employee Training	
		No	%	No	%	No	%	No	%	No	%
1	Well below the competition	2	1.69	2	1.69	14	11.86	2	1.69	4	3.39
2	Slightly below the competition	10	8.47	6	5.08	18	15.25	14	11.86	13	11.02
3	The same as the competition	26	22.03	26	22.03	44	37.29	24	20.34	35	29.66
4	Slightly above the competition	54	45.76	50	42.37	22	18.64	32	27.12	41	34.75
5	Well above the competition	25	21.19	32	27.12	20	16.95	45	38.14	24	20.34
	Total ⁹	117		116		118		117		117	

Table 8.7 Relative performance of firm in absolute number and percentages

Specifically, in terms of profitability, over two fifth (54 respondents or 45.76%) rated their firms' performance as "slightly above the competition" while one fifth (25 respondents or 21.19%) rated their relative performance as "well above the competition". A majority (two third or 66.95%) of the respondents thus regarded their firms to be profitable.

In terms of growth rate, over two fifth (50 respondents or 42.37%) rated their firm's growth rate as "slightly above the competition" followed by over one fifth (32 respondents or 27.12%) which rated their relative growth rate as "well above the competition". A majority (over two third or 69.49%) of the respondents thus reported a positive growth rate relative to the competition.

In terms of the number of employees, over two fifth (44 respondents or 37.29%) rated their employee count to be "the same as the competition". Only one fifth (22 respondents or 18.64%) rated their relative performance in terms of the number of employees as "slightly above the competition". Less than one fifth (20 respondents or 16.95%) rated their relative employee performance as "well above the competition". Compared to the preceding firms' profitability and growth rate, respondents deemed there is further improvement for deployment of their staff.

⁹ For uniformity purpose the percentage (%) computed are based on N = 118 since the number of missing cases varies between 1 and 2 for each of the 5 questions posed to survey respondents.

In terms of investment for future growth, over one third (45 respondents or 38.14%) rated their firms as “well above the competition”. A further one quarter (32 respondents or 27.12%) rated their performance as “slightly above the competition”.

In terms of expenditure on employees training, one third (41 respondents or 34.75%) rated their expenditure on training as “slightly above the competition”. Over one quarter (35 respondents or 29.66%) rated their expenditure as “same as competition”. Only one fifth (24 respondents or 20.34%) rated their expenditure as “well above the competition”. When compared to investments for future growth, the lower training expenditure may be viewed in conjunction with the perceived lower performance rating in terms of the number of employees. Firms therefore are unwilling to incur too much cost on training expenditure¹⁰.

However, it is acknowledged that there is a possibility of some bias in this as some respondents could be overstating their performance to satisfy their own egos or to impress.

8.2.11 The Industry Environment

Respondents were presented with a list of questions on the industry environment ranked 1 to 5¹¹, with 5 being a high level of agreement. From the tabulated response in Table 8.8 below, the highest mean score of 3.80 relates to the issue of competition, indicating that respondents face competitive pressures from substitute products and services. In terms of entry barriers for new entrants, the mean score of 3.04 indicates that the average respondent “neither agree or disagree” that this was a problem in their industry. The lowest mean score of 2.81 (moderately disagree) relates to the issue “government regulations are a major constraint”. Entrepreneurs seem to feel that government regulations are not a major constraint.

¹⁰ The disparity between investment for future growth and training expenditure could also be partly due to a greater anticipation of future growth and thereby provision of higher investment.

		No of respondents	Mean	Median	Mode
1	We face very strong competition from substitute products and services	118.00	3.80	4	4
2	It is relatively easy for new firms to enter the industry	118.00	3.04	3	4
3	It is relatively easy for firms to exit from the industry	118.00	3.54	4	4
4	A small group of customers account for a large number of suppliers	117.00	3.32	4	4
5	The industry is dependent on a small number of suppliers	116.00	2.82	3	2
6	The demand conditions in the industry are very volatile	117.00	3.39	4	4
7	Government regulations are a major constraint	118.00	2.81	3	3

Table 8.8 The Industry Environment

For each of these 7 questions the actual responses and percentages are further tabulated in Table 8.9 below :

	We face very strong competition from substitute Products and services		It is relatively easy for new firms to enter the industry		It is relatively easy for firms to exit from the industry		A small group of customers Account for a large number of suppliers		The industry is dependent on a small number of Suppliers		The demand conditions in the industry are very volatile		Government regulations are a major constraint	
	No	%	No	%	No	%	No	%	No	%	No	%	No	%
Strongly disagree	7	5.93	23	19.49	9	7.63	13	11.02	19	16.10	7	5.93	26	22.03
Moderately disagree	9	7.63	24	20.34	15	12.71	24	20.34	34	28.81	23	19.49	21	17.80
Neither agree nor disagree	21	17.80	17	14.41	24	20.34	20	16.95	24	20.34	27	22.88	36	30.51
Moderately agree	45	38.14	33	27.97	43	36.44	32	27.12	27	22.88	37	31.36	19	16.10
Strongly agree	36	30.51	21	17.80	27	22.88	28	23.73	12	10.17	23	19.49	16	13.56
Total ¹²	118		118		118		117		116		117		118	

Table 8.9 The Industry Environment in absolute number and percentages

¹¹ Response to each of the questions on industry environment are given as : Strongly Disagree(1), Moderately Disagree(2), Neither Agree or Disagree(3), Moderately Agree(4) and Strongly Agree(5).

¹² For uniformity purpose the percentage (%) computed are based on N = 118 since the number of missing cases varies between 1 and 2 for each of the 7 questions posed to survey respondents.

In terms of competition, over one third (45 respondents or 38.14%) “moderately agree” that they faced very strong competition from substitute products and services. Over one quarter (36 respondents or 30.51%) “strongly agree” the existence of strong competition in their industries.

This strong competition could be due to the relative ease for new entrants to the industry - over one quarter (33 respondents or 27.97%) “moderately agree” and a further one sixth (21 respondents or 17.8%) “strongly agree”. However, it is also relatively easy for firms to exit from the industry - over one third (43 respondents or 36.44%) “moderately agree” and a further one fifth (27 respondents or 22.88%) “strongly agree”.

In over half of the firms surveyed (60 respondents or 50.85%), a small group of customers account for a large percentage of their sales. Only a minority (37 respondents or 31.36%) either “moderately disagree” or “strongly disagree” with this.

In terms of the suppliers to their industries, over two fifth (53 respondents or 44.91%) either “moderately disagree” or “strongly disagree” that they are dependent on a small number of suppliers.

A majority (60 respondents or 50.85%) acknowledge that the demand conditions in their industries were very volatile – either “moderately agree” or “strongly agree”. Only a very small minority (7 respondents or 5.93%) “strongly disagree”. Slightly over one fifth (27 respondents or 22.88%) were neutral – “neither agree or disagree” to the volatile demand conditions in their industries.

Close to one third (36 respondents or 30.51%) “neither agree or disagree” to the statement that governmental regulations are a major constraint to their industries. Slightly over one fifth (26 respondents or 22.03%) “strongly disagree” with governmental regulations being a major constraint to their businesses.

8.3 Factor Analysis and Factor Scale Scoring of the key factor scales – *Marketing Orientation, Entrepreneurial Orientation, Relative Performance of the Firm and Industry Environment*

Factor analysis¹³ was performed on questions in section B – *Marketing Orientation*, section C – *Entrepreneurial Orientation*, section D – *Relative Performance of the Firm* and section E – *Industry Environment*¹⁴ respectively. The purpose of the factor analysis was to identify underlying dimensions in the data. In particular, a range of scale items were selected to measure key constructs relating to *Entrepreneurial Orientation* and *Marketing Orientation*. The factor analysis provides a means of exploring whether the constructs emerge from the data. A good factor grouping from factor analysis to the 4 theorized dimensions in these 4 sections would provide a ‘factorial validity’ of the questions in the questionnaire (Sekaran, 1992, pp171-173).

A two stage procedure was adopted. Initially an all attitude scale was factor analysed to check the validity of the general groupings of *Entrepreneurial Orientation, Marketing Orientation, Industry Environment* and *Relative Performance of the Firm*. Secondly each general grouping was factor analysed to identify its sub dimensions.

In Chapter 6, the survey questionnaire grouped the questions into 4 distinct sections – B, C, D and E. Factor analysis could therefore be undertaken by specifying a corresponding 4 factor loading grouping. However, to present an impartial examination, five factor analyses were performed with 13, 12, 11, 10 and 4 factor loading grouping. The questions/variables used in each of these 5 instances were assessed using *Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy*. KMO = 0.713 was obtained for each of the five factor analyses undertaken. This KMO value is greater than the recommended 0.7 (Vaus, 1991, pp 258-259). Reliability Analysis statistic, alpha = 0.8388, was obtained for each of the five factor analyses undertaken. This alpha value is also greater than the recommended 0.7 (Vaus, 1991, p256).

Initially, the number of factors to be extracted was specified using Eigenvalues ≥ 1 as these as consider common factors (Child, 1979). A total of 13 factors were extracted by the SPSS. Further analyses were undertaken by specifying 12, 11 and 10 factors loading. The objective of reducing the

¹³ Factor analysis was performed using the *SPSS 11.0 for Windows* and selecting the following options : Extraction Method - Principal component Analysis; Rotation Method – Varimax with Kaiser Normalization; Reliability Analysis – Alpha Model; Missing Values – exclude cases pairwise.

¹⁴ Section E was labeled *The Industry* in the survey questionnaire. The 7 questions raised in this section however pertain to the industry environment of the respondents. It hence re-labeled as *Industry Environment* henceforth to better reflect the intent of the questions asked.

number of factor loading from 13 to 12, 11 and then 10 was to determine if the 4 set of questions grouped logically under each of the 4 sections do vary significantly with different factor loading.

Results of these factor analyses in Appendix V : *Factor Analysis Matrices* – Table V.1 to Table V.5, reveal there is an underlying set of questions in each of the 4 sections – B, C, D and E :

- The 5 questions raised in section D – *Relative Performance of the Firm*, are always grouped into the same factor in Table V.1, V.2, V.3 and V.4 (factor analysis undertaken using 4, 10, 11 and 12 factors). In Table V.5 (factor analysis using 13 factors), 4¹⁵ of these 5 questions are grouped into the same factor. This provides empirical support that a majority of the questions in section D are closely inter-related.
- Three¹⁶ of the 7 questions raised in section E – *Industry Environment*, are always grouped into the same factor in Table V.5, V.4, V.3, V.2 and V.1 (factor analysis undertaken using 13, 12, 11, 10 and 4 factors). This provides empirical support that there is a core set of questions that describe *Industry Environment*.
- Six¹⁷ of the 16 questions raised in section B – *Marketing Orientation*, are always grouped into the same factor in Table V.5, V.4, V.3, V.2 and V.1 (factor analysis undertaken using 13, 12, 11, 10 and 4 factors). This provides empirical support that there is a core set of questions that describe *Marketing Orientation*.
- Four¹⁸ of the 12 questions raised in section C – *Entrepreneurial Orientation*, are always grouped into the same factor in Tables V.5, V.4, V.3, V.2 and V.1 (factor analysis undertaken using 13, 12, 11, 10 and 4 factors). This provides empirical support that there is a core set of questions that describe *Entrepreneurial Orientation*.

Factor analysis using a 4 factor loading was specifically undertaken to gain insight if questions under each of the 4 sections : B – *Marketing Orientation*, C – *Entrepreneurial Orientation*, D – *Relative Performance of the Firm* and E – *Industry Environment*, could be grouped empirically together

¹⁵ The 4 questions in Section D are : Q2 (Growth Rate), Q3 (No of Employees), Q4 (Investment for future growth) and Q5 (Expenditure on training).

¹⁶ The 3 questions in Section E are : Q1, Q2 and Q3.

¹⁷ The 6 questions in Section B are : Q1, Q2, Q3, Q4, Q9, and Q14.

¹⁸ The 6 questions in Section B are : Q1, Q2, Q3, Q4, Q9, and Q14.

statistically. The later, if successful, would provide further support that questions under each of these 4 sections could be grouped conceptually under each of these sections.

Theoretically, using factor analysis with 4 factors, each of the questions in section B, C, D and E should be grouped into their respective factors correspondingly. While Table V.1 generally shows this rough correspondence between section and factor grouping, exceptions can be found. For example, question No 10 from section B *Marketing Orientation* – ‘Short-term profits are more important than market share’ should be grouped together with the rest of the questions under factor 1. However it is grouped into factor 4 together with questions from section E *Industry Environment*. Further, question No 5 from section E – ‘The industry dependent on a small number of suppliers’ is grouped by the SPSS into factor 3, together with questions from section C *Entrepreneurial Orientation*.

While the SPSS provides the direct statistical grouping, such grouping must be further interpreted as ‘belonging together conceptually’ for meaning to be derived (Vaus, 1991, p255). To illustrate, the aforementioned question No 5 in section E *Industry Environment* is grouped together with questions from section C *Entrepreneurial Orientation*. It does not make for meaningful interpretation to then integrate or transfer this question as belonging to the later section.

In this respect, for a conceptual and meaningful interpretation of Table V.1, we could undertake the following 3 steps:

- (1) Assign each of the 4 factors to be describing section B, C, D and E as follow:
 - Factor 1 to be describing section B *Marketing Orientation*
 - Factor 2 to be describing section D *Relative Performance of the Firm*
 - Factor 3 to be describing section C *Entrepreneurial Orientation*
 - Factor 4 to be describing section E *Industry Environment*
- (2) Questions already in their correct factor groupings are left unchanged. For example, question No 1 in section B *Marketing Orientation* – ‘Information about customer needs are collected regularly’ is already grouped into Factor 1 and left unchanged.

- (3) Questions grouped outside their factors - together with questions from another factor grouping, are reassigned based on their *next higher factor loading*¹⁹.

Based on the above 3 steps the following 2 observations may be observed:

Observation 1 : *the questions in each of these 4 sections are grouped into their respective factors (step (1)) correspondingly.*

Except

Observation 2 : Question No 4 in section E *Industry Environment* – ‘A small group of customers account for a large percentage of our sales’ where it was originally group into Factor 3 section C *Entrepreneurial Orientation* with a factor loading of .154. The *next higher factor loading* is only -.09 under Factor 2 section D *Relative Performance of the Firm*. However this factor loading is small and comparable to the factor loading of -.08 and -0.07 for the next 2 factors. Subsequent Reliability Analysis would determine if this question could be grouped under section E *Industry Environment*²⁰.

Similar 3 steps were undertaken for Table V.2, V.3, V.4 and V.5 (factor analysis using 10, 11, 12 and 13 factors). Observation No 1 – direct grouping of questions into their respective factors, could still be observed. However, with the drastic increase in the number of factors employed, the direct 4 factors assignment to describe section B, C, D and E, an increase in the number of exception questions under Observation 2 were observed.

From the above discussion, Factor Analysis does provide some empirical support for the conceptual grouping of questions in each of the 4 sections – B, C, D and E ie **each set of questions under these sections corresponds to a factor scale**. Further Reliability Analysis on each set of questions in these sections would determine the item-to-scale correlation for each question. Such Reliability Analysis, using item-to-scale correlation and ‘alpha’ test statistic would help to determine if a given question is to be dropped from the final hypothesis computation.

Having established that the general groupings are acceptable, the analysis proceeded to identify sub dimensions for each of the generic groupings.

¹⁹ The *next higher factor loading* is the absolute numeric value. The positive or negative sign value is ignored.

8.3.1 Factor Analysis of Individual Research Factor Scale - *Marketing Orientation, Entrepreneurial Orientation, Relative Performance of the Firm and Industry Environment*

The preceding section applies factor analyses on the entire questionnaire. A further 4 factor analyses were performed on the individual research factors, namely, section B – *Marketing Orientation*, section C – *Entrepreneurial Orientation*, section D – *Relative Performance of the Firm* and section E – *Industry Environment*. Factor Analyses were conducted on the set of questions in each of these sections. The following tables show the *SPSS* results with the factor loading being selected based on eigenvalues ≥ 1.0 ²¹ :

²⁰ The dropping of any particular question is deferred until further confirmation by reliability analysis.

²¹ These 4 tables with additional details can be located in Appendix V : Factor Analysis Matrices Table V..8 to I.11

	Questions posed to survey respondents	Factor Loading					
		1	2	3	4	5	
Q2	Our corporate objectives and policies are aimed directly at creating satisfied customers	0.83	0.03	0.14	0.08	-0.04	Customer Orientation (Custo)
Q1	Information about customer needs are collected regularly	0.78	0.22	0.06	-0.08	-0.04	
Q3	Levels of customer satisfaction are regularly assessed	0.73	0.27	0.04	0.10	-0.20	
Q14	The different departments in the organisation work effectively together to serve customer needs	0.63	-0.04	0.25	0.41	0.05	
Q9	We put major emphasis on differentiating ourselves from the competition on factors important to our customers	0.52	0.15	0.38	0.19	-0.13	
Q4	We put major efforts into building stronger relationships with key customers	0.52	0.20	0.20	0.20	-0.13	Competitor Orientation (Compo)
Q7	We conduct regular benchmarking against major competitor product offerings	0.16	0.83	0.03	0.08	-0.09	
Q6	Information about competitor activities are collected regularly	0.26	0.80	0.07	0.11	0.00	
Q8	We respond rapidly to major competitor actions	0.09	0.65	0.43	0.20	0.13	Long term Goals (LT)
Q12	Our decisions are guided by long-term considerations rather than short-term expediency	0.18	0.04	0.82	0.08	0.01	
Q13	Information about customers are widely circulated throughout the organization	0.20	0.23	0.62	0.09	-0.06	Information - Interfunctional (II) Long term Goals (LT)
Q16	Our organization is not constrained by a hierarchical structure	0.17	-0.02	-0.01	0.83	-0.20	
Q5	We adapt our product offerings accordingly to satisfy distinct market segments	-0.01	0.26	0.07	0.74	0.04	
Q15	Tensions and rivalries between departments are not allowed to get in the way of serving customers effectively	0.28	0.15	0.24	0.45	-0.07	
Q11	Controlling internal costs is more important than responding to customers' needs	-0.22	-0.04	0.11	-0.25	0.81	Long term Goals (LT)
Q10	Short-term profits are more important than market share	-0.05	0.04	-0.55	0.10	0.71	

Table 8.10 Section B - Market Orientation Sub Dimensions

The above table reveals grouping of questions along *Customer Orientation*, *Competitor Orientation* and *Information-Interfunctional*, lending support that questions in section B does provide a certain measure of 'content validity' of *Marketing Orientation* (Sekaran, 1992, pp171-173).

	Questions posed to survey respondents	Factor Loading				
		1	2	3	4	
Q2	<i>Our approach is to look for new and innovative ways to supply existing products/services to the market</i>	0.83	0.15	0.11	-0.05	Catalytic Entrepreneur (CE)
Q1	<i>We frequently introduce new ideas to the market</i>	0.80	0.22	0.08	-0.10	
Q3	<i>We spend much time, effort and money to generate and develop new ideas</i>	0.79	0.05	0.32	0.05	
Q8	<i>Our strategy is focused on being first in then market with a product / service</i>	0.77	0.23	0.08	0.23	
Q9	<i>We tend to find a niche in the market and defend it</i>	0.37	0.27	0.28	0.35	
Q12	<i>A successful entrepreneur has to be good at marketing</i>	0.11	0.81	-0.08	0.03	Strategic Entrepreneur (SE)
Q11	<i>We tend to react to opportunities as and when they present themselves</i>	0.15	0.80	0.20	0.16	
Q10	<i>Our atrategy is to be fast in following competitive trends</i>	0.36	0.61	0.24	0.05	
Q4	<i>We spot opportunities by seeing products/services available in other countries and offering them here</i>	0.17	0.13	0.86	-0.01	Allocating Entrepreneur (AE)
Q5	<i>We identify products/services available elsewhere and modify them to suit the market here</i>	0.17	0.06	0.84	0.12	
Q6	<i>Our competitive advantage is based on effective internal cost controls</i>	-0.26	0.06	0.08	0.78	Refining Entrepreneur (RE)
Q7	<i>We place emphasis on improving our organisational systems to be competitive</i>	0.27	0.09	0.00	0.77	

Table 8.11 Section C - Entrepreneurial Orientation Sub Dimensions

The above table reveals grouping of questions along *Catalytic Entrepreneur*, *Strategic Entrepreneur*, *Allocating Entrepreneur* and *Refining Entrepreneur*, lending support that questions in section C does provide a certain measure of ‘content validity’ of *Entrepreneurial Orientation*.

	Questions posed to survey respondents	Factor Loading
		1
Q4	(Investments for future growth) The relative performance of our firm compared to our competition in the following areas can best be described as	0.86
Q2	(Growth rate) The relative performance of our firm compared to our competition in the following areas can best be described as	0.79
Q5	(Expenditure on employees training) The relative performance of our firm compared to our competition in the following areas can best be described as	0.73
Q3	(No. of employees) The relative performance of our firm compared to our competition in the following areas can best be described as	0.69
Q1	(Profitability) The relative performance of our firm compared to our competition in the following areas can best be described as	0.61

Table 8.12 Section D – Relative Performance of the Firm Sub Dimensions

There was only one factor selected by the SPSS based on eigenvalue ≥ 1.0 . This suggests the set of question in this section to be a cohesive measure of *Relative Performance of the Firm*.

	Questions posed to survey respondents	Factor Loading		
		1	2	3
Q3	<i>It is relatively easy for firms to exit from the industry</i>	0.82	-0.02	0.20
Q2	<i>It is relatively easy for new firms to enter the industry</i>	0.78	-0.25	0.24
Q1	<i>We face very strong competition from substitute products and services</i>	0.67	0.21	-0.14
Q6	<i>The demand conditions in the industry are very volatile</i>	0.52	0.49	-0.10
Q4	<i>A small group of customers account for a large percentage of our sales</i>	-0.03	0.71	0.49
Q5	<i>The industry is dependent on a small number of suppliers</i>	-0.38	0.57	0.22
Q7	<i>Government regulations are a major constraint</i>	0.13	0.41	-0.82

Table 8.13 Section E – Industry Environment Sub Dimensions

In contrast to the preceding table only 4 of the 7 questions in *Industry Environment* load strongly in one factor. This coupled with the small number of questions in this section make the set of question a weak measure of *Industry Environment*.

8.3.2 Reliability Analysis – Dropping of Questions/Items from the Factor Scale

The preceding Factor Analysis conducted above have shown that each set of questions in the four conceptual grouping : sections B – *Marketing Orientation*, C – *Entrepreneurial Orientation*, D – *Relative Performance of the Firm* and E – *Industry Environment* could belong to a factor scale. However, it does not provide adequate discrimination to determine if a particular question is a reliable measure of the scale. Scale Reliability analysis is needed to measure the reliability for the questions in each of the four conceptual grouping.

Two guiding principles underlying reliability measurement are employed (Vaus, 1991, pp255-256) :

- *Test for unidimensionality* : A unidimensional scale is one in which each question/item measures the same underlying concept. As a rule of thumb, **item with less than 0.3 value in the item-to-scale correlation should be dropped from the scale.**
- *Test for reliability* : The overall reliability of the scale is measured by the test statistics *alpha*. As a rule of thumb this value should be **at least 0.7 for a reliable scale.**

From the results of the reliability computation²² in Appendix VI – *Scale Reliability Analysis*, questions from the following sections possess low item-to-scale value of less than 0.3 :

Section B – Marketing Orientation

- Question No 10 *STPPROFIT* ('Short-term profits are more important than market share'). Item-to-scale correlation value = -0.2078.
- Question No 11 *INTCOST* ('Controlling internal costs is more important than responding to customers' needs'). Item-to-scale correlation value = -0.2349.

Section C – Entrepreneurial Orientation

- Question No 6 *COMPADV* ('Our competitive advantage is based on effective internal cost controls'). Item-to-scale correlation value = 0.0363.

Section D – Relative Performance of the Firm

- No Item-to-scale correlation value in this scale is less than 0.3.

Section E – Industry Environment

- All the 7 questions in this section have item-to-scale correlation value < 0.3 . In addition, the *alpha* value for the scale is only .4233. This is much lower than the stipulated 0.7 value for a reliable scale.

From the above the identified 10 questions in sections Section B, C, D and E should be dropped from subsequent statistical computation. This also supports the exclusion of the Industry Environment as a key part of the hypotheses discussed in Chapter 4.

8.3.3 Selection of Factor Scale Scoring – Unweighted, Factor Loading and Factor Score Coefficient

Before subsequent examination of correlations between questions in each of these sections and inter-section relationship, it is necessary to establish the scoring method for questions in these sections. There are at least 3 different ways of forming the scores for a factor scale (Vaus, 1991, pp265-267). Using the factor loading generated by factor analysis, 2 factor-based scale scoring methods are :

- *Unweighted Factor-Based Scale Method* – (1) Group the questions according to their highest factor loading; (2) For each respondent add up the raw score for questions in each grouping; (3) Perform the same computation for all respondents to obtain the unweighted factor-based scale.
- *Weighted Factor-Based Scale Method* – (1) For each respondent multiply each question raw score by its corresponding scale factor loading; (2) Add up the product so obtained for all the questions in each scale for each respondent; (3) Perform the same computation for all respondents to obtain the weighted factor-based scale²³.

Using the factor score coefficient generated by factor analysis itself, a third method of scoring a factor scale is:

²² Reliability computation was performed using the *SPSS 11.0 for Windows* and selecting the Alpha model.

²³ A slight variation of this method is to include only those variables that have a reasonable loading on that scale in the scale computation.

- **Factor Scale Method** – (1) For each respondent multiply each question standardized score²⁴ by its factor score coefficient²⁵; (2) Add up the products so obtained for all the questions of each respondent; (3) Perform the same computation for all respondents to obtain the factor scale²⁶.

Adopting the suggestion given in section 8.2.2, the 10 questions with low item-to-scale correlation and *alpha* value were dropped²⁷. Another factor analysis was hence performed with the remaining 3 factors – *Marketing Orientation*²⁸, *Entrepreneurial Orientation*²⁹ and *Relative Performance of the Firm*³⁰ with the remaining questions. This is done for the purpose of deliberating on the selection of factor scale method discussed next.

Weighted Factor-Based Scale Method

The tabulated factor loading in Table I.6 shows a more discriminated loading by the questions on each of the 3 factors when compared with the factor loadings from preceding tables – Table V.1 to Table V.5. However, factor analysis using the theoretical 3 factors to 3 sections correspondence resulted in some questions loading equally high on 2 factors instead of one. The following highlights some of these questions from Table V.6 :

Section B – Marketing Orientation

- Question No 6 *INFOCOMP* ('Information about competitor activities are collected regularly') loadings on factor 1 and 2 are 0.45 and 0.44 respectively.
- Question No 12 *LTCNSID* ('Our decisions are guided by long-term considerations rather than short-term expediency') loadings on factor 1 and 2 are 0.35 and 0.31 respectively.

Section C – Entrepreneurial Orientation

- Question No 8 *FIRSTMKT* ('Our strategy is focused on being first in the market with a product/service') loadings on factor 1 and 3 are 0.5 and 0.56 respectively.
- Question No 1 *NEWIDEAS* ('We frequently introduce new ideas to the market') loadings on factor 1 and 3 are 0.5 and 0.54 respectively.

²⁴ The standardized score for each question is (raw score - Mean)/Std Deviation.

²⁵ The factor score coefficient is computed by SPSS (using the factor loading) as F1coeff, F2coeff and F3coeff.

²⁶ The results from the above steps are generated by the SPSS as fac1_1, fac2_1 and fac3_1.

²⁷ See Appendix IV for these 10 questions.

²⁸ Question No 10 *STPPROFIT* and Question No 11 *INTCOST* are excluded from the computation of *Marketing Orientation*.

²⁹ Question No 6 *COMPADV* is excluded from the computation of *Entrepreneurial Orientation*.

³⁰ Theoretically, since each set of questions in sections B, C and D is grouped into one factor, factor analysis is undertaken by specifying a 3 factors extraction.

Questions with equally high factor loadings on more than one factor would also contribute equally to more than one factor scale. The *Weighted Factor-Based Scale Method* uses the factor loading to compute the factor scale. This method then when applied on the obtained survey data could result in factor scales that are inherently indiscriminant.

Factor Scale Method

While factor analysis would relegate a given variable to be loaded highly on only one of the factors, loading on other factors cannot be ignored, especially if the difference in the load values is small. The tabulated factor coefficient in Table V.7 shows the coefficients of some questions being loaded equally high on 2 factors instead of one. The following highlights some of these questions from Table V.7 :

Section B – Marketing Orientation

- Question No 13 *INFOCUST* ('Information about customers are widely circulated throughout the organisation') factor 1 and 2 coefficients are 0.10 and 0.08 respectively.
- Question No 6 *INFOCOMP* ('Information about competitors activities are collected regularly') factor 1 and 2 coefficients are 0.09 and 0.08 respectively.
- Question No 12 *LTCONSID* ('Our decisions are guided by long-term considerations rather than short-term expediency') factor 1 and 2 coefficients are 0.06 and 0.04 respectively.

Section C – Entrepreneurial Orientation

- Question No 2 *INNOWAYS* ('Our approach is to look for new and innovative ways to supply existing products/services to the market') factor 1 and 3 coefficients are 0.11 and 0.09 respectively.

Questions with equally high factor coefficients on more than one factor would also contribute equally to more than one factor scale. The *Factor Scale Method* uses the factor score coefficient to compute the factor scale. This method then when applied on the obtained survey data could result in factor scales that are inherently indiscriminant.

Unweighted Factor-Based Scale Method

In the two preceding methods – *Weighted Factor-Based Scale Method* and *Factor Scale Method* – each question contributes to the factor scales computation in varying degrees. Ideally each question should contribute only to a particular factor scale. The *Unweighted Factor-Based Scale Method* groups the questions in each factor according to their highest factor loading thereby eliminating the issue of multiple loading³¹. Each question only contributes to a factor scale computation. **Unweighted Factor-Based Scale Method is hence adopted to compute the factor scales for questions in section B, C and D in subsequent chapter 9.**

8.4 Summary of Descriptive Data Analyses

In summary, the analyses conducted on the survey questionnaire data revealed the following. These preliminary findings serve as the basis for further analyses in the next chapter.

- The respondents were roughly split between the Goods and Service industry.
- Firms' turnover can be relegated into 3 categories - less than \$10 million, \$10 to \$40 million and over \$40 million.
- Respondents' educational qualifications can be roughly separated into 2 distinct groupings - tertiary and non-tertiary.
- Questions in each of the 3 sections : section B – *Marketing Orientation*, section C – *Entrepreneurial Orientation*, and section D – *Relative Performance of the Firm*, could be used to provide measure of the corresponding research factors.
- Questions raised in section E – *Industry Environment*, show consistent lack of cohesiveness and reliability as evident by the diverse loading across factors and low item-to-scale value. Subsequent analyses on questions in this section should be interpreted with caution.

³¹ While no variable purporting as measurement of certain event of interest in the real environment setting is and can be proved to be totally isolated and independent from other variables, this method of computation does provides a reasonable attempt to uncover underlying potential relationships amidst the complexities but with an ensuing understanding of the limitation and danger of simplification.

Chapter 9

Hypotheses Testing

9.1 Introduction

The preceding chapter 8 has examined the set of questions under each of the four research areas : section B – *Marketing Orientation*, section C – *Entrepreneurial Orientation*, section D – *Relative Performance of the Firm* and section E – *Industry Environment*. From Factor Analysis, it was found that a majority of these questions falls into their respective factor scale and research area¹. Reliability Analysis was next undertaken and ‘weak’ questions² were identified. This chapter proceeds to test the hypotheses through a series of analyses using a variety of techniques. Section 9.2 begins the process by examining the relationships between questions within each of these 4 research areas – namely, sections B, C, D and E, through intra-section correlation analyses of the questions within each of these 4 sections. The purpose is to identify the extent to which these co-relations are strong or weak.

Section 9.3 builds on this preliminary exploration using further correlation analyses to identify inter-section relationships. A series of correlation tables on the three research areas *Marketing Orientation* (Section B), *Entrepreneurial Orientation* (Section C) and *Relative Performance of the Firm* (Section D) are undertaken. These correlation tables are stratified in terms of industry types – Goods versus Service, firm size in terms of turnover, and respondents’ educational level – Tertiary versus Non-Tertiary. The objective of such stratification is to examine if these variables have any influence on the correlations between the three research areas.

Section 9.4 employs regression analysis next to test the hypotheses proposed earlier. Besides examining the direct relationship between the research factors - *Marketing Orientation* (Section B), *Entrepreneurial Orientation* (Section C) and *Relative Performance of the Firm* (Section D), environment variables pertaining to nature of industry (service versus goods), firm size and entrepreneur education level are also incorporated in the regression analysis.

¹ The exception being Question No 4 in section E. Questions from this section is found to be unreliable from Reliability Analysis and dropped

² These are not irrelevant questions *per se* as the questionnaire have been previously field tested. Rather these ‘weak’ questions are those that do not relate strongly to other questions in a given factor scale and research area.

9.2 Correlations of Questions in each of the Four Research Areas

While the preceding chapter 8 has examined the set of questions under each of the four major research areas, this section explores the correlations among questions in each of these research areas in greater details. Unlike advance statistical methods such as multiple regression or factor analysis, correlation can be used to quickly key highlight relationship between variables of interest without being bogged down with the technicalities of multivariate technique and cause-effect justification (Sekaran, 1991, pp 21, 264-266; Silver, 1997, p128-135)

Besides exploring the correlation among questions in each research area, the correlation tables also serve as a countercheck to the factor analysis and reliability analysis undertaken on the set of questions under each of the four research areas. In brevity, the objective of presenting the following 4 correlation tables – *Marketing Orientation*, *Entrepreneurial Orientation*, *Relative Performance of the Firm* and *Industry Environment* is exploratory in nature.

Questions		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
(Q1) Information about customer needs are collected regularly	Pearson Correlation	1.00	0.57**	0.60**	0.34**	0.13	0.40**	0.21*	0.19*	0.37**	-0.13	-0.18*	0.26**	0.26**	0.35**	0.20*	0.12
	Sig. (2-tailed)		0.00	0.00	0.00	0.16	0.00	0.02	0.04	0.00	0.15	0.05	0.01	0.00	0.00	0.03	0.19
(Q2) Our corporate objectives and policies are aimed directly at creating satisfied customers	Pearson Correlation	0.57**	1.00	0.52**	0.42**	0.08	0.23**	0.22*	0.23**	0.45**	-0.13	-0.28**	0.26**	0.28**	0.55**	0.33**	0.20*
	Sig. (2-tailed)	0.00		0.00	0.00	0.42	0.01	0.02	0.01	0.00	0.17	0.00	0.01	0.00	0.00	0.00	0.03
(Q3) Levels of customer satisfaction are regularly assessed	Pearson Correlation	0.60**	0.52**	1.00	0.39**	0.19*	0.42**	0.31**	0.23**	0.46**	-0.23**	-0.26**	0.22*	0.24**	0.45**	0.31**	0.27**
	Sig. (2-tailed)	0.00	0.00		0.00	0.04	0.00	0.00	0.01	0.00	0.01	0.00	0.02	0.01	0.00	0.00	0.00
(Q4) We put major efforts into building stronger relationships with key customers	Pearson Correlation	0.34**	0.42**	0.39**	1.00	0.21*	0.31**	0.28**	0.22*	0.45**	-0.17	-0.22*	0.29**	0.23**	0.36**	0.29**	0.22*
	Sig. (2-tailed)	0.00	0.00	0.00		0.02	0.00	0.00	0.02	0.00	0.06	0.02	0.00	0.01	0.00	0.00	0.02
(Q5) We adapt our product offerings accordingly to satisfy distinct market segments	Pearson Correlation	0.13	0.08	0.19*	0.21*	1.00	0.26**	0.20*	0.28**	0.20*	-0.01	-0.12	0.13	0.15	0.22*	0.20*	0.43**
	Sig. (2-tailed)	0.16	0.42	0.04	0.02		0.00	0.03	0.00	0.03	0.92	0.20	0.18	0.10	0.02	0.03	0.00
(Q6) Information about competitor Activities are collected regularly	Pearson Correlation	0.40**	0.23**	0.42**	0.31**	0.26**	1.00	0.55**	0.53**	0.24**	-0.08	-0.06	0.19*	0.25**	0.22*	0.18**	0.21*
	Sig. (2-tailed)	0.00	0.01	0.00	0.00	0.00		0.00	0.00	0.01	0.41	0.53	0.04	0.01	0.02	0.05	0.02
(Q7) We conduct regular benchmarking against major competitor product offerings	Pearson Correlation	0.21*	0.22*	0.31**	0.28**	0.20*	0.55**	1.00	0.46**	0.27**	0.00	-0.15	0.08	0.33**	0.16	0.30**	0.07
	Sig. (2-tailed)	0.02	0.02	0.00	0.00	0.03	0.00		0.00	0.00	0.97	0.10	0.39	0.00	0.08	0.00	0.43
(Q8) We respond rapidly to major competitor actions	Pearson Correlation	0.19*	0.23**	0.23**	0.22*	0.28**	0.53**	0.46**	1.00	0.36**	-0.07	-0.06	0.39**	0.30**	0.26**	0.30**	0.11
	Sig. (2-tailed)	0.04	0.01	0.01	0.02	0.00	0.00	0.00		0.00	0.46	0.50	0.00	0.00	0.01	0.00	0.24
(Q9) We put major emphasis on differentiating ourselves from the competition on factors important to our customers	Pearson Correlation	0.37**	0.45**	0.46**	0.45**	0.20*	0.24**	0.27**	0.36**	1.00	-0.29**	-0.19*	0.34**	0.27**	0.41**	0.30**	0.25**
	Sig. (2-tailed)	0.00	0.00	0.00	0.00	0.03	0.01	0.00	0.00		0.00	0.04	0.00	0.00	0.00	0.00	0.01
(Q10) Short-term profits are more important than market Share	Pearson Correlation	-0.13	-0.13	-0.23**	-0.17	-0.01	-0.08	0.00	-0.07	-0.29**	1.00	0.33**	-0.36**	-0.30**	-0.09	-0.19*	-0.06
	Sig. (2-tailed)	0.15	0.17	0.01	0.06	0.92	0.41	0.97	0.46	0.00		0.00	0.00	0.00	0.33	0.04	0.54
(Q11) Controlling internal costs is more important than responding to customers' needs	Pearson Correlation	-0.18*	-0.28**	-0.26**	-0.22*	-0.12	-0.06	-0.15	-0.06	-0.19*	0.33**	1.00	-0.04	-0.09	-0.25**	-0.14	-0.34**
	Sig. (2-tailed)	0.05	0.00	0.00	0.02	0.20	0.53	0.10	0.50	0.04	0.00		0.67	0.33	0.01	0.14	0.00
(Q12) Our decisions are guided by long-term considerations rather than short-term expediency	Pearson Correlation	0.26**	0.26**	0.22*	0.29**	0.13	0.19*	0.08	0.39**	0.34**	-0.36**	-0.04	1.00	0.38**	0.27**	0.22*	0.13
	Sig. (2-tailed)	0.01	0.01	0.02	0.00	0.18	0.04	0.39	0.00	0.00	0.00	0.67		0.00	0.00	0.02	0.16
(Q13) Information about customers are widely circulated throughout the organization	Pearson Correlation	0.26**	0.28**	0.24**	0.23**	0.15	0.25**	0.33**	0.30**	0.27**	-0.30**	-0.09	0.38**	1.00	0.38**	0.19*	0.16
	Sig. (2-tailed)	0.00	0.00	0.01	0.01	0.10	0.01	0.00	0.00	0.00	0.00	0.33	0.00		0.00	0.04	0.09
(Q14) The different departments in the organization work effectively together to serve customer needs	Pearson Correlation	0.35**	0.55**	0.45**	0.36**	0.22*	0.22*	0.16*	0.26**	0.41**	-0.09	-0.25**	0.27**	0.38**	1.00	0.33**	0.36**
	Sig. (2-tailed)	0.00	0.00	0.00	0.00	0.02	0.02	0.08	0.01	0.00	0.33	0.01	0.00	0.00		0.00	0.00
(Q15) Tensions and rivalries between departments are not Allowed to get in the way of serving customers effectively	Pearson Correlation	0.20*	0.33**	0.31**	0.29**	0.20*	0.18**	0.30**	0.30**	0.30**	-0.19*	-0.14	0.22*	0.19*	0.33**	1.00	0.34**
	Sig. (2-tailed)	0.03	0.00	0.00	0.00	0.03	0.05	0.00	0.00	0.00	0.04	0.14	0.02	0.04	0.00		0.00
(Q16) Our organisation is not constrained by a hierarchical Structure	Pearson Correlation	0.12	0.20*	0.27**	0.22*	0.43**	0.21*	0.07	0.11	0.25**	-0.06	-0.34**	0.13	0.16	0.36**	0.34**	1.00
	Sig. (2-tailed)	0.19	0.03	0.00	0.02	0.00	0.02	0.43	0.24	0.01	0.54	0.00	0.16	0.09	0.00	0.00	

** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).

Number of cases, N, for each bivariate correlation varies from 116 to 118. This is due to 'Exclude cases pairwise' option being selection in the SPSS computation.

From the above table it can be observed that a majority of questions asked under the research area - *Marketing Orientation* have correlations that are significant at the 0.05 level or lower with other questions. The notable exception being Question No 10 *STPPROFIT* ('Short-term profits are more important than market share') and Question No 11 *INTCOST* ('Controlling internal costs is more important than responding to customers' needs'). These 2 questions have the greatest number of low correlation values – 9 and 7 respectively out of 15 other questions, and are not significant at the 0.05 level. This finding reinforces the earlier Scale Reliability Analysis findings in section 8.2.2 on these 2 questions whereby their Item-to-scale correlation values at -0.2078 and -0.2349 respectively are less than the stipulated 0.3 alpha value^{3,4}.

³ Appendix VI – *Scale Reliability Analysis* provides the full details of the computation.

⁴ Note : These 2 unreliable questions were dropped from the statistical computations of *Marketing Orientation* from section 9.3 onwards.

Questions		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
(Q1) We frequently introduce new ideas to the Market	Pearson Correlation	1	.65**	.59**	.20*	.28**	-.13	.12	.58**	.23*	.45**	.28**	.25**
	Sig. (2-tailed)		.000	.000	.032	.002	.151	.184	.000	.013	.000	.002	.007
(Q2) Our approach is to look for new and innovative ways to supply existing products/ services to the market	Pearson Correlation	.65**	1	.62**	.28**	.25**	-.16	.19*	.57**	.28**	.41**	.28**	.19*
	Sig. (2-tailed)	.000		.000	.002	.010	.085	.035	.000	.002	.000	.002	.037
(Q3) We spend much time, effort and money to generate and develop new ideas	Pearson Correlation	.59**	.62**	1	.42**	.36**	-.12	.25**	.58**	.36**	.41**	.25**	.13
	Sig. (2-tailed)	.000	.000		.000	.000	.211	.007	.000	.000	.000	.006	.166
(Q4) We spot opportunities by seeing products/ services available in other countries and offering them here	Pearson Correlation	.20*	.28**	.42**	1	.60**	-.04	.17	.22*	.30**	.32**	.27**	.11
	Sig. (2-tailed)	.032	.002	.000		.000	.708	.074	.020	.001	.000	.004	.247
(Q5) We identify products/services available elsewhere and modify them to suit the market here	Pearson Correlation	.28**	.24**	.35**	.60**	1	.15	.12	.30**	.27**	.22**	.25**	.08
	Sig. (2-tailed)	.002	.010	.000	.000		.109	.198	.001	.003	.017	.008	.393
(Q6) Our competitive advantage is based on effective internal cost controls	Pearson Correlation	-.13	-.16	-.12	-.04	.15	1	.31**	-.03	.09	.10	.10	.02
	Sig. (2-tailed)	.151	.085	.211	.708	.109	.	.001	.762	.321	.268	.260	.869
(Q7) We place emphasis on improving our organisational systems to be competitive	Pearson Correlation	.12	.19*	.25**	.17	.12	.31**	1	.31**	.25**	.15	.27**	.17
	Sig. (2-tailed)	.184	.035	.007	.074	.198	.001		.001	.007	.102	.003	.067
(Q8) Our strategy is focused on being first in the market with a product / service	Pearson Correlation	.58**	.57**	.58**	.22*	.30**	-.03	.31**	1	.51**	.35**	.33**	.32**
	Sig. (2-tailed)	.000	.000	.000	.020	.001	.762	.001		.000	.000	.000	.000
(Q9) We tend to find a niche in the market and defend it	Pearson Correlation	.23*	.28**	.36**	.30**	.27**	.09	.25**	.51**	1	.32**	.34**	.21*
	Sig. (2-tailed)	.013	.002	.000	.001	.003	.321	.007	.000		.000	.000	.020
(Q10) Our strategy is to be fast in following competitive trends	Pearson Correlation	.45**	.41**	.41**	.32**	.22*	.10	.15	.35**	.32**	1	.52**	.31**
	Sig. (2-tailed)	.000	.000	.000	.000	.017	.268	.102	.000	.000		.000	.001
(Q11) We tend to react to opportunities as and when they present themselves	Pearson Correlation	.28**	.28**	.25**	.27**	.25**	.10	.27**	.33**	.34**	.52**	1	.47**
	Sig. (2-tailed)	.002	.002	.006	.004	.008	.260	.003	.000	.000	.000		.000
(Q12) A successful entrepreneur has to be good at Marketing	Pearson Correlation	.25**	.19*	.13	.11	.08	.02	.17	.32**	.21*	.31**	.47**	1
	Sig. (2-tailed)	.007	.037	.166	.247	.393	.869	.067	.000	.020	.001	.000	

** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).
 Number of cases, N, for each bivariate correlation varies from 116 to 118. This is due to 'Exclude cases pairwise' option being selection in the SPSS computation.

From the above table it can be observed that a majority of questions have correlations that are significant at the 0.05 level or lower with other questions. The notable exception is Question No 6 *COMPADV* ('Our competitive advantage is based on effective internal cost controls'). This question has low correlation values with 10 of the other 11 questions and is not significant at the 0.05 level.

This finding reinforces the earlier Scale Reliability Analysis findings in section 8.2.2 whereby the Item-to-scale correlation value for this question is 0.0363 and is less than the stipulated 0.3 alpha value^{5,6}

⁵ Appendix VI – *Scale Reliability Analysis* provides the full details of the computation.

⁶ Note : This unreliable question was dropped from the statistical computations of *Entrepreneurial Orientation* from section 9.3 onwards.

Table 9.3 Correlations of variables under Relative Performance of the Firm

Questions		Q1	Q2	Q3	Q4	Q5
(Q1) Profitability	Pearson Correlation	1.000	0.45**	0.31**	0.370**	0.24**
	Sig. (2-tailed)	.	0.000	0.001	0.000	0.008
(Q2) Growth rate	Pearson Correlation	0.45**	1.000	0.36**	0.60**	0.47**
	Sig. (2-tailed)	0.000	.	0.000	0.000	0.000
(Q3) No of Employees	Pearson Correlation	0.31**	0.36**	1.000	0.55**	0.37**
	Sig. (2-tailed)	0.001	0.000	.	0.000	0.000
(Q4) Investment for future growth	Pearson Correlation	0.37**	0.60**	0.55**	1.000	0.59**
	Sig. (2-tailed)	0.000	0.000	0.000	.	0.000
(Q5) Expenditure on employees Training	Pearson Correlation	0.24**	0.47**	0.37**	0.59**	1.000
	Sig. (2-tailed)	0.008	0.000	0.000	0.000	.

** Correlation is significant at the 0.01 level (2-tailed).

Number of cases, N, for each bivariate correlation varies from 115 to 118. This is due to 'Exclude cases pairwise' option being selection in the SPSS computation

From the above table it can be observed that all the questions have correlations that are significant at the 0.01 level or lower with other questions. This reinforces the earlier Scale Reliability Analysis findings in section 8.2.2 where the Item-to-scale correlation values for all question are greater than the stipulated 0.3 alpha value⁷.

Table 9.4 Correlations of variables under Industry Environment

Questions		Q1	Q2	Q3	Q4	Q5	Q6	Q7
(1) We face very strong competition from substitute Products and services	Pearson Correlation	1	.38**	.37**	.02	-.08	.27**	.15
	Sig. (2-tailed)	.	.000	.000	.813	.425	.004	.116
(2) It is relatively easy for new firms to enter the industry	Pearson Correlation	.38**	1	.58**	-.07	-.27**	.18	-.08
	Sig. (2-tailed)	.000	.	.000	.483	.004	.059	.372
(3) It is relatively easy for firms to exit from the industry	Pearson Correlation	.37**	.58**	1	-.00	-.16	.31**	.02
	Sig. (2-tailed)	.000	.000	.	.979	.087	.001	.865
(4) A small group of customers account for a large percentage of our sales	Pearson Correlation	.02	-.07	-.00	1	.24**	.19*	-.04
	Sig. (2-tailed)	.813	.483	.979	.	.009	.045	.704
(5) The industry is dependent on a small number of suppliers	Pearson Correlation	-.08	-.27**	-.16	.24**	1	-.09	.03
	Sig. (2-tailed)	.425	.004	.087	.009	.	.347	.764
(6) The demand conditions in The industry are very volatile	Pearson Correlation	.27**	.18	.31**	.19*	-.09	1	.15
	Sig. (2-tailed)	.004	.059	.001	.045	.347	.	.101
(7) Government regulations As a major constraint	Pearson Correlation	.15	-.08	.02	-.04	.03	.15	1
	Sig. (2-tailed)	.116	.372	.865	.704	.764	.101	.

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Number of cases, N, for each bivariate correlation varies from 115 to 118. This is due to 'Exclude cases pairwise' option being selection in the SPSS computation

From the above table it can be observed that the following subsets of the questions have correlations that are significant at the 0.01 level or lower among themselves :

- Question No 1, 2 and 3
- Question No 4 and 5

Question No 7 in particular have low correlation values all other questions. The correlation values are also not significant at the 0.05 level.

The earlier Scale Reliability Analysis findings in Section 8.3.2 have found all the 7 questions in this section has item-to-scale correlation value $< 0.3^8$. The *alpha* value for the scale is only .4233, much lower than the stipulated 0.7 value for a reliable scale. Considering the small number of questions in the above 2 subsets – 3 and 2 respectively, it is not a good measurement for the research area *Industry Environment*. This research area cannot be reliably and adequately measured by the given set of question in Section E of the survey questionnaire.

⁷ Appendix VI – Scale Reliability Analysis provides the full details of the computation.

9.2.1 Summary of Findings – Intra-Section Correlations for each of the Four Research Areas

The intra-section factor scale findings coincide with the earlier reliability analysis carried out in section 8.3.2. The 10 questions identified earlier as unreliable are found to be weakly correlated within their respective factor scale and research area.

⁹ Appendix VI – *Scale Reliability Analysis* provides the full details of the computation.

9.3 Correlations between key factor scales – *Marketing Orientation, Entrepreneurial Orientation and Relative Performance of the Firm*

As mentioned earlier, correlation analysis provides a quick method to surface probable relationships between variables of interest. Once identified further statistical methods can then be applied to establish the nature of such relationships. Performing a Bivariate Correlations then for the 3 factors of interest in this research : section B – *Marketing Orientation*, section C – *Entrepreneurial Orientation* and section D – *Relative Performance of the Firm*, the following table is obtained⁹.

Table 9.5 Correlations between *Marketing Orientation, Entrepreneurial Orientation and Relative Performance of the Firm*

		<i>Marketing Orientation</i>	<i>Entrepreneurial Orientation</i>	<i>Relative Performance of the Firm</i>
<i>Marketing Orientation</i>	Pearson Correlation	1.000	0.612 **	0.343 **
	Sig. (2-tailed)	.	0.000	0.000
	N	118	118	118
<i>Entrepreneurial Orientation</i>	Pearson Correlation	0.612 **	1.000	0.495 **
	Sig. (2-tailed)	0.000	.	0.000
	N	118	118	118
<i>Relative Performance of the Firm</i>	Pearson Correlation	0.343 **	0.495 **	1.000
	Sig. (2-tailed)	0.000	0.000	.
	N	118	118	118

** Correlation is significant at the 0.01 level (2-tailed).

- The observed Pearson Correlation between *Marketing Orientation* and *Entrepreneurial Orientation*, $r = 0.612$, indicate that there is a 'moderately high correlation'¹⁰ between these 2 factor scales. The correlation is also significant at the 0.01 level.

⁹ Section 8.2.3 provides discussion on the different scoring methods. *Unweighted Factor-Based Scale Method* is selected to compute the factor scales for questions in section B, C and D.

¹⁰ Wong, T. Q. (1993) pp.463 classifies the r value into a 5-item range – 'little evidence', 'some degree', 'decided', 'fairly high degree' and 'considerably high' of correlation.

- The observed Pearson Correlation between *Marketing Orientation* and *Relative Performance of the Firm*, $r = 0.343$, indicate that there is a ‘some degree of direct correlation’¹¹ between these 2 factor scales. The correlation is also significant at the 0.01 level.
- The observed Pearson Correlation between *Entrepreneurial Orientation* and *Relative Performance of the Firm*, $r = 0.495$, indicate that there is a ‘some degree of direct correlation’ between these 2 factor scales. The correlation is also significant at the 0.01 level.

Comparing the r values of the correlation among the 3 factors, it can be seen that *Marketing Orientation* and *Entrepreneurial Orientation* are most strongly correlated. Because the outcome of the firm’s performance is subject to the vagaries of the business environment this strong relationship reflects the empirical notion that activities undertaken under these 2 factors cannot be isolated from each other.

To delve further into the nature of the interrelationship among the 3 factors the following section examines the relationships using the observed respondent profile categories yielded by the descriptive statistical analysis in Chapter 8, namely, (1) Firms’ Industry Sector, (2) Firms’ Turnover, and (3) Respondents’ Education Level.

9.3.1 *Marketing Orientation, Entrepreneurial Orientation and Relative Performance of the Firm Versus Firms Industry Sector*

Respondents firms were divided into 2 categories : (1) Goods Industry; and (2) Service Industry.

(1) Goods Industry

A bivariate correlation for each of the 3 factors : section B – *Marketing Orientation*, section C – *Entrepreneurial Orientation* and section D – *Relative Performance of the Firm* was undertaken by selecting respondent from the Goods Industry. The following table was obtained.

¹¹ Refer Wong, T. Q. (1993) pp.463 for the actual classification for each r value.

Table 9.6 Correlations between *Marketing Orientation*, *Entrepreneurial Orientation* and *Relative Performance of the Firm* for Goods Industry

		<i>Marketing Orientation</i>	<i>Entrepreneurial Orientation</i>	<i>Relative Performance of the Firm</i>
<i>Marketing Orientation</i>	Pearson Correlation	1.000	0.610**	0.351**
	Sig. (2-tailed)	.	0.000	0.009
	N	55	55	55
<i>Entrepreneurial Orientation</i>	Pearson Correlation	0.610**	1.000	0.356**
	Sig. (2-tailed)	0.000	.	0.008
	N	55	55	55
<i>Relative Performance of the Firm</i>	Pearson Correlation	0.351**	0.356**	1.000
	Sig. (2-tailed)	0.009	0.008	.
	N	55	55	55

** Correlation is significant at the 0.01 level (2-tailed).

- The observed Pearson Correlation between *Marketing Orientation* and *Entrepreneurial Orientation*, $r = 0.610$, indicates that there is a 'moderately high correlation' between these 2 factor scales. The correlation is also significant at the 0.01 level.
- The observed Pearson Correlation between *Marketing Orientation* and *Relative Performance of the Firm*, $r = 0.351$, indicate that there is a 'some degree of direct correlation' between these 2 factor scales. The correlation is also significant at the 0.01 level.
- The observed Pearson Correlation between *Entrepreneurial Orientation* and *Relative Performance of the Firm*, $r = 0.356$, indicate that there is a 'some degree of direct correlation' between these 2 factor scales. The correlation is also significant at the 0.01 level.

(2) Service Industry

Next a Bivariate Correlations for the 3 factors : section B – *Marketing Orientation*, section C – *Entrepreneurial Orientation* and section D – *Relative Performance of the Firm* was undertaken by selecting respondent from the Service Industry. The following table was obtained.

Table 9.7 Correlations between *Marketing Orientation*, *Entrepreneurial Orientation* and *Relative Performance of the Firm* for Service Industry

		<i>Marketing Orientation</i>	<i>Entrepreneurial Orientation</i>	<i>Relative Performance of the Firm</i>
<i>Marketing Orientation</i>	Pearson Correlation	1.000	0.618**	0.335**
	Sig. (2-tailed)	.	0.000	0.007
	N	63	63	63
<i>Entrepreneurial Orientation</i>	Pearson Correlation	0.618**	1.000	0.599**
	Sig. (2-tailed)	0.000	.	0.000
	N	63	63	63
<i>Relative Performance of the Firm</i>	Pearson Correlation	0.335**	0.599**	1.000
	Sig. (2-tailed)	0.007	0.000	.
	N	63	63	63

** Correlation is significant at the 0.01 level (2-tailed).

- The observed Pearson Correlation between *Marketing Orientation* and *Entrepreneurial Orientation*, $r = 0.618$, indicate that there is a ‘moderately high correlation’ between these 2 factor scales. The correlation is also significant at the 0.01 level.
- The observed Pearson Correlation between *Marketing Orientation* and *Relative Performance of the Firm*, $r = 0.335$, indicate that there is a ‘some degree of direct correlation’ between these 2 factor scales. The correlation is also significant at the 0.01 level.
- The observed Pearson Correlation between *Entrepreneurial Orientation* and *Relative Performance of the Firm*, $r = 0.599$, indicate that there is a ‘decided correlation’ between these 2 factor scales. The correlation is also significant at the 0.01 level.

Comparing Table 9.7 with preceding Table 9.5 and 9.6, *Marketing Orientation* and *Entrepreneurial Orientation* is still the most strongly correlated among the 3 factors. This reflects the notion that activities undertaken in marketing orientation and entrepreneurial orientation cannot be devoid from each other in practice. Relationship between *Relative Performance of the Firm* and *Entrepreneurial Orientation* however shows a decline in the Goods Industry and an improvement in the Service Industry. The latter suggests that entrepreneurial orientation have a greater impact on a firm's performance for companies in the Service Industry.

9.3.2 *Marketing Orientation, Entrepreneurial Orientation and Relative Performance of the Firm Versus Firms Turnover*

Respondents firms were divided via their sales turnover into 3 categories : (1) Less than \$10 million; (2) Between \$10 to \$40 million; and (3) Over \$40 million¹².

(1) Firms Turnover less than \$10 million

A Bivariate Correlations for the 3 factors : section B – *Marketing Orientation*, section C – *Entrepreneurial Orientation* and section D – *Relative Performance of the Firm* was undertaken by selecting respondents firm's turnover less than \$10 million. The following table was obtained.

¹² These 3 categories are selected according to the survey return on respondent firms size and sales turnover. From Figure 8.7 the 'less than \$10 million' grouping is the highest single category with 50 respondents; the '\$10 to \$40 million' grouping forms the next highest category with 43 respondents; the balance could be group under 'over \$40 million' category with 23 respondents.

Table 9.8 Correlations between *Marketing Orientation*, *Entrepreneurial Orientation* and *Relative Performance of the Firm* for Firms with turnover less than \$10 million

		<i>Marketing Orientation</i>	<i>Entrepreneurial Orientation</i>	<i>Relative Performance of the Firm</i>
<i>Marketing Orientation</i>	Pearson Correlation	1.000	0.602**	0.390**
	Sig. (2-tailed)	.	0.000	0.005
	N	50	50	50
<i>Entrepreneurial Orientation</i>	Pearson Correlation	0.602**	1.000	0.507**
	Sig. (2-tailed)	0.000	.	0.000
	N	50	50	50
<i>Relative Performance of the Firm</i>	Pearson Correlation	0.390**	0.507**	1.000
	Sig. (2-tailed)	0.005	0.000	.
	N	50	50	50

** Correlation is significant at the 0.01 level (2-tailed).

- The observed Pearson Correlation between *Marketing Orientation* and *Entrepreneurial Orientation*, $r = 0.602$, indicate that there is a 'moderately high correlation' between these 2 factor scales. The correlation is also significant at the 0.01 level.
- The observed Pearson Correlation between *Marketing Orientation* and *Relative Performance of the Firm*, $r = 0.390$, indicate that there is a 'some degree of direct correlation' between these 2 factor scales. The correlation is also significant at the 0.01 level.
- The observed Pearson Correlation between *Entrepreneurial Orientation* and *Relative Performance of the Firm*, $r = 0.507$, indicate that there is a 'decided correlation' between these 2 factor scales. The correlation is also significant at the 0.01 level.

(2) Firms with Turnover between \$10 to \$40 million

A Bivariate Correlations for the 3 factors : section B – *Marketing Orientation*, section C – *Entrepreneurial Orientation* and section D – *Relative Performance of the Firm* was undertaken by selecting respondents firm’s turnover between \$10 to \$40 million. The following table was obtained.

Table 9.9 Correlations between *Marketing Orientation*, *Entrepreneurial Orientation* and *Relative Performance of the Firm* for Firms with turnover between \$10 to \$40 million

		<i>Marketing Orientation</i>	<i>Entrepreneurial Orientation</i>	<i>Relative Performance of the Firm</i>
<i>Marketing Orientation</i>	Pearson Correlation	1.000	0.629**	0.276
	Sig. (2-tailed)	.	0.000	0.073
	N	43	43	43
<i>Entrepreneurial Orientation</i>	Pearson Correlation	0.629**	1.000	0.468**
	Sig. (2-tailed)	0.000	.	0.002
	N	43	43	43
<i>Relative Performance of the Firm</i>	Pearson Correlation	0.276	0.468**	1.000
	Sig. (2-tailed)	0.073	0.002	.
	N	43	43	43

** Correlation is significant at the 0.01 level (2-tailed).

- The observed Pearson Correlation between *Marketing Orientation* and *Entrepreneurial Orientation*, $r = 0.629$, indicate that there is a ‘moderately high correlation’ between these 2 factor scales. The correlation is also significant at the 0.01 level.
- The observed Pearson Correlation between *Marketing Orientation* and *Relative Performance of the Firm*, $r = 0.276$, indicate that there is a ‘little evidence of correlation’¹³ between these 2 factor scales. The correlation is **not** significant at the 0.01 level.

¹³ Wong, T. Q. (1993) pp.463 provides a table classifying the description for each r value range

- The observed Pearson Correlation between *Entrepreneurial Orientation* and *Relative Performance of the Firm*, $r = 0.468$, indicate that there is a 'some degree of direct correlation' between these 2 factor scales. The correlation is also significant at the 0.01 level.

(3) Firms with Turnover over \$40 million

A Bivariate Correlations for the 3 factors : section B – *Marketing Orientation*, section C – *Entrepreneurial Orientation* and section D – *Relative Performance of the Firm* was undertaken by selecting respondents firm's turnover over \$40 million. The following table was obtained.

Table 9.10 Correlations between *Marketing Orientation*, *Entrepreneurial Orientation* and *Relative Performance of the Firm* for Firms with turnover over \$40 million

		<i>Marketing Orientation</i>	<i>Entrepreneurial Orientation</i>	<i>Relative Performance of the Firm</i>
<i>Marketing Orientation</i>	Pearson Correlation	1.000	0.550**	0.188
	Sig. (2-tailed)	.	0.007	0.391
	N	23	23	23
<i>Entrepreneurial Orientation</i>	Pearson Correlation	0.550**	1.000	0.507*
	Sig. (2-tailed)	0.007	.	0.013
	N	23	23	23
<i>Relative Performance of the Firm</i>	Pearson Correlation	0.188	0.507*	1.000
	Sig. (2-tailed)	0.391	0.013	.
	N	23	23	23

- ** Correlation is significant at the 0.01 level (2-tailed).
- * Correlation is significant at the 0.05 level (2-tailed).

- The observed Pearson Correlation between *Marketing Orientation* and *Entrepreneurial Orientation*, $r = 0.550$, indicate that there is a 'moderately high correlation' between these 2 factor scales. The correlation is also significant at the 0.01 level.

- The observed Pearson Correlation between *Marketing Orientation* and *Relative Performance of the Firm*, $r = 0.188$, indicate that there is a 'little evidence of correlation' between these 2 factor scales. The correlation is not significant at the 0.01 level.
- The observed Pearson Correlation between *Entrepreneurial Orientation* and *Relative Performance of the Firm*, $r = 0.507$, indicate that there is a 'decided correlation' between these 2 factor scales. The correlation is also significant at the 0.05 level.

Comparing Table 9.10 with preceding Table 9.5 to 9.9, *Marketing Orientation* and *Entrepreneurial Orientation* is still the most strongly correlated among the 3 factors. This reflects the notion that activities undertaken in marketing orientation and entrepreneurial orientation cannot be devoid from each other in practice. Comparing Table 9.10 with 9.9 and 9.8 however, relationship between *Relative Performance of the Firm* and *Marketing Orientation* show marked decline for firms with turnover in the \$10 to \$40 million and over \$40 million categories. The latter suggests that marketing orientation is not a strong predictor of a firm's performance for firm with turnover greater than \$10 million.

9.3.3 *Marketing Orientation, Entrepreneurial Orientation and Relative Performance of the Firm Versus Respondents Education Level*

Respondents were divided via their education levels : (1) Non Tertiary; and (2) Tertiary¹⁴.

(1) Respondents with Non-Tertiary Education Level¹⁵

A Bivariate Correlations for the 3 factors : section B – *Marketing Orientation*, section C – *Entrepreneurial Orientation* and section D – *Relative Performance of the Firm* was undertaken by selecting respondents with non tertiary education level. The following table was obtained.

¹⁴ The respondents' education level is classified as either 'Non Tertiary' and 'Tertiary' as it was felt that a tertiary education in general would have better trained and equipped the respondents with the necessary skills and mental faculties to absorb and apply new knowledge.

¹⁵ As the survey questionnaires were administered to the entrepreneurs of the firms, respondents and entrepreneur educational level are treated as synonymous.

Table 9.11 Correlations between *Marketing Orientation*, *Entrepreneurial Orientation* and *Relative Performance of the Firm* for Respondents with Non-Tertiary Education Level

		<i>Marketing Orientation</i>	<i>Entrepreneurial Orientation</i>	<i>Relative Performance of the Firm</i>
<i>Marketing Orientation</i>	Pearson Correlation	1.000	0.502**	0.019
	Sig. (2-tailed)	.	0.009	0.928
	N	26	26	26
<i>Entrepreneurial Orientation</i>	Pearson Correlation	0.502**	1.000	0.316
	Sig. (2-tailed)	0.009	.	0.116
	N	26	26	26
<i>Relative Performance of the Firm</i>	Pearson Correlation	0.019	0.316	1.000
	Sig. (2-tailed)	0.928	0.116	.
	N	26	26	26

** Correlation is significant at the 0.01 level (2-tailed).

- The observed Pearson Correlation between *Marketing Orientation* and *Entrepreneurial Orientation*, $r = 0.502$, indicate that there is a 'moderately high correlation' between these 2 factor scales. The correlation is also significant at the 0.01 level.
- The observed Pearson Correlation between *Marketing Orientation* and *Relative Performance of the Firm*, $r = 0.019$, indicate that there is a 'little evidence of correlation' between these 2 factor scales. The correlation is **not** significant at the 0.01 level.
- The observed Pearson Correlation between *Entrepreneurial Orientation* and *Relative Performance of the Firm*, $r = 0.316$, indicate that there is a 'some degree of direct correlation' between these 2 factor scales. The correlation is however **not** significant at the 0.01 level.

The small number of respondents in this category (26) may be a contributing factor for the above observations.

(2) Respondents with Tertiary Education Level

A Bivariate Correlations for the 3 factors: section B – *Marketing Orientation*, section C – *Entrepreneurial Orientation* and section D – *Relative Performance of the Firm* was undertaken by selecting respondents with tertiary education level. The following table was obtained.

Table 9.12 Correlations between *Marketing Orientation*, *Entrepreneurial Orientation* and *Relative Performance of the Firm* for Respondents with Tertiary Education Level

		<i>Marketing Orientation</i>	<i>Entrepreneurial Orientation</i>	<i>Relative Performance of the Firm</i>
<i>Marketing Orientation</i>	Pearson Correlation	1.000	0.663**	0.439**
	Sig. (2-tailed)	.	0.000	0.000
	N	89	89	89
<i>Entrepreneurial Orientation</i>	Pearson Correlation	0.663**	1.000	0.562**
	Sig. (2-tailed)	0.000	.	0.000
	N	89	89	89
<i>Relative Performance of the Firm</i>	Pearson Correlation	0.439**	0.562**	1.000
	Sig. (2-tailed)	0.000	0.000	.
	N	89	89	89

** Correlation is significant at the 0.01 level (2-tailed).

- The observed Pearson Correlation between *Marketing Orientation* and *Entrepreneurial Orientation*, $r = 0.663$, indicate that there is a ‘moderately high correlation’ between these 2 factor scales. The correlation is also significant at the 0.01 level.
- The observed Pearson Correlation between *Marketing Orientation* and *Relative Performance of the Firm*, $r = 0.439$, indicate that there is a ‘some degree of direct correlation’ between these 2 factor scales. The correlation is also significant at the 0.01 level.
- The observed Pearson Correlation between *Entrepreneurial Orientation* and *Relative Performance of the Firm*, $r = 0.562$, indicate that there is a ‘decided correlation’ between these 2 factor scales. The correlation is also significant at the 0.01 level.

Comparing Table 9.12 with preceding Table 9.5 to 9.11, *Marketing Orientation* and *Entrepreneurial Orientation* is still the most strongly correlated among the 3 factors. This reflects the notion that activities undertaken in marketing orientation and entrepreneurial orientation cannot be devoid from each other in practice. Comparing Table 9.12 with Table 9.11 however, relationship between *Relative Performance of the Firm* and the other 2 factors - *Marketing Orientation* and *Entrepreneurial Orientation* shows a marked decline in comparison for entrepreneurs with non-tertiary education. This suggests that formal activities under marketing orientation and entrepreneurial as listed in the survey questionnaire is not a strong predictor of a firm's performance for entrepreneurs with non-tertiary education. Additional activities such as 'networking' may yet determine a firm's performance.

9.3.4 Summary of Finding – Inter-Sections Correlations

Table 9.5 in section 9.2 indicates significant interrelationship ($p < 0.001$) between *Marketing Orientation*, *Entrepreneurial Orientation* and *Relative Performance of the Firm*. Tables 9.6 and 9.7 in section 9.2.1 further show such interrelationships to be independent of the industry type – Goods or Service ($p < 0.01$). However, upon stratifying the respondent firms in terms of turnover, the interrelationship between these three research factors varies. For firms with turnover of below \$10 million, the interrelationship holds (Table 9.8). For firms with turnover between \$10 to \$40 million, *Marketing Orientation* is not significantly related to *Relative Performance of the Firm* (Table 9.9). For firms with turnover above \$40 million turnover, the interrelationship between *Marketing Orientation* and *Relative Performance of the Firm* further weakens while at the same time also showing sign of a somewhat reduced interrelationship between *Entrepreneurial Orientation* and *Relative Performance of the Firm* (Table 9.10).

In terms of entrepreneur education level, the interrelationship between *Relative Performance of the Firm* with *Marketing Orientation* and *Entrepreneurial Orientation* is not significant ($p > 0.11$) for Non-Tertiary education level entrepreneurs (Table 9.11). Among respondents with Tertiary education level, however, the interrelationship among the three research factors remain significant with $p < 0.001$ (Table 9.12).

While this research postulates a strong interrelationship between *Marketing Orientation*, *Entrepreneurial Orientation* and *Relative Performance of the Firm*, the preceding results in Table 9.5 to Table 9.12 show that the nature of these interrelationships may be affected by turnover of the firm as well as the education level of the entrepreneur when predicting the *Relative Performance of the Firm*.

In addition, comparing the Pearson Correlation r value, and the p significance level of *Marketing Orientation* with *Relative Performance of the Firm* and *Entrepreneurial Orientation* with *Relative Performance of the Firm* from Table 9.5 to Table 9.12, *Entrepreneurial Orientation* has a stronger correlation with *Relative Performance of the Firm* than *Marketing Orientation* across all tables. Overall, this shows that *Entrepreneurial Orientation* is a stronger predictor for *Relative Performance of the Firm* than *Marketing Orientation*.

9.4 Multiple Regression Analyses

The preceding section has identified a close interrelationship among the three factors - *Marketing Orientation, Entrepreneurial Orientation* and *Relative Performance of the Firm*. The nature of such relationship is next explored using multiple regression method.

While complexities in the real world are not necessary linear by nature this method provides a prompt way to link up a single endogenous or dependent variable with several exogenous or independent variables. Multiple regression using *Marketing Orientation* and *Entrepreneurial Orientation* as independent variables, is used to predict the *Relative Performance of the Firm*, the dependent variable. The multiple regressions would serve to show the extent of such relationship among these three factors, if any.

Multiple regressions for predicting the *Relative Performance of the Firm* are undertaken with respect to the following factors and context variables¹⁶ :

- *Marketing Orientation* and *Entrepreneurial Orientation*.
- The different sub categories of *Entrepreneurial Orientation*.
- The different sub categories of *Marketing Orientation*.
- *Marketing Orientation* and *Entrepreneurial Orientation* for different industry sector – Goods and Service.
- *Marketing Orientation* and *Entrepreneurial Orientation* for different categories of firm sales turnover.
- *Marketing Orientation* and *Entrepreneurial Orientation* for different respondents' educational level – Non Tertiary and Tertiary.

While the preceding chapter 8 and Table 9.4 of chapter 9 have identified the set of questions under research factor *Industry Environment* to be weak, linear regressions are still undertaken with inclusion of this factor for completeness.

The details results of the statistical computation are provided in Appendix VII *Multiple Regression*.

¹⁶ With the exception of the different categories of *Entrepreneurial Orientation*, all other multiple regressions undertaken are extended investigations of the correlation tables presented in Table 9.5 to Table 9.12.

9.4.1 Multiple Regression - *Relative Performance of the Firm (Perf)* with *Marketing Orientation (MO)*, *Entrepreneurial Orientation (EO)*, *Industry Environment (IE)* and *Size of Firm* as Independent Variables

The preceding Table 9.8 to 9.10 have found the relationship between *Relative Performance of the Firm (Perf)* and *Marketing Orientation (MO)* to vary with the size of the firm in terms of sales turnover. To explore the relationships further a series of linear regression were performed with *Size of the firm* as an additional independent variable. The detail results can be found in Appendix VII *Multiple Regression* Table V.62 to Table V.76. A summary of the results of the computations are tabulated in Table 9.13 below.

The respondents' background is divided into (i) *Goods Industry*, (ii) *Service Industry*, (iii) *Non-Tertiary Education Level*, (iv) *Tertiary Education Level* and (iv) *All Background* ie a composite of (i), (ii), (iii) and (iv).

Examining the columns of standardized beta values of *MO*, *EO*, *IE* and *Size* in Table 9.13 the following can be observed :

- Compared to *Marketing Orientation (MO)* and *Entrepreneurial Orientation (EO)* the independent variables *Industry Environment (IE)* and *Size of firm* in terms of sales turnover do not contribute as much to *Relative Performance of the Firm*.
- *Entrepreneurial Orientation (EO)* contributes the most to *Relative Performance of the Firm* irrespective of respondents' background. The corresponding t statistics p values are also significant at the 0.05 level when compared to the higher *MO*, *IE* and *Size* p values.
- While *Marketing Orientation* and *Entrepreneurial Orientation* have consistently highest r values across Table 9.5 to Table 9.12 this is not translated into *Marketing Orientation* also being a good predictor of *Relative Performance of the Firm* when compared with *Entrepreneurial Orientation*

Table 9.13 Relative Performance of the Firm - with MO, EO, IE and Size as Independent Variables

Respondents' background	Marketing Orientation (MO)+	Entrepreneurial Orientation (EO)+	Industry Environment (IE)+	Sales Turnover of Firms (Size)+	R ² ++	F statistics Sig value*	T statistics Sig value (MO)**	t statistics Sig value (EO)**	t statistics Sig value (IE)**	t statistics Sig value (Size)**	No of Cases N
Goods	0.448	0.455	0.046	0.043	0.962	0.000	0.087	0.090	0.750	0.330	54
Service	-0.027	0.916	0.050	0.067	0.973	0.000	0.891	0.000	0.627	0.032	62
Non-Tertiary	0.140	0.683	0.076	0.118	0.958	0.000	0.654	0.048	0.679	0.067	26
Tertiary	0.158	0.753	0.049	0.036	0.970	0.000	0.423	0.000	0.622	0.217	87
All Background	0.180	0.725	0.038	0.056	0.967	0.000	0.249	0.000	0.652	0.029	116

Note : The coefficients for the independent variables are standardized beta values.

- * The beta values for MO, EO, IE and Size are all in standardized form to facilitate comparison since they are all in the same units of measure.
- ** R² is the coefficient of determination. It measures the proportion of variation of the dependent variable (*Relative Performance of the Firm*) explained by the independent variables (MO, EO, IE and Size) in the linear regression equation.
- * F = (mean squares of regression)/(mean squares of residual). A large value F indicates small residual value ie smaller difference between observed values and those predicted from the computed linear regression equation. A small significance level (less than 0.01 or 0.05) indicates that the results probably are not due to random chance.
- ** The t statistic used to test the null hypothesis that there is no linear relationship between a dependent variable and an independent variable or, in other words, that a regression coefficient is equal to 0. When the significance level is small (less than 0.10) the coefficient is considered significant. The t statistic Sig value is the conditional probability that a relationship as strong as the one observed in the data would be present, if the null hypothesis were true. It is often called the p-value. Typically a value of less than 0.05 is considered significant.

Note :

Q10 and Q11 of Section B of the questionnaire are excluded from the computation of *Marketing Orientation* as they are considered to be unreliable questions. Q6 of Section C of the questionnaire is also excluded from the computation of *Entrepreneurial Orientation* as it is considered to be an unreliable question. Refer to discussion in 8.3.2 for the dropping of these questions from computation.

9.4.2 Multiple Regression - *Relative Performance of the Firm (Perf)* with sub dimensions of *Marketing Orientation (MO)* and *Entrepreneurial Orientation (EO)* and *Industry Environment (IE)* as Independent Variables

To attain a better understanding of the *Relative Performance of the Firm*, a series of further regressions were performed using the sub categories of *Marketing Orientation* and *Entrepreneurial Orientation*. The detail results can be found in Appendix VII *Multiple Regression* Table V.78 to Table V.93a. A summary of the results of the computations are tabulated in Table 9.14 below.

The following general observation can be noted from the table :

- The dominant sub category of *Entrepreneurial Orientation* is *Catalytic Entrepreneur (CE)*. In terms of the entire regression this category is the single most important predictor of the *Relative Performance of the Firm (Perf)*.
- The dominant sub category of *Marketing Orientation* is *Customer Orientation (CustO)*.
- *Sales Turnover of Firms (Size)* has comparable contribution to the *Relative Performance of the Firm (Perf)* as *Customer Orientation (CustO)*.
- *Industry Environment (IE)* has minimal contribution to *Relative Performance of the Firm (Perf)*.

One of the problems with the model reported in Table 9.14 is that there are a large number of explanatory variables, many of which are insignificant. This makes it difficult to identify the specific drivers of performance. To reduce this problem and to identify the few significant variables that can be used to predict the *Relative Performance of the Firm (Perf)*, a stepwise regression was undertaken. The results are shown in Table 9.16. It reiterates the above findings, namely,

- The two variables that can be used to predict the *Relative Performance of the Firm (Perf)* are *Catalytic Entrepreneur (CE)* and *Customer Orientation (CustO)* respectively.

This implies that entrepreneurs who are willing to innovate (catalytic) and are customer focused (customer orientated) achieve higher level of performance for their firms.

Table 9.14 Relative Performance of the Firm – with MO & EO sub categories, IE and Size as Independent Variables

Respondents' background	Marketing Orientation Sub Categories				Entrepreneurial Orientation Sub Categories				Industry Environment (IE)	Sales Turnover of Firms (Size)	R ²	No of Cases N
	Customer Orientation (CustO)	Competitor Orientation (CompO)	Long Term Goals (LT)	Information-Interfunctional (II)	Catalytic Entrepreneur (CE)	Strategic Entrepreneur (SE)	Allocating Entrepreneur (AE)	Refining Entrepreneur (RE)				
All background	0.130	-0.022	-0.033	-0.043	0.450	0.131	0.127	0.148	0.029	0.168	0.330	112

Collinearity Statistics - VIF	1.799	1.769	1.412	1.381	1.610	1.560	1.290	1.291	1.220	1.061
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Note : The coefficients for the independent variables are standardized beta values. Five of the 118 respondents did not fill up their education level. The sub category *Long Term Goals (LT)* is computed using only Q12 and Q13 of Section B. Q10 of Section B is dropped from computation as it is unreliable. The sub category *Refining Entrepreneur (RE)* is computed using only Q7 of Section C. Q6 of Section B is dropped from computation as it is unreliable. Refer to discussion in 8.3.2 for the dropping of these questions from section B and C. The values for the sub-categories of Marketing Orientation and Entrepreneurial Orientation are computed from factor scores instead of using *Unweighted Factor-Based Scale Method* to eliminate the presence of multi-collinearity between these sub-categories.

Table 9.15 Relative Performance of the Firm – associated t Statistics of MO & EO sub categories, IE & Size Variables

Respondents' background	F statistics Sig value	Marketing Orientation Sub Categories t statistics Sig Value				Entrepreneurial Orientation Sub Categories t statistics Sig Value				t statistics Sig value (IE)	t statistics Sig value (Size)	No of Cases N
		CustO	CompO	LT	II	CE	SE	AE	RE			
All Background	0.000	0.149	0.811	0.697	0.641	0.000	0.141	0.158	0.092	0.740	0.045	112

Table 9.16 Relative Performance of the Firm – Stepwise Regression to Identify Significant Variables

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	18.045	.337		53.507	.000		
	Catalytic Entrepreneur (factor score value)	2.077	.353	.490	5.890	.000	1.000	1.000
2	(Constant)	18.065	.329		54.881	.000		
	Catalytic Entrepreneur (factor score value)	1.948	.348	.459	5.604	.000	.979	1.021
	Customer Orientation (factor score value)	.843	.330	.210	2.556	.012	.979	1.021

9.4.3 Summary of Findings - Multiple Regressions

From the preceding discussion on Table 9.5 to 9.15, the summary findings with respect to the survey data are:

- *Entrepreneurial Orientation* is a better predictor of *Relative Performance of the Firm* than *Marketing Orientation*. This finding is reflected in Table 9.5 to Table 9.12 of the preceding section where the correlation r value for *Entrepreneurial Orientation* and *Relative Performance of the Firm* is higher than the r value for *Marketing Orientation* and *Relative Performance of the Firm*.
- In comparison, while *Marketing Orientation* and *Entrepreneurial Orientation* have consistently highest correlation r values across Table 9.5 to Table 9.12 this is not translated into *Marketing Orientation* also being a good predictor of *Relative Performance of the Firm* generally¹⁷.
- *Industry Environment (IE)* does not exert a significant influence on *Relative Performance of the Firm (Perf)*.
- The dominant sub category of *Entrepreneurial Orientation* is *Catalytic Entrepreneur (CE)*.
- The dominant sub category of *Marketing Orientation* is *Customer Orientation (CustO)*.
- The set of 11 questions¹⁸ in section C - *Entrepreneurial Orientation (EO)* provides a good gauge in determining the *Relative Performance of the Firm (Perf)*.

¹⁷ The exception being in 3 of the linear regression computations (i) \$10 to \$40 million turnover and Goods Industry; (ii) Over \$40 million turnover and Service Industry; (iii) All Turnover and Goods Industry.

¹⁸ Note : While the survey questionnaire has 12 questions for section C – *Entrepreneurial Orientation (EO)*, question No 6 COMPADV ('Our competitive advantage is based on effective internal cost controls') was removed from further statistical computation from section 9.3 onwards due to its low reliability and weak intra-section /factor scale correlation (cf discussion at section 8.2.2 and section 9.1 Table 9.2 respectively).

The theoretical model constructed from survey of the literature and deliberation has propounded mathematically:

$$\text{Relative Performance of the Firm (Perf)} = f \{ \text{Marketing Orientation (MO),} \\ \text{Entrepreneurial Orientation (EO),} \\ \text{Industry Environment (IE) } \}$$

The preceding multiple regressions have narrowed down the model into:

$$\text{Relative Performance of the Firm (Perf)} = f \{ \text{Marketing Orientation (MO),} \\ \text{Entrepreneurial Orientation (EO) } \}$$

While the above findings do not validate the theoretical model completely it confirms that *Marketing Orientation (MO)* and *Entrepreneurial Orientation (EO)* do influence the *Relative Performance of the Firm (Perf)* to a significant extent.

The main implication is that entrepreneurs who are willing to innovate (catalytic entrepreneur) and who are also customer focused (customer orientation) tend to achieve higher levels of performance.

Chapter 10

Summary and Conclusion

10.1 Introduction

This chapter summarises and concludes the research findings and contributions made in the process. The purpose is to identify the extent to which the research objectives have been met and to discuss the implications that the results of the empirical survey may have. This chapter is divided into 3 sections. Section 10.2 provides a summary of the key findings and draw conclusions with regard to the conceptual framework. Section 10.3 discusses the contributions of this research, the limitations and any suggestions for future research. Section 10.4 discusses any possible theoretical, methodological and managerial implications that may be derived from this research and its findings.

10.2 Summary of Research

This research has been structured and presented in ten chapters developed to meet the research objectives. Within these ten chapters, three distinct parts may be discerned. The first part comprising Chapters 1-3 discuss the theoretical bases of marketing orientation and entrepreneurial orientation and their application as management philosophies and approach to running businesses. The second part comprising Chapters 4-7 concerns mainly with the development of the conceptual framework and hypotheses within the context of SMEs in Singapore as well as the research methodology employed. The third part comprises Chapters 8-10 which discuss the empirical survey and findings.

Chapter 1, the introductory chapter, aims to provide a preamble on the context of the research and a discussion of the key issues surrounding the decline in entrepreneurship in Singapore. The various reasons for this decline are discussed. The rationale behind the government's efforts to revitalize the entrepreneurial drive of Singaporeans is also discussed.

In Chapters 2-3 the literature on marketing and entrepreneurship are explored. Many theories on entrepreneurship are evident, ranging from viewpoints that entrepreneurs are born to those that expound that the environment can foster entrepreneurship. It would be interesting to see if the concerted government formal efforts to foster entrepreneurship in Singapore will bear fruits. In terms of running a business, an entrepreneurial orientation is but only one side of the coin. It has been

argued that marketing is the other side of the same coin, and one really is home to the other and vice versa. The literature on marketing orientation are reviewed and the many issues pertaining to its interface with entrepreneurship are discussed. To what extent the interface is relevant thus becomes part of the key theme in this research

The second part of the research comprising Chapters 4-7 formulates a theoretical framework and proposes 3 key hypotheses arising from the conceptual framework developed.

In Chapter 4, a conceptual framework is proposed and 3 key hypotheses are derived. The conceptual framework is developed from a number of sources in the literature. First, the literature on entrepreneurship and entrepreneurial orientation are reviewed. These include the work of Miller (1983), Morris & Paul (1987), Casson (1990), Martin & Vale (1990), Woo et al (1991), Miles & Arnold (1991), Morris & Lewis (1995) and others. The key criteria indicating an entrepreneurial orientation are then established from literature reviewed, largely from Morris & Paul (1987). Second, the literature on marketing and marketing orientation are reviewed and these include the work of Kohli & Jaworski (1990), Narver & Slater (1990), Day (1991), Ruekert (1992), Hooley, et al (1998), Kotler (2003) and others. The constructs suggested by Kohli & Jaworski (1990) and Narver & Slater (1990) are synthesized. Such synthesis has been adopted by many other researchers on market orientation. (Diamantopoulos & Hart, 1993; Deng & Dart, 1994; Gray, et al., 1998; Appiah-Adu, 1998; Han, et al., 1998; Holey, et. al., 1998; Mavondo, 1999; Matsuno & Mentzer, 2000; Harris, 2002; Noble, et al., 2002). Third, the literature on marketing-entrepreneurship interface are reviewed and discussed. These include the work of Morris & Paul (1987), Miles & Arnold (1991), Ward et al (1992), Hills (1994), Gardner (1994), Hisrich (1994), Morris & Lewis (1995), Carson et al (1995), Chaston (1997) and others. These are then synthesized to formulate the main hypotheses with regard to the marketing-entrepreneurship interface.

Chapter 5 discusses Singapore as the context for the research. It traces the economic development of Singapore from its independence in 1965 to the present time. Four phases of economic growth are identified using the 1960s, 1970s, 1980s and the 1990s as key markers. The main theme in Chapter 5 is the discussion of Singapore as an ideal context for this research, being a developed economy, a relatively successful mixed economy system in a highly competitive and changing world. It currently stands at the threshold of a new era in political, social and economic management changes as it attempts to reinvent itself to face the new environment.

In Chapter 6, the research methodology and design are discussed. The main approach is to incorporate both qualitative and quantitative aspects in the research methodology. In the qualitative research area, in-depth interviews were conducted with 16 targeted entrepreneurs whose input would be helpful and meaningful. The preliminary analyses of these in-depth interviews are discussed in Chapter 7. These interviews contribute greatly to the clarifications of terminologies which respondents in the main empirical survey may misunderstand. Consequently, a survey questionnaire is designed based on the literature review and the in-depth interviews. Sampling and other related issues pertaining to the main empirical survey are discussed in Chapter 6. To ensure that only qualified respondents are given the survey questionnaire, a highly personal and focused approach was undertaken. Measures were also taken to improve the response rate to the mail survey.

The third and final part of the research comprising Chapters 8-9 essentially covers the descriptive data analysis as well as correlation & regression analyses of the research findings, with Chapter 10 being the concluding chapter. In Chapter 8, the descriptive analysis are undertaken using tabulations, bar charts, pie charts as well as factor analyses.

In Chapter 9, more in-depth analyses are undertaken using correlation and regression analyses to test the 3 hypotheses proposed in Chapter 4. The following summarises the key findings arising from the analyses:

- There is some fit in between Marketing Orientation (MO) and Entrepreneurial Orientation (EO)
- There is some fit between Marketing Orientation (MO) and firm's performance (Perf)
- There is a strong fit between Entrepreneurial Orientation (EO) and firm's performance (Perf)
- There is very poor fit between Industry Environment (IE) and both Marketing Orientation (MO) and Entrepreneurial Orientation (EO)

10.3 Contributions , Limitations and Suggestions for future research

The research has tried to blend the two separate disciplines of marketing and entrepreneurship and to see how best they interface in an actual situation and this in itself may be considered a major contribution. Although discussions on the marketing-entrepreneurship interface are available in the

literature, much of these have provided theoretical arguments for and against their convergence. Thus, the *first* major contribution of this research is towards the study of the marketing-entrepreneurship interface in small and medium size enterprises. Increasingly, small and medium size enterprises play an important role in the global economy and an understanding of the contribution of marketing and entrepreneurship to their success is important.

The *second* major contribution of the research is to the study of the marketing-entrepreneurship in the context of an Asian economy in general and Singapore in particular. There have been no such studies in Singapore and for this reason it could make a significant contribution to the understanding of how such an interface might be essential to the success of other countries as they attempt to develop their small and medium size enterprises as engines of growth. Asian economies have largely depended on investments by Western Multinational Corporations (MNCs) to fuel the growth of their economies. This research can contribute to the understanding of how the marketing-entrepreneurship interface can be developed, encouraged and managed in small and medium size enterprises so that they can play a crucial role in Asian economies. Specifically, it is of relevance to the Singapore as there has been an ongoing national effort to foster entrepreneurship to add more buzz to the economy. Hopefully, over time entrepreneurship may become another wing to the economy thus balancing the economy's over-reliance on foreign investments. It is especially helpful as the Economic Development Board (EDB) has been given the mandate to help develop up to 100 Promising Local Enterprises (PLEs) with potential to become world class MNCs equal to the best. An understanding of how the marketing-entrepreneurship can contribute to the success of local small and medium size enterprises would be helpful in this mission.

The *third* contribution of this research lies in the conceptual framework which may help to bridge the gap between the disciplines of marketing and entrepreneurship. Although both disciplines appear to be separate and distinct, in many areas they do converge and overlap. Marketing as a concept has developed over many years and can provide formal frameworks which practitioners could call upon to analyse issues and implement programmes. Entrepreneurship, on the other hand, cannot call upon definite established frameworks with which the practitioner could analyse issues or implement programmes. Many believe that entrepreneurship is largely inborn and while business skills like marketing can be taught, the spirit and courage to take risks cannot be taught. However, the criteria for establishing an entrepreneurial orientation in a firm have been successfully tested in this research and can thus be effectively relied upon as a gauge of a firm's performance in the context of small and

medium size enterprises. The combination of criteria for a marketing orientation and criteria for entrepreneurial orientation as a conceptual framework for the firm's performance can thus be considered useful contribution to knowledge in these two fields of study.

However, like all research studies this particular research is not without its limitations. One limitation is that the entrepreneurs surveyed are predominantly Chinese. Being traditionally conservative by nature, these entrepreneurs do not readily volunteer information or discuss their thoughts publicly or with strangers without reliable relationships, connections or networking. This web of networks, commonly referred to as 'guanxi', was employed to reach the targeted entrepreneurs. Consequently, those who responded to the two phases of research were those who were willing to participate. On the other hand, those entrepreneurs who did not respond to the survey or were not willing to participate did not have their input considered.

The timing of the survey also be a limitation. The empirical survey was conducted largely before and after the full impact of the Asian Financial Crisis was felt. Had the survey been conducted during the peak of the financial crisis or during later crises like the terrorist attack on the World Trade Center at New York (2001), the terrorist bombing at Bali (2002), the war in Iraq (March 2003), the SARS outbreak (March 2003), and the Marriot bombing at Jakarta in October 2003, respondents' input might have been different.

Another limitation has to do with the limited variables in the research model. Since the majority of the respondents have a tertiary education, by default the findings represent the viewpoints of the educated entrepreneurs. It would be interesting to find out if the older generation of entrepreneurs with lesser education might have provided an entirely different perspective. Although the implementation of the survey might be problematic, particularly with language and translation from English to Mandarin and Chinese dialects, the findings could have been totally different.

Future research studies into the marketing-entrepreneurship interface in SMEs might consider some key modifications. First, the research could be longitudinal in nature, with the same respondents being surveyed over a number of years to determine if their input on the same variables would change over time. In addition, it would be useful to focus the research on older entrepreneurs and those without much formal education. This is especially useful because the older generation of entrepreneurs tend to rely heavily on hard work and informal approaches to networking and building

their businesses. In particular, these entrepreneurs tend to keep their businesses within the family and their insights on the marketing-entrepreneurship interface would be useful in understanding the issues involved.

In addition to modifying or including other variables into the research model, future research studies could perhaps modify the measurement criteria for marketing and entrepreneurial orientations taking into consideration the context of Singapore. One key constraint facing entrepreneurs in the pursuit of growth is access to financing. This in turn affects the expansion of their businesses in terms of product lines, market segments and regional or global expansions. These and other related criteria could have been factored into the measurement criteria. Since the Economic Development Board (EDB) has the mandate to help turn Promising Local Enterprises (PLEs) into world-class global enterprises of the future, the criteria used by EDB for establishing such PLEs could also be included as variables or criteria in the survey questionnaire. Such an approach might provide further insights on whether those firms surveyed could be potential PLEs and also whether cor-relationships exist between marketing-entrepreneurship and these PLEs.

10.4 Implications of Findings

There are a number of implications which may be derived from the findings of this research on the marketing-entrepreneurship interface. The *first* implication is that entrepreneurs in general should consider both marketing and entrepreneurship as being important to their businesses. However, between the two disciplines, it would appear that an entrepreneurial orientation has a far better correlation to the firm's performance. This is significant because while entrepreneurs understand the importance of marketing, they consider an entrepreneurial orientation as even more critical to the success of the firm. This would indicate that for small and medium size companies to survive and thrive, a continuous entrepreneurial orientation should prevail. Larger corporations generally have much more resources, financial and otherwise, as well as economies of scale in many aspects of their operations to develop marketing as a philosophy and function of business management. In contrast, small and medium size enterprises do not have the luxuries of such resources at their disposal to mount formal marketing management development programmes. To overcome these constraints, it might be a valid argument to adopt a more entrepreneurial outlook as the firm grows. While larger firms could rely heavily on marketing to drive their businesses, smaller businesses need to be more entrepreneurial to remain in business. That is not to say that smaller firms should disregard

marketing. What it implies is that marketing is already be a given factor, ie, the products and services offered by SMEs should already meet or exceed customers needs and the firms are competitive in the first place. Marketing expertise is thus the basic element in successful small firms Storey, 1994).Therefore, the first major implication is that SMEs in Singapore must not only remain marketing and entrepreneurially oriented, but also strategic as well. Strategic management is an essential element in the continued survival of SMEs and should not be neglected. (Wheelen & Hunger, 2002; Johnson & Scholes, 2002; Beaver, 2002; David, 2002) As SMEs grow, they tend to reach a stage researchers refer to as '*hitting the growth wall*' where operations reach out-of-control proportions, cash flow problems emerge and key employees leave for more stable jobs (Kuratko & Hodgetts, 2001; Hisrich & Peters, 2002). By adopting strategic management, entrepreneurs can anticipate and navigate through these stumbling blocks and move on to the next growth curve. New venture success can be enhanced if entrepreneurs follow some simple guidelines in managing the business strategically (Hofer & Sandberg, 1987). Small firms tend to go through various stages as part of the organizational life cycle. The growth stage often signals the beginning of a metamorphosis from a personal venture to a group-structured operation. Entrepreneurs need to confront the many fundamental changes confronting small firms in the growth stage. (Chandler, 1962; Greiner, 1972; Churchill & Lewis, 1983; Duck, 1993; Kuratko & Hodgetts, 2001; Hisrich & Peter, 2002). To manage the transition successfully, entrepreneurs need to consider the following: (i) the entrepreneur needs to envision and anticipate the firm in a larger entity, (ii) the team needed for tomorrow is hired and developed today, (iii) the original core vision of the firm is constantly and zealously reinforced, (iv) new 'big-company' processes are introduced gradually as supplements to, rather than replacements for, existing approaches, (v) hierarchy is minimized and (vi) employees hold a financial stake in the firm. (Hambrick & Crozier, 1985) Small firms which actively set out to seek growth tend to share four common characteristics: (i) there is a shift in the product/service markets in which they operate, (ii) the ability to develop managerial teams, often being able to hire managers who had worked in large firms, (iii) businesses with 10 and 50 employees have the greatest difficulty recruiting staff, a substantial barrier that must be overcome to achieve growth and (iv) more rapidly growing small firms generally have particular expertise in marketing when the business is started. (Storey, 1994) The key factors entrepreneurs must understand during the growth stage are: (i) control, (ii) responsibility, (iii) tolerance of failure and (iv) change.(Kuratko & Hodgetts, 2001)

The *second* implication for firms and management lies in the research methodology for social researches of this nature, in particular researches requiring inputs or interviews with successful

entrepreneurs in the context of Singapore. Although at the surface Singapore has very developed economic infrastructure, beneath this veneer, some cultural traditions remain unchanged. It would be useful for researchers to bear this in mind when conducting research surveys or interviews requiring the co-operation and participation of entrepreneurs. The per capita income of Singapore is among the highest in Asia and it has been consistently voted among the top in terms of the freest and competitive economy in the world. The education standard is also impressive with about 20% having a university education. Despite these apparent appearances of a highly developed society, a level of conservatism exists beneath the surface. Entrepreneurs in particular still rely heavily on personal networking and connections in their dealings with people. This web of inter-connectivity or 'guanxi' can be a double-edged sword for them. For example, entrepreneurs are reluctant to respond to surveys or requests for interviews unless they know the researchers directly or indirectly through influences or recommendations within their 'guanxi' network. This essential lubricant when dealing with Chinese businessmen has been covered extensively in the literature. (Chen, 2001; Reynolds, 2002). While this reliance on 'guanxi' may be interpreted as a form of entrepreneurial behaviour, it has a negative connotation as well. To be successful, entrepreneurs need to grow their businesses by seeking new opportunities beyond the domestic marketplace and this can only happen if they broaden their horizons and be open to new ideas that may challenge their established worldview. In addition, they need to be more open to meeting new people, including being accessible to interviews and surveys by students and professional researchers. They should not look at surveys and requests for interviews with suspicion or as a waste of their precious time, something from which they cannot extract any business mileage. Nevertheless, the major implication for marketing or entrepreneurship researchers, therefore, is the need to develop a network of contacts to reach their target respondents (Andreasen, 2002) and the need to provide meaningful incentives that will encourage the willing participation of entrepreneurs in surveys. (Cavusgil & Elvey-Kirk, 1998). In this particular research, a number of incentives meaningful to the participants were employed. For the qualitative phase of the research, ie, in-depth personal interviews, participating entrepreneurs were given mileage in the form of articles written about their experiences published in a leading magazine, *Asia 21*, which was circulated internationally. In the quantitative phase of the research, ie, the mail survey, the key incentive offered was in the form of a book featuring some of the entrepreneurs surveyed. A final incentive was in the form of an invitation to participating entrepreneurs to attend the launching of the book, *Singapore Savvy*, during the International Summit of the World Association of Small and Medium Enterprises (WASME) held in Singapore in 2000.

The *third* major implication of the research has relevance for government planning . Since the current ongoing focus of the government's economic planning is to actively promote local entrepreneurship as an additional engine to drive the economy forward into the future, there are some useful implications that might be helpful to planners. In EDB's quest to help develop 100 Promising Local Enterprises (PLEs) into world-class global Multinational Corporations (MNCs), more attention has been paid to the larger local companies who are already successful as regional players and who have already established themselves as potential global corporations. It is time the EDB and other relevant government agencies look at the second or third tier candidates like those firms who participated in this research. It is important to have an eye on the future and be more strategic in developing tomorrow's winners instead of focusing on today's successful firms. To be fair, the government has been introducing concrete measures to foster entrepreneurship in Singapore as discussed in Chapter 1. However, these measures, which include selective start-up funding, removing rules and regulations which stifle enterprise, organizing local networking among entrepreneurs, and other similar measures, are only useful as starting points. A sustainable holistic approach need to be considered. More can be done for these SMEs in the areas of market and product development for the global markets as well as in the area of global networking. Specifically, the government can undertake the following: (i) adjust the criteria for recognizing Promising Local Enterprises (PLEs) to accommodate more SMEs; in this way, more SMEs will qualify as PLEs and leapfrog into the global marketplace as global firms (Straits Times, 29 Jan 2003); (ii) provide training and tools to help SMEs in strategic planning and management, marketing development , marketing planning and operational planning & implementation ; fees incurred in hiring consultants for this can be subsidized to some extent; (iii) provide a mentoring scheme for entrepreneurs in SMEs who can be assigned specific consultants and / or other successful entrepreneurs who will guide them through the various growth phases (iv) provide more assistance in linking local SMEs with potential partners and markets overseas; one suggestion is that government officials, particularly diplomats who are based overseas, should see themselves not just as diplomats, but also as 'marketers' and 'salespeople' pro-actively promoting local SMEs overseas and linking them with potential opportunities. (v) encourage and facilitate the setting up of an 'SME Bank' catering specifically to the financial needs of SMEs; ss revealed in various surveys, SMEs have consistently rated their problems as: (i) servicing loans, (ii)obtaining credit from banks, (iii) high operating costs, (iv) delayed customer payments, (v) declining sales and (vi) cash flow problems. (The Straits Times, 10 April, 2002; SME 21; The Straits Times, 16 September 2003). However, in fostering entrepreneurship, the government must strike a balance between the necessity to provide a

favourable environment for entrepreneurship to thrive and the danger of becoming a permanent crutch for entrepreneurs. As pointed by Storey (1994), government “needs to do less and better, rather than more and worse”. The key message is that it can and should create a suitable macroeconomic framework within which firms can prosper. (Storey, 1994: pp 315)

In conclusion, the findings of this research have implications for not only entrepreneurs, managers and SMEs, but also for other researchers and government planners. It is useful for managers and entrepreneurs to take a strategic view of marketing and entrepreneurship. While both disciplines have some similarities as well as differences, they can be seen as being both sides of the same coin. Both are different and yet complementary and one cannot exist effectively without the other. A strategic approach to managing marketing and entrepreneurial orientations is important. The findings are also useful to government planners who need to adopt a more strategic approach to propel SMEs forward into the global market place. SMEs must respond by benchmarking and competing with the best in the world if they wish to remain competitive in the future. They must be willing to spend more on training their employees to the highest level. Currently, only 1 in 3 small firms invest in training their staff and this is obviously not satisfactory. (Straits Times, 12 November 2003). SMEs also need to be more nimble and flexible. Currently, small firms tend to be top-down in their management because of an intimate and protective sense of ownership. (Straits Times, 9 December 2003). Such an obsolete mindset must change. They must learn to shed bureaucracy and be prepared to share or even relinquish ownership of their firms to meet the challenges posed by a changing world. They must look beyond the domestic and regional marketplace and see the global market as their future.

Aide-memoire

QUESTIONS	CODES / NOTES
<p><u>Part 1 : Individual Data</u></p> <p>a. Name of entrepreneur: b. Age: c. Date venture started: d. Occupation prior to becoming entrepreneur:</p> <p><u>Part 2 : About the venture</u></p> <p>a. Name of the company: b. What is the nature of the entrepreneurial activity? c. What are your long-term goals for this venture?</p> <p><u>Part 3: Background to the venture</u></p> <p>a. How did this venture come about? b. What were your reasons / motivations for becoming entrepreneur? c. Were there any special circumstances that trigger this move? d. If yes, please explain</p> <p><u>Part 4: Experiences as entrepreneur</u></p> <p>a. What were the most difficult situations / problems you have faced as entrepreneur? b. How did you resolve these difficulties? c. What have been the high points in your entrepreneurial career so far?</p> <p><u>Part 5: Success factors</u></p> <p>a. To what extent is the success of this particular entrepreneurial activity attributed to the following factors?</p> <ul style="list-style-type: none"> - The present economic system in Singapore - The current stage of Singapore's economic development - Your own strategic orientation / direction as entrepreneur - The particular type of entrepreneurial activity in question - Others <p><u>Part 6 : Marketing – entrepreneurship interface</u></p> <p>a. What do you understand by the term 'marketing'? b. Is marketing essential in this venture? c. Explain how marketing is used in this venture d. To what extent is entrepreneurship important in this venture? e. Explain the extent of the marketing – entrepreneurship interface in this venture.</p>	<p>E-SYS. E-DEV. S-ORI. E-ACT OTH.</p> <p>MKT-O MKT-O ENT-O MKT-ENT.</p>

LIST OF INTERVIEWEES

S/No.	Date interviewed	Name	Sex	Age	Company	Business
1	Dec 96	Christopher Gay	Male	Mid 30s	Andersen's Ice-Cream	Master Franchisor
2	Dec 96	Kee Luah	Female	Late 20s	Burke's Coffee	Café
3	Jan 97	K.C. Cheng	Male	Mid 40s	Suite Trading	Printing & trading
4	Jan 97	Benny Jensen	Male	Mid 40s	Densin	High – power water jets
5	Feb 97	Brian Cohen	Male	Mid 40s	SWI	Computer software
6	Feb 97	Sonia Tay	Female	50	Origins Healthcare	Organic food
7	March 97	Selina Ebenhoch Mei Lan	Female	Early 40s	Health Vision	Video production
8	June 97	Jason Juay	Male	Early 40s	Dragon Shokuhin	Food manufacturing
9	June 97	Alvin Lee	Male	Late 30s	Fantasy Castle Workshop	Outdoor beach toys
10	June 97	Robin Li	Female	Early 40s	Prima Research & Technologies	Health food supplements
11	June 97	Gwee Lin Kar	Male	Late 30s	Gwee Group	Retail of pagers and telephones
12	June 97	Bert Chong	Male	Mid 40s	Nobel Design Holdings	Design and renovations
13	June 97	Paul Curley	Male	Mid 40s	Q3 Outplacement	Human resource consulting
14	July 97	Albert Teo	Male	Late 40s	Amara Holdings	Hotel
15	July 97	Kenny Yap	Male	Early 30s	Qian Fu Fish Farm	Tropical fish export
16	August 97	Philip Choong	Male	Mid 40s	6M Technology	Consumer appliances

Summary Tabulation : Analysis of Personal Interviews

Entrepreneur	Entrepreneurial Activity (E-ACT)	Factors attributed to the success of this venture	Orientation towards Marketing (MKT - O)	Orientation towards Entrepreneurship (ENT - O)
1	Ice-cream retail franchisor. Business is an off-shoot from family's hotel business; with consensus from family to allow members to start separate businesses and seek individual success and also to avoid potential family conflict.	<p><u>E-SYS</u>: crucial, allows choices.</p> <p><u>E-DEV</u>: key factor, growing consumer affluence good for ice-cream business.</p> <p><u>S-ORI</u> : mostly from family encouragement and travel overseas. Got idea from a visit to Australia.</p> <p><u>E-ACT</u> : Timing in bringing ice-cream as alternative to the more established Haegen-Dazs.</p> <p><u>OTH</u> : Own undergraduate education in Canada a factor.</p>	<p><u>MKT-O</u>: Proactive in using marketing. Took MBA to learn how to manage better. Does basic marketing research (eg blind tests); seeks growth through franchising; uses promotion campaigns to stimulate sales; Tries to position ice-cream brand name in a variety of ways. Key marketing approach is to differentiate from Haegen-Dazs and others (eg emphasizing country [Danish] experience)</p>	<p>Believes strongly that marketing is essential in today's modern businesses. Takes a cautious and conservative approach to business expansion. Attributes this largely to upbringing by father who started hotel business in the early 1960s.</p> <p><u>ENT-O</u>: Entrepreneurship is being innovative but not just taking risks.</p> <p><u>MKT - ENT</u> : Both are crucial but degree of importance varies.</p>
2	Café selling up-market coffee and snacks catering to young executives and professionals. Got idea during university study at Seattle in the U.S. where such café are common. On returning to Singapore, decided to do something similar and teamed up with 2 friends to start business.	<p><u>E-SYS</u>: free economy a key factor.</p> <p><u>E-DEV</u>: customer tastes to be more discerning as a result.</p> <p><u>S-ORI</u>: Saw concept in US and recognised that it might be workable in Singapore.</p> <p><u>E-ACT</u>: Timing of activity important.</p> <p><u>OTH</u>: overseas experience as student a factor ; builds self-confidence and independence.</p>	<p><u>MKT-O</u>: Undertands importance of marketing as subject was studied in university. Recognises that size of operation cannot match big competitors like Starbucks so need to find niche market. Believes in personal marketing and tries to get to know customers well. Customers are of same age group (in their 20s) and understanding their needs is important. Offers only freshly brewed coffee and provides a cosy friendly ambience. Employs young staff who can interact with customers.</p>	<p><u>ENT-O</u> : important in seizing opportunities and having the courage to strike out and to persevere under difficult circumstances, especially in the initial stages. By itself, it is inadequate and at some stage marketing is important , especially in this business when contact with customers is on a daily basis and competition is stiff. Country / market is small & limited, so marketing is even more crucial. Consumers have so many choices in such a small geographic vicinity.</p> <p><u>MKT-ENT</u> : Both are important</p>

3	<p>Operates 2 businesses using same company name – import and export of canned food and sundry items and a printing operation. Used to work as a manager for several years in Cold Storage, a supermarket chain before venturing out to be an entrepreneur.</p>	<p><u>E-SYS:</u> Believes current system is good and a factor <u>E-DEV:</u> Recognises that growth will be slow and difficult to sustain and business will be affected. <u>S-ORI:</u> Choice of business based on previous work experience. <u>E-ACT:</u> Based on familiarity of the business and the need to survive. <u>OTH:</u> probably the fact that no one owes you a living and you need to fend for yourself.</p>	<p><u>MKT-O:</u> Exposed to marketing practices during period of employment in the supermarket chain. However, marketing is very much a western concept associated with big-budget and large corporations. For smaller firms, marketing is more limited to maintaining good personal relationships with customers and suppliers. Believes that long-term relationships are keys to successful marketing. Cultivates relationships as a matter of habit and develop friendships with as many people as possible ; some of them might become customers some day.</p>	<p>Is always on the lookout for new opportunities, in terms of new markets or new approaches to the market. Example – introduced concept of perpetual pictorial calender / diary with scenes of Singapore and marketing this to tourists in co-operation with the Singapore Tourist Promotion Board.</p> <p><u>MKT-ENT :</u> Formal marketing is not as important as developing an entrepreneurial instinct for opportunities.</p>
4	<p>Manufacture and marketing of a range of power water jet systems for industrial and home uses. Worked as design engineer for a company in the same business before being retrenched. Felt that market was still there and decided to remain in the same business. Teamed up with a colleague to make and market own brand of similar products.</p>	<p><u>E-SYS:</u> Initially felt the system to be stifling but have come to accept it as a key factor to the company's success. <u>E-DEV:</u> Vital to company's success as need for the product matches growth stage. <u>S-ORI:</u> Has to do with the business most familiar in. Avoids venturing into business not familiar with but would consider expansion into new geographical markets. <u>E-ACT:</u> This is an important factor as previous employer's exit from the market allowed me to seize and exploit the opportunities. <u>OTH:</u> Having a good partner who is local and an ex-colleague who can work together, share same vision and contribute ideas and effort.</p>	<p>Market orientation absolutely essential in modern business. Customer needs must be met more effectively. Competitive pressure means we need to be even closer to the market.</p> <p><u>MKT-O :</u> Examples include the introduction of smaller more affordable home models of the equipment; colourful and comprehensive brochures; participation in major exhibitions; trained sales staff; wide distribution and stockist networks; staff members from various nationalities to handle different customer and ethnic groups.</p>	<p>Marketing alone is inadequate in modern day business. An entrepreneurial outlook is essential because of the intensive competition and demanding customer expectations. These pressures mean that in addition to marketing, we need to be more entrepreneurial in bringing quickly to the market innovative products and / or innovative approaches.</p> <p><u>ENT-O:</u> Marketing success brought a different problem eg brand imitation by some competitors in Indonesia. Formal approach to solving problem may not be ideal and we need to be more innovative.</p> <p><u>MKT-O:</u> Both are essential and equally important . Both work hand in hand.</p>

5	<p>Writing and marketing of specialized integrated computer software for use in hospitals. Started work in computer field in stockbroking firm which collapsed. Decided to stay as entrepreneur and offered services to industry.</p>	<p>E-SYS: Generally the system is proactive towards business and contributes to success of venture eg in awarding grants for high-tech developments.</p> <p>E-DEV: Business started as emphasis on computerization was taking off. Being among the first qualified computer professionals at the scene was a big advantage.</p> <p>S-ORI: This has to do with previous training and professional qualifications in computer science. Has a PhD in this area and direction more or less predictable.</p> <p>E-ACT: Activity selected was the right one at the right time at the right place. The rest is matter of getting clients and working hard.</p> <p>OTH: Adverse experiences an influence as job was lost during employment when company closed down . Also physical handicap a motivating factor.</p>	<p>Company has been too technically-oriented , focusing on expertise in writing and implementing superior software programmes for large clients. A major weakness of the company has been a lack of marketing. Although the company is technically strong and respected for its innovative software packages, it has no marketing people to follow up with clients or to pacify them when necessary. Also, there is no concerted effort to develop new businesses.</p> <p>MKT-O: Intends to be more marketing orientation and to start hiring people who can be customer-oriented as well as technically sound. Also will be more proactive in seeking new businesses and mapping growth strategy.</p>	<p>Marketing is essential to the entrepreneur . Having an innovative product but not knowing how to market it properly is disastrous.</p> <p>ENT-O: Sees himself as a technical entrepreneur with a set of skills and expertise which are in demand by industry.</p> <p>MKT-ENT: Some linkage between the two and one cannot do without the other. Both are equally crucial to business success in the modern environment.</p>
6	<p>Marketing of health food supplements, particularly organic food. Represents major brands from overseas but also repacks under own brand for distribution to major retail outlets.</p>	<p>E-SYS: A contributing factor since economic system allows for business opportunities.</p> <p>E-DEV: Also a factor as level of consumer affluence and education are positive for health products.</p> <p>S-ORI : Choice of business result of personal experience and desire for better health.</p> <p>E-ACT: largely inter-related with S-ORI.</p> <p>OTH: A desire to help others as personal philosophy and religious belief.</p>	<p>Marketing cannot be neglected in modern day business. In the old days, marketing was not so crucial as today.</p> <p>MKT-O: Education of public and trade on the benefits of taking organic food; participation in seminars and talks to raise awareness.; repacks some items into smaller units and branding.</p>	<p>Entrepreneurship was a lot easier in the earlier days. Now becoming more difficult as more people enter the business.</p> <p>ENT-O: still relevant as one needs to constantly identify new products and keep up with innovations in the industry and in other countries.</p> <p>MKT-ENT: Both need to go together for greater success.</p>

7	<p>Essentially a service which produces video programmes for screening reception areas in hospitals and clinics. Idea is to educate and raise awareness of health issues to patients while they wait for their turn to see the doctors.</p>	<p><u>E-SYS</u>: Certainty a factor.</p> <p><u>E-DEV</u>: An important factor as sophistication of public hospitals enable such service to be considered.</p> <p><u>S-ORI</u>: Interest in creative aspects determine direction.</p> <p><u>E-ACT</u>: Such services are creative in nature and involve much co-ordination of various talents; background an interest helps.</p> <p><u>OTH</u>:</p>	<p><u>MKT-O</u>: An important aspect of the total business approach. Needs to package the programmes that meet needs of public as well as decision makers in the government hospitals. Being close to their needs and decision-making process is crucial. Dealing with private hospitals and clinics require different approach and so marketing is absolutely essential. Creative and technical skills alone are not enough to succeed in this line of business.</p>	<p><u>ENT-O</u>: Just as important, especially in seeking new business opportunities. Right now, efforts being made to expand business concepts to the region. This is not easy for a number of reasons; eg, E-DEV of the other countries is such that this is low priority; budget also a problem. Entrepreneurial approach required to seek the right partners overseas.</p> <p><u>MKT-ENT</u>: Certainly both are needed in different degrees.</p>
8	<p>Started out operating a hawker stall selling cooked noodles to factory workers. Expanded business by hiring others to operate similar stalls in other locations. Further growth achieved by franchising out operation and brand name. Now owns factory making own noodles, sauces and other ingredients.</p>	<p><u>E-SYS</u>: Has big bearing on success as individual has to strive for himself without state assistance.</p> <p><u>E-DEV</u>: Food is an essential item regardless of stage of E-DEV; some bearing but not entirely so.</p> <p><u>S-ORI</u>: Yes, because vision is to market concept throughout Singapore and the region.</p> <p><u>E-ACT</u>: Taking old idea and giving it an modern outlook. Basically copying a western concept (eg McDonald's) and adapting it.</p> <p><u>OTH</u>: Attitude of never giving up so easily despite the odds</p>	<p>Marketing is more important nowadays as presentation becomes a factor. A concept well presented and marketed can be successful even though the idea is a simple everyday item, eg McDonald's.</p> <p><u>MKT-O</u>: All stalls whether owned or franchised out have uniform image and branding. Prices and promotion are centrally planned and implemented. Sauces and other ingredients are packed and labelled in the factory. Many other ideas like staff compensation are adapted from modern management. Management staff are qualified and have experience in marketing and management.</p>	<p><u>ENT-O</u>: This comes from some gut feel but has a lot to do with the instinct to spot opportunities and the courage to take risks to turn them into businesses. When forced to the corner or left with not much choices, that's when one has to do something.</p> <p><u>MKT-ENT</u>: Both are now so important. In the old days just by being entrepreneurial alone can ensure success. But today consumers' tastes have changed and they have higher expectations, so marketing has become necessary; eg we cannot do without packaging and promotion.</p>

9	<p>Design and manufacture of plastic moulds of all shapes for building different configurations of sand castles. Idea came when walking along the beach and noticing how children had difficulty making decent sand castles using the conventional plastic pail and spade. As a trained engineer, felt that moulds could solve the problem and in fact encourage creativity in children. Designs were eventually patented and manufacturing is now done by an international toy company in the US under licence.</p>	<p>E-SYS: System actually stifles creativity as it encourages only big businesses. Entrepreneurial spirit is damaged as people are too comfortable with salaried employment and job security. E-DEV: This has brought affluence but also lead to parents becoming too protective over their children who are generally too sheltered to try new products under the sun S-ORI: Sees this as crucial to success as concept has not taken off here and resistance by parents still a problem. Needs tie-up with companies having extensive distribution and strong marketing capabilities. E-ACT: Perhaps a factor as it involves coming up with an innovative solution to an old problem. OTH: Having established initial arrangement with an international reputable firm, the next thing is hard work to market concept .</p>	<p>Marketing is very important Entrepreneurs without the marketing networks or strengths cannot go very far these days. MKT-O: Does promotions to raise awareness of the product and demonstrate its benefits over current outdoor toys. Spends many weekends working on the beach. Approaches shopping centres and resorts to allow sand castles competition . Tries very hard to educate the housing authorities to build sand play areas and allow children to build sand castles. Also approaches schools to allow sand castle building as part of curriculum to boost creativity in children.</p>	<p>ENT-O: Basically courage and conviction when seeking out the international toy company to work with. Visited major international toy fair in the USA and talked to each one; being persistent until one of them agreed to have serious discussions and ended up with a deal. MKT-ENT: Seems to have many things in common. Entrepreneurship allows for the opportunities to be spotted and exploited. But it is marketing that helps in the preparation of a convincing business plan and the leg work to persuade retailers to stock the items and getting parents and authorities to accept the toy as an alternative to build creativity in the child.</p>
10	<p>Research, manufacture and marketing of health food supplements. The idea is to take old concepts, give them scientific scrutiny, improve over them and market to wider targets of people. One example is the 'linzhi' which is an extract from a species of mushroom reputed to have health-enhancing qualities. Now made into capsules and sold through health food chains.</p>	<p>E-SYS: See many opportunities now compared to before. E-DEV: A factor as people are becoming more conscious of their health. S-ORI: Has been a researcher all along and still learning about business. E-ACT: Could still improve as still very much focused on research . OTH: Government grants a big help in getting project started.</p>	<p>MKT-O: Brand image, packaging promotion and other aspects of modern marketing are now considered. National 'Merlion' logo adopted on packaging with permission; this gives added enhancement to the brand. Brochures are colourful and include endorsements from satisfied customers and other opinion leaders.</p>	<p>ENT-O: Believes this is an involvement and part of a learning process. Once placed in the situation, tends to make efforts to be more entrepreneurial rather than merely technical because operation needs to be profitable and viable. MKT-ENT: Definitely a close link as one without the other seems inadequate in today's business environment.</p>

11	<p>Owens a chain of retail outlets under the GWEE brand name selling telephone sets, mobile phones, pagers and other related communications products. Stocks major international brands eg Ericsson, Nokia, etc....</p>	<p>E-SYS: Agree it helps by being although sometimes too many rules retarding entrepreneurial drive.</p> <p>E-DEV: An important factor as at this stage consumers can spend more and want the latest gadgets.</p> <p>S-ORI: A key factor as I opted out of the used car business when telecommunications equipment was starting to become popular.</p> <p>E-ACT: Timing was good when moving away from used car to this business so definitely a factor.</p> <p>OTH: Spirit of self-improvement eg have gone back to school to learn about modern business management.</p>	<p>Learnt that marketing is important in modern day business compared to the past.</p> <p>MKT-O: Modern image for the brand name; uses latest shop displays; participates in many promotion programmes with principals; has a modern showroom located at the Head Office; has new product development programmes to bring innovative products to the market – one example is the call-identification incorporated in the telephone set conceived by GWEE and produced by contract manufacturing.</p>	<p>ENT-O: Important to remain alert in recognizing opportunities. eg: recognizing that used car business was stagnating due to difficult conditions and seeing the arrival of the pager and mobile telephone.</p> <p>MKT-ENT: Both seem to go hand in hand. After establishing the GWEE chain, began to see the importance of marketing. Realized the importance to keep tab on changing consumer trends and tastes and adjusting to them. Promotions are an important factor in improving sales; consumers seem to love promotions and respond to them positively.</p>
12	<p>Started out a furniture retailer, stocking furniture made by others. Business has evolved into what is now a design and renovation company which has since been listed on the stock exchange. Clients are homeowners who renovate their homes and corporate clients doing up offices or needing exhibition kiosks when participating in trade shows.</p>	<p>E-SYS: Sometimes too many regulations but on the whole favourable.</p> <p>E-DEV: Compared to the past, currently a major factor as homeowners are house-proud and corporations want to project good image.</p> <p>S-ORI: Move from strictly furniture retailing to 'design and build' early is a major factor.</p> <p>E-ACT: Related to S-ORI as the shift from furniture retail to current value-add business key to success</p> <p>OTH: Recognize the need to hold on to good people and to achieve and maintain company team spirit</p>	<p>Compared to the past when consumers' tastes and expectations were much simpler, today's consumers are much more discerning and demanding; so marketing is essential.</p> <p>MKT-O: Have streamlined operation to be more customer-oriented. Market divided into zones, each headed by a manager responsible for ensuring customer's satisfaction from conception of design to after sales service. Every step of the work in progress is monitored. Operatives like carpenters are also trained in handling customers. A modern showroom is available.</p>	<p>An entrepreneurial outlook is essential to complement modern-day marketing. This comes by keeping a sharp look-out for opportunities.</p> <p>ENT-O: By moving gradually away from being a furniture retailer selling products made by others to being an integrated design and build operation. This means offering value-add to clients and better profit. Also pro-active in offering innovative designs which are provocative and yet functional.</p> <p>MKT-ENT: Both seem to go together in modern day business.</p>

13	<p>Offers an outplacement service to corporate clients, who can refer any retrenched management and executive staff to the company, who will arrange to place these executives in new appointments.</p>	<p>E-SYS: Believes that the system is pro-business and is up to the entrepreneur to recognize opportunities.</p> <p>E-DEV: Clients are mostly MNCs who understand concept of outplacement; local companies are still resistant to using such services.</p> <p>S-ORI: Worked in human resource consultancy before starting own operation in Hong Kong; Singapore is part of expansion.</p> <p>E-ACT: Such service will take some time to take root but believe that with time, results will show.</p> <p>OTH: Experiences with various difficulties in Hong Kong have prepared them for any potential problems in Singapore.</p>	<p>Recognizes that marketing is necessary but need to be applied differently in this business.</p> <p>MKT-O: By being customer-focused, ie tailoring specific packages for individual clients. Low key marketing eg appearing in news articles, giving interviews, presenting seminars etc...help.</p>	<p>ENT-O: Entrepreneurship applies as far as taking the calculated risk to open a branch in Singapore based judgement that the market here is ready for such a service.</p> <p>MKT-ENT: Entrepreneurship is necessary in the set-up stage, after which good marketing and good performance must be seen.</p>
14	<p>Owns and operates the Amara Hotel and Shopping Centre located in downtown Singapore, with a similar operation in China and Vietnam.</p>	<p>E-SYS: The current system generally does not support or encourage local entrepreneurship.</p> <p>E-DEV: Opportunities are available, but competition is also intense.</p> <p>S-ORI: Move from building contractor to hotel owner / manager and now expanding outside Singapore - to China and Vietnam</p> <p>E-ACT: The current activity is to expand beyond Singapore, using the success formula which is combining hotel, shopping centre and food court in one complex.</p> <p>OTH: Having background as chartered accountant is a big plus.</p>	<p>Marketing a definite must in a service industry like ours. Constant efforts have to be made to ensure customer satisfaction and their retention.</p> <p>MKT-O: Start with internal management. Staff need to be well trained to recognize guests' preferences and to remember them. Little things count. Open management style maintained where ideas are openly discussed before implementation. Hotel is 24 hours operation so executives must have empowerment.</p>	<p>ENT-O: Idea of moving from construction to property developer and finally to hotel ownership and management. Foresight to move away from one activity to another higher value-add activity has ensured the continued success and well-being of the group. Next stage is to expand the business beyond Singapore, starting with China and Vietnam.</p> <p>MKT-ENT: Both are complementary; marketing in satisfying customers and entrepreneurship when taking some risks, eg investment overseas.</p>

15	<p>Family owns and manages a fish farm breeding, importing and exporting aquarium fishes and accessories. Markets locally, regionally and internationally.</p>	<p>E-SYS: Has benefited the business and finds environment generally supportive.</p> <p>E-DEV: Fish keeping as hobby has grown in tandem. People living in urban setting appreciates such past-time.</p> <p>S-ORI: Move away from mere trading to real marketing operation which is integrated and measurable</p> <p>E-ACT: Modernising the fish farm and introducing latest production, breeding and logistics a big factor to success.</p> <p>OTH : Fact that the family held together despite many setbacks and adversities in the past ia a big factor. Also that family has entrusted the most educated and capable to make decisions and lead the organization.</p>	<p>Marketing definitely an important aspect of this business. Traditionally this business is backward and relies mostly on trading and transactions.</p> <p>MKT-O: Starting from internal organization which is now focused on quality. From production to delivery and customer satisfaction, quality is maintained. Participates in relevant trade shows regularly. Advertises overseas, visits clients regularly, invites clients – existing and potential – to the farm regularly to allow them to see operation fist-hand. Gains trust and go for long-term business development.</p>	<p>ENT-O: This is basically the spirit of not giving up despite the many adversities and difficulties faced in the past. Also, the willingness to start all over again after each failure. The courage to take risks and move on.</p> <p>MKT-ENT: Both are necessary Ingredients to business success. Can't say one is more important than the other.</p>
16	<p>Likes to invent things although without formal engineering qualifications. Invented the fish aquarium which eliminates the need to change water. Has shops selling this item in various configurations in Singapore and the region, including China. Recently came up with an appliance to prepare soya bean drink. This device is less clumsy and quicker compared to traditional grinding and boiling method.</p>	<p>E-SYS: System does allow for entrepreneurship to flourish although ideas must be good and viable in the first place.</p> <p>E-DEV: Consumers want efficient and effective products which are convenient to use.</p> <p>S-ORI: To improve on products which have weak areas eg traditional types of aquariums and home appliances.</p> <p>E-ACT: Invents and turns to commercial viability, then invites joint-venture partners to manufacture and market.</p>	<p>Marketing is important because product may be good but customers may not be convinced of its benefits. Also needs distribution.</p> <p>MKT-O: Does consumer research and tests very carefully during new product development. Always tries to incorporate consumer feedback. Also joins various groups to further own interests and network with others eg innovators' club</p>	<p>ENT-O: Essentially was the dream to be own boss that decision was made to resign from stable job and starts venture. Felt that even if hit by failure, could always go back to working for others.</p> <p>MKT-ENT: Learned quickly that entrepreneurship without marketing is not good enough. Needs distribution network and exposure to markets and this requires good marketing. Both are complementary.</p>

MARKETING AND ENTREPRENEURSHIP INTERFACE IN SINGAPORE FIRMS

The following questions relate to the extent to which selected entrepreneurial firms in Singapore adopt the marketing orientation and the entrepreneurial orientation. All information provided will be used collectively as part of a survey. Your co-operation is very much appreciated. Thank you.

Section A: The Organisation

1. Please indicate the name of your company: _____

2. Are you the owner-manager of the company: Yes No

3. When was the firm established: _____

4. Describe the products / services your company provides:

5. Which sector would you classify your business in?

Goods industries:-

- Manufacturing Construction Utilities
 Others (Please specify _____)

Services industries:-

- Wholesale & retail trade Financial Services Business Services
 Transport & communications Hotels & restaurants Others (_____)

6. Please state the number of employees currently employed by your company: _____

7. What is the current sales turnover annually in S\$?

- Under S\$ 10 million S\$ 10 - 20 million S\$ 20 - 30 million S\$ 30 - 40 million
 S\$ 40 - 50 million S\$ 50 - 60 million S\$ 60 - 70 million S\$ 70 - 80 million
 S\$ 80 - 90 million S\$ 90 - 100 million Over S\$ 100 million

8. Please state the proportion in which your customers are from :-

Government and other Institutions	%
Other Businesses	%
End-consumers	%
Total	100 %

Section B : Marketing Orientation

Using the scale below, please indicate how well each of the following statements best describes current practices in your firm.

Strongly Disagree	Moderately Disagree	Neither Agree Or Disagree	Moderately Agree	Strongly Agree
1	2	3	4	5

- | | | | | | |
|--|---|---|---|---|---|
| 1. Information about customer needs are collected regularly. | 1 | 2 | 3 | 4 | 5 |
| 2. Our corporate objective and policies are aimed directly at creating satisfied customers. | 1 | 2 | 3 | 4 | 5 |
| 3. Levels of customer satisfaction are regularly assessed. | 1 | 2 | 3 | 4 | 5 |
| 4. We put major efforts into building stronger relationships with key customers | 1 | 2 | 3 | 4 | 5 |
| 5. We adapt our product offerings accordingly to satisfy distinct market segments. | 1 | 2 | 3 | 4 | 5 |
| 6. Information about competitor activities are collected regularly. | 1 | 2 | 3 | 4 | 5 |
| 7. We conduct regular benchmarking against major competitor product offerings | 1 | 2 | 3 | 4 | 5 |
| 8. We respond rapidly to major competitor actions. | 1 | 2 | 3 | 4 | 5 |
| 9. We put major emphasis on differentiating ourselves from the competition on factors important to our customers. | 1 | 2 | 3 | 4 | 5 |
| 10. Short-term profits are more important than market share. | 1 | 2 | 3 | 4 | 5 |
| 11. Controlling internal costs is more important than responding to customers' needs | 1 | 2 | 3 | 4 | 5 |
| 12. Our decisions are guided by long-term considerations rather than short-term expediency. | 1 | 2 | 3 | 4 | 5 |
| 13. Information about customers are widely circulated throughout the organisation. | 1 | 2 | 3 | 4 | 5 |
| 14. The different departments in the organisation work effectively together to serve customer needs. | 1 | 2 | 3 | 4 | 5 |
| 15. Tensions and rivalries between departments are not allowed to get in the way of serving customers effectively. | 1 | 2 | 3 | 4 | 5 |
| 16. Our organisation is not constrained by a hierarchical structure. | 1 | 2 | 3 | 4 | 5 |

Section C: Entrepreneurial Orientation

Using the scale below, please indicate how well each of the following statements best describes current practices in your firm.

Strongly Disagree	Moderately Disagree	Neither Agree Or Disagree	Moderately Agree	Strongly Agree
1	2	3	4	5

- | | | | | | |
|--|---|---|---|---|---|
| 1. We frequently introduce new ideas to the market. | 1 | 2 | 3 | 4 | 5 |
| 2. Our approach is to look for new and innovative ways to supply existing products/services to the market. | 1 | 2 | 3 | 4 | 5 |
| 3. We spend much time, effort and money to generate and develop new ideas. | 1 | 2 | 3 | 4 | 5 |
| 4. We spot opportunities by seeing products/services available in other countries and offering them here | 1 | 2 | 3 | 4 | 5 |
| 5. We identify products /services available elsewhere and modify them to suit the market here. | 1 | 2 | 3 | 4 | 5 |
| 6. Our competitive advantage is based on effective internal cost controls. | 1 | 2 | 3 | 4 | 5 |
| 7. We place emphasis on improving our internal organisational systems to be competitive. | 1 | 2 | 3 | 4 | 5 |
| 8. Our strategy is focused on being first in the market with a product / service. | 1 | 2 | 3 | 4 | 5 |
| 9. We tend to find a niche in the market and defend it. | 1 | 2 | 3 | 4 | 5 |
| 10. Our strategy is to be fast in following competitive trends. | 1 | 2 | 3 | 4 | 5 |
| 11. We tend to react to opportunities as and when they present themselves.. | 1 | 2 | 3 | 4 | 5 |
| 12. A successful entrepreneur has to be good at marketing. | 1 | 2 | 3 | 4 | 5 |

Section D: Relative Performance of the Firm

Compared to your main competition, how do you rate the relative performance of your firm in each of the categories stated below. Use the following scale:

Well Below The Competition	Slightly Below The Competition	The Same As The Competition	Slightly Above The Competition	Well Above The Competition
1	2	3	4	5

The relative performance of our firm compared to our competition in the following areas can best be described as:

1. Profitability	1	2	3	4	5
2. Growth rate	1	2	3	4	5
3. Number of employees	1	2	3	4	5
4. Investments for future growth	1	2	3	4	5
5. Expenditure on employees training	1	2	3	4	5

Section E: The Industry

Considering the business environment in which your business operates, please indicate the extent to which you agree or disagree with the following statements, using the scale below.

Strongly Disagree	Moderately Disagree	Neither Agree Or Disagree	Moderately Agree	Strongly Agree
1	2	3	4	5

1. We face very strong competition from substitute products and services	1	2	3	4	5
2. It is relatively easy for new firms to enter the industry.	1	2	3	4	5
3. It is relatively easy for firms to exit from the industry.	1	2	3	4	5
4. A small group of customers account for a large percentage of our sales	1	2	3	4	5
5. The industry is dependent on a small number of suppliers	1	2	3	4	5
6. The demand conditions in the industry are very volatile	1	2	3	4	5
7. Government regulations are a major constraint.	1	2	3	4	5

Section F: Personal Details

1. Your age: _____ years
2. Gender: Male Female
3. What is your highest level of education?
 - Primary School
 - Secondary School
 - Polytechnic
 - University
 - Post-graduate
4. If you have a University Degree, what is your major? _____
5. Do you have a marketing background?
 - Yes No
6. If yes, please indicate source of your marketing background:
 - Formal study
 - Practical experience
 - Self-study (eg. Reading)
 - Attending seminars
 - Attending training courses
 - Others (please specify): _____
7. Please let us have any other views you may have regarding marketing & entrepreneurship which may not have been covered:

Thank you once again for your co-operation!!

Survey Questions and their SPSS Variable Names

The following provides the variable names in *[bold italic]* for each of the questions used in the questionnaire survey for ease of referencing. It also indicates (by shading) the 10 questions which were dropped from the final statistical computation due to low alpha value.

Section A: The Organisation

1. Please indicate the name of your company: _____

2. Are you the owner-manager of the company: Yes No *[ownermgr]*

3. When was the firm established: _____ *[agefirm]*

4. Describe the products / services your company provides:

5. Which sector would you classify your business in? *[classbus]*

Goods industries:-

Manufacturing Construction Utilities

Others (Please specify _____)

Services industries:-

Wholesale & retail trade Financial Services Business Services

Transport & communications Hotels & restaurants Others (_____)

6. Please state the number of employees currently employed by your company: _____ *[emyeenos]*

7. What is the current sales turnover annually in S\$? *[salestur]*

Under S\$ 10 million S\$ 10 - 20 million S\$ 20 - 30 million S\$ 30 - 40 million

S\$ 40 - 50 million S\$ 50 - 60 million S\$ 60 - 70 million S\$ 70 - 80 million

S\$ 80 - 90 million S\$ 90 - 100 million Over S\$ 100 million

8. Please state the proportion in which your customers are from :-

Government and other Institutions	%
Other Businesses	%
End-consumers	%
Total	100 %

[govtinst]

[otherbus]

[endcons]

Section B : Marketing Orientation

Using the scale below, please indicate how well each of the following statements best describes current practices in your firm.

Strongly Disagree	Moderately Disagree	Neither Agree Or Disagree	Moderately Agree	Strongly Agree			
1	2	3	4	5			
1	Information about customer needs are collected regularly.	1	2	3	4	5	<i>[info]</i>
2	Our corporate objective and policies are aimed directly at creating satisfied customers.	1	2	3	4	5	<i>[obj]</i>
3	Levels of customer satisfaction are regularly assessed.	1	2	3	4	5	<i>[custsat]</i>
4	We put major efforts into building stronger relationships with key customers	1	2	3	4	5	<i>[relation]</i>
5	We adapt our product offerings accordingly to satisfy distinct market segments.	1	2	3	4	5	<i>[prodoff]</i>
6	Information about competitor activities are collected regularly.	1	2	3	4	5	<i>[infocomp]</i>
7	We conduct regular benchmarking against major competitor product offerings	1	2	3	4	5	<i>[benchmk]</i>
8	We respond rapidly to major competitor actions.	1	2	3	4	5	<i>[respond]</i>
9	We put major emphasis on differentiating ourselves from the competition on factors important to our customers.	1	2	3	4	5	<i>[differen]</i>
10	Short-term profits are more important than market share.	1	2	3	4	5	<i>[stprofit]</i>
11	Controlling internal costs is more important than responding to customers' needs	1	2	3	4	5	<i>[intcost]</i>
12	Our decisions are guided by long-term considerations rather than short-term expediency.	1	2	3	4	5	<i>[ltconsid]</i>
13	Information about customers are widely circulated throughout the organisation.	1	2	3	4	5	<i>[infocust]</i>
14	The different departments in the organisation work effectively together to serve customer needs.	1	2	3	4	5	<i>[diffdept]</i>
15	Tensions and rivalries between departments are not allowed to get in the way of serving customers effectively.	1	2	3	4	5	<i>[tensriv]</i>
16	Our organisation is not constrained by a hierarchical structure.	1	2	3	4	5	<i>[hierarch]</i>

* The highlighted questions are removed from the *Unweighted Factor-Based Scale Method* factor computation due to low reliability and low correlation problems. See section 8.2.2 and 9.1 for details

Section C: Entrepreneurial Orientation

Using the scale below, please indicate how well each of the following statements best describes current practices in your firm.

Strongly Disagree	Moderately Disagree	Neither Agree Or Disagree	Moderately Agree	Strongly Agree
1	2	3	4	5

1	We frequently introduce new ideas to the market	1	2	3	4	5	<i>[newideas]</i>
2	Our approach is to look for new and innovative ways to supply existing products/services to the market.	1	2	3	4	5	<i>[innoways]</i>
3	We spend much time, effort and money to generate and develop new ideas.	1	2	3	4	5	<i>[time]</i>
4	We spot opportunities by seeing products/services available in other countries and offering them here.	1	2	3	4	5	<i>[spotopp]</i>
5	We identify products /services available elsewhere and modify them to suit the market here.	1	2	3	4	5	<i>[prodserv]</i>
6	Our competitive advantage is based on effective internal cost controls.	1	2	3	4	5	<i>[compadv]</i>
7	We place emphasis on improving our internal organisational systems to be competitive.	1	2	3	4	5	<i>[intorg]</i>
8	Our strategy is focused on being first in the market with a product / service.	1	2	3	4	5	<i>[firstmkt]</i>
9	We tend to find a niche in the market and defend it.	1	2	3	4	5	<i>[nichemkt]</i>
10	Our strategy is to be fast in following competitive trends.	1	2	3	4	5	<i>[fastflw]</i>
11	We tend to react to opportunities as and when they present themselves.	1	2	3	4	5	<i>[react]</i>
12	A successful entrepreneur has to be good at marketing.	1	2	3	4	5	<i>[goodmktg]</i>

* The highlighted questions are removed from the *Unweighted Factor-Based Scale Method* factor computation due to low reliability and low correlation problems. See section 8.2.2 and 9.1 for details

Section D: Relative Performance of the Firm

Compared to your main competition, how do you rate the relative performance of your firm in each of the categories stated below. Use the following scale:

Well Below The Competition	Slightly Below The Competition	The Same As The Competition	Slightly Above The Competition	Well Above The Competition
1	2	3	4	5

The relative performance of our firm compared to our competition in the following areas can best be described as:

1. Profitability	1	2	3	4	5	<i>[profit]</i>
2. Growth rate	1	2	3	4	5	<i>[growth]</i>
3. Number of employees	1	2	3	4	5	<i>[noemp]</i>
4. Investments for future growth	1	2	3	4	5	<i>[invest]</i>
5. Expenditure on employees training	1	2	3	4	5	<i>[expend]</i>

Section E: The Industry

Considering the business environment in which your business operates, please indicate the extent to which you agree or disagree with the following statements, using the scale below.

Strongly Disagree	Moderately Disagree	Neither Agree Or Disagree	Moderately Agree	Strongly Agree
1	2	3	4	5

1. We face very strong competition from substitute products and services	1	2	3	4	5	<i>[strgcomp]</i>
2. It is relatively easy for new firms to enter the industry.	1	2	3	4	5	<i>[entryind]</i>
3. It is relatively easy for firms to exit from the industry.	1	2	3	4	5	<i>[exitind]</i>
4. A small group of customers account for a large percentage of our sales	1	2	3	4	5	<i>[smallgp]</i>
5. The industry is dependent on a small number of suppliers	1	2	3	4	5	<i>[smallno]</i>
6. The demand conditions in the industry are very volatile	1	2	3	4	5	<i>[demand]</i>
7. Government regulations are a major constraint.	1	2	3	4	5	<i>[govt]</i>

* The highlighted questions are removed from the *Unweighted Factor-Based Scale Method* factor computation due to low reliability and low correlation problems. See section 8.2.2 and 9.1 for details

Section F: Personal Details

1. Your age: _____ years **[age]**
2. Gender: Male Female **[gender]**
3. What is your highest level of education? **[edun]**
- Primary School
- Secondary School
- Polytechnic
- University
- Post-graduate
4. If you have a University Degree, what is your major? _____ **[degree]**
5. Do you have a marketing background? **[mktback]**
- Yes No
6. If yes, please indicate source of your marketing background:
- Formal study **[formal]**
- Practical experience **[pract]**
- Self-study (eg. Reading) **[selfstud]**
- Attending seminars **[sem]**
- Attending training courses **[train]**
- Others (please specify): _____ **[others]**
7. Please let us have any other views you may have regarding marketing & entrepreneurship which may not have been covered:

Thank you once again for your co-operation!!

Factor Analysis Matrices

The legend used in the following tables¹ are :

- Shaded columns indicate empirical grouping of the questions by the *SPSS* into their respective factors.
- Rows with 'clear' wordings are questions grouped conceptually under section B – *Marketing Orientation*.
- Rows with *italic* wordings are questions grouped conceptually under section C – *Entrepreneurial Orientation*.
- Rows with **bold** wordings are questions grouped conceptually under section D – *Relative Performance of the Firm*.
- Rows in ***bold and italic*** are questions grouped conceptually under section E – *Industry Environment*

¹ In Table 1.1 to 1.5, only factors with Eigenvalue ≥ 1 are extracted as these are considered common factors (Child, 1979).

Table I.1 Rotated Component Matrix with 4 Factors

Questions posed to survey respondents	Factor Loading			
	1	2	3	4
Levels of customer satisfaction are regularly assessed	0.77	0.08	0.08	0.02
Our corporate objectives and policies are aimed directly at creating satisfied customers	0.69	0.18	0.05	0.10
Information about customer needs are collected regularly	0.67	0.07	0.09	0.03
The different departments in the organisation work effectively together to serve customer needs	0.63	0.28	0.10	0.04
We put major efforts into building stronger relationships with key customers	0.59	-0.01	0.25	-0.05
We put major emphasis on differentiating ourselves from the competition on factors important to our customers	0.57	0.21	0.31	-0.13
Tensions and rivalries between departments are not allowed to get in the way of serving customers effectively	0.53	0.06	0.12	-0.05
Information about customers are widely circulated throughout the organization	0.45	-0.06	0.36	-0.06
<i>We place emphasis on improving our organisational systems to be competitive</i>	0.45	0.13	0.23	0.07
Our organisation is not constrained by a hierarchical structure	0.45	0.23	-0.02	-0.08
Information about competitor activities are collected regularly	0.43	0.09	0.39	0.27
Controlling internal costs is more important than responding to customers' needs	-0.42	-0.27	0.15	-0.03
We adapt our product offerings accordingly to satisfy distinct market segments	0.26	0.20	0.17	0.16
(Investments for future growth) The relative performance of our firm compared to our competition in the following areas can best be described as	0.16	0.74	0.04	-0.12
(Growth rate) The relative performance of our firm compared to our competition in the following areas can best be described as	0.28	0.72	0.05	0.13
<i>We frequently introduce new ideas to the market</i>	0.17	0.67	0.27	0.00
<i>Our strategy is focused on being first in the market with a product / service</i>	0.11	0.65	0.37	0.03
<i>We spend much time, effort and money to generate and develop new ideas</i>	0.19	0.63	0.40	-0.07
(No. of employees) The relative performance of our firm compared to our competition in the following areas can best be described as	-0.09	0.62	-0.04	0.06

<i>Our approach is to look for new and innovative ways to supply existing products/services to the market</i>	0.22	0.61	0.31	0.04
(Expenditure on employees training) The relative performance of our firm compared to our competition in the following areas can best be described as	0.29	0.60	0.01	0.01
(Profitability) The relative performance of our firm compared to our competition in the following areas can best be described as	0.07	0.50	0.07	0.10
<i>Our strategy is to be fast in following competitive trends</i>	0.10	0.32	0.65	-0.01
<i>We respond rapidly to major competitor actions</i>	0.26	0.16	0.62	0.21
<i>We tend to find a niche in the market and defend it</i>	0.05	0.23	0.57	-0.01
<i>We tend to react to opportunities as and when they present themselves</i>	0.21	0.23	0.51	0.15
<i>We spot opportunities by seeing products/services available in other countries and offering them here</i>	0.18	0.21	0.49	0.16
<i>We identify products/services available elsewhere and modify them to suit the market here</i>	0.15	0.21	0.44	0.04
The industry is dependent on a small number of suppliers	-0.31	-0.02	0.41	-0.37
<i>Our decisions are guided by long-term considerations rather than short-term expediency</i>	0.34	0.20	0.36	-0.26
<i>Our competitive advantage is based on effective internal cost controls</i>	-0.04	-0.24	0.36	-0.13
<i>A successful entrepreneur has to be good at marketing</i>	0.13	0.17	0.32	0.31
Government regulations are a major constraint	0.05	-0.02	0.22	0.16
A small group of customers account for a large percentage of our sales	0.08	-0.09	0.15	-0.07
It is relatively easy for firms to exit from the industry	0.10	0.00	-0.03	0.76
It is relatively easy for new firms to enter the industry	-0.10	0.13	-0.23	0.72
We face very strong competition from substitute products and services	-0.12	0.06	0.19	0.66
We conduct regular benchmarking against major competitor product offerings	0.39	0.04	0.35	0.46
Short-term profits are more important than market share	-0.37	0.04	-0.10	0.47
The demand conditions in the industry are very volatile	0.02	-0.06	0.23	0.43

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 8 iterations.

Table I.2 Rotated Component Matrix with 10 Factors

Questions posed to survey respondents	Factor Loading									
	1	2	3	4	5	6	7	8	9	10
Our corporate objectives and policies are aimed directly at creating satisfied customers	0.76	0.21	0.04	0.14	-0	0.11	0.04	0.13	0.05	0.08
Levels of customer satisfaction are regularly assessed	0.73	0.08	0.13	-0.1	0.25	0.13	-0	-0	0.11	-0.2
Information about customer needs are collected regularly	0.68	0.14	-0.1	-0.1	0.2	0.16	-0.1	0.12	0.08	-0.1
The different departments in the organisation work effectively together to serve customer needs	0.61	0.13	0.37	0.13	-0.1	-0.1	0.16	0.26	0.04	-0.1
We put major efforts into building stronger relationships with key customers	0.57	-0	0.07	-0.1	0.18	0.14	0.18	0.05	-0	0.23
We put major emphasis on differentiating ourselves from the competition on factors important to our customers	0.53	0.19	0.24	-0.1	0.16	0.06	0.14	0.1	0.22	0.18
Controlling internal costs is more important than responding to customers' needs	-0.5	-0.2	-0.2	-0	0.08	-0.2	-0.1	0.41	0.32	-0.3
Tensions and rivalries between departments are not allowed to get in the way of serving customers effectively	0.42	0.04	0.24	0.01	0.25	-0.3	0.31	-0.1	0.1	0.11
(Investments for future growth) The relative performance of our firm compared to our competition in the following areas can best be described as	0.15	0.79	0.11	-0.1	0.04	0	0.01	0.18	0.03	-0.1
(No. of employees) The relative performance of our firm compared to our competition in the following areas can best be described as	-0.1	0.74	-0	0.06	-0	0.1	0.03	-0.2	0.04	0.14
(Growth rate) The relative performance of our firm compared to our competition in the following areas can best be described as	0.23	0.71	0.15	0.04	0.18	0.13	0.15	0.04	-0.2	-0.1
(Expenditure on employees training) The relative performance of our firm compared to our competition in the following areas can best be described as	0.22	0.62	0.29	0.01	0.18	-0.1	-0.2	0.04	0.22	-0.1
(Profitability) The relative performance of our firm compared to our competition in the following areas can best be described as	0.12	0.59	-0.1	0.14	-0.1	0.07	0.25	-0	0.04	0.16
Our organisation is not constrained by a hierarchical structure	0.31	-0	0.75	0.02	0.03	-0.2	-0	-0.2	-0.1	0.08
Our strategy is focused on being first in the market with a product / service	0.06	0.43	0.57	0	-0	0.34	0.1	0.15	0.15	-0
We spend much time, effort and money to generate and develop new ideas	0.04	0.42	0.57	-0.1	0.2	0.05	0.31	0.25	-0.1	-0
We adapt our product offerings accordingly to satisfy distinct market segments	0.08	-0.1	0.54	0.02	0.35	0.17	0.06	-0.1	-0.3	-0.1
Our approach is to look for new and innovative ways to supply existing products/services to the market	0.12	0.41	0.52	0.04	0.14	0.14	0.09	0.29	-0.1	0.06
We frequently introduce new ideas to the market	0.1	0.47	0.52	0.01	0.03	0.17	0.07	0.31	-0.1	-0.1
We tend to find a niche in the market and defend it	-0	0.02	0.47	-0.1	0.12	0.38	0.27	0.1	0.21	0.06
It is relatively easy for firms to exit from the industry	0.07	-0	0.06	0.83	0.17	-0.1	0.09	-0	-0	0.05
It is relatively easy for new firms to enter the industry	-0.1	0.15	-0.1	0.77	0.03	-0	0.03	-0.1	-0.1	-0.1
The demand conditions in the industry are very volatile	0.05	-0.1	0.04	0.53	-0	0.09	-0.1	0.48	0.13	0.05

<i>We face very strong competition from substitute products and services</i>	-0.1	0.06	-0.1	0.52	0.17	0.48	0.04	-0.1	0.01	0.06
<i>Short-term profits are more important than market share</i>	-0.4	-0	0.06	0.47	-0.1	0.12	-0.1	-0	0.1	-0.3
<i>Information about competitor activities are collected regularly</i>	0.25	0.09	0.14	0.03	0.77	0.19	-0	0.1	0.01	-0
<i>We conduct regular benchmarking against major competitor product offerings</i>	0.23	0.07	0.07	0.31	0.69	0.05	0.22	-0	0.12	-0
<i>We respond rapidly to major competitor actions</i>	0.09	0.15	0.12	0.07	0.65	0.12	0.28	0.3	0.03	0.19
<i>A successful entrepreneur has to be good at marketing</i>	0.17	0.1	0.07	0.09	0.12	0.71	-0	-0	0.04	0.02
<i>We tend to react to opportunities as and when they present themselves</i>	0.23	0.1	0.19	-0	0.09	0.69	0.19	0.11	0.08	0.02
<i>We spot opportunities by seeing products/services available in other countries and offering them here</i>	0.12	0.15	0.03	0.07	0.21	0.09	0.81	0.14	-0.1	-0.1
<i>We identify products/services available elsewhere and modify them to suit the market here</i>	0.1	0.11	0.19	-0	0.03	0.08	0.72	0.05	0.18	-0.1
<i>Our decisions are guided by long-term considerations rather than short-term expediency</i>	0.31	0.19	0.04	-0.2	0.13	-0	0.13	0.62	-0.1	0.12
<i>Our strategy is to be fast in following competitive trends</i>	0.08	0.21	0.21	-0	0.12	0.39	0.26	0.51	0.01	0.23
<i>Information about customers are widely circulated throughout the organisation</i>	0.37	-0.1	0.12	-0.1	0.26	-0.1	0.21	0.46	-0.1	-0
<i>Our competitive advantage is based on effective internal cost controls</i>	0.01	-0.1	-0.1	-0.1	-0.1	-0	0.13	0.03	0.77	0.17
<i>We place emphasis on improving our organisational systems to be competitive</i>	0.4	0.17	0.19	0.02	0.2	0.04	0.02	-0.1	0.57	-0.1
<i>Government regulations are a major constraint</i>	0.1	0.1	-0.1	0.04	0.09	0.31	-0	-0.1	0.51	-0.1
<i>A small group of customers account for a large percentage of our sales</i>	0.14	-0	-0	0.06	-0	0.09	-0.2	0.06	-0	0.78
<i>The industry is dependent on a small number of suppliers</i>	-0.3	0.06	0.04	-0.3	0.08	-0.1	0.07	0.1	0.29	0.58

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 21 iterations.

Table I.3 Rotated Component Matrix with 11 Factors

Questions posed to survey respondents	Factor Loading										
	1	2	3	4	5	6	7	8	9	10	11
Our corporate objectives and policies are aimed directly at creating satisfied customers	0.77	0.11	0.17	0.15	-0.03	0.1	0.04	0.08	0.05	0.01	-0.12
Information about customer needs are collected regularly	0.7	0.02	0.11	-0.08	0.21	0.15	-0.05	0.12	-0.14	-0.05	-0.02
Levels of customer satisfaction are regularly assessed	0.69	0.07	0.04	-0.11	0.25	0.14	-0.04	0.2	-0.2	0.14	-0.11
The different departments in the organisation work effectively together to serve customer needs	0.65	0.37	0.02	0.13	-0.08	-0.05	0.18	0.03	-0.1	0.2	0.03
We put major efforts into building stronger relationships with key customers	0.6	-0.06	0.03	-0.08	0.17	0.19	0.18	-0.09	0.21	0.17	-0.1
We put major emphasis on differentiating ourselves from the competition on factors important to our customers	0.51	0.25	0.11	-0.12	0.16	0.05	0.14	0.24	0.19	0.13	-0.12
Our decisions are guided by long-term considerations rather than short-term expediency	0.44	0.4	0.03	-0.19	0.19	-0.07	0.14	-0.25	0.19	-0.26	0.11
Tensions and rivalries between departments are not allowed to get in the way of serving customers effectively	0.4	-0.01	0.09	0.01	0.23	-0.28	0.33	0.08	0.11	0.38	-0.06
We frequently introduce new ideas to the market	0.11	0.76	0.22	0.03	0.05	0.11	0.06	-0.01	-0.05	0.07	-0.04
Our strategy is focused on being first in the market with a product / service	0.02	0.74	0.2	0.01	-0.02	0.28	0.08	0.25	-0	0.13	-0.1
Our approach is to look for new and innovative ways to supply existing products/services to the market	0.12	0.73	0.18	0.07	0.16	0.09	0.06	-0.03	0.05	0.11	-0.11
We spend much time, effort and money to generate and develop new ideas	0.06	0.68	0.23	-0.08	0.2	0.03	0.3	-0.05	-0	0.22	-0.01
Our strategy is to be fast in following competitive trends	0.2	0.48	0.08	-0.03	0.15	0.37	0.27	-0.11	0.31	-0.12	0.16
Information about customers are widely circulated throughout the organisation	0.37	0.39	-0.35	-0.02	0.3	-0.13	0.21	-0.01	0.02	-0.2	-0.1
(No. of employees) The relative performance of our firm compared to our competition in the following areas can best be described as	-0.06	0.12	0.75	0.05	-0.01	0.09	0	0.07	0.09	-0.04	-0.1
(Investments for future growth) The relative performance of our firm compared to our competition in the following areas can best be described as	0.24	0.36	0.73	-0.15	0.06	-0.01	0.02	-0.02	-0.07	-0.03	0.16
(Profitability) The relative performance of our firm compared to our competition in the following areas can best be described as	0.13	0.09	0.61	0.14	-0.05	0.07	0.23	0.02	0.13	-0.04	-0.07
(Growth rate) The relative performance of our firm compared to our competition in the following areas can best be described as	0.22	0.38	0.61	0.05	0.2	0.1	0.12	-0.08	-0.19	-0	-0.14

(Expenditure on employees training) The relative performance of our firm compared to our competition in the following areas can best be described as	0.22	0.41	0.51	0	0.18	-0.11	-0.15	0.28	-0.08	0.14	0.04
<i>It is relatively easy for firms to exit from the industry</i>	0.04	0.02	-0.04	0.84	0.15	-0.05	0.07	0.02	-0	0.08	-0.05
<i>It is relatively easy for new firms to enter the industry</i>	-0.11	-0.07	0.19	0.76	0.02	-0.02	0	-0.06	-0.15	0.02	-0.02
<i>We face very strong competition from substitute products and services</i>	-0.12	-0.04	0.08	0.53	0.16	0.46	0.02	0.08	0.01	-0.12	-0.06
<i>The demand conditions in the industry are very volatile</i>	0.17	0.21	-0.19	0.52	0	0.08	-0.04	0.01	0.15	-0.16	0.35
Information about competitor activities are collected regularly	0.25	0.13	0.05	0.04	0.76	0.2	-0.03	0.05	-0.02	0.13	0.04
We conduct regular benchmarking against major competitor product offerings	0.15	0.13	-0.01	0.33	0.68	0.03	0.21	0.25	-0.07	0.03	-0.14
We respond rapidly to major competitor actions	0.16	0.22	0.1	0.09	0.66	0.13	0.3	-0.04	0.24	0.02	0.13
<i>A successful entrepreneur has to be good at marketing</i>	0.15	0.11	0.08	0.09	0.11	0.7	-0.04	0.1	-0.01	-0.01	-0.07
<i>We tend to react to opportunities as and when they present themselves</i>	0.25	0.22	0.06	-0.05	0.08	0.7	0.19	0.07	0.04	0.04	0.01
<i>We tend to find a niche in the market and defend it</i>	-0.01	0.35	-0.03	-0.12	0.09	0.41	0.29	0.16	0.13	0.29	0.12
<i>We spot opportunities by seeing products/services available in other countries and offering them here</i>	0.12	0.16	0.11	0.09	0.22	0.09	0.81	-0.06	-0.06	-0.06	-0.06
<i>We identify products/services available elsewhere and modify them to suit the market here</i>	0.09	0.19	0.07	-0	0.02	0.08	0.73	0.16	-0.07	0.09	-0
<i>We place emphasis on improving our organisational systems to be competitive</i>	0.33	0.19	0.07	0.01	0.17	0	0.05	0.67	-0.06	0.09	-0.04
Government regulations are a major constraint	0.03	-0	0.04	0.04	0.07	0.24	-0	0.61	-0.05	-0.22	-0.06
<i>Our competitive advantage is based on effective internal cost controls</i>	0.07	-0.19	-0.03	-0.1	-0.12	0.02	0.2	0.6	0.33	0	0.33
A small group of customers account for a large percentage of our sales	0.15	-0.02	-0	0.1	-0	0.1	-0.23	-0.08	0.73	0	-0.21
The industry is dependent on a small number of suppliers	-0.28	0.05	0.07	-0.27	0.07	-0.07	0.09	0.14	0.67	0.01	0.1
Our organisation is not constrained by a hierarchical structure	0.27	0.3	-0.06	0.01	-0.01	-0.09	-0.01	-0.02	0.04	0.75	-0.12
We adapt our product offerings accordingly to satisfy distinct market segments	0.08	0.2	-0.04	0.01	0.32	0.25	0.06	-0.28	-0.1	0.57	-0.01
Controlling internal costs is more important than responding to customers' needs	-0.23	-0.12	-0.14	-0.08	0.07	-0.14	-0.02	0.03	-0.05	-0.16	0.8
Short-term profits are more important than market share	-0.24	-0.13	0.11	0.4	-0.13	0.2	-0.09	-0.06	-0.19	0.21	0.53

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 14 iterations.

Table I.4 Rotated Component Matrix with 12 Factors

Questions posed to survey respondents	Factor Loading											
	1	2	3	4	5	6	7	8	9	10	11	12
Information about customer needs are collected regularly	0.75	0.05	0.1	-0.1	0.09	0.05	0.24	0.04	-0.1	-0	0.04	0.01
Our corporate objectives and policies are aimed directly at creating satisfied customers	0.74	0.09	0.18	0.15	0.1	0.17	-0	0.06	0.03	0.08	-0.1	0.12
Levels of customer satisfaction are regularly assessed	0.74	0.1	0.03	-0.1	0.12	0.03	0.27	-0	0.09	0.1	-0.1	-0.1
The different departments in the organisation work effectively together to serve customer needs	0.58	0.31	0.05	0.16	0	0.29	-0.1	0.13	0.27	0.13	-0	-0.1
We put major efforts into building stronger relationships with key customers	0.55	-0.1	0.04	-0.1	0.16	0.13	0.15	0.23	0.21	-0	-0.1	0.29
We put major emphasis on differentiating ourselves from the competition on factors important to our customers	0.42	0.19	0.15	-0.1	0.12	0.27	0.13	0.08	0.17	0.34	-0.2	0.08
Our strategy is focused on being first in the market with a product / service	0.04	0.77	0.19	0.01	0.29	0.03	0.01	0.08	0.03	0.15	-0.1	-0
Our approach is to look for new and innovative ways to supply existing products/services to the market	0.13	0.74	0.17	0.02	0.06	0.13	0.16	0.13	0.07	-0.1	-0	0.14
We frequently introduce new ideas to the market	0.1	0.74	0.23	0.02	0.12	0.19	0.04	0.07	0.07	-0.1	-0	-0
We spend much time, effort and money to generate and develop new ideas	0.03	0.65	0.24	-0.1	0.04	0.19	0.18	0.32	0.24	-0	0	-0
(Investments for future growth) The relative performance of our firm compared to our competition in the following areas can best be described as	0.19	0.29	0.76	-0.1	0.02	0.2	0.03	-0	0.04	0.03	0.1	-0.1
(No. of employees) The relative performance of our firm compared to our competition in the following areas can best be described as	-0.1	0.12	0.75	0.08	0.1	-0.1	0	-0	-0.1	0.05	-0.1	0.06
(Profitability) The relative performance of our firm compared to our competition in the following areas can best be described as	0.12	0.09	0.61	0.13	0.07	0.01	-0.1	0.25	-0	0.03	-0	0.14
(Growth rate) The relative performance of our firm compared to our competition in the following areas can best be described as	0.26	0.39	0.6	0.05	0.08	0.04	0.19	0.16	-0	-0.2	-0.1	-0.1
(Expenditure on employees training) The relative performance of our firm compared to our competition in the following areas can best be described as	0.23	0.43	0.51	0.02	-0.1	0.02	0.2	-0.2	0.08	0.23	-0	-0.1
It is relatively easy for firms to exit from the industry	0.04	0.03	-0	0.85	-0	0.01	0.14	0.05	0.09	0.02	0.03	0.03
It is relatively easy for new firms to enter the industry	-0.1	-0.1	0.17	0.79	0	-0.1	0.01	-0	0.03	-0.1	0.06	-0.1
We face very strong competition from substitute products and services	-0.1	-0	0.07	0.55	0.49	-0	0.16	-0	-0.1	0.01	-0	0.01

<i>We tend to react to opportunities as and when they present themselves</i>	0.23	0.18	0.08	-0	0.72	0.11	0.06	0.17	0.05	0.07	-0	0.01
<i>A successful entrepreneur has to be good at marketing</i>	0.17	0.1	0.08	0.11	0.72	-0	0.11	-0.1	-0	0.03	-0.1	-0
<i>We tend to find a niche in the market and defend it</i>	-0	0.37	-0	-0.1	0.42	0.01	0.11	0.28	0.22	0.21	0.1	0.07
<i>Our decisions are guided by long-term considerations rather than short-term expediency</i>	0.23	0.16	0.13	-0.1	0.02	0.75	0.05	0.04	0.02	-0	-0	0.04
<i>Information about customers are widely circulated throughout the organisation</i>	0.24	0.23	-0.3	0.05	-0	0.59	0.21	0.12	-0	0.05	-0.2	-0.1
<i>Our strategy is to be fast in following competitive trends</i>	0.04	0.31	0.15	-0	0.45	0.54	0.05	0.19	0.05	0.08	0.09	0.17
<i>Information about competitor activities are collected regularly</i>	0.27	0.14	0.05	0.01	0.19	0.1	0.76	0.01	0.12	-0	0.07	0.04
<i>We conduct regular benchmarking against major competitor product offerings</i>	0.2	0.18	-0	0.33	0.02	0.02	0.71	0.25	-0.1	0.08	-0.1	-0
<i>We respond rapidly to major competitor actions</i>	0.02	0.08	0.16	0.13	0.22	0.47	0.57	0.22	0.18	0.12	0.04	0.09
<i>We spot opportunities by seeing products/services available in other countries and offering them here</i>	0.07	0.1	0.13	0.1	0.1	0.24	0.18	0.8	0.01	-0	-0.1	-0.1
<i>We identify products/services available elsewhere and modify them to suit the market here</i>	0.12	0.24	0.05	-0	0.05	-0	0.04	0.78	0	0.12	0.02	-0.1
<i>Our organisation is not constrained by a hierarchical structure</i>	0.26	0.35	-0.1	0.03	-0.1	-0.1	-0	-0	0.72	0.1	-0.1	0.05
<i>We adapt our product offerings accordingly to satisfy distinct market segments</i>	0.06	0.18	-0	0.03	0.27	0.02	0.28	0.05	0.64	-0.2	0.01	-0.1
<i>Government regulations are a major constraint</i>	0.17	0.15	-0	-0	0.18	-0.3	0.2	0.07	-0.5	0.33	-0	0.03
<i>Tensions and rivalries between departments are not allowed to get in the way of serving customers effectively</i>	0.35	0	0.09	0.03	-0.3	0.09	0.21	0.32	0.39	0.21	-0.1	0.08
<i>Our competitive advantage is based on effective internal cost controls</i>	-0	-0.2	-0	-0.1	0.09	0.04	-0.1	0.1	-0.1	0.79	0.15	0.08
<i>We place emphasis on improving our organisational systems to be competitive</i>	0.36	0.24	0.07	0.07	0.06	-0	0.22	-0	-0.1	0.91	-0.2	-0.2
<i>Controlling internal costs is more important than responding to customers' needs</i>	-0.3	-0.2	-0.1	-0.2	-0.1	0.11	0.07	-0	-0.1	0.16	0.74	-0.2
<i>Short-term profits are more important than market share</i>	-0.1	-0	0.06	0.29	0.13	-0.4	-0.1	-0	0.09	-0.1	0.65	-0.1
<i>The demand conditions in the industry are very volatile</i>	0.19	0.23	-0.2	0.39	0.01	0.09	0.02	0.05	-0.2	-0	0.49	0.29
<i>A small group of customers account for a large percentage of our sales</i>	0.1	0.02	-0	0	0.03	-0	0.02	-0.1	-0	-0	-0.1	0.87
<i>The industry is dependent on a small number of suppliers</i>	-0.4	0.01	0.11	-0.3	-0	0.15	0.06	0.05	0.03	0.36	-0	0.49

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 12 iterations.

Table I.5 Rotated Component Matrix with 13 Factors²

Questions posed to survey respondents	Factor Loading												
	1	2	3	4	5	6	7	8	9	10	11	12	13
<i>Our approach is to look for new and innovative ways to supply existing products/services to the market</i>	0.78	0.12	0.01	0.06	0.19	0.04	0.11	0.07	-0.1	0.06	-0	0.1	0.16
<i>We frequently introduce new ideas to the market</i>	0.76	0.1	0.02	0.19	0.04	0.11	0.18	0.06	-0	0.06	-0	-0	0.07
<i>Our strategy is focused on being first in the market with a product / service</i>	0.74	0.06	0.03	0.24	-0	0.3	0.03	0.14	0.15	0.04	-0.1	0.01	-0.1
<i>We spend much time, effort and money to generate and develop new ideas</i>	0.68	0.03	-0.1	0.17	0.2	0.03	0.17	0.28	-0	0.23	-0	-0	0.16
Information about customer needs are collected regularly	0.06	0.76	-0.1	0.1	0.23	0.09	0.04	0.04	-0	-0.1	0.04	0.01	0
Our corporate objectives and policies are aimed directly at creating satisfied customers	0.1	0.75	0.16	0.14	-0	0.09	0.17	0.06	0.08	0.03	-0.1	0.11	0.11
Levels of customer satisfaction are regularly assessed	0.08	0.74	-0.1	0.1	0.24	0.12	0.04	0.03	0.09	0.1	-0.1	-0.1	-0.1
The different departments in the organisation work effectively together to serve customer needs	0.31	0.57	0.16	0.03	-0.1	-0	0.29	0.12	0.15	0.28	-0	-0.2	0.05
We put major efforts into building stronger relationships with key customers	-0	0.56	-0.1	-0.1	0.18	0.14	0.13	0.18	-0	0.2	-0.1	0.25	0.2
We put major emphasis on differentiating ourselves from the competition on factors important to our customers	0.19	0.42	-0.1	0.14	0.13	0.11	0.28	0.08	0.34	0.17	-0.2	0.08	0.04
<i>It is relatively easy for firms to exit from the industry</i>	0.02	0.03	0.86	-0.1	0.14	-0	0.01	0.05	0.02	0.09	0.02	0.02	-0
<i>It is relatively easy for new firms to enter the industry</i>	-0	-0.1	0.79	0.11	0.02	0.01	-0.1	-0	-0.1	0.02	0.04	-0.1	0.14
<i>We face very strong competition from substitute products and services</i>	-0.1	-0.1	0.57	0.13	0.13	0.51	-0	0.06	-0	-0.1	-0	0.05	-0.1
(No. of employees) The relative performance of our firm compared to our competition in the following areas can best be described as	0.1	-0	0.12	0.81	-0.1	0.12	-0.1	0.12	-0	-0.1	-0.1	0.14	0.07
(Investments for future growth) The relative performance of our firm compared to our competition in the following areas can best be described as	0.29	0.21	-0.1	0.76	-0	0.03	0.18	0.04	0	0.04	0.1	-0.1	0.17
(Expenditure on employees training) The relative performance of our firm compared to our competition in the following areas can best be described as	0.41	0.24	0.05	0.58	0.16	-0.1	0.01	-0.1	0.21	0.08	-0	-0.1	-0
(Growth rate) The relative performance of our firm compared to our competition in the following areas can best be described as	0.43	0.26	0.05	0.48	0.21	0.06	0.03	0.14	-0.2	-0	-0.1	-0.1	0.32
Information about competitor activities are collected regularly	0.14	0.28	0.01	0.07	0.76	0.18	0.09	0	-0	0.11	0.07	0.04	-0
We conduct regular benchmarking against major competitor product offerings	0.2	0.19	0.31	-0.1	0.74	0	0.01	0.19	0.11	-0.1	-0.1	-0	0.06

² Only 13 factors have Eigenvalue ≥ 1.0 .

We respond rapidly to major competitor actions	0.11	0.02	0.12	0.12	0.59	0.21	0.45	0.19	0.12	0.17	0.05	0.09	0.15
A successful entrepreneur has to be good at marketing	0.09	0.18	0.12	0.12	0.08	0.73	-0	-0	0.02	-0	-0.1	0.02	-0.1
We tend to react to opportunities as and when they present themselves	0.24	0.22	-0.1	-0.1	0.11	0.7	0.11	0.09	0.11	0.04	-0	-0	0.27
We tend to find a niche in the market and defend it	0.35	-0	-0.1	0	0.09	0.42	0.01	0.32	0.2	0.24	0.1	0.09	-0.1
Our decisions are guided by long-term considerations rather than short-term expediency	0.17	0.23	-0.1	0.14	0.05	0.02	0.75	0.05	-0	0.02	0.02	0.05	0.03
Information about customers are widely circulated throughout the organisation	0.21	0.23	0.05	-0.2	0.2	-0	0.6	0.14	0.06	-0	-0.2	-0.1	-0.2
Our strategy is to be fast in following competitive trends	0.36	0.03	-0	-0	0.1	0.42	0.52	0.11	0.11	0.04	0.1	0.12	0.32
We identify products/services available elsewhere and modify them to suit the market here	0.22	0.14	-0	0.07	0.02	0.04	-0	0.84	0.1	0.02	0.03	-0	-0
We spot opportunities by seeing products/services available in other countries and offering them here	0.11	0.08	0.1	0.06	0.19	0.09	0.24	0.8	-0	0.01	-0.1	-0.1	0.15
Our competitive advantage is based on effective internal cost controls	-0.2	-0	-0.1	-0	-0.1	0.08	0.04	0.08	0.8	-0.1	0.16	0.09	0.09
We place emphasis on improving our organisational systems to be competitive	0.24	0.34	0.06	0.07	0.23	0.05	-0	-0	0.63	-0.1	-0.2	-0.2	-0
Our organisation is not constrained by a hierarchical structure	0.34	0.25	0.02	-0.1	-0	-0.1	-0.1	-0	0.1	0.72	-0.1	0.04	-0.1
We adapt our product offerings accordingly to satisfy distinct market segments	0.15	0.07	0.04	0.06	0.25	0.28	0.02	0.1	-0.2	0.65	0.01	-0.1	-0.2
Government regulations are a major constraint	0.13	0.17	-0	0.02	0.18	0.19	-0.3	0.1	0.34	-0.5	-0	0.04	-0.1
Tensions and rivalries between departments are not allowed to get in the way of serving customers effectively	0.01	0.35	0.02	0.04	0.23	-0.3	0.09	0.29	0.21	0.39	-0.1	0.06	0.13
Controlling internal costs is more important than responding to customers' needs	-0.2	-0.3	-0.1	0.02	0.04	-0.1	0.09	0.01	0.13	-0.1	0.77	-0.1	-0.2
Short-term profits are more important than market share	0.01	-0.1	0.27	-0.1	-0	0.12	-0.4	-0.1	-0.1	0.08	0.62	-0.1	0.25
The demand conditions in the industry are very volatile	0.21	0.2	0.41	-0.2	0	0.01	0.07	0.08	-0	-0.2	0.5	0.3	-0.1
A small group of customers account for a large percentage of our sales	0.02	0.13	0.02	-0	0.01	0.04	-0	-0.1	-0.1	-0	-0.1	0.87	0.03
The industry is dependent on a small number of suppliers	-0	-0.4	-0.3	0.15	0.04	-0	0.14	0.09	0.31	0.04	0.02	0.54	-0
(Profitability)The relative performance of our firm compared to our competition in the following areas can best be described as	0.21	0.09	0.09	0.25	0.05	0.03	-0	0.07	0.1	-0.1	-0.1	0.03	0.78

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 15 iterations.

Table I.6 Rotated Component Matrix (Excluding Industry Environment, STPPROFIT, INTCOST, COMPADV) with 3 Factors

Questions posed to survey respondents	Factor Loading		
	1	2	3
<i>Our strategy is to be fast in following competitive trends</i>	0.66	0.09	0.22
<i>We respond rapidly to major competitor actions</i>	0.65	0.27	0.02
<i>We spend much time, effort and money to generate and develop new ideas</i>	0.64	0.1	0.45
<i>We spot opportunities by seeing products/services available in other countries and offering them here</i>	0.6	0.14	0.06
<i>We tend to find a niche in the market and defend it</i>	0.57	0.04	0.12
<i>Our approach is to look for new and innovative ways to supply existing products/services to the market</i>	0.54	0.14	0.46
<i>We tend to react to opportunities as and when they present themselves</i>	0.52	0.2	0.16
<i>We identify products/services available elsewhere and modify them to suit the market here</i>	0.5	0.11	0.12
Information about competitor activities are collected regularly	0.45	0.44	0
We conduct regular benchmarking against major competitor product offerings	0.45	0.38	-0
We adapt our product offerings accordingly to satisfy distinct market segments	0.45	0.17	-0
Our decisions are guided by long-term considerations rather than short-term expediency	0.35	0.31	0.15
<i>A successful entrepreneur has to be good at marketing</i>	0.31	0.15	0.15
Levels of customer satisfaction are regularly assessed	0.09	0.78	0.11
Our corporate objectives and policies are aimed directly at creating satisfied customers	0.04	0.73	0.24
Information about customer needs are collected regularly	0.03	0.73	0.13
The different departments in the organisation work effectively together to serve customer needs	0.23	0.61	0.23
We put major efforts into building stronger relationships with key customers	0.23	0.59	-0
We put major emphasis on differentiating ourselves from the competition on factors important to our customers	0.27	0.58	0.21
Tensions and rivalries between departments are not allowed to get in the way of serving customers effectively	0.2	0.5	0
<i>We place emphasis on improving our organisational systems to be competitive</i>	0.12	0.5	0.21
Information about customers are widely circulated throughout the organization	0.4	0.41	-0.2
Our organisation is not constrained by a hierarchical structure	0.23	0.34	0.1
(Investments for future growth) The relative performance of our firm compared to our competition in the following areas can best be described as	0.09	0.19	0.79
(No. of employees) The relative performance of our firm compared to our competition in the following areas can best be described as	-0	-0.1	0.7
(Growth rate) The relative performance of our firm compared to our competition in the following areas can best be described as	0.26	0.23	0.68
(Expenditure on employees training) The relative performance of our firm compared to our competitor in the following areas can best be described as	0.07	0.33	0.65
<i>Our strategy is focused on being first in the market with a product / service</i>	0.5	0.06	0.56
<i>We frequently introduce new ideas to the market</i>	0.5	0.09	0.54
(Profitability) The relative performance of our firm compared to our competition in the following areas can best be described as	0.11	0.08	0.53

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.
 a. Rotation converged in 7 iterations.

Table I.7 Component Score Coefficient Matrix (excluding Industry Environment, STPPROFIT, INTCOST, COMPADV)

Questions posed to survey respondents	Factor		
	F1 coeff	F2 coeff	F3 coeff
<i>Our strategy is to be fast in following competitive trends</i>	0.19	-0.08	-0.01
<i>We respond rapidly to major competitor actions</i>	0.18	-0.01	-0.09
<i>We spot opportunities by seeing products/services available in other countries and offering them here</i>	0.18	-0.04	-0.06
<i>We tend to find a niche in the market and defend it</i>	0.18	-0.07	-0.03
<i>We spend much time, effort and money to generate and develop new ideas</i>	0.15	-0.08	0.08
<i>We identify products/services available elsewhere and modify them to suit the market here</i>	0.14	-0.04	-0.03
<i>We adapt our product offerings accordingly to satisfy distinct market segments</i>	0.13	-0.01	-0.07
<i>We tend to react to opportunities as and when they present themselves</i>	0.13	-0.02	-0.02
<i>Our approach is to look for new and innovative ways to supply existing products/services to the market</i>	0.11	-0.06	0.09
<i>We conduct regular benchmarking against major competitor product offerings</i>	0.11	0.06	-0.10
<i>Information about customers are widely circulated throughout the organisation</i>	0.10	0.08	-0.13
<i>Our strategy is focused on being first in the market with a product / service</i>	0.09	-0.08	0.13
<i>Information about competitor activities are collected regularly</i>	0.09	0.08	-0.08
<i>We frequently introduce new ideas to the market</i>	0.09	-0.07	0.13
<i>A successful entrepreneur has to be good at marketing</i>	0.07	0.00	0.01
<i>Our decisions are guided by long-term considerations rather than short-term expediency</i>	0.06	0.04	-0.01
<i>Our organisation is not constrained by a hierarchical structure</i>	0.02	0.07	-0.01
<i>We put major efforts into building stronger relationships with key customers</i>	0.00	0.16	-0.08
<i>Tensions and rivalries between departments are not allowed to get in the way of serving customers effectively</i>	0.00	0.13	-0.05
<i>We put major emphasis on differentiating ourselves from the competition on factors important to our customers</i>	-0.02	0.14	0.01
(Growth rate) The relative performance of our firm compared to our competition in the following areas can best be described as	-0.03	0.00	0.20
<i>The different departments in the organisation work effectively together to serve customer needs</i>	-0.04	0.15	0.02
(Profitability) The relative performance of our firm compared to our competition in the following areas can best be described as	-0.04	-0.02	0.17
<i>We place emphasis on improving our organisational systems to be competitive</i>	-0.05	0.13	0.03
(No. of employees) The relative performance of our firm compared to our competition in the following areas can best be described as	-0.09	-0.05	0.26
<i>Levels of customer satisfaction are regularly assessed</i>	-0.09	0.23	-0.01
(Investments for future growth) The relative performance of our firm compared to our competition in the following areas can best be described as	-0.10	0.01	0.26
(Expenditure on employees training) The relative performance of our firm compared to our competitor in the following areas can best be described as	-0.10	0.06	0.21
<i>Information about customer needs are collected regularly</i>	-0.11	0.22	0.00
<i>Our corporate objectives and policies are aimed directly at creating satisfied customers</i>	-0.12	0.22	0.04

Table I.8 Section B - Market Orientation : Rotated Component Matrix - 5 factors³

	Questions posed to survey respondents	Factor Loading					
		1	2	3	4	5	
Q2	Our corporate objectives and policies are aimed directly at creating satisfied customers	0.83	0.03	0.14	0.08	-0.04	Customer Orientation
Q1	Information about customer needs are collected regularly	0.78	0.22	0.06	-0.08	-0.04	
Q3	Levels of customer satisfaction are regularly assessed	0.73	0.27	0.04	0.10	-0.20	
Q14	The different departments in the organisation work effectively together to serve customer needs	0.63	-0.04	0.25	0.41	0.05	
Q9	We put major emphasis on differentiating ourselves from the competition on factors important to our customers	0.52	0.15	0.38	0.19	-0.13	
Q4	We put major efforts into building stronger relationships with key customers	0.52	0.20	0.20	0.20	-0.13	Competitor Orientation
Q7	We conduct regular benchmarking against major competitor product offerings	0.16	0.83	0.03	0.08	-0.09	
Q6	Information about competitor activities are collected regularly	0.26	0.80	0.07	0.11	0.00	
Q8	We respond rapidly to major competitor actions	0.09	0.65	0.43	0.20	0.13	Long terms Goals
Q12	Our decisions are guided by long-term considerations rather than short-term expediency	0.18	0.04	0.82	0.08	0.01	
Q13	Information about customers are widely circulated throughout the organisation	0.20	0.23	0.62	0.09	-0.06	Information - Interfunctional
Q16	Our organisation is not constrained by a hierarchical structure	0.17	-0.02	-0.01	0.83	-0.20	
Q5	We adapt our product offerings accordingly to satisfy distinct market segments	-0.01	0.26	0.07	0.74	0.04	Long terms Goals
Q15	Tensions and rivalries between departments are not allowed to get in the way of serving customers effectively	0.28	0.15	0.24	0.45	-0.07	
Q11 ⁴	Controlling internal costs is more important than responding to customers' needs	-0.22	-0.04	0.11	-0.25	0.81	Long terms Goals
Q10	Short-term profits are more important than market share	-0.05	0.04	-0.55	0.10	0.71	

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

³ This table concentrates solely on the 16 questions in Section B – Marketing Orientation of the Survey Questionnaire
Only 5 factors have Eigenvalues ≥ 1.0 .

⁴ From Appendix VI - Scale Reliability Analysis Table VI.1, Q11 and Q10 are unreliable questions. A further factor analysis specifying 4 factors instead of 5 factors yield table with same grouping of questions

Table I.9 Section C - Entrepreneurial Orientation : Rotated Component Matrix - 4 factors⁵

	Questions posed to survey respondents	Factor Loading				
		1	2	3	4	
Q2	<i>Our approach is to look for new and innovative ways to supply existing products/services to the market</i>	0.83	0.15	0.11	-0.05	Catalytic Entrepreneur
Q1	<i>We frequently introduce new ideas to the market</i>	0.80	0.22	0.08	-0.10	
Q3	<i>We spend much time, effort and money to generate and develop new ideas</i>	0.79	0.05	0.32	0.05	
Q8	<i>Our strategy is focused on being first in then market with a product / service</i>	0.77	0.23	0.08	0.23	
Q9	<i>We tend to find a niche in the market and defend it</i>	0.37	0.27	0.28	0.35	
Q12	<i>A successful entrepreneur has to be good at marketing</i>	0.11	0.81	-0.08	0.03	Strategic Entrepreneur
Q11	<i>We tend to react to opportunities as and when they present themselves</i>	0.15	0.80	0.20	0.16	
Q10	<i>Our atrategy is to be fast in following competitive trends</i>	0.36	0.61	0.24	0.05	
Q4	<i>We spot opportunities by seeing products/services available in other countries and offering them here</i>	0.17	0.13	0.86	-0.01	Allocating Entrepreneur
Q5	<i>We identify products/services available elsewhere and modify them to suit the market here</i>	0.17	0.06	0.84	0.12	
Q6 ⁶	<i>Our competitive advantage is based on effective intemal cost controls</i>	-0.26	0.06	0.08	0.78	Refining Entrepreneur
Q7	<i>We place emphasis on improving our organisational systems to be competitive</i>	0.27	0.09	0.00	0.77	

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

⁵ This table concentrates solely on the 12 questions in Section C – Entrepreneurial Orientation of the Survey Questionnaire. Only 4 factors have Eigenvalues >= 1.0.

⁶ From Appendix VI - Scale Reliability Analysis Table VI.2, Q6 is an unreliable question.

Table I.10 Section D – Relative Performance of the Firm : Component Matrix - 1 factor⁷

	Questions posed to survey respondents	Factor Loading
		1
Q4	(Investments for future growth) The relative performance of our firm compared to our competition in the following areas can best be described as	0.86
Q2	(Growth rate) The relative performance of our firm compared to our competition in the following areas can best be described as	0.79
Q5	(Expenditure on employees training) The relative performance of our firm compared to our competitor in the following areas can best be described as	0.73
Q3	(No. of employees) The relative performance of our firm compared to our competition in the following areas can best be described as	0.69
Q1	(Profitability) The relative performance of our firm compared to our competition in the following areas can best be described as	0.61

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

⁷ This table concentrates solely on the 5 questions in Section D – *Relative Performance of the Firm* of the Survey Questionnaire. Only 1 factor has Eigenvalues ≥ 1.0 . The Component Matrix is hence not rotated. From Appendix VI - *Scale Reliability Analysis* Table VI.3, all the questions in this section are reliable.

Table I.11 Section E – Industry Environment : Rotated Component Matrix - 3 factor⁸

	Questions posed to survey respondents	Factor Loading		
		1	2	3
Q3	<i>It is relatively easy for firms to exit from the industry</i>	0.82	-0.02	0.20
Q2	<i>It is relatively easy for new firms to enter the industry</i>	0.78	-0.25	0.24
Q1	<i>We face very strong competition from substitute products and services</i>	0.67	0.21	-0.14
Q6	<i>The demand conditions in the industry are very volatile</i>	0.52	0.49	-0.10
Q4	<i>A small group of customers account for a large percentage of our sales</i>	-0.03	0.71	0.49
Q5	<i>The industry is dependent on a small number of suppliers</i>	-0.38	0.57	0.22
Q7	<i>Government regulations are a major constraint</i>	0.13	0.41	-0.82

Extraction Method: Principal Component Analysis.

a. 3 components extracted.

⁸ This table concentrates solely on the 7 questions in Section E – Industry Environment of the Survey Questionnaire. Only 3 factors have Eigenvalues ≥ 1.0 . From Appendix VI - Scale Reliability Analysis Table VI.4, all the questions in this section are unreliable.

Scale Reliability Analysis

From the results and discussion in section 8.2 and Appendix V, preceding Factor Analysis have demonstrated that each set of questions under the four conceptual grouping : sections B – *Marketing Orientation*, C – *Entrepreneurial Orientation*, D – *Relative Performance of the Firm* and E – *Industry Environment*¹, corresponds to a scale factor. To remove those questions that are weakly related to a particular scale, scale reliability analysis is next conducted for each set of questions in the four conceptual grouping.

¹ Section E was labeled *The Industry* in the survey questionnaire. The 7 questions raised in this section however pertain to the industry environment of the respondents. It hence re-labeled as *Industry Environment* henceforth to better reflect the intent of the questions asked.

Section B Questions

From table VI.1 below it can be seen that Question No 10 *STPPROFIT* ('Short-term profits are more important than market share') and Question No 11 *INTCOST* ('Controlling internal costs is more important than responding to customers' needs') have item-to-scale correlation values -0.2078 and -0.2349 which is less than 0.3. The corresponding *alpha* value with these 2 questions deleted would be raised to 0.8007 and 0.7875 respectively. These 2 questions are hence deleted from subsequent computation.

**Table VI.1 Reliability of Items in Section B
- Marketing Orientation**

Section B Items		Corrected Item-Total Correlation	Alpha if item deleted
Q1	INFO	0.4776	0.7217
Q2	OBJ	0.5192	0.7233
Q3	CUSTSAT	0.5345	0.7174
Q4	RELATION	0.4776	0.7261
Q5	PRODOFF	0.3950	0.7284
Q6	INFOCOMP	0.5399	0.7157
Q7	BENCHMK	0.4635	0.7209
Q8	RESPOND	0.5203	0.7138
Q9	DIFFEREN	0.5088	0.7191
Q10	STPPROFIT	-0.2078	0.8007
Q11	INTCOST	-0.2349	0.7875
Q12	LTCNSID	0.3538	0.7319
Q13	INFOCUST	0.3948	0.7277
Q14	DIFFDEPT	0.5394	0.7159
Q15	TENSRIV	0.4179	0.7260
Q16	HIERARCH	0.3373	0.7335

Alpha = .7459

Section C Questions

From table VI.2 below it can be seen that Question No 6 *COMPADV* ('Our competitive advantage is based on effective internal cost controls') has item-to-scale correlation value 0.0363 which is less than 0.3. The corresponding *alpha* value with this question deleted would be raised to 0.8438. This question is hence deleted from subsequent computation.

**Table VI.2 Reliability of Items in Section C
- Entrepreneurial Orientation**

Section C Items		Corrected Item-Total Correlation	Alpha if item deleted
Q1	NEWIDEAS	0.5617	0.7958
Q2	INNOWAYS	0.5690	0.7953
Q3	TIME	0.6203	0.7901
Q4	SPOTOPP	0.4368	0.8066
Q5	PRODSERV	0.4510	0.8053
Q6	COMPADV	0.0363	0.8438
Q7	INTORG	0.3626	0.8120
Q8	FIRSTMKT	0.6519	0.7852
Q9	NICHEMKT	0.5048	0.8008
Q10	FASTFLLW	0.5788	0.7943
Q11	REACT	0.5710	0.7952
Q12	GOODMKTG	0.3450	0.8133

Alpha = .8173

Section D Questions

From table VI.3 below it can be seen that all questions has item-to-scale correlation value greater than 0.3. This shows that the questions in this section constitute a sufficiently reliable scale.

**Table VI.3 Reliability of Items in Section D
- Relative Performance of the Firm**

Section D Items		Corrected Item-Total Correlation	Alpha if item deleted
Q1	PROFIT	0.4332	0.7864
Q2	GROWTH	0.6205	0.7341
Q3	NOEMP	0.5187	0.7689
Q4	INVEST	0.7321	0.6880
Q5	EXPEND	0.5511	0.7524

Alpha = .7877

Section E Questions

From table VI.4 below it can be seen that all questions has item-to-scale correlation value less than 0.3. The overall *alpha* value is 0.4233 which is less than the 0.7 value. In addition, individual question deletion would not raise the *alpha* to a value greater than 0.7. This shows that the questions in this section do not constitute a sufficiently reliable scale. The questions in this section are thus deleted from subsequent computation.

**Table VI.4 Reliability of Items in Section E
- Industry Environment**

Section E Items		Corrected Item-Total Correlation	Alpha if item deleted
Q1	STRGCOMP	0.3942	0.2911
Q2	ENTRYIND	0.2177	0.3717
Q3	EXITIND	0.4026	0.2764
Q4	SMALLGP	0.1068	0.4318
Q5	SMALLNO	-0.0987	0.5216
Q6	DEMAND	0.3493	0.3075
Q7	GOVT	0.0764	0.4452

Alpha = .4233

Multiple Regression

Multiple linear regression computations were performed from factors grouped under sections B – *Marketing Orientation*, C – *Entrepreneurial Orientation*, E – *Industry Environment* and D – *Relative Performance of the Firm*¹ using *Unweighted Factor-Based Scale Method*. In all computations, *Relative Performance of the Firm* is treated as the dependent variable and *Marketing Orientation*, *Entrepreneurial Orientation*, and *Industry Environment* as independent variables. The treatment of missing value is ‘exclude cases pairwise’.

The size of firms is measured in terms of sales turnover grouped into – (i) *Less than \$10 million*, (ii) *\$10 to \$40 million*, (iii) *Over \$40 million*, and (iv) *All Turnover* ie a composite of (i), (ii) and (iii).

The respondents’ background is divided into (i) *Goods Industry*, (ii) *Service Industry*, (iii) *Non-Tertiary Education Level*, (iv) *Tertiary Education Level* and (v) *All Background* ie a composite of (i), (ii), (iii) and (iv).

Section 8.2.2 and Appendix VI *Scale Reliability Analysis* recommended a total of 10 questions - all the 7 questions in section E, 2 questions from section B and 1 question from section C, in the survey questionnaire to be dropped from statistical computation. The following computations still include all the 7 questions in section E since these questions form part of the research factor *Industry Environment* which would be lost otherwise. The other 3 questions however are removed from the following computations.

¹ Questions with low reliability and low correlation problems were removed these three sections. See section 8.2.2, 9.1 and Appendix VI for details.

1.1 Relative Performance of the Firm (Dependent Variable) with Firm Sales Turnover - All Turnover and Respondents' Background - All Background

N = 118

Table VII.1 Model Summary

Model	R	R Square ^a	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1.000	0.982 ^b	0.965	0.964	3.498	0.965	1066.445	3.000	116.000	0.000

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept.

b Predictors: IE, MO, EO

Table VII.2 ANOVA ^{c,d}

Model		Sum of Squares	Df	Mean Square	F	Sig.
1.000	Regression	39149.763	3.000	13049.921	1066.445	0.000 ^a
	Residual	1407.237	115.000	12.237		
	Total	40557.000 ^b	118.000			

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept

b This total sum of squares is not corrected for the constant because the constant is zero for regression through the origin.

c Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

d Linear Regression through the Origin

Table VII.3 Coefficients ^{a,b}

Model		Unstandardized		Standardized	T	Sig.	95% Conf Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1.000	MO	0.068	0.049	0.217	1.395	0.166	-0.029	0.165	0.012	80.456
	EO	0.290	0.063	0.713	4.569	0.000	0.164	0.415	0.012	80.767
	IE	0.044	0.068	0.054	0.642	0.522	-0.091	0.179	0.042	23.619

a Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

b Linear Regression through the Origin

1.2 Relative Performance of the Firm (Dependent Variable) with Firm Sales Turnover - All Turnover and Respondents' Background – Goods Industry

N = 55

Table VII.4 Model Summary

Model	R	R Square ^a	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1.000	0.980 ^b	0.961	0.959	3.744	0.961	426.607	3.000	53.000	0.000

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept.

b Predictors: IE, MO, EO

Table VII.5 ANOVA ^{c,d}

Model		Sum of Squares	Df	Mean Square	F	Sig.
1.000	Regression	17942.965	3.000	5980.988	426.607	0.000 ^a
	Residual	729.035	52.000	14.020		
	Total	18672.000 ^b	55.000			

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept

b This total sum of squares is not corrected for the constant because the constant is zero for regression through the origin.

c Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

d Linear Regression through the Origin

Table VII.6 Coefficients ^{a,b}

Model		Unstandardized		Standardized	T	Sig.	95% Conf Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1.000	MO	0.151	0.079	0.480	1.902	0.063	-0.008	0.310	0.012	84.754
	EO	0.174	0.105	0.427	1.652	0.105	-0.037	0.385	0.011	89.117
	IE	0.061	0.113	0.076	0.544	0.589	-0.165	0.288	0.039	25.931

a Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

b Linear Regression through the Origin

1.3 Relative Performance of the Firm (Dependent Variable) with Firm Sales Turnover - All Turnover and Respondents' Background – Service Industry

N = 63

Table VII.7 Model Summary

Model	R	R Square ^a	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1.000	0.985 ^b	0.970	0.969	3.286	0.970	655.615	3.000	61.000	0.000

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept.

b Predictors: IE, MO, EO

Table VII. 8 ANOVA ^{c,d}

Model		Sum of Squares	Df	Mean Square	F	Sig.
1.000	Regression	21237.146	3.000	7079.049	655.615	0.000 ^a
	Residual	647.854	60.000	10.798		
	Total	21885.000 ^b	63.000			

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept

b This total sum of squares is not corrected for the constant because the constant is zero for regression through the origin.

c Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

d Linear Regression through the Origin

Table VII.9 Coefficients ^{a,b}

Model		Unstandardized		Standardized	T	Sig.	95% Conf Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1.000	MO	0.006	0.061	0.019	0.095	0.924	-0.116	0.128	0.013	77.263
	EO	0.373	0.078	0.920	4.784	0.000	0.217	0.529	0.013	75.024
	IE	0.038	0.084	0.047	0.453	0.652	-0.130	0.206	0.045	22.024

a Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

b Linear Regression through the Origin

1.4 Relative Performance of the Firm (Dependent Variable) with Firm Sales Turnover - All Turnover and Respondents' Background – Non-Tertiary Education Level

N = 26

Table VII.10 Model Summary

Model	R	R Square ^a	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1.000	0.975 ^b	0.951	0.945	4.510	0.951	150.391	3.000	24.000	0.000

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept.

b Predictors: IE, MO, EO

Table VII. 11 ANOVA ^{c,d}

Model		Sum of Squares	Df	Mean Square	F	Sig.
1.000	Regression	9175.263	3.000	3058.421	150.391	0.000 ^a
	Residual	467.737	23.000	20.336		
	Total	9643.000 ^b	26.000			

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept

b This total sum of squares is not corrected for the constant because the constant is zero for regression through the origin.

c Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

d Linear Regression through the Origin

Table VII.12 Coefficients ^{a,b}

Model		Unstandardized		Standardized	T	Sig.	95% Conf Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1 000	MO	0.093	0.102	0.286	0.910	0.372	-0.119	0.305	0.021	46.965
	EO	0.268	0.145	0.634	1.848	0.078	-0.032	0.568	0.018	55.794
	IE	0.050	0.163	0.059	0.309	0.760	-0.287	0.387	0.058	17.318

a Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

b Linear Regression through the Origin

1.5 Relative Performance of the Firm (Dependent Variable) with Firm Sales Turnover - All Turnover and Respondents' Background – Tertiary Education Level

N = 89

Table VII.13 Model Summary

Model	R	R Square ^a	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1.000	0.984 ^b	0.969	0.968	3.272	0.969	902.571	3.000	87.000	0.000

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept.

b Predictors: IE, MO, EO

Table VII. 14 ANOVA ^{c,d}

Model		Sum of Squares	Df	Mean Square	F	Sig.
1.000	Regression	28997.023	3.000	9665.674	902.571	0.000 ^a
	Residual	920.977	86.000	10.709		
	Total	29918.000 ^b	89.000			

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept

b This total sum of squares is not corrected for the constant because the constant is zero for regression through the origin.

c Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

d Linear Regression through the Origin

Table VII.15 Coefficients ^{a,b}

Model		Unstandardized		Standardized	T	Sig.	95% Conf Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1.000	MO	0.051	0.060	0.165	0.848	0.399	-0.069	0.171	0.009	105.381
	EO	0.302	0.074	0.754	4.075	0.000	0.155	0.450	0.010	95.666
	IE	0.054	0.077	0.068	0.696	0.488	-0.100	0.207	0.038	26.512

a Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

b Linear Regression through the Origin

1.6 Relative Performance of the Firm (Dependent Variable) with Firm Sales Turnover – Over \$40 million and Respondents' Background - All Background

N = 23

Table VII.16 Model Summary

Model	R	R Square ^a	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1.000	0.993 ^b	0.986	0.984	2.498	0.986	480.086	3.000	21.000	0.000

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept.

b Predictors: IE, MO, EO

Table VII. 17 ANOVA ^{c,d}

Model		Sum of Squares	Df	Mean Square	F	Sig.
1.000	Regression	8985.227	3.000	2995.076	480.086	0.000 ^a
	Residual	124.773	20.000	6.239		
	Total	9110.000 ^b	23.000			

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept

b This total sum of squares is not corrected for the constant because the constant is zero for regression through the origin.

c Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

d Linear Regression through the Origin

Table VII.18 Coefficients ^{a,b}

Model		Unstandardized		Standardized	T	Sig.	95% Conf Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1.000	MO	0.028	0.102	0.086	0.277	0.785	-0.185	0.241	0.007	139.740
	EO	0.364	0.116	0.851	3.148	0.005	0.123	0.606	0.009	106.591
	IE	0.049	0.105	0.059	0.463	0.649	-0.171	0.268	0.043	23.520

a Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

b Linear Regression through the Origin

1.7 Relative Performance of the Firm (Dependent Variable) with Firm Sales Turnover – Over \$40 million and Respondents’ Background – Goods Industry

N = 15

Table VII.19 Model Summary

Model	R	R Square ^a	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1.000	0.994 ^b	0.987	0.984	2.422	0.987	314.700	3.000	13.000	0.000

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept.

b Predictors: IE, MO, EO

Table VII. 20 ANOVA ^{c,d}

Model		Sum of Squares	Df	Mean Square	F	Sig.
1.000	Regression	5539.589	3.000	1846.530	314.700	0.000 ^a
	Residual	70.411	12.000	5.868		
	Total	5610.000 ^b	15.000			

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept

b This total sum of squares is not corrected for the constant because the constant is zero for regression through the origin.

c Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

d Linear Regression through the Origin

Table VII.21 Coefficients ^{a,b}

Model		Unstandardized		Standardized	T	Sig.	95% Conf Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1.000	MO	-0.073	0.123	-0.226	-0.598	0.561	-0.341	0.194	0.007	136.337
	EO	0.371	0.142	0.878	2.614	0.023	0.062	0.681	0.009	107.900
	IE	0.267	0.141	0.345	1.897	0.082	-0.040	0.574	0.032	31.663

a Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

b Linear Regression through the Origin

1.8 Relative Performance of the Firm (Dependent Variable) with Firm Sales Turnover – Over \$40 million and Respondents’ Background – Service Industry

N = 8

Table VII.22 Model Summary

Model	R	R Square ^a	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1.000	0.997 ^b	0.993	0.989	2.148	0.993	251.293	3.000	6.000	0.000

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept.

b Predictors: IE, MO, EO

Table VII. 23 ANOVA ^{c,d}

Model		Sum of Squares	Df	Mean Square	F	Sig.
1.000	Regression	3476.940	3.000	1158.980	251.293	0.000 ^a
	Residual	23.060	5.000	4.612		
	Total	3500.000 ^b	8.000			

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept

b This total sum of squares is not corrected for the constant because the constant is zero for regression through the origin.

c Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

d Linear Regression through the Origin

Table VII.24 Coefficients ^{a,b}

Model		Unstandardized		Standardized	T	Sig.	95% Conf Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1.000	MO	0.208	0.155	0.613	1.344	0.237	-0.190	0.606	0.006	158.024
	EO	0.259	0.167	0.591	1.545	0.183	-0.172	0.689	0.009	110.826
	IE	-0.201	0.158	-0.213	-1.274	0.259	-0.608	0.205	0.047	21.311

a Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

b Linear Regression through the Origin

1.9 Relative Performance of the Firm (Dependent Variable) with Firm Sales Turnover – Over \$40 million and Respondents' Background – Non-Tertiary Education Level

N = 6

Table VII.25 Model Summary

Model	R	R Square ^a	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1.000	0.997 ^b	0.994	0.988	2.310	0.994	160.793	3.000	4.000	0.001

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept.

b Predictors: IE, MO, EO

Table VII. 26 ANOVA ^{c,d}

Model		Sum of Squares	Df	Mean Square	F	Sig.
1.000	Regression	2574.986	3.000	858.329	160.793	0.001 ^a
	Residual	16.014	3.000	5.338		
	Total	2591.000 ^b	6.000			

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept

b This total sum of squares is not corrected for the constant because the constant is zero for regression through the origin.

c Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

d Linear Regression through the Origin

Table VII.27 Coefficients ^{a,b}

Model		Unstandardized		Standardized	T	Sig.	95% Conf Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1.000	MO	-0.008	0.201	-0.022	-0.038	0.972	-0.649	0.633	0.006	160.649
	EO	0.555	0.233	1.182	2.384	0.097	-0.186	1.296	0.008	119.331
	IE	-0.162	0.172	-0.173	-0.942	0.416	-0.709	0.385	0.061	16.378

a Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

b Linear Regression through the Origin

1.10 Relative Performance of the Firm (Dependent Variable) with Firm Sales Turnover – Over \$40 million and Respondents' Background – Tertiary Education Level

N = 17

Table VII.28 Model Summary

Model	R	R Square ^a	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1.000	0.996 ^b	0.992	0.990	1.921	0.992	583.947	3.000	15.000	0.000

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept.

b Predictors: IE, MO, EO

Table VII. 29 ANOVA ^{c,d}

Model		Sum of Squares	Df	Mean Square	F	Sig.
1.000	Regression	6467.316	3.000	2155.772	583.947	0.000 ^a
	Residual	51.684	14.000	3.692		
	Total	6519.000 ^b	17.000			

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept

b This total sum of squares is not corrected for the constant because the constant is zero for regression through the origin.

c Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

d Linear Regression through the Origin

Table VII.30 Coefficients ^{a,b}

Model		Unstandardized		Standardized	T	Sig.	95% Conf Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1.000	MO	-0.061	0.094	-0.188	-0.647	0.528	-0.263	0.141	0.007	149.905
	EO	0.356	0.104	0.858	3.428	0.004	0.133	0.579	0.009	110.672
	IE	0.263	0.103	0.331	2.543	0.023	0.041	0.484	0.033	29.910

a Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

b Linear Regression through the Origin

1.11 Relative Performance of the Firm (Dependent Variable) with Firm Sales Turnover – \$10 to \$40 million and Respondents' Background – All Background

N = 43

Table VII.31 Model Summary

Model	R	R Square ^a	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1.000	0.987 ^b	0.975	0.973	3.163	0.975	512.404	3.000	41.000	0.000

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept.

b Predictors: IE, MO, EO

Table VII. 32 ANOVA ^{c,d}

Model		Sum of Squares	Df	Mean Square	F	Sig.
1.000	Regression	15375.902	3.000	5125.301	512.404	0.000 ^a
	Residual	400.098	40.000	10.002		
	Total	15776.000 ^b	43.000			

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept

b This total sum of squares is not corrected for the constant because the constant is zero for regression through the origin.

c Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

d Linear Regression through the Origin

Table VII.33 Coefficients ^{a,b}

Model		Unstandardized		Standardized	T	Sig.	95% Conf Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1.000	MO	0.041	0.073	0.128	0.562	0.578	-0.107	0.189	0.012	82.211
	EO	0.262	0.103	0.627	2.533	0.015	0.053	0.471	0.010	96.503
	IE	0.197	0.108	0.237	1.829	0.075	-0.021	0.415	0.038	26.383

a Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

b Linear Regression through the Origin

1.12 Relative Performance of the Firm (Dependent Variable) with Firm Sales Turnover – \$10 to \$40 million and Respondents' Background – Goods Industry

N = 18

Table VII.34 Model Summary

Model	R	R Square ^a	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1.000	0.988 ^b	0.976	0.972	3.270	0.976	206.453	3.000	16.000	0.000

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept.

b Predictors: IE, MO, EO

Table VII. 35 ANOVA ^{c,d}

Model		Sum of Squares	Df	Mean Square	F	Sig.
1.000	Regression	6623.586	3.000	2207.862	206.453	0.000 ^a
	Residual	160.414	15.000	10.694		
	Total	6784.000 ^b	18.000			

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept

b This total sum of squares is not corrected for the constant because the constant is zero for regression through the origin.

c Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

d Linear Regression through the Origin

Table VII.36 Coefficients ^{a,b}

Model		Unstandardized		Standardized	T	Sig.	95% Conf Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1.000	MO	0.229	0.110	0.706	2.088	0.054	-0.005	0.464	0.014	72.563
	EO	0.027	0.166	0.063	0.163	0.873	-0.327	0.381	0.010	95.327
	IE	0.205	0.230	0.222	0.891	0.387	-0.286	0.696	0.025	39.381

a Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

b Linear Regression through the Origin

1.13 Relative Performance of the Firm (Dependent Variable) with Firm Sales Turnover – \$10 to \$40 million and Respondents' Background – Service Industry

N = 25

Table VII.37 Model Summary

Model	R	R Square ^a	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1.000	0.991 ^b	0.983	0.981	2.648	0.983	420.098	3.000	23.000	0.000

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept.

b Predictors: IE, MO, EO

Table VII. 38 ANOVA ^{c,d}

Model		Sum of Squares	Df	Mean Square	F	Sig.
1.000	Regression	8837.727	3.000	2945.909	420.098	0.000 ^a
	Residual	154.273	22.000	7.012		
	Total	8992.000 ^b	25.000			

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept

b This total sum of squares is not corrected for the constant because the constant is zero for regression through the origin.

c Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

d Linear Regression through the Origin

Table VII.39 Coefficients ^{a,b}

Model		Unstandardized		Standardized	T	Sig.	95% Conf Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1.000	MO	-0.157	0.086	-0.494	-1.828	0.081	-0.335	0.021	0.011	93.664
	EO	0.467	0.116	1.137	4.014	0.001	0.226	0.708	0.010	102.903
	IE	0.272	0.110	0.349	2.468	0.022	0.043	0.500	0.039	25.675

a Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

b Linear Regression through the Origin

1.14 Relative Performance of the Firm (Dependent Variable) with Firm Sales Turnover – \$10 to \$40 million and Respondents' Background – Non-Tertiary Education Level

N = 6

Table VII.40 Model Summary

Model	R	R Square ^a	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1.000	0.997 ^b	0.993	0.987	2.380	0.993	149.064	3.000	4.000	0.001

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept.

b Predictors: IE, MO, EO

Table VII. 41 ANOVA ^{c,d}

Model		Sum of Squares	Df	Mean Square	F	Sig.
1.000	Regression	2534.001	3.000	844.667	149.064	0.001 ^a
	Residual	16.999	3.000	5.666		
	Total	2551.000 ^b	6.000			

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept

b This total sum of squares is not corrected for the constant because the constant is zero for regression through the origin.

c Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

d Linear Regression through the Origin

Table VII.42 Coefficients ^{a,b}

Model		Unstandardized		Standardized	T	Sig.	95% Conf Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1.000	MO	0.183	0.110	0.511	1.663	0.195	-0.167	0.534	0.023	42.600
	EO	-0.006	0.182	-0.012	-0.031	0.977	-0.586	0.575	0.014	69.310
	IE	0.501	0.157	0.519	3.201	0.049	0.003	1.000	0.084	11.844

a Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

b Linear Regression through the Origin

1.15 Relative Performance of the Firm (Dependent Variable) with Firm Sales Turnover – \$10 to \$40 million and Respondents' Background – Tertiary Education Level

N = 35

Table VII.43 Model Summary

Model	R	R Square ^a	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1.000	0.987 ^b	0.975	0.973	3.141	0.975	415.987	3.000	33.000	0.000

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept.

b Predictors: IE, MO, EO

Table VII. 44 ANOVA ^{c,d}

Model		Sum of Squares	Df	Mean Square	F	Sig.
1.000	Regression	12313.265	3.000	4104.422	415.987	0.000 ^a
	Residual	315.735	32.000	9.867		
	Total	12629.000 ^b	35.000			

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept

b This total sum of squares is not corrected for the constant because the constant is zero for regression through the origin.

c Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

d Linear Regression through the Origin

Table VII.45 Coefficients ^{a,b}

Model		Unstandardized		Standardized	T	Sig.	95% Conf Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1.000	MO	0.028	0.097	0.089	0.291	0.773	-0.169	0.226	0.008	119.871
	EO	0.291	0.119	0.710	2.454	0.020	0.050	0.533	0.009	107.257
	IE	0.154	0.141	0.190	1.092	0.283	-0.134	0.442	0.026	38.952

a Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

b Linear Regression through the Origin

1.16 Relative Performance of the Firm (Dependent Variable) with Firm Sales Turnover – Less than \$10 million and Respondents' Background – All Background

N = 50

Table VII.46 Model Summary

Model	R	R Square ^a	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1.000	0.976 ^b	0.952	0.949	3.932	0.952	308.857	3.000	48.000	0.000

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept.

b Predictors: IE, MO, EO

Table VII. 47 ANOVA ^{c,d}

Model		Sum of Squares	Df	Mean Square	F	Sig.
1.000	Regression	14327.255	3.000	4775.752	308.857	0.000 ^a
	Residual	726.745	47.000	15.463		
	Total	15054.000 ^b	50.000			

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept

b This total sum of squares is not corrected for the constant because the constant is zero for regression through the origin.

c Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

d Linear Regression through the Origin

Table VII.48 Coefficients ^{a,b}

Model		Unstandardized		Standardized	T	Sig.	95% Conf Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1.000	MO	0.097	0.077	0.328	1.263	0.213	-0.058	0.253	0.015	65.605
	EO	0.301	0.103	0.786	2.927	0.005	0.094	0.509	0.014	70.116
	IE	-0.107	0.121	-0.139	-0.882	0.382	-0.352	0.137	0.041	24.257

a Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

b Linear Regression through the Origin

1.17 Relative Performance of the Firm (Dependent Variable) with Firm Sales Turnover – Less than \$10 million and Respondents' Background – Goods Industry

N = 21

Table VII.49 Model Summary

Model	R	R Square ^a	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1.000	0.968 ^b	0.938	0.927	4.566	0.938	90.298	3.000	19.000	0.000

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept.

b Predictors: IE, MO, EO

Table VII. 50 ANOVA ^{c,d}

Model		Sum of Squares	df	Mean Square	F	Sig.
1.000	Regression	5646.791	3.000	1882.264	90.298	0.000 ^a
	Residual	375.209	18.000	20.845		
	Total	6022.000 ^b	21.000			

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept

b This total sum of squares is not corrected for the constant because the constant is zero for regression through the origin.

c Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

d Linear Regression through the Origin

Table VII.51 Coefficients ^{a,b}

Model		Unstandardized		Standardized	T	Sig.	95% Conf Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1.000	MO	0.086	0.155	0.292	0.554	0.587	-0.240	0.412	0.012	80.159
	EO	0.302	0.210	0.808	1.441	0.167	-0.138	0.743	0.011	90.858
	IE	-0.100	0.223	-0.133	-0.449	0.659	-0.568	0.368	0.039	25.399

a Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

b Linear Regression through the Origin

1.18 Relative Performance of the Firm (Dependent Variable) with Firm Sales Turnover – Less than \$10 million and Respondents' Background – Service Industry

N = 29

Table VII.52 Model Summary

Model	R	R Square ^a	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1.000	0.981 ^b	0.962	0.958	3.637	0.962	218.937	3.000	27.000	0.000

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept.

b Predictors: IE, MO, EO

Table VII. 53 ANOVA ^{c,d}

Model		Sum of Squares	Df	Mean Square	F	Sig.
1.000	Regression	8688.081	3.000	2896.027	218.937	0.000 ^a
	Residual	343.919	26.000	13.228		
	Total	9032.000 ^b	29.000			

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept

b This total sum of squares is not corrected for the constant because the constant is zero for regression through the origin.

c Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

d Linear Regression through the Origin

Table VII.54 Coefficients ^{a,b}

Model		Unstandardized		Standardized	T	Sig.	95% Conf Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1.000	MO	0.095	0.089	0.318	1.074	0.293	-0.087	0.277	0.017	59.882
	EO	0.312	0.117	0.800	2.673	0.013	0.072	0.553	0.016	61.157
	IE	-0.109	0.146	-0.139	-0.745	0.463	-0.408	0.191	0.042	23.628

a Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

b Linear Regression through the Origin

1.19 Relative Performance of the Firm (Dependent Variable) with Firm Sales Turnover – Less than \$10 million and Respondents' Background – Non-Tertiary Education Level

N = 14

Table VII.55 Model Summary

Model	R	R Square ^a	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1.000	0.970 ^b	0.941	0.925	4.901	0.941	58.791	3.000	12.000	0.000

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept.

b Predictors: IE, MO, EO

Table VII. 56 ANOVA ^{c,d}

Model		Sum of Squares	Df	Mean Square	F	Sig.
1.000	Regression	4236.764	3.000	1412.255	58.791	0.000 ^a
	Residual	264.236	11.000	24.021		
	Total	4501.000 ^b	14.000			

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept

b This total sum of squares is not corrected for the constant because the constant is zero for regression through the origin.

c Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

d Linear Regression through the Origin

Table VII.57 Coefficients ^{a,b}

Model		Unstandardized		Standardized	T	Sig.	95% Conf Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1.000	MO	0.121	0.152	0.404	0.796	0.443	-0.214	0.456	0.021	48.357
	EO	0.228	0.208	0.593	1.100	0.295	-0.228	0.685	0.018	54.490
	IE	-0.019	0.347	-0.025	-0.056	0.957	-0.782	0.744	0.026	37.945

a Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

b Linear Regression through the Origin

1.20 Relative Performance of the Firm (Dependent Variable) with Firm Sales Turnover – Less than \$10 million and Respondents' Background – Tertiary Education Level

N = 35

Table VII.58 Model Summary

Model	R	R Square ^a	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1.000	0.978 ^b	0.956	0.951	3.756	0.956	229.234	3.000	33.000	0.000

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept.

b Predictors: IE, MO, EO

Table VII. 59 ANOVA ^{c,d}

Model		Sum of Squares	Df	Mean Square	F	Sig.
1.000	Regression	9701.569	3.000	3233.856	229.234	0.000 ^a
	Residual	451.431	32.000	14.107		
	Total	10153.000 ^b	35.000			

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept

b This total sum of squares is not corrected for the constant because the constant is zero for regression through the origin.

c Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

d Linear Regression through the Origin

Table VII.60 Coefficients ^{a,b}

Model		Unstandardized		Standardized	T	Sig.	95% Conf Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1.000	MO	0.086	0.100	0.292	0.861	0.395	-0.117	0.289	0.012	82.421
	EO	0.329	0.131	0.859	2.499	0.018	0.061	0.596	0.012	85.056
	IE	-0.136	0.130	-0.177	-1.048	0.302	-0.400	0.128	0.049	20.481

a Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

b Linear Regression through the Origin

1.21 *Relative Performance of the Firm with MO, EO and IE as Independent Variables for different Firms' Size*

Summarizing the data in preceding section 1.1 to 1.20 – Tables VII.1 to VII.60, the following Table VI.61 provides an overview of the contribution by each research factor under different stratifications – Goods versus Service Industry and Respondents' educational level – Tertiary versus Non-Tertiary. The objective of such stratification is to examine if these have any influence on the corresponding linear regression equation.

The size of firms is measured in terms of sales turnover grouped into – (i) *Less than \$10 million*, (ii) *\$10 to \$40 million*, (iii) *Over \$40 million*, and (iv) *All Turnover* ie a composite of (i), (ii) and (iii).

The respondents' background is divided into (i) *Goods Industry*, (ii) *Service Industry*, (iii) *Non-Tertiary Education Level*, (iv) *Tertiary Education Level* and (v) *All Background* ie a composite of (i), (ii), (iii) and (iv).

Examining the columns of standardized beta values of *MO*, *EO* and *IE* in Table V.61 the following can be observed :

- In comparison with *Marketing Orientation* and *Entrepreneurial Orientation*, the contribution by *Industry Environment* towards *Relative Performance of the Firm* is the least of the three in 13 of the 20 linear regression computations.
- *Entrepreneurial Orientation* contributes the most towards *Relative Performance of the Firm* in 16 of the 20 computations. *Marketing Orientation* contributes most in 3 of the 20 computations and *Industry Environment* contributes most in only 1 of the 20 linear regression computations.

Examining the columns of t statistic significant value of *MO*, *EO* and *IE* in Table VII.61 the following can be observed :

- The p value for *Entrepreneurial Orientation* is significant (ie $p < 0.10$) in 14 of the 20 linear regression computations ie the corresponding 14 standardized beta coefficient for *Entrepreneurial Orientation* are considered significant.

- The p value for *Marketing Orientation* is significant (ie $p < 0.1$) in 3 of the 20 linear regression computations ie the corresponding 3 standardized beta coefficients for *Marketing Orientation* are considered significant.
- The p value for *Industry Environment* is significant (ie $p < 0.05$) in 5 of the 20 linear regression computations ie the corresponding 5 standardized beta coefficients for *Industry Environment* are considered significant.

From Table VII.61 below, the coefficient of determination, R^2 , is greater than 0.94 in all the 20 linear regression computations. This shows that prediction of *Relative Performance of the Firm* using *MO*, *EO* and *IE* account for an overwhelming majority of the variation in the data from the survey questionnaire.

In addition, the p value for the F statistic, which measures the probability that the computed coefficient values for each of the computed linear regression is due to chance, is consistently smaller than the significant level of 0.01 for all the 20 linear regression computations ie the computed values are not due to chance for all the computed linear regressions.

Comparing Table VII.61 with the findings from Chapter 9 Table 9.5 to Table 9.12, the following can be observed :

- Overall *Entrepreneurial Orientation* is a better predictor of *Relative Performance of the Firm* than *Marketing Orientation*. This finding is reflected in Table 9.5 to Table 9.12 of the preceding section where the r value for *Entrepreneurial Orientation* and *Relative Performance of the Firm* is higher than the r value for *Marketing Orientation* and *Relative Performance of the Firm*.
- While *Marketing Orientation* and *Entrepreneurial Orientation* have consistently highest r values across Table 9.5 to Table 9.12 this is not translated into *Marketing Orientation* also being a good predictor of *Relative Performance of the Firm* generally².

² The exception being in 3 of the linear regression computations (i) \$10 to \$40 million turnover and Goods Industry; (ii) Over \$40 million turnover and Service Industry; (iii) All Turnover and Goods Industry

Table VII.61 Relative Performance of the Firm with MO, EO and IE as Independent Variables for Different Firms' Size

Size of firm in terms of sales turnover	Respondents' Background	Marketing Orientation (MO)+	Entrepreneurial Orientation (EO)+	Industry Environment (IE)+	R ² ++	F statistics Sig value*	t statistics Sig value (MO)**	t statistics Sig value (EO)**	t statistics Sig value (IE)**	No of Cases N
Less than \$10 million	Goods	0.292	0.808	-0.133	0.938	0.000	0.587	0.167	0.659	21
	Service	0.318	0.800	-0.139	0.962	0.000	0.293	0.013	0.463	29
	Non-Tertiary	0.404	0.593	-0.025	0.941	0.000	0.443	0.295	0.957	14
	Tertiary	0.292	0.859	-0.177	0.956	0.000	0.395	0.018	0.302	35
Less than \$10 million and All Background		0.328	0.786	-0.139	0.952	0.000	0.213	0.005	0.382	50
\$10 to \$40 million	Goods	0.706	0.063	0.222	0.976	0.000	0.054	0.873	0.387	18
	Service	-0.494	1.137	0.349	0.983	0.000	0.081	0.001	0.022	25
	Non-Tertiary	0.511	-0.012	0.519	0.993	0.001	0.195	0.977	0.049	6
	Tertiary	0.089	0.710	0.190	0.975	0.000	0.773	0.020	0.283	35
\$10 to \$40 million and All Background		0.128	0.627	0.237	0.975	0.000	0.578	0.015	0.075	43
Over \$40 million	Goods	-0.226	0.878	0.345	0.987	0.000	0.561	0.023	0.082	15
	Service	0.613	0.591	-0.213	0.993	0.000	0.237	0.183	0.259	8
	Non-Tertiary	-0.022	1.182	-0.173	0.994	0.001	0.972	0.097	0.416	6
	Tertiary	-0.188	0.858	0.331	0.992	0.000	0.528	0.023	0.004	17
Over \$40 million and All Background		0.086	0.851	0.059	0.986	0.000	0.785	0.005	0.649	23
All Turnover	Goods	0.480	0.427	0.076	0.961	0.000	0.063	0.105	0.589	55
	Service	0.019	0.920	0.047	0.970	0.000	0.924	0.000	0.652	63
	Non-Tertiary	0.286	0.634	0.059	0.951	0.000	0.372	0.078	0.760	26
	Tertiary	0.165	0.754	0.068	0.969	0.000	0.399	0.000	0.488	89
All turnover and All Background		0.217	0.713	0.054	0.965	0.000	0.166	0.000	0.522	118

Note The coefficients for the independent variables are standardized beta values. Three of the 118 respondents did not fill up their education level.

- * The beta values for MO, EO and IE are all in standardized form to facilitate comparison since they are all in the same units of measure.
- ** R² is the coefficient of determination. It measures the proportion of variation of the dependent variable (*Relative Performance of the Firm*) explained by the independent variables (MO, EO and IE) in the linear regression equation.
- * F = (mean squares of regression)/(mean squares of residual). A large value F indicates small residual value ie smaller difference between observed values and those predicted from the computed linear regression equation. A small significance level (less than 0.01 or 0.05) indicates that the results probably are not due to random chance
- ** The t statistic is used to test the strength of the linear relationship between the dependent variable and an independent variable. When the significance level is small (less than 0.10) the coefficient is considered significant

1.22 Relative Performance of the Firm (Dependent Variable) - with MO, EO, IE and Size as Independent Variables and Respondents' Background – Goods Industry

N = 54

Table VII.62 Model Summary

Model	R	R Square ^a	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1.000	0.981 ^b	0.962	0.981	0.962	0.959	3.748	0.962	313.844	4.000

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept.

b Predictors: IE, MO, EO, Size of the firm in terms of sales turnover

Table VII.63 ANOVA ^{c,d}

Model		Sum of Squares	Df	Mean Square	F	Sig.
1.000	Regression	17630.317	4.000	4407.579	313.844	0.000 ^a
	Residual	702.192	50.000	14.044		
	Total	18332.509 ^b	54.000			

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept

b This total sum of squares is not corrected for the constant because the constant is zero for regression through the origin.

c Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

d Linear Regression through the Origin

Table VII.64 Coefficients ^{a,b}

Model		Unstandardized		Standardized	T	Sig.	95% Conf Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1.000	MO	0.141	0.081	0.448	1.746	0.087	-0.021	0.303	0.012	86.095
	EO	0.185	0.107	0.455	1.731	0.090	-0.030	0.400	0.011	90.151
	IE	0.037	0.117	0.046	0.320	0.750	-0.197	0.272	0.037	27.126
	Size	0.164	0.167	0.043	0.984	0.330	-0.171	0.499	0.395	2.528

a Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

b Linear Regression through the Origin

**1.23 Relative Performance of the Firm (Dependent Variable) - with MO, EO, IE and Size as Independent Variables and Respondents'
Background – Service Industry**

N = 62

Table VII.65 Model Summary

Model	R	R Square ^a	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1.000	0.986 ^b	0.973	0.971	3.186	0.973	515.973	4.000	59.000	0.000

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept.

b Predictors: IE, MO, EO, Size of the firm in terms of sales turnover

Table VII.66 ANOVA ^{c,d}

Model		Sum of Squares	Df	Mean Square	F	Sig.
1.000	Regression	20948.908	4.000	5237.227	515.973	0.000
	Residual	588.711	58.000	10.150		
	Total	21537.619 ^b	62.000			

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept

b This total sum of squares is not corrected for the constant because the constant is zero for regression through the origin.

c Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

d Linear Regression through the Origin

Table VII.67 Coefficients ^{a,b}

Model		Unstandardized		Standardized	T	Sig.	95% Conf Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1.000	MO	-0.008	0.060	-0.027	-0.138	0.891	-0.128	0.112	0.013	78.160
	EO	0.371	0.076	0.916	4.871	0.000	0.219	0.524	0.013	75.033
	IE	0.040	0.082	0.050	0.489	0.627	-0.124	0.204	0.045	22.026
	Size	0.323	0.147	0.067	2.194	0.032	0.028	0.618	0.505	1.981

a Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

b Linear Regression through the Origin

1.24 Relative Performance of the Firm (Dependent Variable) - with MO, EO, IE and Size as Independent Variables and Respondents' Background – Non-Tertiary Education Level

N = 26

Table VII.68 Model Summary

Model	R	R Square ^a	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1.000	0.979 ^b	0.958	0.951	4.265	0.958	127.019	4.000	23.000	0.000

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept.

b Predictors: IE, MO, EO, Size of the firm in terms of sales turnover

Table VII.69 ANOVA ^{c,d}

Model		Sum of Squares	Df	Mean Square	F	Sig.
1.000	Regression	9242.782	4.000	2310.696	127.019	0.000 ^a
	Residual	400.218	22.000	18.192		
	Total	9643.000 ^b	26.000			

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept

b This total sum of squares is not corrected for the constant because the constant is zero for regression through the origin.

c Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

d Linear Regression through the Origin

Table VII.70 Coefficients ^{a,b}

Model		Unstandardized		Standardized	T	Sig.	95% Conf Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1.000	MO	0.045	0.100	0.140	0.454	0.654	-0.162	0.253	0.020	50.038
	EO	0.289	0.138	0.683	2.098	0.048	0.003	0.574	0.018	56.138
	IE	0.065	0.154	0.076	0.419	0.679	-0.255	0.385	0.058	17.358
	Size	0.501	0.260	0.118	1.927	0.067	-0.038	1.040	0.506	1.975

a Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

b Linear Regression through the Origin

1.25 Relative Performance of the Firm (Dependent Variable) - with MO, EO, IE and Size as Independent Variables and Respondents' Background - Tertiary Education Level

N = 87

Table VII.71 Model Summary

Model	R	R Square ^a	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1.000	0.985 ^b	0.970	0.968	3.263	0.970	665.910	4.000	84.000	0.000

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept.

b Predictors: IE, MO, EO, Size of the firm in terms of sales turnover

Table VII.72 ANOVA ^{c,d}

Model		Sum of Squares	Df	Mean Square	F	Sig.
1.000	Regression	28361.917	4.000	7090.479	665.910	0.000 ^a
	Residual	883.768	83.000	10.648		
	Total	29245.685 ^b	87.000			

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept

b This total sum of squares is not corrected for the constant because the constant is zero for regression through the origin.

c Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

d Linear Regression through the Origin

Table VII.73 Coefficients ^{a,b}

Model		Unstandardized		Standardized	T	Sig.	95% Conf Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1.000	MO	0.049	0.061	0.158	0.804	0.423	-0.072	0.170	0.009	105.469
	EO	0.302	0.075	0.753	4.033	0.000	0.153	0.451	0.010	95.669
	IE	0.039	0.079	0.049	0.495	0.622	-0.118	0.196	0.037	27.127
	Size	0.150	0.121	0.036	1.245	0.217	-0.090	0.391	0.439	2.277

a Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

b Linear Regression through the Origin

1.26 Relative Performance of the Firm (Dependent Variable) - with MO, EO, IE and Size as Independent Variables and Respondents' Background - All Background

N = 116

Table VII.74 Model Summary

Model	R	R Square ^a	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1.000	0.983 ^b	0.967	0.966	3.440	0.967	814.219	4.000	113.000	0.000

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept.

b Predictors: IE, MO, EO, Size of the firm in terms of sales turnover

Table VII.75 ANOVA ^{c,d}

Model		Sum of Squares	Df	Mean Square	F	Sig.
1.000	Regression	38544.108	4.000	9636.027	814.219	0.000 ^a
	Residual	1325.485	112.000	11.835		
	Total	39869.593 ^b	116.000			

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept

b This total sum of squares is not corrected for the constant because the constant is zero for regression through the origin.

c Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

d Linear Regression through the Origin

Table VII.76 Coefficients ^{a,b}

Model		Unstandardized		Standardized	T	Sig.	95% Conf Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1.000	MO	0.056	0.049	0.180	1.159	0.249	-0.040	0.153	0.012	81.406
	EO	0.295	0.063	0.725	4.682	0.000	0.170	0.419	0.012	80.870
	IE	0.031	0.068	0.038	0.452	0.652	-0.104	0.165	0.042	23.801
	Size	0.238	0.108	0.056	2.212	0.029	0.025	0.452	0.463	2.159

a Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

b Linear Regression through the Origin

1.27 *Relative Performance of the Firm with MO, EO and IE and Size as Independent Variables*

Summarizing the data in preceding section 1.22 to 1.26 – Tables VII.62 to VII.76, the following Table VII.77 provides an overview of the contribution by each research factors under different stratifications – Goods versus Service Industry and Respondents' educational level – Tertiary versus Non-Tertiary. The objective of such stratification is to examine if these have any influence on the corresponding linear regression equation. Unlike the preceding section 1.21 Table VII.61, Size of the Firm in terms of its turnover is included as an independent variable in the linear regression.

Table VII.77 Relative Performance of the Firm - with MO, EO, IE and Size as Independent Variables

Respondents' background	Marketing Orientation (MO)+	Entrepreneurial Orientation (EO)+	Industry Environment (IE)+	Sales Turnover of Firms (Size)+	R ² ++	F statistics Sig value*	t statistics Sig value (MO)**	t statistics Sig value (EO)**	t statistics Sig value (IE)**	t statistics Sig value (Size)**	No of Cases N
Goods	0.448	0.455	0.046	0.043	0.962	0.000	0.087	0.090	0.750	0.330	54
Service	-0.027	0.916	0.050	0.067	0.973	0.000	0.891	0.000	0.627	0.032	62
Non-Tertiary	0.140	0.683	0.076	0.118	0.958	0.000	0.654	0.048	0.679	0.067	26
Tertiary	0.158	0.753	0.049	0.036	0.970	0.000	0.423	0.000	0.622	0.217	87
All Background	0.180	0.725	0.038	0.056	0.967	0.000	0.249	0.000	0.652	0.029	116

Note : The coefficients for the independent variables are standardized beta values.

1.28 Relative Performance of the Firm (Dependent Variable) - with sub categories of MO and EO, IE and Size as Independent Variables and Respondents' Background – Goods Industry

N = 53

Table VII.78 Model Summary

Model	R	R Square ^a	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1.000	0.983 ^b	0.966	0.958	3.788	0.966	121.121	10.000	44.000	0.000

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept.

b Predictors: IE, MO sub categories, EO sub categories, Size of the firm in terms of sales turnover

Table VII.79 ANOVA^{c,d}

Model		Sum of Squares	Df	Mean Square	F	Sig.
1.000	Regression	17376.137	10.000	1737.614	121.121	0.000 ^a
	Residual	616.882	43.000	14.346		
	Total	17993.018 ^b	53.000			

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept

b This total sum of squares is not corrected for the constant because the constant is zero for regression through the origin.

c Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

d Linear Regression through the Origin

Table VII.80 Coefficients ^{a,b}

Model		Unstandardized		Standardized	T	Sig.	95% Conf Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1.000	CustO	0.367	0.232	0.532	1.585	0.120	-0.100	0.834	0.007	141.315
	CompO	0.596	0.387	0.379	1.539	0.131	-0.185	1.378	0.013	75.891
	LT	-0.558	0.430	-0.240	-1.297	0.201	-1.424	0.309	0.023	42.764
	II	-0.154	0.331	-0.107	-0.465	0.644	-0.823	0.514	0.015	66.077
	CE	0.292	0.177	0.332	1.644	0.108	-0.066	0.649	0.020	51.191
	SE	-0.009	0.344	-0.006	-0.025	0.980	-0.702	0.685	0.014	72.826
	AE	0.079	0.319	0.032	0.246	0.807	-0.564	0.721	0.047	21.431
	RE	0.346	0.733	0.080	0.472	0.640	-1.133	1.825	0.028	35.824
	IE	-0.040	0.153	-0.050	-0.262	0.795	-0.349	0.269	0.022	45.075
	Size	0.159	0.181	0.042	0.875	0.386	-0.207	0.524	0.350	2.861

a Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

b Linear Regression through the Origin

Note

Sub Categories of MO :

CustO - Customer Orientation; CompO - Competitor Orientation; LT - Long Term Goals; II - Information-Interfunctional

Sub Categories of EO :

CE - Catalytic Entrepreneur; SE - Strategic Entrepreneur; AE - Allocating Entrepreneur; RE - Refining Entrepreneur

1.29 Relative Performance of the Firm (Dependent Variable) - with sub categories of MO and EO, IE and Size as Independent Variables and Respondents' Background – Service Industry

N = 61

Table VII.81 Model Summary

Model	R	R Square ^a	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1.000	0.988 ^b	0.976	0.972	3.138	0.976	210.026	10.000	52.000	0.000

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept.

b Predictors: IE, MO sub categories, EO sub categories, Size of the firm in terms of sales turnover

Table VII.82 ANOVA^{c,d}

Model		Sum of Squares	Df	Mean Square	F	Sig.
1.000	Regression	20687.879	10.000	2068.788	210.026	0.000 ^a
	Residual	502.359	51.000	9.850		
	Total	21190.238 ^b	61.000			

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept

b This total sum of squares is not corrected for the constant because the constant is zero for regression through the origin.

c Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

d Linear Regression through the Origin

Table VII.83 Coefficients ^{a,b}

Model		Unstandardized		Standardized	T	Sig.	95% Conf Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1.000	CustO	0.183	0.156	0.264	1.168	0.248	-0.131	0.497	0.009	109.939
	CompO	-0.382	0.213	-0.251	-1.796	0.078	-0.809	0.045	0.024	41.896
	LT	-0.087	0.273	-0.037	-0.317	0.752	-0.634	0.461	0.034	29.183
	II	-0.038	0.219	-0.027	-0.175	0.862	-0.477	0.401	0.020	50.722
	CE	0.609	0.158	0.688	3.847	0.000	0.291	0.926	0.015	68.863
	SE	0.195	0.247	0.134	0.791	0.433	-0.301	0.691	0.016	61.818
	AE	0.010	0.299	0.004	0.032	0.974	-0.590	0.609	0.027	36.696
	RE	0.526	0.615	0.120	0.855	0.397	-0.709	1.761	0.024	42.266
	IE	0.037	0.084	0.046	0.436	0.665	-0.133	0.206	0.042	23.689
	Size	0.323	0.152	0.067	2.124	0.039	0.018	0.628	0.467	2.140

a Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

b Linear Regression through the Origin

Note

Sub Categories of MO :

CustO - Customer Orientation; CompO - Competitor Orientation; LT - Long Term Goals; II - Information-Interfunctional

Sub Categories of EO :

CE - Catalytic Entrepreneur; SE - Strategic Entrepreneur; AE – Allocating Entrepreneur; RE - Refining Entrepreneur

1.30 Relative Performance of the Firm (Dependent Variable) - with sub categories of MO and EO, IE and Size as Independent Variables and Respondents' Background – Non-Tertiary Education Level

N = 25

Table VII.84 Model Summary

Model	R	R Square ^a	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1.000	0.987 ^b	0.974	0.957	4.013	0.974	56.136	10.000	15.000	0.000

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept.

B Predictors: IE, MO sub categories, EO sub categories, Size of the firm in terms of sales turnover

Table VII.85 ANOVA^{a,d}

Model		Sum of Squares	df	Mean Square	F	Sig.
1.000	Regression	9040.431	10.000	904.043	56.136	0.000 ^a
	Residual	241.569	15.000	16.105		
	Total	9282.000 ^b	25.000			

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept

b This total sum of squares is not corrected for the constant because the constant is zero for regression through the origin.

c Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

d Linear Regression through the Origin

Table VII.86 Coefficients ^{a,b}

Model		Unstandardized		Standardized	T	Sig.	95% Conf Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1.000	CustO	0.337	0.279	0.475	1.210	0.245	-0.257	0.931	0.011	88.605
	CompO	0.421	0.484	0.247	0.868	0.399	-0.612	1.453	0.021	46.515
	LT	-1.765	0.874	-0.735	-2.021	0.062	-3.627	0.097	0.013	76.338
	II	0.624	0.617	0.426	1.012	0.328	-0.690	1.938	0.010	102.342
	CE	-0.074	0.343	-0.079	-0.217	0.831	-0.806	0.657	0.013	77.244
	SE	0.564	0.463	0.389	1.220	0.241	-0.422	1.550	0.017	58.594
	AE	-0.381	0.751	-0.157	-0.507	0.620	-1.982	1.220	0.018	55.217
	RE	1.030	1.367	0.233	0.753	0.463	-1.884	3.945	0.018	55.149
	IE	0.097	0.166	0.115	0.585	0.568	-0.256	0.450	0.045	22.430
	Size	0.419	0.267	0.099	1.573	0.137	-0.149	0.988	0.439	2.280

a Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

b Linear Regression through the Origin

Note

Sub Categories of MO :

CustO - Customer Orientation; CompO - Competitor Orientation; LT - Long Term Goals; II - Information-Interfunctional

Sub Categories of EO :

CE - Catalytic Entrepreneur; SE - Strategic Entrepreneur; AE - Allocating Entrepreneur; RE - Refining Entrepreneur

1.31 Relative Performance of the Firm (Dependent Variable) - with sub categories of MO and EO, IE and Size as Independent Variables and Respondents' Background – Tertiary Education Level

N = 85

Table VII.87 Model Summary

Model	R	R Square ^a	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1.000	0.987 ^b	0.973	0.970	3.192	0.973	273.574	10.000	75.000	0.000

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept.

b Predictors: IE, MO sub categories, EO sub categories, Size of the firm in terms of sales turnover

Table VII.88 ANOVA^{c,d}

Model		Sum of Squares	Df	Mean Square	F	Sig.
1.000	Regression	27880.655	10.000	2788.065	273.574	0.000 ^a
	Residual	764.345	75.000	10.191		
	Total	28645.000 ^b	85.000			

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept

b This total sum of squares is not corrected for the constant because the constant is zero for regression through the origin.

c Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

d Linear Regression through the Origin

Table VII.89 Coefficients ^{a,b}

Model		Unstandardized		Standardized	T	Sig.	95% Conf Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1.000	CustO	0.172	0.148	0.251	1.165	0.248	-0.122	0.467	0.008	130.536
	CompO	-0.013	0.216	-0.009	-0.061	0.952	-0.443	0.417	0.017	57.570
	LT	0.087	0.254	0.037	0.344	0.732	-0.418	0.593	0.030	33.379
	II	-0.112	0.197	-0.079	-0.568	0.572	-0.504	0.280	0.019	53.979
	CE	0.578	0.131	0.671	4.411	0.000	0.317	0.839	0.015	65.027
	SE	-0.383	0.232	-0.266	-1.655	0.102	-0.845	0.078	0.014	72.724
	AE	0.204	0.214	0.088	0.951	0.344	-0.223	0.630	0.041	24.290
	RE	0.827	0.509	0.190	1.623	0.109	-0.188	1.841	0.026	38.312
	IE	0.071	0.086	0.089	0.819	0.416	-0.101	0.243	0.030	33.111
	Size	0.110	0.128	0.025	0.856	0.395	-0.146	0.365	0.404	2.478

a Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

b Linear Regression through the Origin

Note

Sub Categories of MO :

CustO - Customer Orientation; CompO - Competitor Orientation; LT - Long Term Goals; II - Information-Interfunctional

Sub Categories of EO :

CE - Catalytic Entrepreneur; SE - Strategic Entrepreneur; AE – Allocating Entrepreneur; RE - Refining Entrepreneur

1.32 Relative Performance of the Firm (Dependent Variable) - with sub categories of MO and EO, IE and Size as Independent Variables and Respondents' Background – All Background

N = 113

Table VII.90 Model Summary

Model	R	R Square ^a	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1.000	0.984 ^b	0.968	0.965	3.481	0.968	310.986	10.000	103.000	0.000

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept.

b Predictors: IE, MO sub categories, EO sub categories, Size of the firm in terms of sales turnover

Table VII.91 ANOVA^{c,d}

Model		Sum of Squares	Df	Mean Square	F	Sig.
1.000	Regression	37675.180	10.000	3767.518	310.986	0.000 ^a
	Residual	1247.820	103.000	12.115		
	Total	38923.000 ^b	113.000			

a For regression through the origin (the no-intercept model), R Square measures the proportion of the variability in the dependent variable about the origin explained by regression. This CANNOT be compared to R Square for models which include an intercept

b This total sum of squares is not corrected for the constant because the constant is zero for regression through the origin.

c Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

d Linear Regression through the Origin

Table VII.92 Coefficients ^{a,b}

Model		Unstandardized		Standardized	T	Sig.	95% Conf Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1.000	CustO	0.255	0.125	0.369	2.041	0.044	0.007	0.504	0.010	105.098
	CompO	-0.016	0.185	-0.011	-0.088	0.930	-0.383	0.351	0.022	46.066
	LT	-0.254	0.231	-0.109	-1.101	0.274	-0.712	0.204	0.032	31.312
	II	-0.050	0.182	-0.035	-0.275	0.784	-0.411	0.311	0.019	51.959
	CE	0.481	0.116	0.547	4.135	0.000	0.250	0.711	0.018	56.132
	SE	0.042	0.195	0.029	0.216	0.830	-0.344	0.428	0.017	58.571
	AE	0.122	0.212	0.052	0.579	0.564	-0.297	0.542	0.038	26.286
	RE	0.288	0.452	0.066	0.636	0.526	-0.609	1.184	0.029	34.328
	IE	0.035	0.075	0.043	0.465	0.643	-0.114	0.185	0.036	28.042
	Size	0.206	0.114	0.048	1.812	0.073	-0.020	0.432	0.453	2.209

a Dependent Variable: Sum of Relative Performance of the Firm questions (unweighted scale)

b Linear Regression through the Origin

Note

Sub Categories of MO :

CustO - Customer Orientation; CompO - Competitor Orientation; LT - Long Term Goals; II - Information-Interfunctional

Sub Categories of EO :

CE - Catalytic Entrepreneur; SE - Strategic Entrepreneur; AE – Allocating Entrepreneur; RE - Refining Entrepreneur

1.33 *Relative Performance of the Firm (Dependent Variable) - with sub categories of MO and EO, IE and Size as Independent Variables*

Summarizing the data in preceding section 1.28 to 1.32 – Tables VII.78 to VII.92, the following Table VII.93 provides an overview of the contribution by each research factors under different stratifications – Goods versus Service Industry and Respondents' educational level – Tertiary versus Non-Tertiary. The objective of such stratification is to examine if these have any influence on the corresponding linear regression equation. Unlike the preceding sections, MO and EO are further broken down into their respective sub categories besides IE and Size of the Firm as independent variables in the linear regression.

Table VII.93 Relative Performance of the Firm - with MO & EO sub categories, IE and Size as Independent Variables

Respondents' background	Marketing Orientation Sub Categories				Entrepreneurial Orientation Sub Categories				Industry Environment (IE)	Sales Turnover of Firms (Size)	R ²	No of Cases N
	Customer Orientation (CustO)	Competitor Orientation (CompO)	Long Term Goals (LT)	Information-Interfunctional (II)	Catalytic Entrepreneur (CE)	Strategic Entrepreneur (SE)	Allocating Entrepreneur (AE)	Refining Entrepreneur (RE)				
Goods Service	0.532	0.379	-0.240	-0.107	0.332	-0.006	0.032	0.080	-0.050	0.042	0.966	53
	0.264	-0.251	-0.037	-0.027	0.688	0.134	0.004	0.120	0.046	0.067	0.976	61
Non-Tertiary Tertiary	0.475	0.247	-0.735	0.426	-0.079	0.389	-0.157	0.233	0.115	0.099	0.974	25
	0.251	-0.009	0.037	-0.079	0.671	-0.266	0.088	0.190	0.089	0.025	0.973	85
All Background	0.369	-0.011	-0.109	-0.035	0.547	0.029	0.052	0.066	0.043	0.048	0.968	113

Note : The coefficients for the independent variables are standardized beta values.
Five of the 118 respondents did not fill up their education level.

Table VII.93a Relative Performance of the Firm – associated t Statistics of MO & EO sub categories, IE & Size Variables

Respondents' background	F statistics Sig value	Marketing Orientation Sub Categories t statistics Sig Value				Entrepreneurial Orientation Sub Categories t statistics Sig Value				t statistics Sig value (IE)	t statistics Sig value (Size)	No of Cases N
		CustO	CompO	LT	II	CE	SE	AE	RE			
Goods Service	0.000	0.120	0.131	0.201	0.644	0.108	0.980	0.807	0.640	0.795	0.386	53
	0.000	0.248	0.078	0.752	0.862	0.000	0.433	0.974	0.397	0.665	0.039	61
Non-Tertiary Tertiary	0.000	0.245	0.399	0.062	0.328	0.831	0.241	0.620	0.463	0.568	0.137	25
	0.000	0.248	0.952	0.732	0.572	0.000	0.102	0.344	0.109	0.416	0.395	85
All Background	0.000	0.044	0.930	0.274	0.784	0.000	0.830	0.564	0.526	0.643	0.073	113

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