



University Of Nottingham

**How Can Retail Assist Exploit The Growth Opportunities
Arising From New Technology Changes Driving Change
Within The Retail Environment ?**

Kevin Greathead

MBA

2013

Executive Summary

This management project aimed to discover if Retail Assist had the capabilities to exploit 2 opportunities arising from new technology driving change within the Retail IT market, how changes in the omni-channel supply chain model can be exploited, then how the movement of UK retailers into an overseas market can be supported, focusing on the Chinese market. Analysis has used strategic and economic theory to review Retail Assist's external environment and internal capabilities, each step of the process has used direct observation and theory to reflect on the evidence gathered to define my final chosen strategy. Chapter 2 will explain the two market opportunities in detail, chapter 3 will critically analyse the strategic and economic theories used, chapter 4 will include the detailed application of these theories to the RA case study, finally, I will summarise my analysis in chapter 5 and define my strategic vision for RA's future.

Analysis has identified that Retail Assist are well placed to compete within their existing UK market, this is in stark contrast to the issues that would be experienced when trying to enter China, I do not believe that RA are prepared for this challenge. In contrast, Merret has already been developed to include detailed omni-channel functionality, this is a key strength that should be used to build market share. I have applied theory to the UK Helpdesk and Merret case studies to analyse that successful and well understood model, then reflected the overseas expansion and omni-channel case studies against this framework.

In summary, I believe Retail Assist's resources and capabilities should be directed to delivering the following growth strategies into the UK and overseas Retail IT markets:

Opportunity Identified:	My Chosen Strategy:
Helpdesk Expansion Into Overseas Markets e.g. China	<ul style="list-style-type: none">• Provide store opening project management to existing clients moving into China• Build partnerships with 'in territory' Chinese partners to deliver local services• Identify UK EPOS providers that can provide Chinese EPOS devices• Start longer term planning to consider opportunities to locate RA services in Beijing
Merret Expansion Into Overseas Markets	<ul style="list-style-type: none">• There is currently NO opportunity to sell Merret into China• Start medium term strategy to choose partner to sell Merret into US, start sales and marketing planning to support this strategy• Concentrate Merret sales activity in UK market, increase the existing testing and project management team to ease the implementation process
Exploring Future Omni-Channel Opportunities	<ul style="list-style-type: none">• Build generation 'Y' planning team members to identify technology trends• Build relationships with e-commerce partners to identify new opportunities• Marketing drive to grow market awareness of new Merret functionality

I believe that this will be an interesting case study for your review.

Table of Contents

Executive Summary.....	2
Table of Contents.....	3
1 Introduction.....	4
1.1 Data Collection And Analysis	7
2 An Introduction To The Areas Of Technological Change Used In This Study	8
2.1 Supporting Existing Customers Expansions Into Overseas Markets – A China Case Study.....	8
2.2 An Introduction To The Omni-Channel Supply Chain	11
3 Literature Review – The Theories Used To Analyse The Retail Assist Case Study	14
3.1 The High Level Model Used To Frame Analysis.....	14
3.2 The PEST Model.....	15
3.3 Porter’s 5 Force Model.....	16
3.4 The Resource Based View & VRIO Framework.....	19
3.5 Porter’s Value Chain.....	20
3.6 SWOT Analysis.....	21
3.7 The Transaction Cost Model.....	23
4 Strategic & Economic Analysis – An Application Of Theory To The Retail Assist Case Study....	28
4.1 An Introduction To Retail Assist Products & Services.....	28
4.2 An Analysis Of The Retail IT Market Environment	32
4.3 An Assessment Of Retail Assists Environment	35
4.4 An Examination Of The Key Environment Forces Affecting Retail IT	36
4.5 Identifying RA’s Competitive Position Within The Retail IT Market.....	46
4.6 An Examination Of The Activities Within RA’s Value Chain	52
4.7 Identify The Strengths & Weaknesses Of RA.....	58
4.8 Assessing RA’s Vertical Boundary	61
5 Summary & Conclusion	81
5.1 My Appraisal Of The Theories Applied.....	81
5.2 A Summary Review Of The Retail IT Market & RA’s Capabilities	83
5.3 Providing Local Helpdesk Services For UK Retailer Stores In China.....	84
5.4 Developing Merret For Use Within An Overseas Market.....	85
5.5 Exploring Future Omni-Channel Opportunities.....	86
6 References.....	88
7 Diagrams & Tables	90
8 Appendix 1 – RA Clients & Products Delivered.....	91
9 Appendix 2 – Merret Implementation Costs & Margin Calculation	93
9.1 Merret Implementation Costs.....	93
9.2 Merret Margin & Profit Calculations	95
9.3 Merret Value Chain Analysis	98
9.4 Merret Financial Analysis.....	99
10 Appendix 3 – Helpdesk Service Implementation Costs.....	100
10.1 Helpdesk Service Value Chain Analysis	101
11 Appendix 4 – Interview Data	102
11.1 Excerpts From Charlotte Ellis Interview – 13th March 2013.....	102
11.2 Excerpts From Mike Padfield Interview – 13th March 2013.....	105

1 Introduction

Retail Assist is a UK based IT consultancy and support organization, operating in the non-food Retail IT sector, providing technical and support services for 26 clothing and apparel retailers. Until 2007 RA provided an outsourced IT services offering, including a retail Helpdesk, network and infrastructure Technical Services, operational support, and Project Management services. RA provided a single channel for a retailers IT needs offering a fully outsourced service, or clients could selectively purchase service components to supplement existing IT teams. This changed in 2007 with the purchase of Merret, a retail supply chain enterprise tool, RA's product portfolio has subsequently grown to offer a new 'Enterprise Solution', a collection of components that all retailers use, including Merret, an EPOS application called Infinity, Sage finance and a business intelligence reporting tool Board MIT. This solution is also supported by the existing service delivery teams within RA, offering technical services, machine housing, Helpdesk and implementation services. Together, these products provided a comprehensive toolkit for retailers who are primarily focused at volume sales in Highstreet stores and e-commerce within the UK and European markets.

The retail IT sector is a fast moving environment, offering opportunities for firms who can meet retailers changing needs, however it is threatened by the arrival of market entrants who can use new technology to reduce entry barriers. This paper will examine 2 major opportunities arising from the technologies driving this change, then assess strategies that can be employed by RA to exploit these opportunities, or deflect new entrants to protect their market position. Porter (1996) commented, "Strategy is about achieving competitive advantage through being different, delivering unique value add to the customer, having a clear and enactable view of how to position yourself uniquely in your industry." (Dobson et al 2004, p.1). RA believe they have found a niche position to deliver this unique service, I will use strategic and economic theory to define this market and the forces acting upon it, then highlight competitive strategies that should enable RA to compete and grow.

The first opportunity has been influenced by the greatest technological change in the last 10 years, the use of web services to change the way in which retailers interact with customers, then how those customers consume products. This has advanced from e-commerce to omni-channel services where customers can review, price match and buy products from multiple channels, to be delivered to a location of their choice. Martec estimate that the biggest growth area in retail IT spend is in the mobile commerce sector, with 28% of IT Directors identifying this as their top spending priority (Martec 2011, p.5).

The second opportunity has been the expansion of retail markets, most Tier 2 retailers (£100m+ sales) have expanded their trading horizons through Europe, the US, into the Middle East and Asia, there is currently a huge desire for UK retailers to enter the Chinese market. This adds a new layer of complexity with multi-currency, multi-language and multi-platform solutions required to manage sales and logistics into these territories. Traditional planning and supply chain strategies have been extended to manage these complexities, IT systems have had to change to accommodate this growth. Many retailers have decided to outsource their IT services to reduce operating costs and broaden the skill sets, this is key to RA as they provide this outsourced service, Martec found that the majority of non-food retailers (38% to 62%) used some form of outsourcing, with 3% of the top 100 retailers choosing to outsource their entire IT operation (Martec 2011, p.11). Consider table 1:

Opportunity Identified:	Technology Change Influencing Opportunity:
Exploring Future Omni-Channel Opportunities	<ul style="list-style-type: none"> • Availability of cheap, reliable and high bandwidth networks • Growth of social media functionality, Facebook, Twitter etc. • Consumer access to mobile devices, e.g. smartphones
Retail market expansion into Asia / China	<ul style="list-style-type: none"> • Availability of cheap, reliable and high bandwidth networks • Supply chain network and transportation improvements • E-commerce / marketing solutions created desire for UK products abroad • EPOS systems able to manage multi language / currency transactions

Table 1 – Technology Changes & Resultant Market Opportunities

Diagram 1 outlines the retail supply chain, represented as a vertical chain of activities, from product design, supplier and fabric selection, through the processing stages of raising the required purchase orders, managing the inward supply chain into the warehouse, allocating goods to stores or the web, managing sales, polling transactions to the merchandising package for analysis and reporting, then managing price changes to encourage sales. I have highlighted where key RA products impact this chain, Merret is an ERP package and manages the interaction of data through the supply chain, then interfaces data into the EPOS and e-commerce solutions. The Helpdesk scope may often be larger, supporting external planning tools that manage the financial planning process.

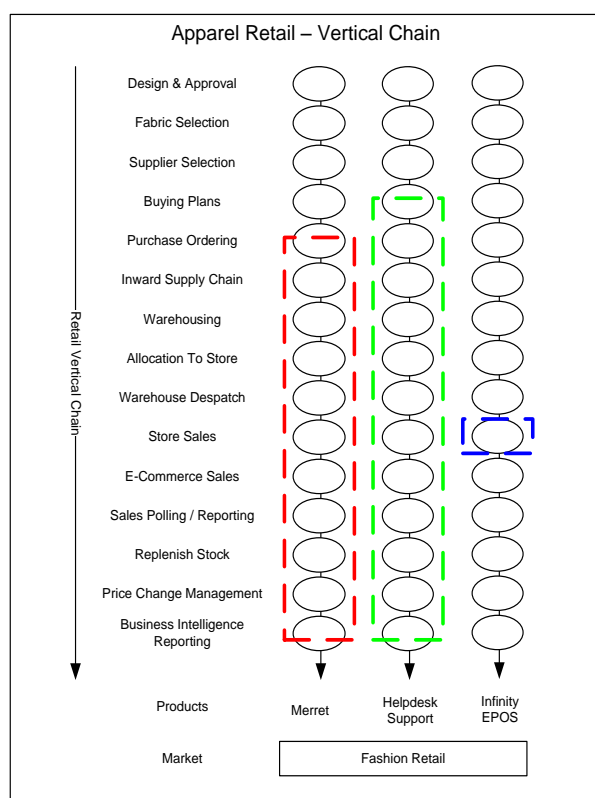


Diagram 1 – The Retail Vertical Chain

This study has been separated into chapters that logically lead to a future strategic plan. Chapter 2 will explain the two market opportunities in detail to provide an understanding of how these changes will impact Merret and the Helpdesk Solution. Chapter 3 will introduce the strategic and economic theories that I will use to review RA and the market. Chapter 4 will include my detailed application of these theories to the RA case study, reviewing the forces at work and the competitive assets that allow RA to compete, setting RA's optimum vertical boundary. Finally, I will summarise my analysis in chapter 5 and define my strategic vision for RA's future.

All supporting information not included within the main body of the text will be located in the appendix, this will include a list of RA clients, the products they consume and the length of contract undertaken, a detailed breakdown of Merret and Helpdesk service costing models and their associated value chains, finally a transcript of the interviews held with Charlotte Ellis from Aurora Fashions and Mike Padfield at Cath Kidston, discussing their experiences of opening new retail stores in Beijing.

1.1 Data Collection And Analysis

My data gathering, analytical and empirical research process has used a combination of techniques, aided by my experience of working within Retail Assist for 13 years, during this time I have built many strong relationships, I have been able to use these contacts to access internal RA information and key market data. I have used Retail Assist as a working model throughout my MBA studies, this has provided a insight into the workings of the organization, previous strategic management studies helped me to choose this specific topic. I had previously created a costing model for the calculation of Merret contractual deals, this analysis has been updated an reused in this management report. China market data has been particularly difficult to collect and analyse, to accommodate this lack of information I have consulted numerous market journals and conducted interviews with IT colleagues in several UK highstreet retailers, all referenced in chapter 7.

Merret and Helpdesk Service cost models have been taken directly from RA and used within Value Chain analysis, Martec (2011/2) marketing analysis has been used throughout to review RA's market share and identify the key spending requirements within the industry. Interviews were held on the 13th March 2013 with IT representatives from 2 UK retailers, Cath Kidston and Karen Millen, to reflect on their experiences of opening new stores in Beijing, direct internal observations and my own knowledge of the organization have been made to identify RA's perceived strengths and weaknesses. I have used numerous retail market journals and blogs to identify the key trends affecting the market, in particular the issues that will be faced when opening new retail stores in China. I have also interviewed key employees within Retail Assist to explore data, Tim Moxon, CFO, provided all costing and financial data, Tim Moger is the Head Of Merret Development estimated the work required to re-develop Merret into Chinese, Andy Tudor is the Head Of IT at Aurora Fashions and has outlined the impact of omni-channel retailing.

This assignment is of particular interest to the author, as the Head Of Project Services at RA I work closely with retail customers to help define their IT roadmaps and then manage the introduction of services to achieve those goals. This is a complex and rewarding area, however RA need to constantly review the mixture of their services provided to remain current whilst identifying key areas of growth.

2 An Introduction To The Areas Of Technological Change Used In This Study

It is important to understand the two areas of technological change that have been identified for this case study, this will enable the reader to appreciate the implications of the strategic and economic analysis explored in chapter 4. I have considered how changes in the omni-channel supply chain model can be exploited, then how the movement of retail into an overseas market can be supported, in particular the Chinese market. I have chosen China due to its market size, Mintel estimate that China will be responsible for 44% of the global luxury market in 2020, timezone, language and cultural differences lead to complexity. RA already provide outsourced services to UK retailers, the impact on this outsourcing model will be reflected throughout, a detailed analysis of RA's products will be provided in chapter 4.1.

2.1 Supporting Existing Customers Expansions Into Overseas Markets – A China Case Study

RA's Helpdesk Solution and Merret serve mature UK segments, one consideration for their potential growth is to expand these service offerings overseas, supporting retailers as they move into new markets, or selling those products directly to overseas consumers. My first area of analysis will consider how both products could be sold into the China market. A. T. Kearney (2011) ranked the most attractive emerging markets for apparel retailers, China placed first due to its large population and growing disposable income in its emerging middleclass, UAE placed second with Kuwait third. McKinsey analyzed the economic forces within China, "Gross National Income (GNI) per capita has expanded 13 times in the past 20 years. They estimate that by 2015, per capita consumption in China is set to increase to 17,000 Renminbi (\$2502) from 13,400 Renminbi (\$1975) in 2008, total urban consumption in 2015 is likely to exceed 13.3 trillion Renminbi (\$1.96 trillion), making the country the third biggest consumer market after the U.S. and Japan." (McKinsey 2009, pp.1-2). These changes have led to the emergence of a buoyant retail sector, global retail chains are opening stores throughout China to share in the booming retail market. A review of the Chinese marketplace highlights a number of factors that need to be considered, this will be explored fully in chapter 4, I will use several of these factors to shape the case study.

Consider Appendix 4, interviews were held with IT representatives from Karen Millen (Charlotte Ellis) and Cath Kidston (Mike Padfield) to analyze their recent experiences of opening stores in Beijing, RA provide Helpdesk and Technical Services for both retailers. Both companies have existing relationships in Hong Kong and throughout the Pacific region, both have strong brand identities and want to drive sales through owned stores in tier 1 cities. Karen Millen anticipate volume sales in

Beijing, Ellis commented that KM have a store in the Galeries Lafayette shopping center in Paris, this area has the highest footfall of Chinese tourists in Europe, customer feedback indicated that Beijing will be a good market opportunity. KM consider themselves to be a bridge brand, bridging highstreet and luxury brands, this is the biggest apparel retail growth area in China, they looked at the success of a competitor brand, Michael Kors, as evidence of the emerging market. Cath Kidston consider the Beijing store opening as a trial, Padfield commented that they have other working partnerships in Japan and the Far East and they are getting great feedback on brand identity. They have a small team based in Beijing to manage the store, this is supported directly from the UK operational team.

2.1.1 *Providing Local Helpdesk Services For UK Retailer Stores In China*

There are two scenarios to consider, how do RA provide support services to UK retailers opening new stores within the Chinese market, and can RA sell their existing service to new Chinese retailers. Retailers need specific support to allow their stores to trade successfully, this includes an electronic point of sale EPOS (till) to record sales and manage payments, connection into a merchandising solution that will inform the store of all products and process, a local IT infrastructure that will provide a network, email and printing services. RA select and install many of these systems for retail clients, the Helpdesk team are the first point of contact to help the store if they have a technical or training problem, this support is currently provided 24x7x 364 days per annum in English, RA currently do not employ Chinese speaking Helpdesk analysts. I have considered RA to be a new entrant into this market as they do not currently provide localized services in China, all support is provided from the UK. Having a small footprint in such a large market will be cost prohibitive, UK retailers have a very limited number of stores in territory making the marginal cost of providing support very high. RA could enter this market to provide support working with their existing suppliers as they open new stores in territory, this will remove some barriers, however the method of support delivery needs to be considered carefully.

Karen Millen opened a new store in Beijing in September 2012, the implementation process was fraught with difficulties and the store opened 4 months late. Major issues were experienced with the Legal and Accounting workstreams, stock import preparation took 24 months to stabilise, numerous technical issues still added cost and complexity. Their ROI on sales is currently very low, business setup costs have been expensive and sales are much lower than expected. RA managed the IT implementation, we were forced to incorporate the China store into a cumbersome merchandising solution managed from Australia, the IT spend was £86k, including all hardware, software and interfacing services. This has created an IT infrastructure that will support multiple warehouses and

stores, at a low incremental cost for each install. The store is supported by a KM Chinese speaking team in Melbourne, hardware and comms support is managed locally by partners in territory.

Cath Kidston had a very different experience, they costed several solutions (Cegid / BTE), both at approximately £40-50k, they eventually used their UK supplier Eurostop, the system was implemented for £15k, using local partners to manage the technical, comms and training parts of the project. All electrical components imported into China have to be approved (3C regulation), they worked with Eurostop and their freight forwarder (Seiko) to pre-approve equipment and complete all import documentation. They had a local project manager who controlled the shop build and fit out, the PM chose a local comms provider and technician to complete all IT work. For example the tills were successfully implemented for £70, support calls are paid on a time and materials basis, the last call experienced was resolved for £40.

Considering the KM and CK implementations and the Chinese market as a whole, I believe this would be a very difficult market for RA to compete in, I believe RA could be effective by managing the IT element of store expansions, working with local partners to provide a single point of presence in the remote market, then using that supplier as an in territory support resource, under the control of RA. My analysis will consider all of the forces that will affect RA's ability to setup an appropriate Helpdesk support service, whether that would be provided from the UK, or whether there is an opportunity to set up a local office in China.

2.1.2 *Developing Merret For Use Within The Chinese Market*

Analysis suggests the opportunity to sell and implement Merret into the Asian market is even more difficult, Merret is a UK centric ERP product, developed in a single byte character set that does not currently support Chinese characters, it is extremely functionally rich, but this functionality is targeted at the UK retail process, this may not translate well with Chinese requirements. Merret would face a costly redevelopment to make it market ready, adding local language and local functionality. This capital investment would need to be funded by RA alone, there will be no opportunity to share this development cost between a group of clients. These issues do not exclude Merret from the China market altogether, RA are currently exploiting an opportunity to load Chinese characters into their e-commerce portal, for distribution to Chinese text web servers. This may be a compromise position that works for many UK retailers, supporting their e-commerce growth to Chinese customers, current estimates suggest that this development will be relatively simple, taking

an estimated 45 days to complete. My analysis will consider all of the components required to make Merret China ready, then assess the sustainability of this approach.

2.2 An Introduction To The Omni-Channel Supply Chain

Omni-channel retailing describes a scenario where consumers can shop through several channels, e.g. store, web, catalogue or franchise partners, retailers can track customers and their orders across all of these channels at the same time, for this approach to be successful all channels need to work from a single database of products, prices and promotions.

Omni-channel retailers want consumers to experience the brand first, then provide different methods of consumption, whether on-line or physically in store. Products and promotions are no longer channel specific, but consistent across all retail channels, existing store estates become an extension of the supply chain, products can be researched through a number of routes, web, smartphones, QR code searches, physically viewing in store, purchased via any channel, for delivery to a location specified by the customer. Consider diagram 2:

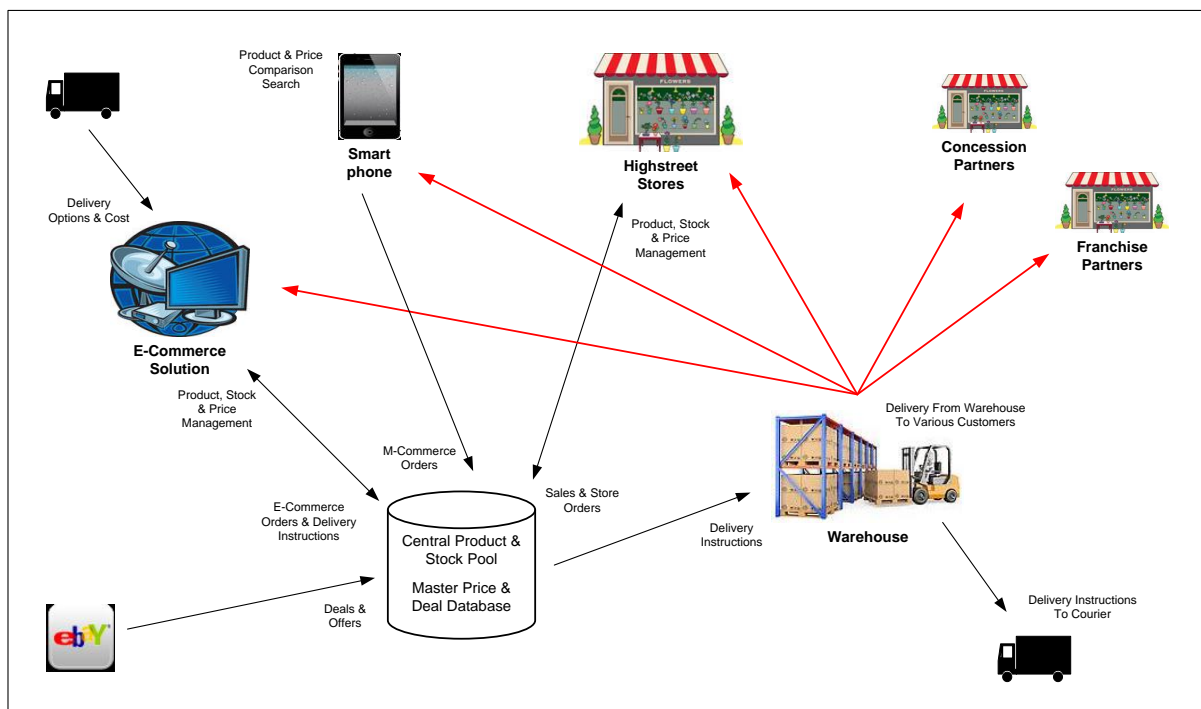


Diagram 2 – The Omni-Channel Market

Diagram 2 represents a retailer with a single solution that centrally controls the product database, holding all descriptions and attributes, manages all stock totals in the stores and warehouse, price

changes and deal offers that may be available to the consumer, this data will be interfaced to the various channels for delivery to the customer. Orders are interfaced into the solution, then passed onto the warehouse management application to manage distribution to the required location (red arrows), this may require data to be interfaced to a courier for orders to be delivered directly to a customer address. All order and delivery data will be shared between systems so that a complete picture of omni-channel operations can be viewed.

Marketing is made more efficient with offers that are relative to a consumer determined by purchase patterns, social network affinities, website visits, loyalty programs, and other data mining techniques. Recent research by IDC Retail Insights concludes the multichannel shopper will spend, on average, 15 to 30 % more than someone using just one channel, omni-channel shoppers outspend multichannel shoppers by over 20 percent. It is also suggested that multichannel shoppers exhibit strong loyalty and are more likely to influence others to endorse a retailer (IDC Retail Insights 2010).

The drive to omni-channel retailing has been fully embraced by Aurora Fashions, they have invested heavily in system developments with their merchandise and EPOS provider BT Expedite and their e-commerce partner BT Fresca to provide several award winning omni-channel solutions. Their 90 minute delivery solution allows consumers to purchase items and have them delivered within a guaranteed 90 minutes in specific locations. The Retail Gazette reported “Within a three-month pilot in London, 91% of orders were delivered in under 90 minutes, the fastest fulfilment was just 16 minutes to an address in Central London. The service is also already available in Manchester, Leeds, Edinburgh and Glasgow, having launched in those cities in August.” (Retail Gazette 2011).

Aurora outsourced their IT support function to RA in 2011, this provided access to the design team who planned and managed those system developments, this business knowledge is now a key element of the Merret Value Chain, RA have subsequently committed 300 days of development (approximately £90k @ average absorbed cost rate – see appendix 2), adding enhanced omni-channel functionality into Merret. This has introduced a deeper layer of complexity into the integration with websites and EPOS systems, introducing Web Services into the application for the first time. Integration work was undertaken with RA’s EPOS provider, Triquestra, the EPOS software was upgraded to accommodate these new features, linking into the core Merret application, again using Web Services. Customers can now purchase items from a store or website, fulfilled from an internal or external distribution center, delivered to the same store, a different store, or to their

home. Merret will manage the fulfillment and logistical processes, linked to a web resource that can manage the customer centric processes, marketing, deal management and CRM activity.

I have now outlined the purpose of this analysis exercise and provided an indepth introduction to the two areas of technological change that may offer new opportunities for RA. Chapter 3 will introduce and critically investigate the 9 strategic and economic theories that have been applied to this case study, these have been selected to examine key areas of market and firm forces that will impact RA's ability to compete.

3 Literature Review – The Theories Used To Analyse The Retail Assist Case Study

3.1 The High Level Model Used To Frame Analysis

Dobson et al define strategy as “An organization’s way of saying how it creates unique value and thus attracts the custom that is its lifeblood” (Dobson et al 2004, p.4), I have used the main elements of their Strategic Management Approach to organize my review of RA, providing strategic vision to create my chosen strategy. Consider diagram 3, I have amended this model to add in economic theory to review RA’s perceived Transaction Costs, I believe this provides a more complete model to assess the overseas market that RA may consider entering, a thorough understanding of RA’s optimum vertical chain is essential to setting effective strategy. I will review all elements of RA’s external environment, then internal considerations, identifying key opportunities and threats to create that strategic vision, please note the greyed out boxes will not be included in my analysis.

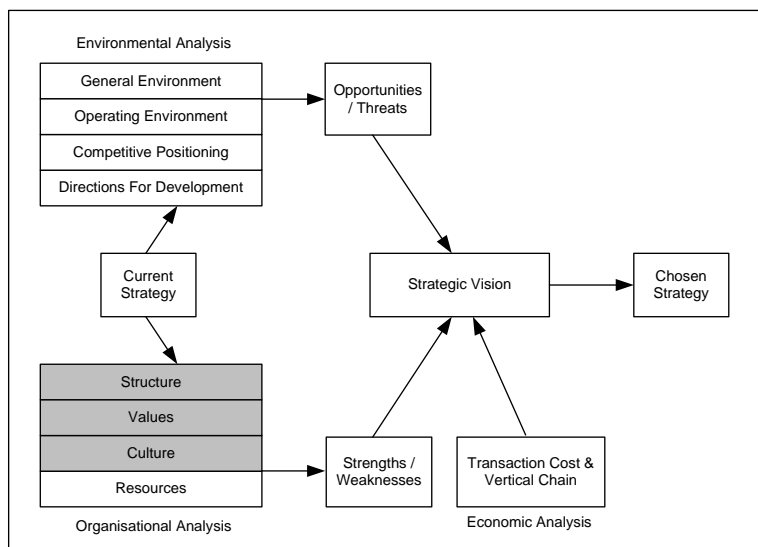


Diagram 3 – Strategic Management Approach

Environmental analysis will be split into four elements, analyzing the market environment, considering the social and economic factors affecting that market; their operating environment; RA’s competitive position assessing the elements that allow them to compete; and the direction for their future development. Each step of this process will use direct observation and strategic / economic theory to reflect on the evidence gathered. A PEST framework will be used scan the environment, analysing the political, economic, socio-cultural and technological factors in evidence. Porter’s 5 Forces model will be used to identify the key environmental factors influencing the Retail IT market, Dobson’s Stages Of The Life Cycle and Barney’s VRIO Framework will be used to assess RA’s

competitive position against their direct competitors and their core competencies, finally a SWOT analysis will be used to identify the external market opportunities and threats and RA's internal strengths and weaknesses. I will use this strategic position to define my chosen strategy, applying the Transaction Cost theory to identify RA's optimum market position, I have amended Dobson et al's assessment process, consider diagram 4. This review will follow the order suggested by Dobson where my selected theories will be introduced at each stage of the review.

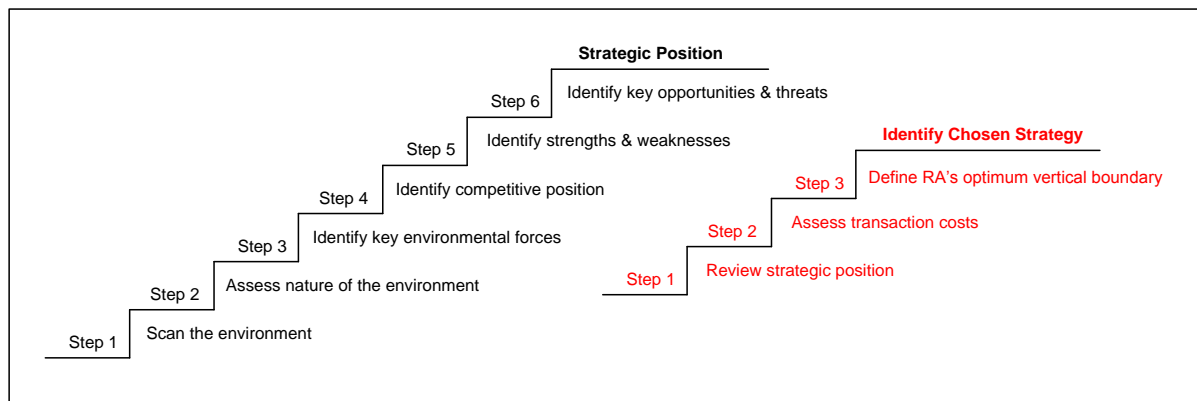


Diagram 4 – Strategic Position Analysis

The final stage of analysis will consider the optimum scope of RA's strategic boundary for making or buying in products and services, theory has been added to consider a number of internal and external considerations affecting transaction costs, this will include Transaction Cost theory, an assessment of vertical chain components and Ferguson's Linkage Approach. I will now consider the key theories that will be used in these 2 stages of analysis.

3.2 The PEST Model

I have used PEST analysis to examine the macroeconomic forces affecting Retail IT including the political, economic, social and technological factors at work in the retail sector, RA need to understand the influence of these forces and align their strategy to take advantage of the factors most likely to contribute to success. Henry comments "PEST analysis is simply another tool to help the organization detect and monitor those weak signals in the hope of recognizing the discontinuities or fractures shaping the environment [...] A link between the general and competitive environments in that weak signals in the general environment can become key forces for change in the competitive environment." (Henry 2011, p.49).

Political factors deal with the effect of government policy on the market, this may be in the form of direct legislation, government stability or taxation policy. Government policy in the UK has had a profound effect on retail in the last 15 years, the lowering of trade barriers has allowed retailers to expand overseas. This may also include CSR legislation, retailers are encouraged to develop CSR and environmental policies, e.g. M&S's Plan A, for example many UK retailers no longer work with suppliers who use child labour in developing nations. Economic factors include interest rates, inflation rates or unemployment levels, access to low interest rates post 1998 contributed to higher spending and a 'buy now pay later' culture, this has had a major impact on how retailers operate and led to a disposable clothing culture. A change in social factors has had a major impact on retail, population growth, demographic distribution and the rise of social media have changed how retailers target their customers, the UK population is growing and ageing, leading to larger 'older' population, an understanding of this demographic is of particular interest to companies who target this sector. The final consideration is technology, R&D activity, technology incentives and the rate of technological change. They can influence barriers to entry, influence outsourcing decisions, impacting costs and the quality of delivery.

Henry critiqued the use of PEST, he commented it should not simply be a shopping list of points without consideration of their wider implications, "One must clearly draw out the implications of each factor on the organisations environment." (Henry 2011, p.58). He also identified the rate of change of PEST factors in the market environment as a major limiting factor to the successful use of the model, analysis needs to be re-evaluated on a regular basis to remain current. There is an important link between an organizations competitive and general environment, Henry identified this when he commented that weak signals may become key forces for change in the competitive environment, these theories work well together, strategic insight can be gained as analysis is examined from both sides. The importance of the competitive analysis should not negate the value of analyzing the general environment.

3.3 Porter's 5 Force Model

Porter created a model to identify then assess a number of competitive forces that he believed affected any market, these included the threat of new entrants and substitutes, the bargaining power of suppliers and buyers, and rivalry among existing competitors. I have found this to be a very useful model in understanding forces impacting Retail IT, Porter commented, "Drawing industry boundaries correctly, around the area in which competition actually takes place, will clarify the causes for profitability and the appropriate unit for setting strategy." (Porter 2008, p.92).

The first force to consider is the threat of new entrants. Porter commented “New entrants to an industry bring new capacity and a desire to gain market share and puts pressure on prices, costs and the rate of investment necessary to compete. Particularly when new entrants are diversifying from other markets, they can leverage existing capabilities and cash flows to shake up the competition.” (Porter 2008, p.80). Analysis of this force needs to consider a number of key identifiers, ‘supply side economies of scale’ allow firms with larger contracts to spread their cost of service delivery across multiple contracts, employ efficient technologies, or command better terms from their suppliers; ‘demand side benefits of scale’ where a consumers desire to use a support partner is increased with the number of similar clients who are already using that service; ‘customer switching costs’ faced by existing customers switching to a new solution / service provider, the ‘capital investment’ required to compete with incumbent suppliers; and ‘unequal access to distribution channels’ where new entrants may be locked out of access to technology or the source a contract due to an existing supplier having sole access.

The second force is the power of suppliers, Porter continues “Powerful suppliers capture more value for themselves by charging higher prices , limiting quality or services, or shifting costs to industry participants.” (Porter 2008, p.82). Suppliers will have increased power if they do not depend heavily on an industry for its revenues; if companies face switching costs when changing suppliers; or there is no substitute for the product provided e.g. software functionality. The third force is the power of buyers, Porter suggested this power is increased if there are few buyers relative to the number of service providers; the industry’s products are undifferentiated; buyers face few switching costs, resulting in them having no loyalty; or intermediate customers who do not purchase for their own use e.g. assemblers or agents, can influence purchasing decisions of customers downstream. The threat of substitutes is important in all markets, when the threat of substitutes is high, industry profitability suffers. The threat of a substitute would be high if it offers an attractive price performance trade-off to the industry’s product, or if the buyers cost of switching to that substitute is low. Finally we need to consider the rivalry among competitors, rivalry will be greatest when the number of competitors are numerous; when industry growth is slow, forcing companies to fight for market share; when exit barriers are high, this will keep companies in an industry even if they are making low returns. Competition on dimensions other than price e.g. support service, are less likely to erode profitability, this improves customer value and can support higher prices.

Henry identifies a number of criticisms of this theory, firstly “The 5 forces framework assumes a zero-sum game, competitors can only succeed at the expense of other players in the industry.” (Henry 2011, p.82). This is certainly not true, competition may be hidden in a growing market as new entrants consume additional services. Secondly “The framework is a static analysis which assumes relatively stable markets [...] it represents a traditional view of strategy that is less capable of dealing with today’s rapidly changing environment.” (Henry 2011, p.82). Henry introduces Prahalad’s opinion that strategy is not about positioning the company, but influencing and shaping the industry space, (Prahalad 2000 pp75-80). This is a valid comment RA have created a niche position and grown an industry space, Porter replied to this criticism commenting that the 5 forces model applies at any point in time and helps reveal whether changes in an industry are important.

The third criticism is that many strategies are not deliberate and have been allowed to develop naturally in response to the inputs of the environment, Henry argues that this is prevalent in emerging industries where companies do not know who their competitors are, this would make the static use of the framework a problem. Again I have seen direct evidence of this within RA, many products e.g. RAX has developed from a client’s business need and has been extended to being an important part of the product set, this was certainly not a planned development and emerged from a direct need. Porter responded to this criticism commenting that skills are not valuable as such, but are valuable in the context of their use, he argues that firms need continuity of strategy to cope, not a change of strategy. Finally, Brandenburger and Nalebuff identified that complementors may produce products and services which complement another organization, adding value, this is not included in Porter’s model (Brandenburger et al 1999, pp.57-71). They used game theory to introduce a new theory of the Value Net to consider the whole game, the players in the game and their relationship to each other. Porter responded to this criticism saying complementors may add to high profitability at one point, then low profitability at another, Porter view was how do they affect the 5 force model.

I have used Porter’s model extensively in this analysis, RA have adopted emergent strategies and work with complementor strategies, I have found this an intuitive model and believe the identified limitations do not invalidate the strategic output.

3.4 The Resource Based View & VRIO Framework

Henry describes the resource based view as “Dealing with the competitive environment facing the organization but takes an ‘inside-out’ approach [...] the organisations internal environment. As such it is often seen as an alternative to Porter’s five forces framework, which takes the industry structure (outside-in) as its starting point.” (Henry 2011, p.129). This emphasises the internal capabilities of an organisation in formulating and delivering a strategy to achieve sustained competitive advantage, Barney (1991) argued that not all of the resources at a firms disposal will be strategically relevant, “A competitive advantage arises when an organisation is implementing a value-creating strategy that is not also being implemented by current or potential competitors.” (Henry 2011, p.144). Barney suggested that each resource needs to be assessed against the question of value, rarity, imitability and organisation.

He suggested that sustainable competitive advantage is not the result of correct positioning, but derived from firms internal resources, a resource or capability will create value when it can be used to exploit an opportunity or mitigate a threat in the retail IT marketplace, if it can do this it can be considered as a strength, if not it will be a weakness, and of no value. Amit and Schoemaker (1993) contend that “Companies must have access to adequate capabilities to take advantage of their resources. That is while certain resources may have the potential to create valuable services, the value of these services will remain latent until the firm has the capabilities needed to deploy them.” (Cardeal et al 2012, p.10161). I believe that this is a key component for RA, having the capabilities to utilise resources to their fullest extent is key in such a small organisation.

Rarity is when a firm has a valuable resource that is unique among a set of competitors, resources considered rare must be in short supply and available to exploit over time to be a source of competitive advantage, if not then they will not be a source of sustained competitive advantage and will eventually be imitated by competitors. Imitability can be considered a resource that opponents will find costly to obtain or develop internally, organisations that possess rare and hard to imitate resources should be able to exploit this advantage to gain a competitive advantage, analysis will demonstrate how RA have been able to do this to develop feature rich and efficient products. The final consideration is organisation. Valuable, rare and difficult to imitate resources will be of little strategic importance if the organisation is not structured correctly to exploit that resource, organisation is considered by economists as being the 4th factor of production, adding true value.

Firms need to ensure that policies and procedures are in place, these may include formal reporting structures, management control systems and remuneration policies.

Douma et al critiqued the resource based view, they suggested that RBV is 'tautological', explaining superior performance in terms of resource usage, but then assessing value by referencing the value they enable, creating a circular argument, they also suggest the theory is static and assumes that resources exist within an organisation, to be chosen from, not considering how they were acquired, developed and maintained. They suggest that the theory needs an independent selection mechanism that explains which resources are valuable and which are not, and validates this judgement. They suggest that the RBV theory has been developed to assess the second issue, introducing the concept of dynamic capabilities, the capacity of an organisation to create, extend or modify its resource base. (Douma et al 2008, p.207).

The role of management is not only to choose from existing resources but build, enhance and secure resources and capabilities, this counters their criticism that the theory is static, in this way they suggest dynamic capabilities may contribute to resources generating advantage, if they depend on tacit knowledge, firm specific knowledge or are isolated from competitors then they will be rare, hard to replicate or imitate, meeting the criteria of the VRIO framework. There is a direct crossover here into transaction cost and vertical chain theory, this will be explored further in chapter 3.7.

3.5 Porter's Value Chain

Porter (1985) identified the importance of the link or chain of activities an organization has to manage to create its end product or service, the underlying principle being that even if each activity along the chain will incur a transactions cost, it should add value (Dobson et al 2004, p.42). The capability of any organization can be measured by how efficiently it links together these activities, the strategist needs to consider the value chain as a means of extending the operational viewpoint in pursuit of a sustainable competitive advantage. In real terms, organizations need to ensure that all parts of the business work collectively to make the production process as efficient as possible, all cross functional and multi-disciplinary teams need to recognize their contribution to meeting that objective.

Fearne suggests that a strategist should use the value chain to try and achieve 3 separate goals, the first being to remove cost from the value chain by removing uncertainty. It is essential that all

elements of the value chain are fully aligned to the organizations strategic goal, if they are not aligned then even a correctly strategically aligned plan will fail Fearne (2013). The second goal is to improve the information flow throughout the value chain, to consider the impact of decisions or changes to the rest of the chain. The final goal is to gain additional customer insight . Fearne suggests that organizations need to “Have their finger on the pulse of their customers” so they can respond to their demands, not to make assumptions on what customers want or need as this will lead to the commodity trap where unwanted products are brought to market. He suggests firms need to actively target customers, raising awareness and increasing the knowledge of their products, demonstrating why they should be purchased.

Value Chain analysis has been applied to Merret and the Helpdesk service, in both cases the model helps to identify where the real value is within the chain, however there are several issues to consider. The model was developed to analyze physical assets in product environments, I applied this model to the Helpdesk Service which has somewhat reduced its effectiveness. It is also difficult to correctly assess the value that can be apportioned at each stage of the chain, especially when considering competing organizations within the chain.

Nilofer Merchant identified a competitive scenario that identifies weaknesses with Porter’s Value Chain model. She argues “Porter's value chain is antiquated in the light of the social era. It was created at a time when being big and having scale was in itself a key aspect to competitive advantage and profitability.” (Merchant 2012). Merchant suggests that Porter’s model is still relevant to the supply of generic commodity products where mass-market, cost-driven customers remain at the end of the supply chain, however technological advancements have led to the production of more customized products and companies are serving that market using social media. I accept this criticism, brands have the ability to directly and immediately gather customer feedback, putting the customer at the center of the company, this is the essence of omni-channel. By allowing this feedback to impact strategic direction there is an opportunity to learn what the market demands, then adapt to what works and improve profitability, not simply following the formulaic strategy identified by the value chain.

3.6 SWOT Analysis

SWOT analysis is a useful tool to determine if an organization is capable of competing in a market, assessing its core abilities, strengths and weaknesses that will provide an advantage or disadvantage

against others, against the external opportunities and threats presented by the market. Strategists need a good understanding of a firm's strategic direction and goals before using this tool to analyse those abilities and effects, distilling the most important elements of the strategic audit, PEST, Porter's 5 Forces & Value Chain. Kotler et al commented that the SWOT analysis should not list all of the features of the company, analysis should concentrate on those elements that will contribute to or affect "Critical success" (Kotler et al 2005, p.539). The model will lose focus if too many items are included and it will be difficult to differentiate what is important. Strengths should include an organization's capabilities and areas of competitive advantage, its resources, assets and people, within RA this is key, their internal experience, knowledge, data, accreditations and qualifications are key to their success. Other components to include are financial reserves, price, value and perceived quality. Weaknesses may include gaps within an organization's capabilities or lack of competitive strength, problems with their reputation or known vulnerabilities within their structure or product. Financial restrictions may lead to poor performance or an inability to exploit opportunities, management issues may lead to issues with morale, commitment and leadership.

The external market will provide new opportunities, firms need to ensure that they have the strengths to match demand. Opportunities may include the failure of a competitor, market developments, changes in consumer tastes and lifestyles, technology developments and innovation, fashion changes or the availability of new contracts or tenders. In comparison, not all external threats will call for the same level of attention or concern, the impact of each needs to be assessed for the potential damage they could cause. Threats can include political or legislative changes, economic changes restricting demand and income, competitor performance or advancements in technology that may reduce entry barriers or supersede an existing product.

This model has been critiqued by several authors, Valentin identified issues and suggested a Defensive/Offensive Evaluation as an alternative, Coman and Ronen suggested a number of criteria for a more effective use of the model.

Valentin argues "SWOT analysis has shallow roots [...] they run no deeper than the tenet that a business can prosper only if it achieves a good fit between itself and its environment [...] analysis rests on the rather shaky suppositions that every strategically significant feature of a business' internal and external context can be categorized neatly as favourable or unfavourable, such categorizing affords strategic insight ." (Valentin 2005, p.91). He suggested that typical SWOT guidelines promote superficial scanning instead of performing a methodical study, incorrectly

suggesting that key issues can be spotted at a glance and without thorough study, the framework does not easily accommodate tradeoff's, tradeoff's and their consequences are significant and complex and cannot be easily represented on a simplistic matrices, finally SWOT guidelines generally lack criteria for prioritizing analysis suggesting that all items listed are of equal importance leading to the impact of critical issues being hidden. Valetin suggested scrapping the SWOT process in total, replacing it with a Defensive/Offensive Evaluation framework.

Coman and Ronen identified other issues as being a lack of methodology to identify strengths and weaknesses, analysis focuses on an excessive number of ideas rather than focusing on the most important, there is no indication of causality between strengths and weaknesses and there is no hierarchy, finally analysis is usually a one-time event lacking a mechanism to review changes over time. They suggested a list of criteria that should be applied for the evaluation of key strengths and weaknesses, lists should be concise only including 4 or 5 items per category, all items should be actionable, tasks should be significant any tasks with little value or impact should be excluded, finally the list should be authentic rather than being wishful thinking. (Coman et al 2009, pp.5678-9).

In summary I found SWOT analysis to be a simplistic method of categorization however as a summary ready reckoner I have found some value in using it, I have combined the analysis results with the VRIO model to identify the true strengths that I feel drive strategic value.

3.7 The Transaction Cost Model

The final stage of analysis will consider the optimum scope of RA's vertical boundary for making or buying products or services, theory has been added to consider the internal and external factors that affect this decision, the Transaction Cost theory. I have separated out one section of this theory to discuss separately as I believe it adds true value, an assessment of Ferguson's Linkage Approach. I will use these theories to validate the results of the market analysis.

Douma et al suggest transactions can take place across markets or within a firm, "Whether a particular transaction is allocated to the market or an organisation is a matter of cost minimization. The term 'transaction costs' includes costs of both market transactions and internal transactions." (Douma and Schreuder 2008, p.161). Each step of production is an economic transaction, adding these together creates a transaction cost. This rejects the economic concept that markets are perfectly efficient and that transaction costs are zero, firms must be able to internalise the

management of transaction costs better than the market, they exist solely to do this. This represents the fourth factor of production, organisation, and at the market level this is called the firm, the firm is operating as a command and control economy.

Williamson extended this view to identify operational tasks that are cost generating. He identified that it is difficult to find trusted trading partners, it is expensive to negotiate trading contracts and monitoring compliance, it is then difficult to monitor that compliance to agreed standards (Williamson 1971, pp. 112-123). He argued that firms are better placed to perform these actions than the open market, internalising control via SOP's, they are better placed to negotiate contracts and develop longer term working relationships with partners. In this sense the firm is using command and control to inform decisions, this industry knowledge is a procedure to make decisions quickly.

Williamson identified other factors affecting cost as opportunism and bounded rationality. Opportunism suggests that people will take an advantage where they can, acting in a non-efficient way for personal gain. Ferguson commented "The transaction cost approach assumes that an individual's ability to handle complex information is limited, this is termed bounded rationality. Because economic agents have imperfect information, using the market incurs costs." (Ferguson 1993, p.10). This analysis rejects a second economic concept, that economic agents will act rationally. Bounded rationality and opportunism can be internalised by firms to remove this lack of knowledge and uncertainty, using command and control to minimise their impact, management costs are the firm equivalent of the transaction costs involved in using the market. RA have proceduralised their operation, investing in ISO and ITIL accreditations to manage compliance, reducing opportunism and lack of knowledge by the use of these defined standards of operation.

The vertical chain describes a list of the transactions required to make a product, against each transaction the firm must consider the Make-Buy decision. Ferguson highlighted seven characteristics that need to be considered, individually they provide a useful insight, however it is the impact of their interaction that needs to be truly understood. These characteristics are the "Economies of scale or scope", RA are a small business and so not have the ability to exploit scale, the impact of scope is much more important, how different products or outputs can draw on common assets; the "Number of firms" in the marketplace; the impact of "Asset specificity", for RA resource specificity is particularly important, many assets are very specific to their current roles and cannot easily be moved to produce another, these assets may need to be brought in-house to retain

competitive advantage. “Firm specific knowledge” is key and may be difficult to obtain from the marketplace, RA believe they have found a niche market position, resources need to build several years of experience to be truly effective; market “Uncertainty” may require scarce resources to be secured or medium term contracts to be put in place to reduce cost and complexity; if the “Scope for opportunism” or bounded rationality is low then the market may be trusted to provide that service, if not then that resource should be brought under the control of the firm where control can be closely exercised. Finally “Complexity of production”, if a role or task is complex it may be more pragmatic to bring it in-house, alternatively the firm will need to agree specific instructions with suppliers, using contractual terms, quality standards or monitoring control to ensure quality.

There have been several criticisms applied to the transaction cost theory. Earl & Wakeley commented “One major issue is that it seems implicitly to presume that there is no problem in obtaining capabilities to perform an upstream or downstream activity in-house. However even checking on what is being delivered may be impossible to do successfully without having the capacity to perform the task oneself.” (Earl & Wakeley 2005, pp.308-9). This is a valid concern, RA have managed to balance vertical integration where these key technical capabilities have been internalised within the UK, this is a much more difficult option when considering the delivery of these services in overseas markets. Analysis within chapter 4 will demonstrate how difficult or expensive it would be for RA to enter the Chinese market and obtain these upstream or downstream activities to manage in-house.

Douma et al identified several additional criticisms, they suggest theory assumes that transactions will only be managed by the market or within firms, “A major criticism of transaction cost economics is that it ignores the role of social relations and culture. Many relations built between human beings are built on trust, without trust it is difficult to understand how people can cooperate within a firm or build lasting commercial relations.” (Douma et al 2008, p.190). Ouchi (1980) argued Williamson’s framework ignored the benefits of co-ordination within the organisation, suggesting that there is 3rd way to co-ordinate transactions, the socialisation of individuals to work towards a common goal (a bureaucracy), Douma et al reject both of these proposals as being absolute, suggesting markets may be replaced by different organizational forms, e.g. long term relationships between buyers and suppliers or joint ventures, when price co-ordination breaks down, not simple hierarchies (the firm) or bureaucracies. They identify six co-ordinating mechanisms, direct supervision standardization of work processes, skills and outputs, mutual adjustment and the standardization of norms as being key to this control. (Douma et al 2008, pp.181-2). They also conclude that trust is a major factor and

that economic agents will not always act purely for economic gain, this contradicts Williamson's proposal of opportunism.

These criticisms can be clearly demonstrated when reviewing the Retail IT marketplace, Porter's 5 Force analysis will demonstrate how important trust is to building partnerships and retaining competitive advantage, RA have formed key partnerships, e.g. with Vista, acting as a retailer's trusted partner. RA have created many procedural guidelines to help their small teams work towards a common goal, supporting Ouchi's analysis, however I still believe Douma and Screuder provide a more practical view on the strength of building relationships.

3.7.1 The Linkage Approach Model

The final element of the Transaction Cost theory is the Linkage Approach suggested by Ferguson, he identified that coordinating activity within the firm will be preferred where management can draw on existing strengths and expertise, the stronger the links, the stronger the desire to retain that skill in-house. He commented "As such this technique can help to identify the optimum boundary of the firm. Competitive advantage flows from ways in which specialized information and expertise available to managers is combined to enable the right goods or services to be sold by a firm whose organization and production methods are efficient and low-cost." (Ferguson 1993, p.18). This exploitation of internal linkages is a key concept at RA, the firm has a high percentage of employees who have grown with the organization for over 10 years, the vertical boundary of the firm has been drawn around that learned experience of this core team, RA need to understand how new Aurora resources can be integrated to exploit their omni-channel experience. Ferguson continues "A firm can benefit from economies of scope by extending its operations into new areas that can draw heavily on the existing knowledge and skills of its management and workers." (Ferguson 1993, p.18). Again this can be seen at RA, the Helpdesk and support teams were originally setup to manage non-food apparel retail calls, this scope has recently been extended to include facilities management calls for building maintenance contracts, RA are now investigating the move into supporting restaurant and entertainment organisations, using the linked experience of the Helpdesk Analysts, Operational Support and Store Systems teams.

Ferguson also highlighted issues that may be experienced using the Linkage Approach, "The linkage approach is a static mode of analysis [...] firms are continuously changing their boundaries by expanding or contracting the number of tasks they perform." (Ferguson 1993, p.20). Defining the firm's boundary on the basis of how activities are linked is useful in a stable environment where cost

is expected to be an important variable, careful analysis of linkages can help to control these costs. In a faster changing environment firms may gain strategic advantage by exploiting new technology, not on being able to exploit existing linkages, the lack of existing links should not deter the application of a new technology, costs may need to increase to exploit this new opportunity, however the eventual rewards may be greater.

This chapter has introduced all of the theories that I will use within my review, chapter 4 will apply each theory to the case study in turn, again following the order dictated by Dobson's model. I have started the chapter with an detailed review of RA's products, this will introduce the reader to Merret and the Helpdesk Service in more detail, this should help support the application of theory.

4 Strategic & Economic Analysis – An Application Of Theory To The Retail Assist Case Study

This part of the review will use the economic and strategic models introduced in chapter 3 to analyze Retail Assist and the Retail IT market in detail, identifying the key competitive forces that will impact RA's ability to compete. I have started this chapter with a historical review of RA, using Kotler's theory of product to define the 2 products that will be referenced throughout this study, the Merret ERP package and the Helpdesk solution. Strategic analysis will use a combination of a PEST framework to scan the environment, Porter's 5 Forces model to identify the key environmental factors influencing the market, Barney's VRIO Framework to assess RA's competitive position, a SWOT analysis will be used to identify RA's internal strengths and weaknesses. The output from this analysis will be used in chapter 5 to help formulate a strategic plan to exploit the opportunities offered by omni-channel technology changes and the market expansion into Asia.

4.1 An Introduction To Retail Assist Products & Services

Founded in 1999, Retail Assist operate in the UK non-food Retail IT sector, providing technical and support services for numerous apparel retailers. Martec (2011) surveyed the top 100 retailers operating within this sector, these account for £65billion in sales, 63% of the total non-food retail sector, encompassing over 31,000 retail outlets. Until 2007 RA provided an outsourced IT 'services' offering, without promoting and selling individual products, the company ethos and marketing message was to assess each client requirement individually, research available options and present the most appropriate and cost effective options without bias. This service included a retail focused Helpdesk function, network and infrastructure Technical services, 24 x 7 x 365 machine housing and operational support, and Project Management services. RA provided a single channel for a retailers IT needs offering a fully outsourced service, or clients could selectively purchase service components to supplement existing IT teams.

This changed in 2007 with the purchase of Merret from Grantfort Computer Services (GCS), a retail merchandising and warehousing supply chain enterprise tool, this opened a new channel of opportunity for both organizations, marketed as Retail Assist. RA's product portfolio has subsequently grown to offer a new 'Enterprise Solution', a collection of components that all retailers use, including Merret, Infinity an EPOS application, Sage finance and a business intelligence reporting tool Board MIT. This solution is also supported by the existing service delivery teams within RA, offering technical services, machine housing, Helpdesk and implementation services.

The desire to offer the all-encompassing Enterprise Solution has waned in the last 2 years, RA still have the ability to offer all products bundled into a single solution, or provided separately, depending on the client's needs, however managing the relationship with Board IT has been difficult, leading to the product only being offered if requested directly. RA are happy to interface data to any Business Intelligence tool, this provides reporting flexibility and does not tie them into binding relationship with an organization with a small UK footprint.

Kotler defined a product as "Anything that is offered to the market for attention, acquisitions, use or consumption and that might satisfy a want or need. Products include more than just tangible goods, broadly defined products include physical objects, services, persons, places, organizations, ideas or mixes of these entities", he defined services as [...] "Products that consist of activities, benefits or satisfactions that are offered for sale that are essentially intangible and do not result in the ownership of anything." (Kotler 2005, p.539). These definitions cover the products and services that are provided by RA, as can be seen in table 2.

Kotler suggested that planners need to consider products on 3 levels, firstly the core product, the problem solving benefit that satisfies the customers basic needs, secondly the actual product where that core benefit has been turned into a product, finally the augmented product where additional consumer services and benefits have been added to create a more desirable article. He suggests that a product is more than a simple collection of tangible benefits, firms need to identify the basic need of the customer, create a product to satisfy that need, then augment it with services to create the 'bundle of benefits' that will satisfy their need. RA's products and services have been mapped onto Kotler's 3 Levels of Products, consider diagram 5.

Retailers have the same basic need, IT solutions to manage their complex buying, warehousing, distribution and sales management processes, with core IT technical services to manage the environment in which these processes can run. The basic need has been identified above, RA have created a number of products that can serve that need, Merret to manage the buying, merchandising and stock control functions, Infinity to manage store operations, RAX to connect remote data transfer services, Board MIT to manage business reporting, and interfacing to pass data into / out of Merret and 3rd party systems e.g. finance packages.

Component:	Description:
RA Service Offering:	
Retail Helpdesk	24 x 7 x 365 coverage, working as a first line of support, call handling and problem resolution mainly focused on store retail operations and facilities management.
Technical Services	Networking, technical consultancy, machine design and build, technical support.
Store Systems	EPOS technical support services, payment system e.g. chip and pin, EPOS build and installation.
Datacenter	24 x 7 x 365 operational support, machine housing, disaster recovery services, tape back-up, out of hours system monitoring and support.
Project Management	Project services, end to end management of any system changes, project design and delivery.
Client Management	Direct interaction with client for feedback on support services, point of escalation for issues, providing advice on potential issues or areas of improvement.
Application Development	RAX – extended poller services, data translation and formatting, connection and transmission of data using diverse technologies.
Merret:	
Merchandising	Retail merchandising functions including, supplier management, purchase ordering, allocation and replenishment, planning, reporting, stock control.
Warehousing	Warehousing operations using radio-frequency RF technology, stock receipt and putaway, stock picking and distribution, links to e-commerce, stock auditing.
MIS Reporting	Key business performance reporting, sales pipeline reporting.
Interfacing	Interfacing into and out of Merret to any required 3 rd parties, usually covering EPOS applications, e-commerce applications, finance systems, planning systems, garment ticket printers, material shipping companies.
Polling Services	Pre-scheduled data passing between systems to support the Merret interface application, using FTP (file transfer protocol) technology.
Combined Solution:	
Merret	Core Merret product, using v5 green screen, or v6 .net platform. Merret uses a combination of an i-series platform, the .net application uses Wintel technology to provide web services.
Interfacing	Interfacing data into and out of Merret.
POS Solution	Powered by the Infinity POS solution.
BI Reporting	Powered by the Board BI application, business intelligence reporting for key business performance indicators.
Finance	Powered by Sage or Coda, linked into Merret to monitor and control business operations, and manage the finance function.
Support Services	RA support and project management services to implement and support all aspects of the solution offering.

Table 2 – Retail Assist Product Offerings.

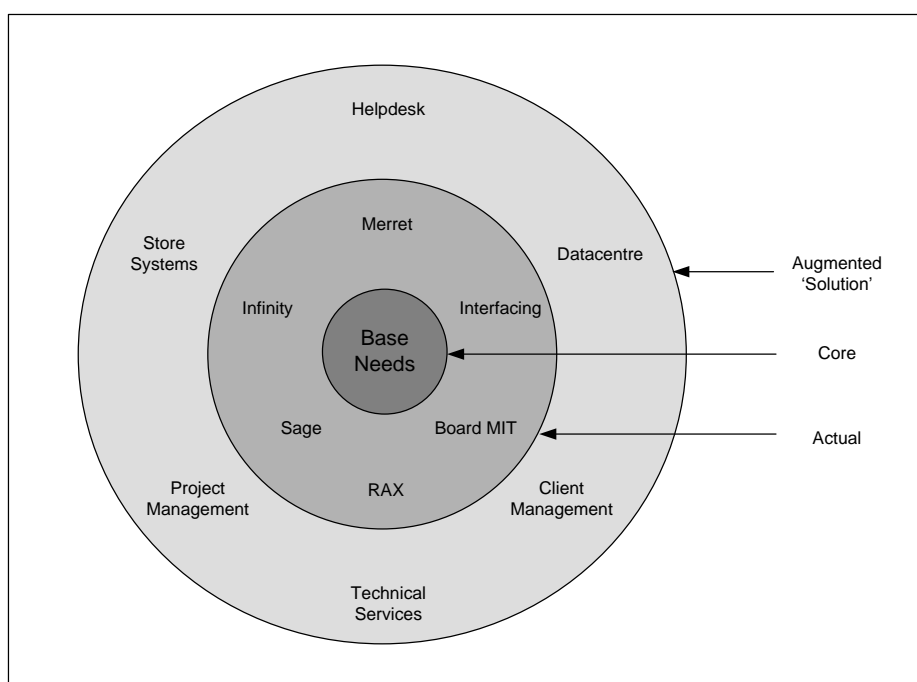


Diagram 5 - Kotler's Three Levels Of Product For Retail Assist

The augmented solution offers all of the ancillary services that allow those systems to work efficiently, the Datacenter will house machinery and provide 24x7 operational support, the Technical Services team implement and support technical solution, the Helpdesk provide the 1st line of support for all solutions, the project management team manage all additions and changes to business system. Without these wraparound implementation and support services, the core and actual products will simply fail to operate efficiently and will not add the expected business benefit. This analysis exercise will be focused on 2 collections of RA products, the Helpdesk solution and Merret, neither can be considered in isolation, for example all Merret implementations are supported by RA Technical Services, operational support and project implementation services, however to ease analysis a clear distinction will be made between the two. The scope of each augmented product in this analysis exercise will be:

Product	Scope & Definition
Helpdesk Services	Implementation of RA support services into a client, primarily based around the RA Helpdesk providing 1 st Line services. This will often be supplemented by 2 nd line EPOS and operational support, technical and project services will be used to implement the project
Merret	Implementation of the Merret supply chain solution, providing buying, merchandising, warehousing and distribution services. Merret will be linked / interfaced into existing IT tools e.g. a website solution. The implementation will encompass technical teams to configure and setup the solution, the implementation will be controlled by the Project Services team. The final solution will be supported by the 1 st line Helpdesk, 2 nd line Merret support, machine housing, operational support and monitoring of technical systems

Table 3 – Definition Of Product Scope

The definition of each product will be enhanced throughout this report, I will aim to review how RA are being impacted by the changing nature of Retail IT, assessing how relevant each product is to the market, suggesting strategies that should be considered to grow market presence, or remove inefficient products. The marketplace for Retail IT is rapidly changing as UK retailers expand through Europe into the wider world, RA need to understand which of their products can be used to exploit this expansion, and which are not appropriate to make the transition. RA provide a combination of products and services to 26 retail IT clients, as can be seen in table 19 (Appendix 1), this shows the diversity of products and services offered, but also how the supporting teams, Helpdesk, Technical Services, Operational Support, are used in both Merret and support transition project delivery. It also demonstrates that RA have been able to create medium to long term support contracts, ranging from 3 to 10 year contracts, providing stability from this on-going annuity income.

4.2 An Analysis Of The Retail IT Market Environment

This area of analysis will examine the market environment in which RA operate, reviewing the forces at work and their competitive assets that allow them to compete. This will use a PEST framework to analyse any political or legal factors at work, potentially employment legislation or legislative structures that will effect performance; socio-cultural factors influencing the demographic, attitudes or lifestyles of the target consumer; economic factors or technology factors that may affect performance. Consider table 4:

<p>Political / Legal Factors</p> <ul style="list-style-type: none"> • UK government driving a policy of low taxation, growth of home ownership and easier access to credit. Has been affected by economic downturn. • Political strategy to rescue economies has led to additional drop in interest rates, trying to ease flow of credit and encourage retail. • Diminishing unionisation of workforce has made it easier to outsource key services, employees may need to TUPE to new service provider, however this can easily be accommodated. 	<p>Socio-Cultural Factors</p> <ul style="list-style-type: none"> • Attitudes influenced by the economic downturn, the largest growth in savers in the under 35's: http://news.bbc.co.uk/1/hi/business/8139877.stm • Consumers still have 'spend now - pay later' attitude, fuelling retail marketplace. • Trend to follow brands, particularly important in the Tier 1 and 2 retail markets. Popularity of magazines and celebrity lifestyles have reinforced this. • Joint ventures e.g. HOF with multiple concession partners, have supported desire for multi branded stores, thus increasing retail channels to market. • Fashion led marketplace supported growth of large retail organisations, require complex merchandising and warehousing systems to accommodate growth. • Stigma / mistrust of outsourced services has been removed through 90's as companies outsource services to reduce costs and broaden skills.
<p>Economic Factors</p> <ul style="list-style-type: none"> • Severe downturn in economy has hit the retail sector hard, disposable income and consumer confidence at a 15 year low. • Banks have been heavily fined / consolidated, restricting available credit in the marketplace. • Retailers are actively downsizing store estates to reflect the drop in income, reshaping store profiles away from 'bricks and mortar' to on-line retailing. • Price competition led to a 'disposable' clothing culture e.g. Primark t-shirts available for £2.00. • Reduced income has led to consolidation of services and greatly reduced internal spend. This has adversely effected the outsourced IT market. • Many capital IT projects shelved until the effects of the economic downturn are fully understood. • Focus of spending has moved from large capital expenditure to investment in cost reduction, retailers have not stopped investment, however the focus of this investment has changed. 	<p>Technological Factors</p> <ul style="list-style-type: none"> • Cost reduction technologies are becoming more attractive to retail organisations e.g. reduced communications costs via ADSL etc. • Availability of outsourcing services will allow retailers to reduce fixed cost spend on internal teams, whilst increasing access to broader IT skills. • Improvements in technology have opened up new, more productive and more cost effective channels to market e.g. e-commerce. • Improvements in IT supported business processes has led to more efficient fulfilment of goods and services. • Many retailers have changed systems to exploit recent advances in technology, e.g. e-commerce, e-mail, material handling, supply chain management.

Table 4 – Retail Assist Business PEST Analysis

The retail IT marketplace has been dramatically affected by the economic downturn, retailers are downsizing as markets shrink due to restricted sales, therefore the most influential sector effecting retail IT has been the economy. The economy moved from a period of boom into recession, low interest rates had provided consumers with increased disposable income, and a reduced propensity to save. House price inflation and job security provided additional consumer confidence, access to interest free credit fuelled the 'buy now – pay later' culture. Increased price competition led to a disposable clothing culture e.g. Primark t-shirts being available for £2.00, retailers were pushed to reduce operating costs to compete on high street, this led directly to an increase in IT spend, on complex systems to improve operating efficiencies, and outsourced services to reduce costs.

The economic downturn has hit the retail sector hard, disposable income and consumer confidence is at a reported 15 year low, retailers are actively downsizing store estates to reflect their drop in

income, reshaping store profiles away from bricks and mortar to on-line retailing. Several large UK chains have gone into administration including Jessops, HMV and Comet. This reduced income has led to a consolidation of services and reduced internal IT spending on support services, many capital IT projects have been shelved and the focus of retail spending has now moved from large capital expenditure to investment in cost reduction, retailers have not stopped investing, the focus of this investment has changed. This has created an opportunity for Retail Assist to exploit cost reduction methodologies.

There has been a step change in government economic policy since the onset of the recession, low levels of taxation and easy access to personal credit fuelled the growth in the retail economy, pushing personal spending to unsustainable levels. Financial institutions seemed sparsely regulated, even encouraged to drive forward personal spending. Since the recession, governments have acted to try and release credit within economies, whilst investing in financial institutions to try and prop up the economy. The British Retail Council is actively asking the Government to change the method of inflation used to calculate annual business rate increases as part of its Budget submission, rate rises are determined using September's retail price index (RPI) inflation figure. Rates and utility bills have increased sharply, demonstrated by the number of empty properties on the highstreet. Finally, the diminishing unionisation of workforce has made it easier for organisations to outsource key services, employees may need to TUPE to new service provider, however this can easily be accommodated, this has led to RA picking up new support contracts as IT teams are outsourced.

Socio-economic factors have had a major impact on retail IT. The trend for consumers to 'spend now - pay later' has fuelled a growing retail marketplace, consumers have become very brand aware, this is particularly important within the Tier 1 and 2 retail markets. Joint ventures e.g. HOF with multiple concession partners, have supported the desire for multi branded stores, thus increasing retail channels to market. This fashion led marketplace supported growth of large retail organisations, require complex merchandising and warehousing systems to accommodate growth. This has been exploited by Merret, managing all of these components for the UK market. Attitudes have changed somewhat since the recession, consumers are less cash rich and confidence is lower, unemployment is rising and many salaries have remained static or even reduced. This has resulted in a shift towards saving, the Money Programme (2009) reported that the biggest shift in saving is in the under 35's, the generation that had previously driven consumerism.

The final element to consider is technology. Improvements in technology have opened up new, more productive and more cost effective channels to market e.g. e-commerce, improvements in IT supported business processes have led to more efficient fulfilment of goods and services. As a result many retailers have upgraded their systems to exploit recent advances in technology, e.g. e-commerce, e-mail, material handling, supply chain management. This drive has continued through the recession, cost reduction technologies are becoming more attractive to retail organisations e.g. reduced communications costs via ADSL etc. The availability of outsourcing services is allowing retailers to reduce fixed cost spend on internal teams, whilst increasing access to broader IT skills.

4.3 An Assessment Of Retail Assists Environment

Mintzberg et al identified a number of market types, the strategist needs to understand the nature and characteristics of that market to build a coherent strategy to manage its complexities. (Mintzberg et al 2003, pp.131-2). Mintzberg et al identified the following markets types and their associated characteristics:

Name	Characteristic
Mass market	Large and homogeneous
Fragmented market	Many small niches
Segmented market	Differing demand segments
Thin market	Few, occasional buyers
Geographic market	Looked at from the perspective of place
Emerging market	Young and not yet clearly defined
Established (mature) market	Clearly defined
Eroding market	Diminishing or negative growth
Erupting market	Undergoing destabilizing changes

Table 5 – Mintzberg's Market Types & Characteristics

In general terms, I believe the non-food apparel retail IT market to be a segmented market, there are several smaller demand segments where firms specialize. Most firms competing with Retail Assist provide a number of different services, or partner with other firms to provide an augmented product. For example RA provide an augmented product that is a combination of Merret, working with an EPOS supplier from New Zealand, a Business Intelligence reporting supplier from Switzerland, several UK based finance packages and an international web service provider. All of these firms serve their own segment within the market, and combine forces when required. Both the Merret and Helpdesk Service products serve mature segments within the Retail IT market, there are a number of established market players controlling a large percentage of market turnover, for example the top 10 merchandising applications account for 72% of market spend. RA need to find a

strategy that suits this market segmentation, there are other forces affecting their ability to compete here, these will be explored further using Porter's 5 Forces model.

4.4 An Examination Of The Key Environment Forces Affecting Retail IT

This analysis will identify the key influences that affect competition within the Retail IT environment, Porter commented "The job of the strategist is to understand and cope with competition" [...] "competition for profits goes beyond existing industry rivals to include 4 other competitive forces, customers, suppliers, potential entrants and substitute products." (Porter 2008, p.79). When viewed externally, Retail Assist appear to operate in a fast changing environment that has been under financial pressure for a number of years, the apparel retail sector is subject to constant change as many established retailers move into administration, whilst new brands build an identity and become established market players. This rate of change has seen a dramatic shift in the use of technology, the rate of technological change has had a major impact on all retailers with internet 'savvy' consumers demanding new sales channels, better pricing information and more information on the products that they buy. Martec confirm that the average spend on IT systems among the top 100 non-food retailers is 1.6% of sales, detailed sector analysis from the Martec report has been used through this study (Martec 2011, p.6).

Porter's 5 Forces Model has been applied to examine this market in more depth, examining the 5 competitive forces to establish whether this is an attractive market to operate in. This analysis has been structured to view RA's existing market, the UK and European apparel retail sector, in relation to their main product offerings of the Support Service and the Merret ERP solution, both products are consumed in the tier 2 retail market, however they are different enough to merit their own analysis. This analysis will then be extended to consider the Asian retail marketplace to identify the forces that RA will need to accommodate if they are to be able to compete in that market.

4.4.1 Porter's Analysis Of The UK & European Helpdesk Market

The first force to consider is the threat of new entrants, analysis suggests that the threat of new entrants into the UK / European market is medium. There is evidence that RA are having to compete against support service companies from a more general IT sector encroaching on the retail IT sector, e.g. Cap Gemini and IBM, additionally Tier 1 suppliers are also now targeting Tier 2 retail due to a shrinking market. That said RA have managed to expand their client roster, providing (non-Merret)

Helpdesk support for 15 retailers, this has grown 275% since 2008 (4 to 15 customers). Consider diagram 6.

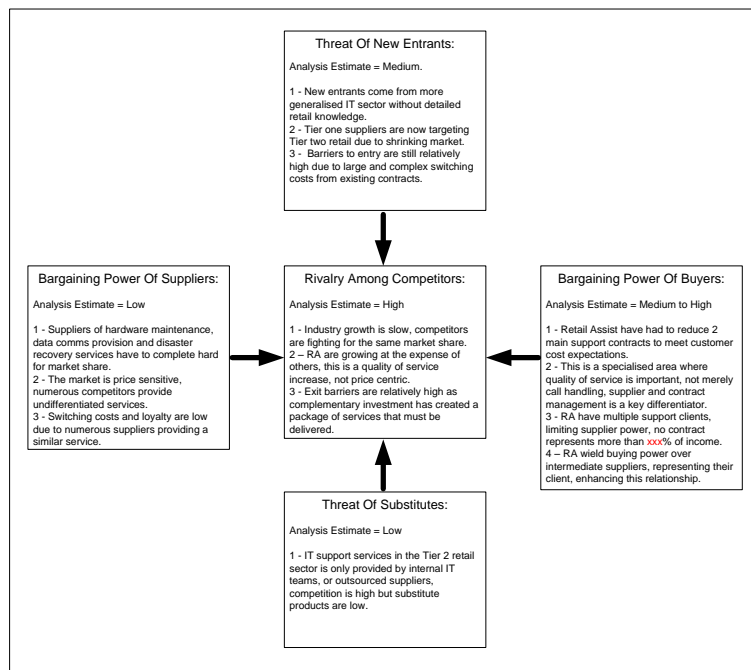


Diagram 6 – Porter’s 5 Forces Review – UK / European Support Industry

This growth has primarily been organic, capturing new contracts by demonstrating an ability to deliver a quality service at a competitive price, this has exploited the demand side benefits of scale where RA’s reputation has certainly created new opportunities. Mike Padfield, Head Of IT at Cath Kidston, has employed the RA Helpdesk at each of his last 3 companies, as he has moved, RA have been able to open new opportunities. Customer switching costs on this type of service are not huge, depending on the type of service employed, RA will provide a Helpdesk service at approximately £7 per call. The major issue for retailers is the poor quality of service experienced that has made them switch to RA, this transition process may be a 6 to 12 month cycle during which retailers have to manage incumbent suppliers, whilst preparing to transition to new partner.

The key forces underpinning RA’s level of performance and profitability are the ability to exploit the demand side benefits of scale to expand their client base, provide a quality service using internal knowledge achieved through capital investment in their internal resources, this ensures a higher switching cost for any customer wanting to change supplier, competitors would need to replace RA’s level of knowledge and services supported.

The second force to consider is the power of suppliers. Analysis suggests that the bargaining power of suppliers is low, there are many suppliers of generic IT services, e.g. comms / hardware, this makes the market price sensitive as suppliers compete for undifferentiated sales. Similarly switching costs and loyalty are low, RA manage many retailers contracts with their end suppliers, this unequal access to the distribution channels allows RA to leverage efficiencies in their favor. Analysis suggests that the power of buyers is medium to high, powerful customers can capture value by forcing down prices, demanding higher quality or playing suppliers off against each other, buyers are powerful if they have negotiating leverage against their supplier, especially if they are price sensitive.

Establishing an efficient support relationship is difficult and time consuming, therefore contracts tend to run for a 3 year term, this ensures that all support providers are keen to tender for contracts when they are made available. This drives price and quality competition, Service Level Agreement (SLA) requirements for contracts are increasingly complex and buyers demand higher levels of account management, both items affect profitability. RA have been able to limit this power by forming a key bond with their clients / buyers, managing their 3rd party suppliers and influencing purchasing decisions of customers downstream. This has recently been demonstrated at Aurora Fashions, Aurora outsourced their IT support function to RA in 2011, the strength of this relationship has allowed RA to sell their ERP solution into 4 Aurora brands, a contract that is worth £560k in implementation fees, then support income of £265k per annum over the next 5 years.

Analysis suggests that the threat of substitutes is very low in this sector, when the threat of substitutes is high, industry profitability suffers. The threat of a substitute would be high if it offers an attractive price performance trade-off to the industry's product, or if the buyers cost of switching to that substitute is low. There are not many substitute services on offer in this marketplace, retailers could manage this support internally, but once a retailer has chosen to outsource their ability to take that service back in house will quickly diminish. Martec found that the majority of non-food retailers (38% to 62%) used some form of outsourcing, 3% of the top 100 retailers had chosen to outsource their entire IT operation Martec (2011, p.11).

Finally, analysis suggests that the rivalry amongst competitors is high, this may take varied forms including price discounting, new product introductions or service improvements. Rivalry is especially destructive if it concentrates on price, this passes potential profits to the customer. Industry growth is slow or even contracting due to the economic downturn experienced across Europe in the past 4 years. 60% of retailers with EPOS systems choose to outsource some part of their store system

support, RA have 4% of this market. However the average age of a store system in 2012 was 6.1 years, the desire to change support providers is often linked to changing the POS solution, this length of system use has been consistent over the last 5 years. That said, RA have increased their customer base 275% since 2008, demonstrating they are competing in a competitive market. Exit barriers are high, the loss of a support service is commonly linked with the loss of a complementary service, e.g. an ERP contract, service providers fight hard to retain market share and support services will often be run at a low margin to retain lucrative software and project management contracts.

In summary, I feel that the UK / European Support sector is still an attractive place for RA to compete. RA have been able to exploit the demand side benefits of scale to expand their client base, provide a quality service through internal knowledge whilst reducing the power of potential entrants into the sector. They have been able to limit buyer power by forming strategic alliances, managing contracts with 3rd party suppliers to influence downstream purchasing decisions. Contractual growth of 275% since 2008 also suggests that they are able to outperform competitor rivalry by the sale of complementary products, e.g. Merret and RAX, countering the effects of a declining market.

4.4.2 Porter's Analysis Of The UK & European ERP Market

Analysis of Porter's model has identified the forces that underpin the profitability within the ERP market, consider diagram 7. Analysis suggests that the threat of new entrants into the market is medium, systems need extensive functionality to compete, however a change in model delivery has seen Microsoft buy a number of complementary products, creating an augmented product that works across all sectors of the retail marketplace. Distributors, e.g. K3, have developed these core products to deliver market specific functionality, this has made it easier for smaller competitors to enter the market, creating niche products but supported by the brand identity of Microsoft. Merret have countered this threat by exploiting their supply side economies of scale, creating focus groups and leading joint developments to create a feature rich product that encompasses many new technologies, e-commerce, m-commerce and omni-channel. E-commerce is used by 87% of the top 100 non-food retailers, m-commerce is expected to grow by 18% in 2013, this is differentiating Merret from more generic products, raising the barriers of entry. This reinforces the demand side benefits of scale, the number of customers using Merret has grown by 267% (3 to 11 customers) since 2008, as the product has been converted to a .net application and functionality has increased.

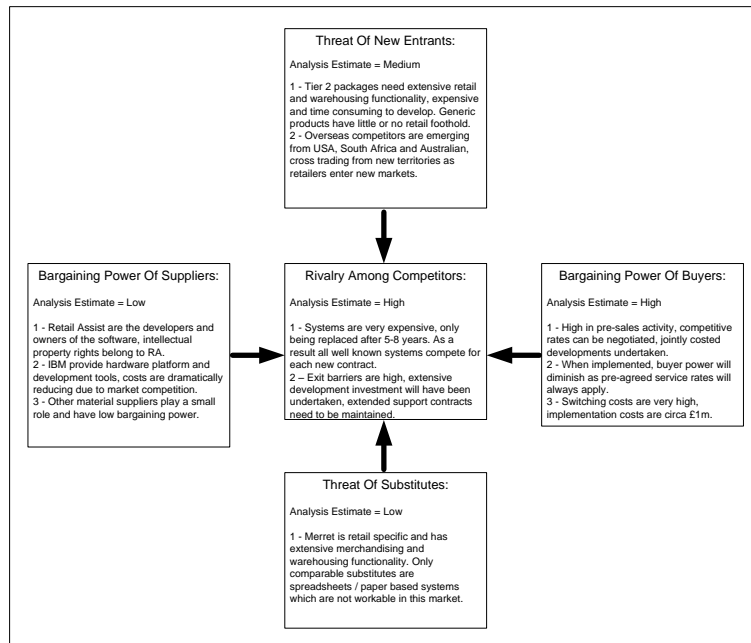


Diagram 7 – Porter’s 5 Forces Review – UK / European ERP Industry - Merret

Analysis suggests that the power of suppliers is low, RA develop and own this software, the suppliers of intellectual input all work for RA. IBM provide the hardware platform and development tools, costs are dramatically reducing in this sector as the supply of undifferentiated products increases, IBM do not solely rely on i-series hardware sales to drive profits. Component costs are reducing and suppliers face an increase in the competitors they face, in 2012, 39% of the leading retailers used IBM systems, down from 44% in 2011.

Analysis suggests that the power of buyers is high, customers can retain profit by forcing down prices if they have negotiating leverage against suppliers. Analysis suggests that merchandising systems are only replaced every 12.2 years, logistics systems every 9.3, Merret provides both of these functions. Consequently slow growth leads to increased competition, reinforcing buyer power. Merret supports 4% of the merchandising and 3% of the logistics markets, the average length of an implementation is 9 to 12 months, therefore the ability to grow this market share will be limited. This buyer power will diminish rapidly once a contract has been agreed, switching costs are very high and customers have a vested interest in choosing and retaining a market leading product.

The perceived threat of substitutes is low, retailers in the tier 2 sector gain competitive advantage by using complex systems, customers demand new channels to market e.g. m-commerce, the opportunity to run multi-million pound enterprises on a spreadsheet are unworkable. Finally, the perceived rivalry among competitors is high, 41% of retailers have an in-house system or do not use

a merchandising product, the remaining 59% of retailers use upto 10 major solutions. This slow change of contracts and the level of R&D investment built into each product ensures that the exit barrier are very high.

In summary, I feel that the UK / European ERP industry is an attractive place for RA to compete. Merret has grown its market share 267% since 2008, RA are using supply side economies of scale to enhance the features available within Merret, the strategy of including all changes into the core product ensures that customers are constantly rewarded with new functionality. RA receive tax relief on all new R&D in the UK market (DTI 2004), in 2010/11 R&D investment was £363k, tax relief was received on £288k of Merret development, reducing the cost of enhancement. Customer switching costs are very high in this sector, customers pay a 21% maintenance fee on all Merret licenses, this rate is always protected and never negotiated down. Retail Assist also exploit their unequal access to distribution channels, Merret is often sold with complementary services provided by RA, implementation and technical services, Helpdesk and operational support. This increases income whilst opening new avenues to provide support services into each customer.

Porter commented “The strength of the competitive forces affects prices, costs and the investment required to compete, industry structure defines the gap between revenues and costs.” (Porter 2008, p.87). RA have demonstrated an ability to affect these factors to their benefit, shifting the threat of new entry, RA focus on tier 2 retailers who have adopted new inventory management technologies that have large fixed costs, products are feature rich and have increased the economies of scale, making it more difficult for smaller companies to enter the market, this has also reduced the threat of substitute products being applied. They have affected supplier and buyer power by forming strategic alliances or using undifferentiated generic technologies. Strategy can be viewed as building a defense against an industry’s competitive forces, RA have discovered a niche position enabling them to grow where these industry forces are weakest.

4.4.3 Porter’s Analysis Of The Asian Helpdesk Market

I have considered RA to be a new entrant into this market as they do not currently provide localized services in China, all support is provided from the UK, I consider the barriers of entry to be high, there is an essential need for local language skills, culturally Chinese retailers may wish to retain contracts with Chinese service providers, this would make it very difficult for UK firms to compete. RA will find it very difficult to expand their client base using demand side benefits of scale, using similar services to their direct competitors, expecting a similar level of service. Having a small

footprint in such a large market will be cost prohibitive, UK retailers have a limited number of stores in territory making the marginal cost of providing support very high. RA could enter this market to provide support working with their existing suppliers as they open new stores in territory, this will remove some barriers, however the method of support delivery needs to be considered carefully.

Supplier power will increase, RA will find it difficult to lever contract efficiencies using the unequal access to the distribution channels, they will have to use local territory suppliers with a better knowledge of the market, who will be able to exploit that unequal access. I consider the power of buyers to be medium, this power is increased if there are few buyers relative to the number of service providers. Asian retailers will have higher bargaining power as the number of service providers in the market will diminish RA's ability to differentiate their service offering. The focus of this power balance will change when RA support their existing clients in Asia, RA could work with a local partner, retaining negotiating power when influencing purchasing decisions of customers downstream.

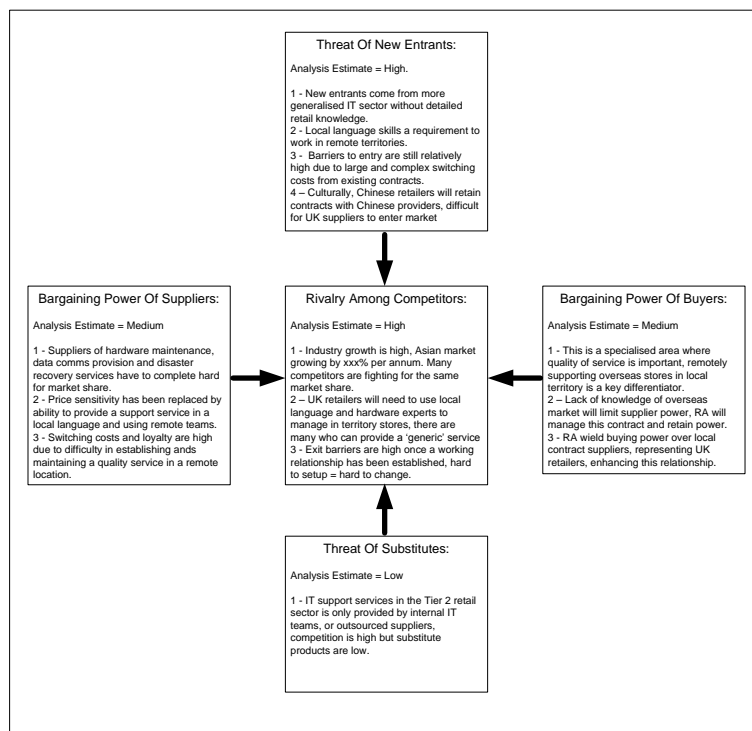


Diagram 8 – Porter's 5 Forces Review – Asian Support Industry

I consider the threat of substitute products threatening RA's market with their existing customers to be low, UK retailers opening branches in China will want to retain a high quality of service and SLA management for their stores, Asian retailers may accept a lower quality of service, but this will still

be with a service provider. The final factor to consider is rivalry amongst competitors, I believe that this will be very high. McKinsey predict China's luxury goods market will grow at the pace of 25% a year, twice as fast as the broader retail sector (McKinsey 2009, p.4). This growth should allow support organization to grow in line without all suppliers chasing similar contracts, RA would actively target this tier 1 / 2 internationally branded market where growth is at its highest. However once established the exit barriers of changing to a new in territory support partner would be costly and slow.

The new store opening issues experienced by Karen Millen and Cath Kidston were identified in chapter 2, both implementations were difficult, Karen Millen experienced a large number of issues and the store opened 4 months late. RA managed their IT implementation and were forced to incorporate the China store into a cumbersome merchandising solution managed from Australia. Considering both implementations and the Chinese market as a whole, I believe this would be a very difficult market for RA to compete in, in its current form. RA will struggle to replicate the forces that underpin the UK market's levels of profitability, the demand side benefits of scale to expand their client base, and limiting buyer power by forming strategic alliances, managing contracts with 3rd party suppliers to influence downstream purchasing decisions. RA do have the ability to strategically manage some competitive forces to trigger a reaction in others, they can use their existing clients need to support their growing store estates, to establish working partnerships with local providers, removing one barrier of entry, then start to grow market share by reselling this in territory relationship to other UK suppliers who are moving to Asia, gaining advantage from this intellectual capital, creating a physical RA presence may be a longer term goal. I believe RA will be more effective by managing the IT element of store expansions, working with local partners to provide a single point of presence in the remote market, then using that supplier as a in territory support resource, under the control of RA.

4.4.4 *Developing Merret For Use Within The Chinese Market*

Analysis suggests the opportunity to sell and implement Merret into the Asian market is even more difficult, Merret is a UK centric ERP product, developed in a single byte character set that does not support Chinese characters, it is extremely functionally rich, but again this functionality is targeted at the UK retail process, this may not translate well with Chinese requirements. Consider diagram 9:

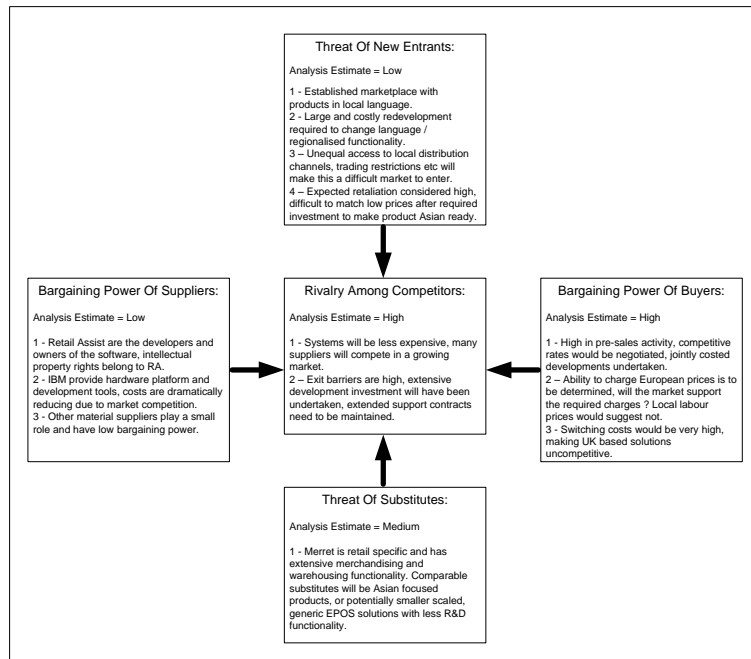


Diagram 9 – Porter’s 5 Forces Review – Asian ERP Industry – Merret

Analysis suggests that the threat of new entrants into the Asian market is low, making it difficult for Merret to enter that market. RA would be entering an established market competing against territorially-functionally focused products, already in the appropriate local language, Merret would face a costly redevelopment to make it market ready, adding local language and local functionality. This capital investment would need to be funded by RA alone, there will be no opportunity to share this development cost between a group of clients. An analysis of this scope has been conducted by Tim Moger, the Merret Development Manager at RA.

Tim Moger has identified that Merret has 745 items on the main Merret menu (programs and screens), there are 1338 files held in the core database and 2894 RPG programs that provide the core functionality. Merret has been developed over a 15 year period, at that time the ‘double byte character system (DBCS)’ required to provide Chinese based character sets was not even considered, therefore Merret has not been built to accommodate this. Moger estimates that it may take 1 man day per module to convert to the DBCS standard, this would require 5000 days of development. Working on an estimated average absorbed cost rate of £300 per day (see appendix 2), this redevelopment would be £1.5m, this is an unsustainable cost, RA would need to find some form of automated tool to complete this redevelopment, or start the base development process again.

The bargaining power of buyers will be even higher than the UK, RA will not be able to exploit their demand side benefits of scale as they will be the new entrant, buyers will wield stronger buying power and may reject the opportunity to work with a non-Chinese supplier. Supplier power and the threat of substitutes will remain low, however analysis suggests that competitor rivalry will be high, Merret would be seen as an expensive product in a competitive marketplace, RA would need to implement a cost differentiation strategy to accommodate this market entry. If entered, RA's exit barriers would be very high due to the level of sunk cost investment, they will be competing against less expensive, lower differentiated products where price competition will be more fierce. This will erode RA's ability to retain sales margins to reinvest back into the development of the product.

Analysis of the Asian industry structure offers a different perspective to the external view of exploiting a rapidly growing marketplace. Entry into this market will diminishes RA's ability to exploit all of the strategic forces that underpin today's levels of profitability in the UK. RA must ensure that they do not misinterpret visible attributes of an industry for its underlying structure. For example fast growing industries are not always attractive, fast growth may hide rivalries as all companies can grow into an ever increasing market. These issues do not exclude Merret from the China market altogether, RA are currently exploiting an opportunity to load Chinese characters into their e-commerce portal, for distribution to Chinese text web servers. This may be a compromise position that works for many UK retailers, supporting their e-commerce growth to Chinese customers, Moger estimates that this development will be relatively simple, taking an estimated 45 days to complete.

4.5 Identifying RA's Competitive Position Within The Retail IT Market

The next stage of analysis maps RA's competitive position within the retail IT marketplace, analysis will use a life-cycle model to review the stage of development of RA's markets, then the VRIO framework and Value Chain models to assess their capability to deliver a chosen strategy using internal resources, fundamentally how well RA can link their internal activities to perform effectively and efficiently. Dobson et al suggest that conditions in the marketplace fundamentally affect competitive behavior at different stages of their development and organizations need to apply different strategies to cope with these competitive conditions (Dobson et al 2004, p.32) . Dobson summarized a number of conditions that could be expected at different stages in this cycle of development, consider table 6:

	Introduction	Growth	Maturity	Decline
Growth Rate	Rising slowly	Accelerating	Leveling	Declining
Sales	Low	Rising	Peak	Declining
Unit Costs	High	Declining	Low	Low
Product Line	Very short	Growing	Diversified	Shrinking
Profits	Negative	Increasing	High but declining	Declining
Competitors	Few	Increasing	More but stable	Declining
Typical Pricing	Cost plus	Penetration	Competitive	Cut
Entry Barriers	Technology	Start-up costs	Competitors	Overcapacity
Advertising	Information / education	Mass market awareness	Persuasion / differentiation	Reduced

Table 6 – Stages Of The Life Cycle

These analysis factors have been applied to Merret and the Support Service to assess the type of market they are operating in, consider tables 7 and 8:

MERRET	Analysis	Observation
Growth Rate	Accelerating	Merret serves 4% of the merchandising and 3% of the logistics markets
Sales	Rising	Grown by 267% since 2008 (3 to 11 customers)
Unit Costs	Rising	Annual increase applied each year to match the retail price index increase
Product Line	Growing & diversified	Increasing functionality to facilitate omni-channel processing, linked into complementary products to create an augmented product, e.g. Infinity EPOS
Profits	Rising	Annuity income increased from 2008 to 2012, £363.5 to £1,383.9 respectively
Competitors	Increasing	Microsoft have created a new market offering that controls 9% of retailers, advances in technology have enabled lower cost suppliers to enter the market and use niche specialists to tailor their product e.g. K3
Typical Pricing	Competitive	Pricing defines by license cost plus implementation tasks. Merret is typically a 6 to 12 month install ranging from £500k to £1m
Entry Barriers	Competitors	Most Tier 2 competitors are enhancing well known products, adding functionality to compete in the omni-channel space, RA invested 7,697 man hours in Merret R+D in 2011/12
Advertising	Mass market awareness	Combination of press releases, award entries, marketing publications, industry websites and magazines

Table 7 – Stages Of The Life Cycle – Merret Analysis

Analysis of the competitive conditions affecting the supply chain shows a market going through growth into maturity, this seems counter intuitive after the decline in retail trade. Martec's analysis

found that supply chain solutions are only changed every 12 years, however recent advances in technology have made that change more attractive, allowing retailers to exploit e-commerce and m-commerce advancements, creating new opportunities to downsize expensive store estates and increase their reach to a more IT literate consumer. The Tier 2 retail sector is maintaining its 1.6% of turnover spend. Merret's market performance is growing at the expense of direct competitors, for example BTE have lost key clients at Whistles and Aurora in the last 3 years, both of whom are now Merret clients.

HELPDESK	Analysis	Observation
Growth Rate	Accelerating	11 new clients since 2008, increase in complexity and number of tills being supported
Sales	Rising	Grown by 275% since 2008 (4 to 15 customers)
Unit Costs	Declining	Average call management cost of £7 per call
Product Line	Growing & diversified	Moved into facilities management market with M&S and Vue Entertainment contracts in last 5 years, recently employed new sales person to drive sales in the recreational / entertainment markets
Profits	Rising	Actual data not made available by RA
Competitors	More but stable	Competitor mark less specialized than Merret, have to compete against call handling services where competition is based on price, not just quality of service
Typical Pricing	Competitive	Call cost on average of £7 per call, intention to drive down the number of calls managed through process improvements and training, constant pressure to reduce service cost, or offer higher levels of service
Entry Barriers	Competitors	Reputation and experience is key, managing support contracts for clients enforces barriers to entry
Advertising	Mass market awareness	Combination of press releases, award entries, marketing publications, industry websites and magazines

Table 8 – Stages Of The Life Cycle – Support Service Analysis

Analysis of the competitive conditions affecting the Helpdesk Service again shows a market going through growth into maturity, this is a much larger and more diverse market where the levels of differentiation are smaller and competitors compete on price as well as the quality of service. RA have gained a much larger footprint of customers, upto 15, and the range of services being offered has now diversified into the entertainment and facilities management markets.

Retailers have been more willing to outsource key services in the last 3 to 5 years, Martec found that 38% to 62% of the 100 top non-food retailers used some form of outsourcing, and there are many competitors fighting for this trade (Martec 2011, p.11). RA are growing their market share at the expense of their competitors, for example Prologic have lost several main contracts recently, all of which are being actively targeted by RA. The cost advantage of using an external partner has also been recognized and at an average call cost of £7, this is very competitively priced.

To validate this analysis, it is important to understand RA's position in relation to their competitors, my analysis uses Martec data and a direct observation of the solutions, comparable data is not available for the Support Solution, therefore I have combined the Merret and Helpdesk channels into a single dataset. It is also impossible to rank the competitor products on cost without having

example data, which is not commercially available for review, therefore a general measure has been applied with a low / medium / high factor, functionality has been measured looking at the number of core products offered within the solution, against the number of partners that are bundled together to make the augmented product. Consider table 9:

Company / Product	% Market Share	Merch Function	Warehouse Function	Finance Function	EPOS Function	E-Com Function	Omni Channel	Support Helpdesk	Score	Average Cost
SAP	11	CORE	CORE	CORE	PARTNER	PARTNER	CORE	CORE	17	HIGH
Microsoft Dynamics K3	9	CORE	PARTNER	CORE	CORE	PARTNER	CORE	PARTNER	15	MEDIUM
BT Expedite Mercatus	7	CORE	PARTNER	PARTNER	CORE	CORE	CORE	CORE	17	HIGH
Prologic	6	CORE	PARTNER	PARTNER	CORE	PARTNER	PARTNER	PARTNER	11	MEDIUM
JDA	5	CORE	CORE	PARTNER	PARTNER	PARTNER	CORE	PARTNER	13	HIGH
Retail Assist Merret	4	CORE	CORE	PARTNER	PARTNER	PARTNER	CORE	CORE	15	HIGH
Torex	4	PARTNER	PARTNER	PARTNER	CORE	PARTNER	CORE	PARTNER	11	MEDIUM
Island Pacific	3	CORE	CORE	PARTNER	PARTNER	PARTNER	CORE	PARTNER	13	HIGH
Itim	2	CORE	CORE	PARTNER	CORE	PARTNER	CORE	CORE	17	HIGH
Oracle	2	CORE	CORE	CORE	PARTNER	PARTNER	CORE	PARTNER	15	HIGH
In House Systems n/a	28									

Key: CORE Function delivered as part of core product
PARTNER Function outsourced to partner provider
COST LOW < £250K install, MEDIUM £250K to £500K, HIGH > £500K for typical install 50HO users, 100 stores
SCORE 3 points for CORE, 1 point for PARTNER

Table 9— RA Merret Competitor Analysis

From this analysis, it is possible to map RA's competitive position against the leading supply chain solutions, the market is dominated by a number of well established brands, e.g. SAP and Oracle, these brands do benefit from an enhanced reputation and the high exit costs retailers will have after a large investment, as outlined by Martec, supply chain systems are changed on average every 12.2 years. There have been several new products / growing brands in the marker, RA / Merret has grown its market share by 267% in the last 5 years, Microsoft Dynamics K3 is a new entrant and this now supplies systems to 9% of the market. Both of these applications benefit from the 'Demand Side Benefits Of Scale' where their growth can be attributed to a shared experience of retailers, attracted to using a product, used by their competitors.

Microsoft Dynamics K3 also has the benefit of being linked into the Microsoft corporation, it is not particularly retail specific or functionally rich, Microsoft have merged a number of products into a suite and made them industry non-specific. They have then encouraged industry specialists, e.g. K3,

to tailor their core products to the industry, augmenting the solution and building market share. Merret has benefitted from the move to a .net environment and its use is growing, in 2013 Aurora Fashions have decided to implement Merret, removing BT Expedite, Prologic is losing market share, the Merret sales team are actively targeting four tier 2 Prologic users to provide a replacement system. All of these users will look at the other main industry products, I expect the usage chart to show very different values in 2013. Diagram 10 shows a positioning map for the 10 leading products mapped against their corresponding functionality and price results:

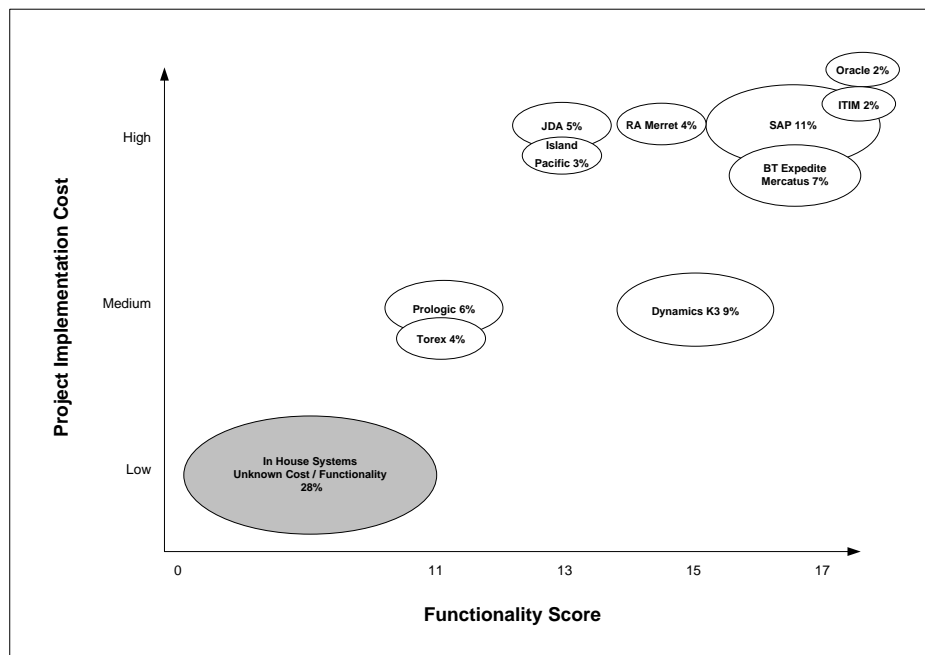


Diagram 10 – A Positioning Map For Retail IT Enterprise Solutions

The resource based view emphasises the internal capabilities of an organisation in formulating and delivering a strategy to achieve sustained competitive advantage. This may be seen as a direct contrast to Porter's 5 Forces model outlined in chapter 4.4 which has industry structure at its core, I believe organizations need to consider the internal and external forces, this complementarity is essential to create strategic vision.

Barney's VRIO framework has been applied to evaluate RA's resources and capabilities to determine if they add competitive advantage, each assessed against the question of value, rarity, imitability and organisation (Barney 2007, pp.138-9). RA need to continually identify opportunities they can exploit, see SWOT analysis results, this will often include technological advancements, demographic and cultural changes, economic changes or political opportunities. The recent economic downturn has encouraged retailers to invest in cost reduction technologies, RA's end to end solution and

outsourced offering perfectly fit this criteria, additionally the move to diverse retail solutions has increased the need for broad and diverse IT skills, internal teams cannot support this complexity, leading to a drive towards outsourcing. An analysis of RA's capital resources have identified the following, split into financial, physical, human and organisational components, consider table 10:

Resource:	Resource Analysis:
Financial Capital	<ul style="list-style-type: none"> Owner managed business with 4 shareholders. All are still actively employed by the organisation. No external debt, internally funded, annuity income of £7.4m.
Physical Capital	<ul style="list-style-type: none"> Packaged solutions of Merret and RAX, industry leading and functionally rich retail IT business applications. Northampton Datacentre, 24x7 operational support Datacentre, with full power resilience. Head office situated in Nottingham.
Human Capital	<ul style="list-style-type: none"> Nigel Illingworth, majority shareholder and Solution Development Director, responsible for development of Merret. Extensive B&M experience and relationships within the retail sector. Alan Morris, Managing Director with an extensive list of contacts and relationships within the retail IT sector. Business reputation and brand identity. Extensive marketing and sales experience within this sector. Experienced staff, 65% of staff employed by RA for more than 5 years.
Organisational Capital	<ul style="list-style-type: none"> Highly proceduralised business structure, all departments responsible for generation and maintenance of operating procedures. ISO20000 and ITIL accredited business, only support company in sector with ISO20000 compliance. 'Can Do' flexible culture, working in teams to deliver services very quickly. Has helped build strong interpersonal relationships within the business.

Table 10 – RA's Resources Plotted Against Barney's Resource Categories

When applied to Barney's VRIO framework, it is possible to identify those resources and capabilities that are a strength, those that are truly valuable, rare and hard to imitate, the resources that can be considered a weakness, not able to exploit an opportunity or mitigate a threat. Consider table 11:

Valuable	Rare	Hard To Imitate	Exploited By Org.	Competitive Implications	Economic Implications	RA Resource Fitting Criteria
No				Parity	Normal	<ul style="list-style-type: none"> Main office located in Nottingham, remote from major client bases in central London
Yes	No			Parity	Normal	<ul style="list-style-type: none"> Northampton Datacentre Internal working teams, high % of staff with extensive industry experience
Yes	Yes	No		Temporary Advantage	Above Normal	<ul style="list-style-type: none"> ISO20000 and ITIL accreditation Reputation for delivering
Yes	Yes	Yes	Yes	Sustained Advantage	Sustained Advantage	<ul style="list-style-type: none"> Merret & RAX packaged solutions Owner managed, no external debt Nigel Illingworth B&M experience Alan Morris industry relationships Marketing and sales team relationships / value

Table 11 – RA's Resources Plotted Against Barney's VRIO Framework

The mapping of RA's key resources against Barney's resource categories and VRIO framework has identified a key strategic move that was exploited in 2007, RA recognized that it did not possess the required resources to compete effectively, and the most efficient method of acquiring those resources was to purchase a collaborative partner. Merret provided RA with a tool to differentiate

their market offering, creating a solution of services, driving sales and increasing market share whilst introducing varied core competencies and new resources into the organization.

The existing key support resources were all valuable and had been heavily exploited by the business, however they were not particularly rare or hard to imitate. The business had grown on the back of its reputation of delivering a quality and cost effective solution, however this relied on RA's ability to exploit industry relationships, and that the market was not particularly attractive to larger competitors. The introduction of Merret added a new core competence to the business, a market leading Enterprise application that was functionally rich and very difficult to imitate. This had the added advantage of being able to exploit one of RA's other key resources, the power and value of the sales and marketing team. This can be demonstrated by reviewing the number of recent sales of Merret, Merret has been purchased by 8 new customers since 2007, all during a major downturn in the economy. In a similar period pre-2007, Merret had only been sold into 3 retailers, this demonstrates that even if a product has a rare, valuable and hard to imitate set of functionality it still cannot be efficiently exploited without organization, in this case the exploitation of industry relationships and a strong marketing / sales presence.

This is an example of Douma et al's dynamic capabilities theory enhancement, RA management built, enhanced and secured resources and capabilities, building dynamic capabilities contributed to resources generating advantage, Merret resources depend on tacit knowledge, they need extensive firm specific knowledge and are isolated from competitors, this makes them rare, hard to replicate and imitate, meeting the criteria of the VRIO framework.

RA have also improved other key resources, attaining ISO20000 and ITIL accreditations that demonstrate quality, whilst introducing a culture of proceduralisation and change management to ensure that the business can cope with an ever more complex business model. This need to continually develop resources was identified by Chacarbaghi et al commented "An organization should exploit existing business opportunities using the present resources whilst generating and developing a new set of resources to sustain its competitiveness in the future market environments." (Chacarbaghi et al 1999). This has proven that the overall sum of RA's activities is greater than the parts, combining diverse resources to be able to deliver services to a higher standard.

4.6 An Examination Of The Activities Within RA's Value Chain

Porter identified the importance of the link or chain of activities an organization has to manage to create its end product or service, the underlying principle being that even if each activity along the chain will incur a transactions cost, it should add value. (Dobson et al, 2004, p.42). Porter identified a number of primary and supporting activities that should be considered, these elements have been mapped for the deployment of Merret and the deployment of the Helpdesk Service into RA's clients. It can be assumed that RA will provide the underlying support services of procurement, technology delivery and human resource management to all teams managing these product deliveries.

4.6.1 The Merret Value Chain

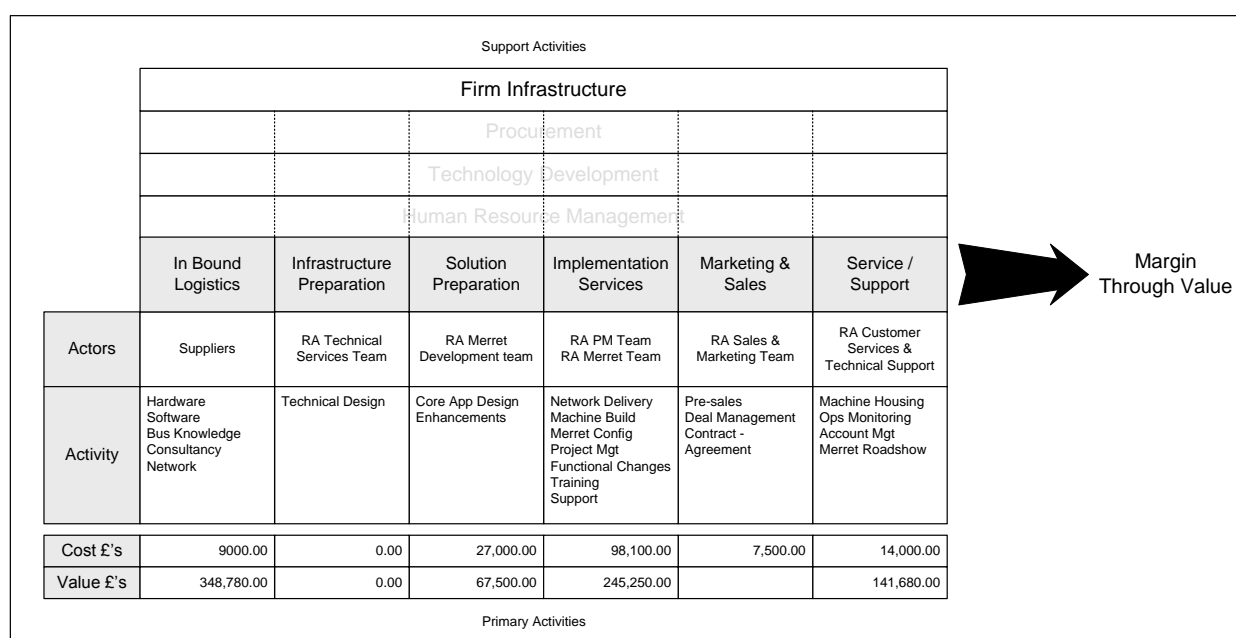


Diagram 11 – Merret Value Chain

A full cost calculation for the Merret implementation tasks and a calculation of value at each stage of the chain have been provided in Appendix 2. This analysis used a model for a typical Merret implementation, a retailer with 105 head office users of Merret, 25 warehouse users, 180 highstreet stores (solus), 25 concession stores, e.g. House Of Fraser, 10 Franchise partners, and 2 web stores, used to run websites in £GBP or foreign currency. Data was captured during direct interviews with Alan Morris, Executive Chairman and Head Of Sales, Tim Moxon Chief Financial Officer, and Renny Wadsworth Head Of Delivery for Merret.

Each deployment of Merret will be managed in a similar way, the sales team will engage with a client and respond to an ITT (invitation to tender) where the required due diligence and consultancy analysis will take place to formulate a bid for the contract. This activity will allow RA to determine the inbound logistics costs required to establish the solution, then calculate the more complex area, the implementation process. The value applied to this stage is a combination of 30 days consultancy, plus the value of the Merret licenses that have been sold in this contract. The Merret license fee is set by the sales team, all existing development costs can be considered as sunk costs, the investment has already been made, this adds a disproportionate value against the cost applied. All hardware, software and networking cost / value has been ignored at this stage, RA may purchase and implement these components, however this may be done directly by the client. If RA do complete this task, this is usually done at cost, with no additional value being taken.

The infrastructure preparation tasks have no value here, the process of building Merret and the associated hardware profile has already been designed, any value that would have been derived from this task will have been associated to the first Merret .net implementation into ASOS in 2010, for all new implementations this is a sunk cost. A technical architect will be deployed to formalize this detail with the client, adding value by generating a technical implementation plan that will be realized during the implementation stage. Similarly the solution preparation component is a sunk cost, RA are continually developing the core product, this is funded through the maintenance license paid by all Merret users (21% of license cost) plus any additional developments that have been requested by clients, and incorporated into the core design. This adds absolute value to the product, keeping it current and adding new functional components to attract potential clients. The annual spend on non-project related development activity in 2011/12 was £192,500, an investment of 16.4% of Merret income, see appendix 2. However this stage will include the development of any new interfaces and functional components identified during the consultancy stage, in this example adding value of £67,500.

The major area of value input is during the implementation phase, a cross function implementation team is built to complete all of the technical, configuration and training tasks to complete the install, this is also the stage where the highest portion of the cost of sale is taken. This is by far the most complex phase of the deployment taking between 6 and 12 months to complete, the value achieved will be negatively affected by any quality issues experienced, adding cost to RA which will usually cannot be passed onto the client. In this example the 327 days of implementation tasks add a value of £245,250. The marketing and sales activities contribute a cost to the model, estimated at 25 days,

however provide the inbound logistics for the deployment team, creating the demand for this project. I have not apportioned any value to this stage as this has all been apportioned to the delivery teams, however there is obviously value created here.

The final stage is service and support. The value applied to this stage is a combination of 35 days 1st line Helpdesk support and 35 days of remote Operational Support. I have added in the value of the annuity Merret maintenance cost, this is 21% of the capital license fee, this adds value of £95,760 per annum which contributes to the ongoing software maintenance cost and the cost of the Merret support team based in Northampton.

Fearne suggested that a strategist should use the value chain to try and achieve 3 separate goals. The first goal will be to remove cost from the value chain by removing uncertainty. It is essential that all elements of the value chain are fully aligned to the organizations strategic goal, if they are not aligned then even a correctly strategically aligned plan will fail Fearne (2013, p1). This was a major issue at RA in 2009/10, the business identified a market need to deploy a .net version of Merret, this resulted in an program to fast path the development of the .net version whilst the sales team were actively selling, promising that RA could deliver the application to a required timeline and quality standards.

Merret was sold to 4 retailers at the same time, ASOS, Jane Norman, Jacques Vet and Whistles, the implementations were sequentially aligned, however the ability to deliver the upgraded version was not managed well. This resulted in a delay to the delivery of all 4 projects, delaying the planned capital and annuity income from each project, plus this generated an additional contractor development cost of £443,600 in 2010/11 where external contractor programming resource was employed to manage the delay in development. Finally this had the indirect impact of affecting all supporting teams where the quality of support provided to existing clients fell to accommodate the problematic installs. This unplanned expenditure needs to be considered against the opportunity cost of not undertaking the development, without the upgrade to .NET, none of these deals would have been successful, however an improvement in management and delivery would have led to higher returns.

The second goal is to improve the information flow throughout the value chain, to consider the impact of decisions or changes to the rest of the chain. As can be seen in the example above, the decision to sell the .net version of Merret should have been delayed until the product was ready, or

additional resources should have been employed to facilitate an earlier delivery. RA have an excellent relationship with many customers, this allows them to pass customer requirements back through the value chain and produce valid products and services, e.g. the Merret omni-channel developments. It is essential that RA build trust and interdependence with key customers and suppliers, this has been demonstrated by the relationship between Alan Morris and Richard Glanville / Ish Patel at Aurora Fashions, working as a trusted advisor, Morris has been able to grow RA's service delivery, Aurora outsourced their entire IT operation to RA in 2011 and have recently decided to implement Merret into their 4 brands in 2013 / 14. These relationships need to be protected, managing teams need to understand the impact of adversely affecting external relationships which will lead to conflict, increase costs and reduce value.

The final goal is to gain additional customer insight. Fearne suggests that organizations need to "Have their finger on the pulse of their customers" so they can respond to their demands, not to make assumptions on what customers want or need as this will lead to the commodity trap where unwanted products are brought to market. Fearne (2013, p1). He suggests firms need to actively target customers, raising awareness and increasing the knowledge of their products, demonstrating why they should be purchased. RA have adopted this concept, Merret awareness days are held on a 6 monthly basis, all customers are encouraged to attend sessions that demonstrate new development roadmaps, plus they are asked to contribute ideas on potential functional improvements.

Analysis of RA's Merret value chain clearly identifies RA's strengths and weaknesses. Merret is a feature rich product that can compete within the Retail IT market, real value can be achieved by exploiting market relationships through the sales / marketing and Directorate functions to increase Merret's standing, then deploy as quickly as possible to achieve capital and annuity income. The implementation process is a strength, utilizing multi-disciplinary teams who work flexibly together, this is helped by a lack of politics at RA, teams have full access to the key decision makers and are empowered to move quickly. However this strength can also be considered a weakness, the Merret teams are led by Nigel Illingworth who has massive product and industry knowledge, Illingworth leads all implementations, working with a RA Programme Manager. This produces a bottleneck in production which RA have struggled to accommodate, especially when managing multiple simultaneous implementations. This is an obvious threat that needs to be resolved, RA have attempted to resolve this by splitting the organizations reporting structures, creating teams who

only work on Merret deployments and building a team of senior managers with distinct Merret knowledge, Renny Wadsworth, Head Of Delivery, and Gemma Woodlock, Head Of Design.

4.6.2 *The Helpdesk Support Value Chain*

A full cost calculation for the Helpdesk implementation tasks and a calculation of value at each stage of the chain have been provided in Appendix 3. This analysis used a model for a Helpdesk Service transition in July 2012, a retailer with 61 stores requested a 1st Line Helpdesk service, a facilities management resource to manage property calls, a Client Account Manager to manage the provision of data between RA and the client, and 3 technical resources to provide desktop support, remote network management and IT security services.

The inbound logistics suppliers provide the technical infrastructure required to provide the Helpdesk support, including sample hardware to use as reference kit, remote comms to dial into client sites, software to manage calls and 3rd party break-fix contracts to manage hardware issues within the client estate. All of these actions will be contracted directly by the client, RA are adding value at this stage by completing a 10 day due diligence exercise, this will establish all logistical elements that need to be established during the implementation phase, this also includes a 5 day training exercise to educate the Helpdesk team on the EPOS service they will be supporting.

The Infrastructure Preparation stage includes a 4 days technical exercise to establish the remote access and internal network changes required to access client devices, this is a simple process that is completed in each service transition and adds a small amount of value. More significantly, RA have fully proceduralised their supporting teams, achieving ITIL and ISO20000 quality standards, this is a major selling point for the support service and provides the foundation for a quality service to be provided. This framework has already been implemented, the true value of this facility is the ability to support clients with the number of support team members, this intellectual capital is added to with each new contract as training is delivered and new supporting procedures documented. This can be considered a sunk cost, with the true value difficult to estimate.

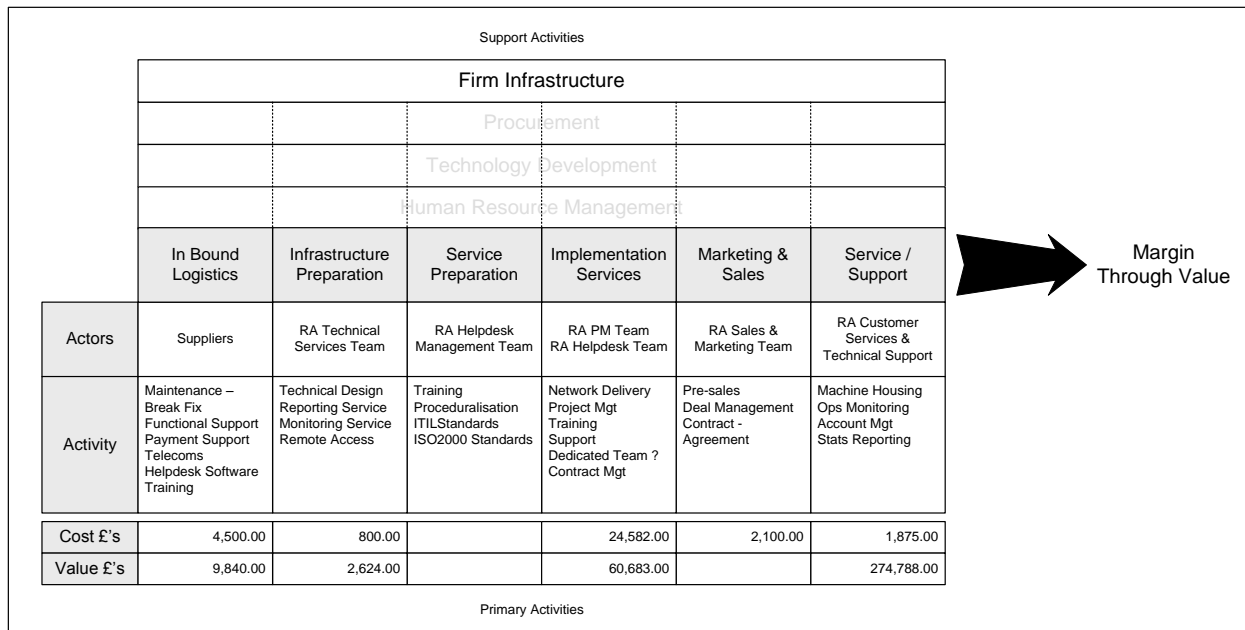


Diagram 12 – Helpdesk Implementation Value Chain

As outlined with Merret, the major area of value input is during the implementation phase, a small cross function implementation team completes all technical, configuration and training tasks to complete the install. The value apportioned here is £60,683, this is a tried and tested approach which rarely presents significant issues. The marketing and sales activities again contribute a cost to the model, estimated at 7 days, however provide the inbound logistics for the implementation team, creating the demand for this project, again I have not apportioned any value to this stage, however again there is value created here.

The final stage is service and support, this is a crucial section forming the direct reporting link between RA and the client. This is not simply a reporting function, the Client Account Manager is tasked with identifying trends and business opportunities, adding further value into the chain. I have added in the value of the annuity contract into this section, this adds value of £274,788 per annum, RA provided all of these services with existing personnel so the cost to the business did not vary significantly.

Fearne's 2nd and 3rd principles are key here, it is essential to improve the information flow through the value chain to ensure that all suppliers, RA and 3rd party maintainers, understand the complexity of the client's business, all support parties work to agreed SLA's so they understand the strategic direction set by the client. This performance is measured on a monthly basis with RA managing most of these contracts, this provides RA with the 'unequal access to distribution channels' where RA can

influence their clients downstream buying decisions and lock potential new entrants from entering their market. Building and cultivating the client relationship is key to RA's success, all but 3 (Burberry, Threshers, Ottakers) annuity contracts have been renewed in the last 10 years, proving that clients trust RA to deliver a quality service at a competitive price.

RA need to strategically consider which of the above services it wants to deliver in house and which can be outsourced to partner organizations, I will make recommendations on potential changes, after the core competencies of the organization have been mapped, identifying the key business strengths to exploit, and the weaknesses that must be identified and turned into opportunities.

4.7 Identify The Strengths & Weaknesses Of RA

The final step within this section of analysis will consider whether Retail Assist's strategic position is capable of accommodating the changes presented by the market. The technique used is a SWOT analysis, aiming to contrast the internal strengths and weaknesses within the organization against those external opportunities and threats presented. Jobber et al highlighted that the firm should use this analysis to create "Conversion Strategies", converting weaknesses into strengths, and threats into opportunities (Jobber et al 2013, p.51). Consider the following SWOT analysis of Retail Assist within the UK and European markets:

Strengths:	Weaknesses:
<ul style="list-style-type: none"> • Excellent brand identity, marketed as a leading retail-only solutions and services company. • The retail IT marketplace is small, companies trade on reputation and personal contacts. On average, RA Directors have worked in retail for 16 years. • Highly visible clients e.g. Selfridges, ASOS, Harvey Nichols, have helped build brand identity. • Product portfolio to cover all aspects of retail IT, ERP and support services. • Merret is owned, developed and supported by RA, having total control of solution development path. • Diverse and highly skilled IT staff, staff turnover figure of 11.2%, industry standard of 10.1% • Approved members of ISO20000 and ITIL, showing quality and consistency through measurable industry standards. • Owner managed and financed. Little red tape, no outside influences from shareholders, no banking debt, therefore low liquidity issues. • Flexible workforce can react quickly to business opportunities, lack of internal politics has fostered effective cross functional teams. • New office premises is very high quality, creates a professional image, also provides room to grow essential resources e.g. Helpdesk. 	<ul style="list-style-type: none"> • Size of business means RA are not always invited to tender on all occasions. Business size may be seen as a risk for potential customers, limiting exposure to the Tier 2 market, away from Tier 1 customers e.g. Marks and Spencer, Tesco. • A number of large support contracts are the foundation of business income, the economic downturn has slowed market growth and the opportunity to expand. RA have actively increased the number of support clients to try and counter this issue.

Diagram 13 – RA Internal Strengths & Weaknesses

RA's strengths have supported growth from an organization with 77 staff and a £5.6m turnover in 2005, to 179 staff and a £8.85m turnover in 2012. They have an impressive retail client list and actively use this within their marketing, building a strong brand identity. The business is owned and directly managed by 4 Directors, supported by a team of 175 employees, the management team have built a multi-skilled, flexible and mobile workforce that has a low turnover of staff, growing the intellectual capital of the organization whilst allowing the business to be flexible and reactive to change, without being affected by external controlling forces.

The strength and reputation of the Directorate team cannot be underestimated, the UK tier 2 Retail sector is small with a limited number of IT Directors moving between retailers. RA have been able to exploit the demand side benefits of scale where RA's reputation has certainly created new opportunities, for example Mike Padfield, the Head Of IT at Cath Kidston, has employed the RA Helpdesk at each of his last 3 companies. This has been supported by the implementation of numerous quality standards, e.g. ITIL and ISO20000, instilling quality processes throughout their operations. The acquisition of Merret in 2008 has enabled RA to create a portfolio of products to cover all aspects of Retail IT, this has increased their ability to market comprehensive services to prospective clients, e.g. cross selling support, technical and implementation services to any new Merret users.

The size of the business has historically been a weakness, Retail Assist has expanded through natural growth and the securing of new contracts, then the acquisition of Merret in 2007. This limited size has often been a factor in not being able to tender for contracts, this barrier has now been broken in the Tier 2 sector through brand identity, business performance and reputation, however this is still a barrier to entry when trying to compete with Tier 1 suppliers, e.g. Computerland or SAP. RA had previously relied on large support contracts from a small number of customers to underpin business operations, this was a major weakness, the business was forced to restructure when Adams Childrenswear and Aurora Fashions both went into administration in 2009/10. RA have managed to resolve this issue by expanding their customer base and contracting footprint in the last 5 years to 26 clients, this has alleviated the immediate problem, however the apparel sector is still suffering from the economic downturn. The implementation of Merret into 8 clients in the past 5 years has led to a significant increase in annuity income, from £363k in 2008 to £1,384k in 2012, contracts are usually administered over 5 years which is providing more stability.

The retail IT sector has a number of opportunities may be exploited by RA, consider diagram 14:

Opportunities:	Threats:
<ul style="list-style-type: none"> • Purchase and integration of Merret product has greatly increased product offering and access to prospective new customers base. • RA have created an 'end to end' IT solution, including POS, merchandising, warehousing, and business intelligence reporting. This is supported by the existing service support structure. • Recent economic downturn will encourage retailers to invest in cost reduction technologies, end to end 'solution' and outsourced offering fit this criteria. • Partnering with POS provider with interfacing into Merret has created a vertically integrated offering. • Move to diverse retail IT solutions increases the need for broad and diverse IT skills, internal IT teams cannot support this complexity, leading to a drive towards outsourcing. • Weakness of Merret competitor solutions creates a marketing opportunity for RA e.g. BTE Store 6 with no development roadmap. 	<ul style="list-style-type: none"> • Downturn in economy has postponed several key purchasing decisions from potential customers. • Downturn in economy has led to increased market competition, tier 1 IT service providers are now competing in the tier 2 marketplace. • Highstreet stores are closing at an alarming rate, this will reduce RA's store network coverage and associated income. • Advances in technology are changing the delivery of retail IT, new market entrants find it easier to exploit new technology and erode existing relationships. • Changes in customer demand lead to more complex functionality requirements within supply chain solutions, this increases the capital investment required to keep Merret current.

Diagram 14 – RA's External Opportunities & Threats

Prospective customers continue to look for partners who can provide all of their IT needs, exploiting recent advances in capability and able to provide cost effective solutions. Martec found that the majority of non-food retailers (38% to 62%) used some form of outsourcing, 3% of the top 100 retailers had chosen to outsource their entire IT operation, one example is Aurora Fashions who have outsourced their entire IT operation to RA (Martec 2011, p.11). This has exposed weaknesses in other competitors, the number of SAP and Oracle sales has decreased dramatically in the last year, RA need to be able to exploit these weaknesses to grow.

In contrast, an analysis of market threats shows that the economic downturn is affecting areas of retailer decision making, Martec's analysis suggests that IT spend as a % of sales has remained constant (at 1.6%) in the last year, where money being spent is for short term projects to get more out of existing assets. A decrease in the stock of high street stores will impact RA's traditional source of income, whereas the fast pace change of retail functionality may open opportunities, RA still need to deploy resources to accommodate these new challenges and deflect new entrants into the market. Retail Assist have historically been able to transform weaknesses or threats into strengths, primarily through the use of their main asset, their staff, then creating a market leading single enterprise solution to meet customer needs. Merret now supports 4% of the merchandising and 3% of the logistics needs of the top 100 non-food retailers in the UK. Many tier 2 retailers are expanding their portfolio into the Asian market, analysis is required to confirm if RA will have the ability to transform new weaknesses and threats to their competitive advantage in this new marketplace.

4.8 Assessing RA's Vertical Boundary

Economics is the science of choice, assessing the efficiency of the allocation of resources where all firms have finite resources, 26 retailers have already identified a desire to outsource or an inability to provide an adequate support infrastructure for their IT operations, RA now provide this service. Martec's analysis of the ERP sector has shown that 28% of the top 100 non-food retailers still use an in-house ERP solution, RA want to gain as much of the remaining 72% market share as possible. Analysis will assess RA's optimum position within the ERP and Helpdesk Support markets, then consider their optimum position to exploit the opportunities presented by omni-channel changes and the growth into overseas markets. Analysis will use the Transaction Cost theory and the Vertical Chain characteristics that need to be considered when making the make/buy decision, finally Ferguson's Linkage Approach theory will be used to identify the internal bonds that can be exploited to extend competitive advantage.

Douma et al suggested that transactions can take place across markets or within a firm, "Whether a particular transaction is allocated to the market or an organisation is a matter of cost minimization. The term 'transaction costs' includes costs of both market transactions and internal transactions." (Douma et al 2008, p.161). Douma et al comment that Transaction Cost theory was developed by O.E. Williamson, he identified that the 2 factors affecting a transaction cost are opportunism and bounded rationality. Opportunism suggests that people will take an advantage where they can, acting in a non-efficient way for personal gain. (Douma et al 2008, p.162). Bounded rationality and opportunism can be internalised by firms to remove this lack of knowledge and uncertainty, using command and control to minimise their impact, management costs are the firm equivalent of the transaction costs involved in using the market. Analysis will show how RA have proceduralised their operation, investing in ISO and ITIL accreditations to manage compliance, reducing this opportunism and lack of knowledge by the use of these defined standards of operation.

The vertical chain is a sequential list of the transactions that need to be carried out to make a product, the collection of factors of production, RA must consider the Make-Buy decision for each transaction step within the Helpdesk Solution and Merret vertical chains, the decision to perform an activity in-house or purchase it from the market. I have created vertical chains for each strategic scenario to validate this analysis, I will use the UK based analysis to validate my strategic plans for the omni-channel and overseas opportunities, creating an overall strategic vision for the medium and long term operation of the firm. Besanko et al commented managers need to assess whether the market offers any alternatives to vertical integration, if not then the firm will have to manage

this process internally or potentially join forces with an external organization to create a joint venture or strategic alliance, Besanko et al (2010 p145). This is an important concept for RA to consider, the potential movement into China would be complex and require extensive management control, working with a local partner may be the preferred strategic choice. Besanko et al created a “Make-or-Buy Decision Tree” to simplify this decision process, see diagram 15:

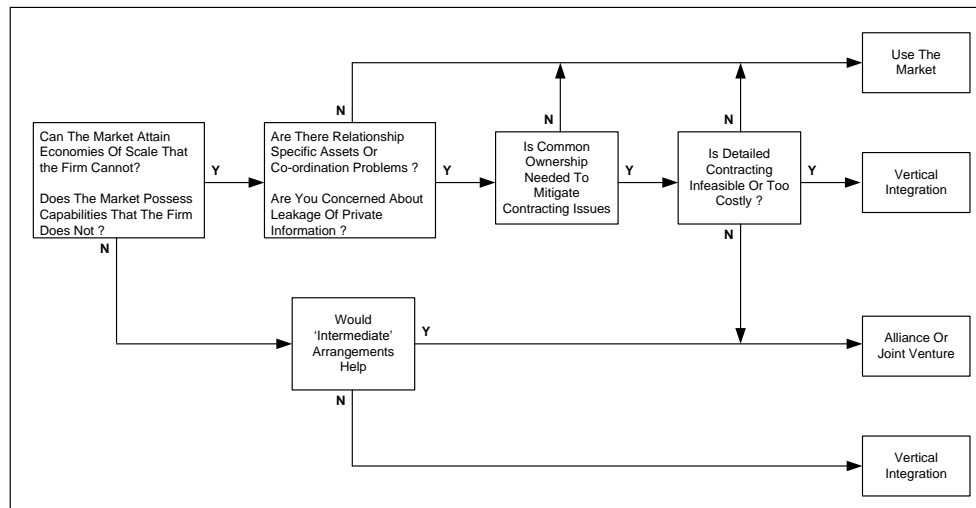


Diagram 15 – Questions Influencing The Make-Buy Decision

This decision tree highlights several approaches that I will consider through my analysis:

- If the market does not offer additional economies of scope or possess more capabilities than the firm, consider managing that task in-house or working with an alliance partner.
- If the market does offer opportunities and there are no co-ordination or asset specificity conflicts, consider outsourcing this transaction to the market.
- If there are co-ordination or asset specificity conflicts, but no need to own the process to remove contracting issues, consider outsourcing this transaction to the market.
- If there are conflicts or the costs of establishing valid monitoring controls are too high, bring the transaction in-house to manage potential opportunism or bounded rationality issues.

4.8.1 Supporting Expansion Into Overseas Markets – Setting RA's Optimum Vertical Boundary

Analysis will consider the optimum vertical chains for the Helpdesk and Merret solutions within an overseas market, using China as the target market. A number of perceived issues with this approach were identified in chapter 4, I will reflect on how these services are delivered in the UK market to validate all ideas for delivery into China, then create a strategic vision on how services should be delivered into all markets.

4.8.2 Providing Local Helpdesk Services For UK Retailers With Stores In China

There are two scenarios to consider, how do RA provide support services to UK retailers going into the Chinese market, and can they sell that service directly to new Chinese retailers, I consider RA to be a new entrant into this market if providing localized services (not from UK). Analysis OF Porter's 5 Forces suggests that entering the China market will be very difficult for RA to achieve, particularly if trying to replicate the forces that underpin the UK market's levels of profitability. Consider table 12, a review of the make/buy characteristics for the existing UK and European market shows that RA have selected the tasks that it believes can be managed by the market, and those that it feels brings strategic advantage to retain in-house. The outsourced services all have low firm knowledge, asset specificity and scope for opportunism, the provision of external comms lines is served by many firms all with high technical barriers to entry, similarly the supply of computer hardware is managed by a large number of firms and this is a very established market.

Williamson extended the Transaction Cost theory to identify operational tasks that are cost generating. He identified that it is difficult to find trusted trading partners, it is expensive to negotiate trading contracts then monitor that compliance to agreed standards (Williamson 1971). He argued that firms are better placed to perform these actions than the open market, internalising control via SOP's, they are better placed to negotiate contracts and develop longer term working relationships with partners. In this sense the firm is using command and control to inform decisions, this industry knowledge is a procedure make decisions quickly. RA work with a number of hardware break/fix suppliers, engineers who need to cover the UK and Europe to fix store machinery when it is broken, RA could not provide this service due to a lack of technical knowledge and the prohibitive cost of employing the required engineering staff. RA have established long term relationships with trusted partners, e.g. Vista to provide the hardware break/fix engineering services to reduce the monitoring burden, creating service level agreements to guarantee compliance. The agreement of strict contractual terms is a key driver to this success, RA have fully proceduralised their support

operation, investing in ISO and ITIL accreditations to manage compliance, reducing opportunism and lack of knowledge by the use of these defined standards of operation.

I have identified the key vertical chain transactions that have been retained in-house (highlighted in yellow), all have high asset specificity, firm specific knowledge, scope for opportunism, monitoring costs and complexity of production. The Helpdesk procedure bank is an example of human asset specificity, knowledge that is more useful inside a working relationship than outside of it. This database has been developed over 10 years from learned experience and is essential to provide a quality service, in a similar way the Store Systems and Helpdesk Analyst teams have grown and been educated in the systems supported by these procedures, gaining that vital learned experience.

This is an example of the Linked Approach suggested by Ferguson, RA have identified internal links to provide sustained competitive advantage, see diagram 16. The final transaction stage is the Store Management Team, two individuals who concentrate on managing the implementation of IT services into new stores, or manage the IT change to existing stores. This is a complex area and is very specific to the retail market (high asset specificity), these skills are learned and cannot easily be translated for new entrants to the team. Due to the complex nature of these tasks all have high monitoring costs which would make outsourcing difficult, this provides RA with a strategic advantage over many competitors who do not have the skills to provide this service. The key linkage in diagram 16 is the link between the Helpdesk Analysts and Store Systems team. The Helpdesk team manage all calls on initial receipt, if that call cannot be resolved it will be passed to a resolver group, for EPOS issues this is the Store Systems team. All eventual resolutions are documented and added into the Procedure Bank, increasing internal knowledge and the rate of 1st time fix.

This allows RA to drive down the calls received from clients by identifying issue trends, plus it is a good source of education for new analysts. The links to the Store Management team are still important, they handle all new store openings, closures and changes, this often creates issues that need to be managed by the Helpdesk and Store Systems teams, again showing the importance of the Procedure Bank. RA have recognized the strength of these links, all teams have been moved into the same physical area and under the same management team.

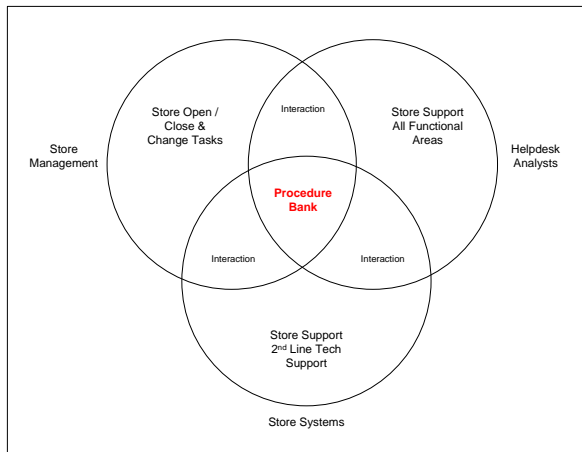


Diagram 16 – Support Services Linked Approach Model

I believe RA have optimized their vertical chain correctly for the UK and the European markets, I do not see additional areas that should be outsourced to the market, or any external tasks that should be brought in-house, as represented in diagram 17, the Helpdesk Support Vertical Chain – All Markets. The first 2 columns represent the UK and European markets, with green circles representing the internalised processes, RA have outsourced (red circles) the key tasks that would create logistical or economy of scale challenges, these tasks would be impacted by multi-lingual issues, local partners are used to provide these services.

Analysis of the perceived make/buy characteristics for the China market, see table 13, presents a very different scenario. I have completed the same analysis steps, this time scoring each transaction to identify the 5 most important or highest impacting transactions, industry knowledge, procedure bank, Helpdesk Analysts, hardware break / fix, Store Systems 2nd line. Each has a medium economy of scope, high asset specificity, firm specific knowledge, scope for opportunism, monitoring costs and complexity of production. Ferguson would suggest that these transaction stages should be retained in-house so they can be managed efficiently, I do not believe that RA has the ability to provide these services due to the complex nature of the market and the transaction costs that would be incurred to build the required capabilities.

This highlights an essential weakness in the vertical chain theory, it assumes that the firm has the ability to perform the required tasks, in this scenario RA do not have the required language skills or localized knowledge to be able to provide the required service in China. Earl & Wakeley critiqued transaction cost theory, commenting “One major issue is that it seems implicitly to presume that there is no problem in obtaining capabilities to perform an upstream or downstream activity in-

house. However even checking on what is being delivered may be impossible to do successfully without having the capacity to perform the task oneself.” (Earl & Wakeley 2005, pp.308-9). This is a valid concern, RA have balanced vertical integration where these key technical capabilities have been internalised in the UK and European English speaking market, this is a task that I don’t believe they have the capacity to repeat in China.

The scope for opportunism is considered to be high in the key impacting transactions, these will require extensive management time to establish contracts and monitor compliance adding additional cost, management costs are the firm equivalent of the transaction costs involved in using the market. These issues suggest that an alternative strategy would be required to manage the impact of operating a support service in China, either creating a strategic alliance or a joint venture with a local service provider, consider diagram 17:

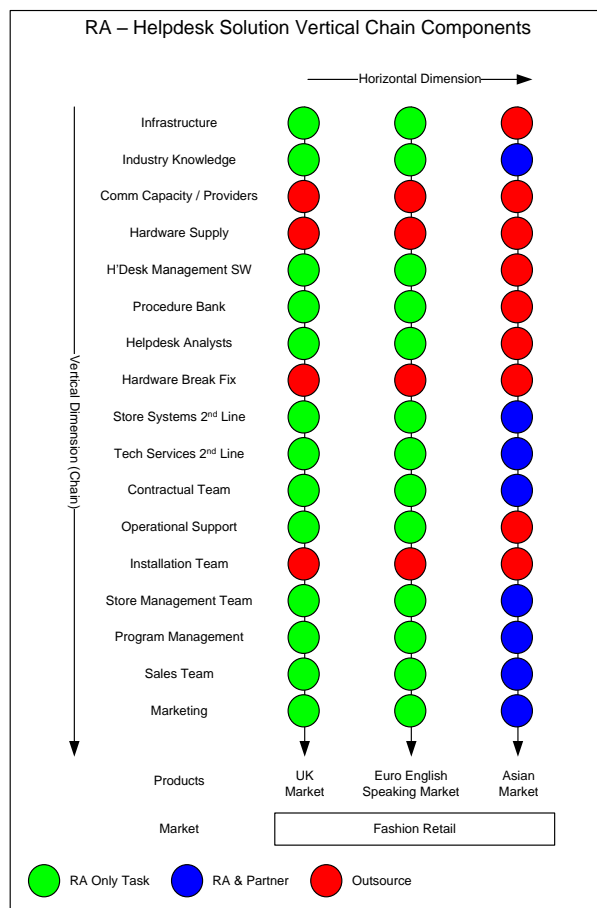


Diagram 17 – Helpdesk Support Vertical Chain – All Markets

The third column represents the suggested vertical chain for the Helpdesk Solution in the China market. Analysis of Porter’s 5 Forces identified that RA will find it difficult to exploit the demand side

benefits of scale to expand their client base, having a small footprint in such a large market will be cost prohibitive. UK retailers have a limited number of stores in territory making the marginal cost of support very high, I believe that RA will be more effective by managing the IT element of store expansions for existing clients from the UK, working with trusted local partners to provide a single point of presence in the remote market. RA can still contribute to a number of the transaction stages, however due to the complexity of providing this service in Chinese, I would suggest that an increased number of the transactions are outsourced to the market.

The issues experienced at Karen Millen and Cath Kidston, see Appendix 4, support this view, the opening of both stores in Beijing were managed by UK teams working with local partners to deliver local services. The EPOS solution needs Chinese character screens, all training, procedure guides and telephone support must be provided in the local dialect for that city. RA will have the opportunity to add value from their UK industry knowledge and some technical knowledge linking the new systems into the existing technical infrastructure, however the main components will need to be provided in local language. These areas are local infrastructure and comms, hardware supply and break/fix support, Helpdesk services including the analyst team, the procedure bank, ops support and kit installation. RA will be able to retain the store management task, managing IT delivery via local partners and coordinating into the UK management teams, removing one barrier of entry. This will require new alliances to be formed, establishing contracts and monitoring compliance will add cost, RA have extensive experience of doing this in the UK, this will be a new challenge in China but some of the cost of this exercise can be charged to existing clients when setting up their relationships.

This should provide a medium to long term opportunity to grow market share by reselling this capability to other UK suppliers who are moving to Asia, gaining advantage from this intellectual capital, this may also lead to a future RA presence in territory if the sales demand is large enough to warrant it.

Make / Buy Decision Components For The Helpdesk Support Vertical Chain – UK / European Based Contracts

An analysis of the key make / buy decisions for Helpdesk UK and European based contracts:

Type	Transaction	Example	Economies Of Scope	Number Of Firms	Asset Specificity	Firm Specific Knowledge	Uncertainty Of Future	Scope For Opportunism	Monitoring Costs	Complexity Of Production	In-house / Outsourced	Potential To Change
Raw Material	Infrastructure	Land & capital, buildings, computers, software	LOW	HIGH	LOW	LOW	LOW	LOW	LOW	HIGH	IN HOUSE	No
Raw Material	Industry Knowledge	Retail industry knowledge, R&D of future functionality	HIGH	LOW	HIGH	HIGH	HIGH	LOW	LOW	HIGH	IN HOUSE	No
Component	Comm Capacity / Providers	Provision of data lines to connect remote sites to network	HIGH	MEDIUM	LOW	LOW	LOW	MEDIUM	LOW	HIGH	OUT	No
Component	Hardware Supply	EPOS and store system hardware component providers	LOW	HIGH	LOW	LOW	LOW	LOW	LOW	LOW	OUT	No
Component	Helpdesk Mgt Software	Software tools used to log calls and access remote tills Ambercat, VNC etc.	LOW	MEDIUM	LOW	LOW	LOW	LOW	LOW	LOW	IN HOUSE	No
Component	Procedure Bank	Learned experience of Helpdesk team – ISO compliant procedures	HIGH	LOW	HIGH	HIGH	HIGH	LOW	HIGH	HIGH	IN HOUSE	No
Component	Helpdesk Analysts	Helpdesk personnel providing the support service	MEDIUM	MEDIUM	HIGH	HIGH	MEDIUM	HIGH	HIGH	MEDIUM	IN HOUSE	No
Assembly	Hardware Break / Fix	3 rd party hardware engineers contractually supporting kit	MEDIUM	MEDIUM	LOW	LOW	LOW	MEDIUM	MEDIUM	LOW	OUT	No
Assembly	Store Systems 2 nd Line Support	RA EPOS experts who provide extended build / support services	LOW	LOW	HIGH	MEDIUM	MEDIUM	HIGH	HIGH	MEDIUM	IN HOUSE	No
Assembly	Tech Services 2 nd Line Support	RA network / server experts who provide build / support services	LOW	LOW	HIGH	MEDIUM	MEDIUM	HIGH	HIGH	MEDIUM	IN HOUSE	No
Assembly	Contractual Team - CAM	Management of contractual and control principles, monthly reporting	LOW	MEDIUM	HIGH	MEDIUM	LOW	LOW	HIGH	MEDIUM	IN HOUSE	No
Assembly	Operational Support	24x7x365 operational monitoring and support of networks and servers	LOW	MEDIUM	HIGH	LOW	LOW	LOW	LOW	LOW	IN HOUSE	No
Assembly	Installation Team	External engineering team physically installing kit into stores	LOW	MEDIUM	HIGH	LOW	LOW	LOW	MEDIUM	MEDIUM	OUT	No
Transport	Store Mgt Team	RA project management of store opening processes	LOW	MEDIUM	HIGH	MEDIUM	MEDIUM	MEDIUM	MEDIUM	HIGH	IN HOUSE	No
Transport	Project Management	Client liaison, project delivery, vendor selection	LOW	HIGH	HIGH	HIGH	LOW	HIGH	HIGH	MEDIUM	IN HOUSE	No
Retailing	Sales Team	Initial deal agreement, agreement of project scope, financial agreement	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	LOW	IN HOUSE	No
Retailing	Marketing Team	Brand awareness, promotion of RA products within retail sector	LOW	HIGH	LOW	HIGH	LOW	LOW	LOW	LOW	IN HOUSE	No

Table 12 – Make Buy Decisions – Helpdesk Support UK / US Based Contracts

Make / Buy Decision Components For The Anticipated Helpdesk Support Vertical Chain – Asian Based Contracts

An analysis of the expected make / buy components for Helpdesk Asian based contracts:

Type	Transaction	Example	Economies Of Scope	Number Of Firms	Asset Specificity	Firm Specific Knowledge	Uncertainty Of Future	Scope For Opportunism	Monitoring Costs	Complexity Of Production	Score L=1 M=2 H=3	Ideal In Out Decision
Raw Material	Infrastructure	Land & capital, buildings, computers, software	LOW	HIGH	LOW	LOW	LOW	LOW	MEDIUM	LOW	11	OUT
Raw Material	Industry Knowledge	Retail industry knowledge, R&D of future functionality	MEDIUM	MEDIUM	HIGH	HIGH	HIGH	HIGH	MEDIUM	HIGH	21	MIX
Component	Comm Capacity / Providers	Provision of data lines to connect remote sites to network	LOW	HIGH	LOW	LOW	LOW	LOW	LOW	MEDIUM	11	OUT
Component	Hardware Supply	EPOS and store system hardware component providers	LOW	HIGH	LOW	MEDIUM	MEDIUM	LOW	LOW	LOW	12	OUT
Component	Helpdesk Mgt Software	Software tools used to log calls and access remote tills Ambercat, VNC	LOW	LOW	MEDIUM	LOW	LOW	LOW	LOW	LOW	9	OUT
Component	Procedure Bank	Learned experience of Helpdesk team – ISO compliant procedures	MEDIUM	LOW	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	21	OUT
Component	Helpdesk Analysts	Helpdesk personnel providing the support service	MEDIUM	MEDIUM	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	22	OUT
Assembly	Hardware Break / Fix	3 rd party hardware engineers contractually supporting kit	MEDIUM	MEDIUM	MEDIUM	HIGH	MEDIUM	MEDIUM	HIGH	MEDIUM	18	OUT
Assembly	Store Systems 2 nd Line Support	RA EPOS experts who provide extended build / support services	LOW	LOW	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	20	MIX
Assembly	Tech Services 2 nd Line Support	RA network / server experts who provide build / support services	LOW	HIGH	MEDIUM	MEDIUM	MEDIUM	HIGH	MEDIUM	MEDIUM	17	MIX
Assembly	Contractual Team - CAM	Management of contractual and control principles, monthly reporting	LOW	MEDIUM	LOW	MEDIUM	LOW	HIGH	HIGH	LOW	14	MIX
Assembly	Operational Support	24x7x365 operational monitoring and support of networks and servers	LOW	HIGH	LOW	MEDIUM	LOW	LOW	LOW	LOW	11	OUT
Assembly	Installation Team	External engineering team physically installing kit into stores	LOW	HIGH	MEDIUM	LOW	LOW	LOW	HIGH	LOW	13	OUT
Transport	Store Mgt Team	RA project management of store opening processes	LOW	LOW	MEDIUM	MEDIUM	MEDIUM	MEDIUM	MEDIUM	MEDIUM	14	MIX
Transport	Project Management	Client liaison, project delivery, vendor selection	LOW	MEDIUM	LOW	LOW	MEDIUM	LOW	MEDIUM	LOW	11	MIX
Retailing	Sales Team	Initial deal agreement, agreement of project scope, financial agreement	LOW	HIGH	LOW	LOW	LOW	LOW	LOW	LOW	10	MIX
Retailing	Marketing Team	Brand awareness, promotion of RA products within retail sector	LOW	HIGH	LOW	LOW	LOW	LOW	LOW	LOW	10	MIX

Table 13 – Anticipated Make Buy Decisions – Helpdesk Support Asia / China Based Contracts

4.8.3 *Developing Merret For Use Within The Chinese Market*

The analysis completed in chapter 2 highlights how difficult it would be to introduce Merret into the Chinese market, requiring a complex, costly and time consuming redevelopment to provide Chinese character sets, the UK implementation process can take from 6 to 12 months for UK retailers where their retailing process is well known, managing that transition into a Chinese retailer has not been contemplated to date. To accommodate these potential issues I have reviewed the process of developing Merret for two overseas markets, the US and China, the resultant vertical chains encompass all downstream analysis and development transactions, managing the upstream delivery, operational support and sales processes.

Consider table 14, a review of the make/buy characteristics for the existing UK market shows that RA have decided to manage all transaction tasks internally, the one exception being training. As a small organisation, RA cannot fully exploit economies of scale, consequently the training function has been outsourced to an external training agency for larger contracts, RA do provide ad-hoc training using non-professional internal resources. There are many medium sized firms operating in this market therefore price competition is fierce, RA responded to this issue in 2007 by purchasing Merret from GCS, bringing the product in-house and controlling the downstream supply, this also had the advantage of securing the lead architect of Merret, Nigel Illingworth. Two related transactional areas are important, Industry / Firm Knowledge and Retail Analysts are both very scarce, both have been secured internally to retain R&D skills and functional competitive advantage.

Asset specificity is key to the successful development of Merret. Ferguson commented “Human asset specificity occurs where individuals or teams have particular skills which cannot be transferred fully between firms or tasks.” (Ferguson 1993, p.13). RA employ Retail Analysts who are essential to the R&D process and the improvement of the feature rich product. The uncertainty of these resources is a major concern, losing key analysts could severely impact operations. Monitoring costs are at their most complex in technically focused areas, Ferguson argued that these will be influenced by organizational structure, RA’s ITIL and ISO procedures have been designed to manage this complexity, this is a command and control activity, an approach to policing behaviour. RA have focused on scarcity, the purchase of Merret has reduced this issue and the scope for opportunism, GCS were a competitor to Retail Assist, RA expanded their vertical position whilst acquiring Merret. Finally, the impact of complexity of production is highest within technology transactions, e.g. code development and server management, all have been brought in-house.

RA have recognized the strength of multiple links within the Application Centre team combining teams to create a standard development and implementation methodology, I have identified the following links:

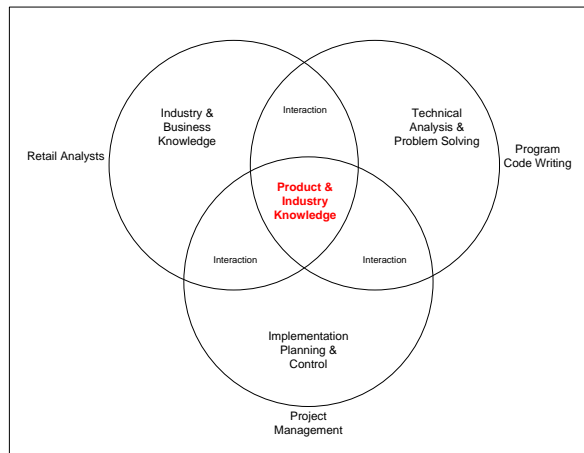


Diagram 18 – Merret Linked Approach Model

Analysis suggests that RA have not reached their optimum degree of vertical integration, I believe that two areas could be de-integrated from RA's vertical boundary, the internal employment of programming resources and external management of a Datacenter. There are valid operational arguments for this suggestion, RA have recently found it difficult to flex programmer numbers to manage changes in demand, however the economic arguments are more important. The datacentre has low asset specificity and firm specific knowledge, both have high monitoring costs and complexity of production. Numerous Datacentres are available for use, large sites can exploit economies of scale, RA's smaller building is cost prohibitive. There have been recent movements away from internal programming teams, I believe that RA could outsource this transaction, allowing resources to be flexed, with more emphasis being placed on industry knowledge, R&D and testing, all asset specific tasks. RA will need a strong command and control approach to manage quality in the development of specifications, then test rigorously to ensure a quality output. This increase in monitoring costs should be shared with the outsourced program team who will need to offer quality testing as part of any contractual agreement. However, the development team is currently seen as a positive attribute within RA, I believe the Directorate team would be unwilling to make this change.

This is supported by the analysis of Earl et al who identified Relational Contracting, "The firm builds up relationships of trust by making repeated use of particular suppliers. Close relationships also facilitate the two-way transfer of knowledge about issues such as customer needs and technological possibilities." (Earl & Wakeley 2005, p.316). RA's use of long term support partners has already

defined their support boundary, this could be extended to include programming and Datacentre resources. RA only exists because they can internally manage costs better than the market, they are more economically efficient when they can capitalise on the specialist knowledge of their workforce and make effective use of the skills of the management team.

Analysis of the perceived make/buy characteristics for the China market, see table 15, presents a very difficult scenario. I have completed the same analysis steps, again scoring each transaction to identify the 4 highest impacting transactions, Industry Knowledge, Retail Analysts and Programming Resource / Activity are key strategic assets within RA, the movement into an unknown Chinese market will diminish their effectiveness and RA's ability to differentiate their product with the strength of these assets. Each has medium or low economies of scope, high asset specificity, firm specific knowledge, scope for opportunism, monitoring costs and complexity of production. Ferguson would again suggest that these transaction stages be retained in-house, however again I do not believe that RA has the ability to provide these services in the Chinese market, the transaction costs required to build these capabilities would be prohibitive. The scope for opportunism is also high, this will require extensive management control, these issues suggest that an alternative strategy would be required to redevelop the product and implement it into China, either creating a strategic alliance or a joint venture with a local provider, consider diagram 19.

The third column represents the suggested vertical chain for the redevelopment and implementation of Merret into the China market. Analysis of Porter's 5 Forces suggests that buyer power and competitive rivalry will be high, making this a difficult market to enter. Analysis suggests that RA would have to enter a relationship with a local partner to complete the development tasks to use Chinese characters, then review the local market supply chain to add in any market specific functionality required to compete with local products. The vertical chain for the Chinese market has only identified 4 transactions where RA could contribute to this relationship, industry / product knowledge, development resource of the core elements of the package, then testing any changes. My analysis suggests that all other transactions would need to be performed by an in-territory partner, this will reduce RA's income opportunities, in my opinion I believe this is an unsustainable model.

Column 2 represents the implementation of Merret into the US market, this is a similar market to the UK and Europe, removing the need to redevelop Merret to provide multi-language capabilities, the product could be enhanced to accommodate any US based functionality, e.g. county and state

tax rules, however I believe this will be a minor change. Due to the remote market RA would need to find a strategic partner to deliver key services, the number of shared actions would be much higher than the Asian model. RA could retain the intellectual input into product design and development of the core application, both of which have high asset specificity, firm knowledge, scope for opportunism and complexity of production. RA could then work in partnership to deliver retail analysis, server technical, testing and project management, these tasks generally have medium asset specificity and firm knowledge, and medium to high scope for opportunism and complexity of production. RA would need to build strong SLA agreements for the delivery of these services to ensure compliance and quality of delivery.

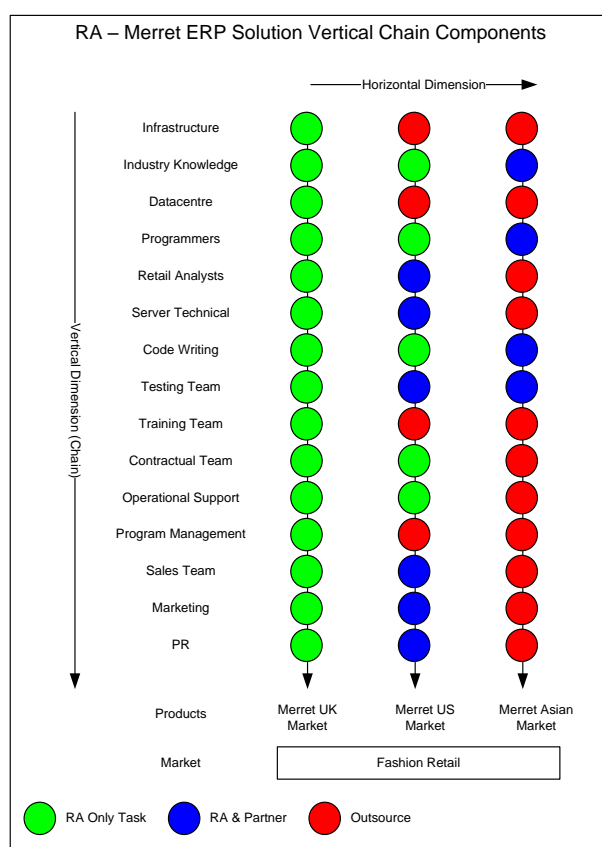


Diagram 19 – Merret Vertical Chain – All Markets

I have suggested that the sales, marketing and PR functions would be a shared responsibility, RA are a highly branded company, analysis of Barney's VRIO categories identified Illingworth's B&M knowledge, Morris' ability to build senior relationships and the strength of the Marketing and Sales teams are all valuable, rare and hard to imitate attributes producing a competitive and economic sustained advantage. This need to continually develop resources was identified by Chacarbaghi et al commented "An organization should exploit existing business opportunities using the present

resources whilst generating and developing a new set of resources to sustain its competitiveness in the future market environments” (Chacarbaghi et al 1999, p.45), RA resources would be well placed to establish the sales, costing and contract management functions with a local partner, before taking a more reduced role in the medium term. Some tasks could be fully outsourced to the market or managed by the strategic partner locally, examples being project management and training, tasks where the delivery resources need to operate locally for the duration of the implementation.

I believe the US model offers a sustainable approach, the ability to manage implementations in English with limited system changes is key. Building the strategic alliance with a US based partner would reduce the expected levels of income from an implementation, but it would increase Merret’s market reach, that US partner would be expected to invest in the relationship, driving sales with local market knowledge. I do not believe the same could be said for the China model, the system redevelopment, complexity of production and lack of strength in a remote market would make this an unattractive proposal, if entered, RA’s exit barriers would be very high due to the level of sunk cost investment. This will erode RA’s ability to retain sales margins to reinvest back into the development of the product.

Finally, I believe there is a more attractive and profitable market to pursue, Merret is only used in 4% of the top 100 non-food retailers in the UK, I believe this is the area where all sales and marketing efforts should be focused, growing market share where RA are able to use supply side economies of scale to enhance product features and grow market share, this has already provided growth of 267% since 2008.

Make / Buy Decision Components For The Merret Vertical Chain – UK / US Based Contracts

The following table shows the key make / buy decisions that Retail Assist need to consider for their Merret ERP vertical chain transaction components within the UK and US English speaking markets:

Type	Transaction	Example	Economies Of Scope	Number Of Firms	Asset Specificity	Firm Specific Knowledge	Uncertainty Of Future	Scope For Opportunism	Monitoring Costs	Complexity Of Production	In-house / Outsourced	Potential To Change
Raw Material	Infrastructure	Land & capital, buildings, computers, software	LOW	HIGH	LOW	LOW	LOW	LOW	MEDIUM	MEDIUM	IN HOUSE	No
Raw Material	Industry Knowledge	Retail industry knowledge, R&D of future functionality	HIGH	LOW	HIGH	HIGH	MEDIUM	HIGH	HIGH	HIGH	IN HOUSE	No
Component	Datacenter	Machine storage, network and operational support	LOW	HIGH	LOW	LOW	LOW	MEDIUM	HIGH	HIGH	IN HOUSE	POTENTIAL OUTSOURCE
Component	Programmers	RPG and .net code writers	LOW	HIGH	HIGH	HIGH	LOW	HIGH	HIGH	HIGH	IN HOUSE	POTENTIAL OUTSOURCE
Component	Retail Analysts	Detailed retail knowledge, R&D of new functionality	HIGH	LOW	HIGH	HIGH	MEDIUM	HIGH	LOW	HIGH	IN HOUSE	No
Assembly	Server Technical	Scoping, build and config. of server technology	MEDIUM	HIGH	LOW	HIGH	LOW	MEDIUM	HIGH	MEDIUM	IN HOUSE	No
Assembly	Program Code Writing	Analysis, scoping and writing of code, basic testing of functionality	LOW	HIGH	HIGH	HIGH	LOW	HIGH	HIGH	HIGH	IN HOUSE	POTENTIAL OUTSOURCE
Assembly	Testing Team	Detailed testing against pre-agreed specifications and standards	LOW	HIGH	HIGH	HIGH	LOW	LOW	LOW	LOW	IN HOUSE	No
Assembly	Training Team	Product training, process improvement within client	MEDIUM	LOW	LOW	HIGH	LOW	LOW	LOW	LOW	OUT	No
Assembly	Contractual Team	Translation of the sales deal into contractual and control principles	LOW	HIGH	MEDIUM	HIGH	LOW	LOW	HIGH	HIGH	IN HOUSE	No
Assembly	Operational Support	24x7x365 operational monitoring and support	MEDIUM	HIGH	HIGH	LOW	LOW	LOW	LOW	LOW	IN HOUSE	No
Transport	Project Management	Implementation management, client liaison and project delivery	MEDIUM	HIGH	HIGH	HIGH	LOW	HIGH	HIGH	LOW	IN HOUSE	No
Retailing	Sales Team	Initial deal agreement, agreement of project scope, financial agreement	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	LOW	IN HOUSE	No
Retailing	Marketing Team	Brand awareness, promotion of RA products within retail sector	LOW	HIGH	LOW	HIGH	LOW	LOW	LOW	LOW	IN HOUSE	No

Table 14 – Make Buy Decisions – Merret UK / US Based Contracts

Make / Buy Decision Components For The Anticipated Merret Vertical Chain – Asian Based Contracts

The following table shows the expected make / buy decisions that Retail Assist need to consider for their Merret ERP vertical chain transaction components in an Asian / China based market:

Type	Transaction	Example	Economies Of Scope	Number Of Firms	Asset Specificity	Firm Specific Knowledge	Uncertainty Of Future	Scope For Opportunism	Monitoring Costs	Complexity Of Production	Score L=1 M=2 H=3	Ideal In Out Decision
Raw Material	Infrastructure	Land & capital, buildings, computers, software	LOW	HIGH	LOW	LOW	LOW	LOW	LOW	HIGH	12	OUT
Raw Material	Industry Knowledge	Retail industry knowledge, R&D of future functionality	MEDIUM	MEDIUM	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	22	MIX
Component	Datacenter	Machine storage, network and operational support	LOW	HIGH	MEDIUM	LOW	LOW	MEDIUM	HIGH	HIGH	16	OUT
Component	Programmers	RPG and .net code writers	LOW	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	22	MIX
Component	Retail Analysts	Detailed retail knowledge, R&D of new functionality	LOW	HIGH	HIGH	HIGH	HIGH	MEDIUM	MEDIUM	HIGH	20	OUT
Assembly	Server Technical	Scoping, build and config. of server technology	LOW	HIGH	LOW	MEDIUM	LOW	MEDIUM	HIGH	LOW	14	OUT
Assembly	Program Code Writing	Analysis, scoping and writing of code, basic testing of functionality	LOW	HIGH	MEDIUM	HIGH	HIGH	HIGH	HIGH	HIGH	21	MIX
Assembly	Testing Team	Detailed testing against pre-agreed specifications and standards	LOW	HIGH	LOW	MEDIUM	LOW	HIGH	MEDIUM	LOW	14	MIX
Assembly	Training Team	Product training, process improvement within client	LOW	MEDIUM	HIGH	MEDIUM	HIGH	HIGH	MEDIUM	LOW	17	OUT
Assembly	Contractual Team	Translation of the sales deal into contractual and control principles	LOW	MEDIUM	LOW	MEDIUM	LOW	MEDIUM	MEDIUM	HIGH	14	OUT
Assembly	Operational Support	24x7x365 operational monitoring and support	LOW	HIGH	MEDIUM	MEDIUM	LOW	LOW	LOW	LOW	12	OUT
Transport	Project Management	Implementation management, client liaison and project delivery	LOW	HIGH	HIGH	MEDIUM	LOW	MEDIUM	HIGH	MEDIUM	17	OUT
Retailing	Sales Team	Initial deal agreement, agreement of project scope, financial agreement	LOW	HIGH	LOW	LOW	LOW	LOW	LOW	LOW	10	OUT
Retailing	Marketing Team	Brand awareness, promotion of RA products within retail sector	LOW	HIGH	LOW	LOW	LOW	LOW	LOW	LOW	10	OUT

Table 15 – Anticipated Make Buy Decisions – Merret Asia / China Based Contracts

4.8.4 Omni-Channel Supply Chain – Setting RA's Optimum Vertical Boundary

As outlined in chapter 4, omni-channel retailing describes a scenario where customers can shop via any sales channel for delivery to their chosen location, whilst the retailer tracks customers and their orders across all of these channels. This process is a combination of many systems and processes not all affected by IT, analysis suggests that RA could be involved in at least 6 of the transaction stages.

Consider table 16, a review of the make/buy characteristics for the omni-channel market identified the upstream and downstream business processes that the retailer will need to consider when building their market proposition, RA will not be involved in the selection of courier partners, negotiation of cross-channel deals with marketing partners, e.g. ebay, managing the delivery of goods to the customer, managing the social media interaction or external marketing campaigns. This analysis is focused on the component and assembly tasks where IT systems, particularly Merret, have the ability to add process value. I have scored each transaction to identify the 4 highest impacting transactions, all of which are major IT system components.

The product and stock database is the central repository where all product data that will be shared with the EPOS, websites, concession and franchise partners is held, this will also manage all web content, images and text, price changes and deals e.g. BOGOF (buy one get one free). The central stock pool is an essential component of the solution, to ensure maximum throughput of sales, the stock offered to each channel needs to be as current as possible, and available everywhere. The order processing module receives inputs from the web, store and mobile commerce applications, processes the order to create the dispatch instructions managed by the warehousing module in Merret. This may select the most effective courier to use, then transmits instructions to that courier to pick up the order and deliver. Merret has been redeveloped in the last year to manage these components, making the product highly asset specific and requiring an in depth understanding of the firm to make the product relevant, the solution open to opportunism and complex. RA have understood the importance of this tool, incorporating the functionality into Merret, instead of linking to an external application, differentiating it from many competitors, this has raised the barriers of entry for any potential competitor.

The e-commerce and m-commerce applications are the other highest impacting transactions, both of these applications are complex, with multiple suppliers in the market providing this service. Both applications will be functionally rich and aimed at the apparel retail market, they will highly asset specific, usually developed in partnership with the retailer requiring high firm knowledge, providing

high scope for opportunism. Ferguson would suggest that these transaction stages should be retained in-house so they can be managed efficiently, however due to the investment that would be required to develop a comparable solution, in a technology where RA have no experience, I believe the barriers of entry are too high. Using Besanko's 'Make-or-Buy Decision Tree' I would suggest the following:

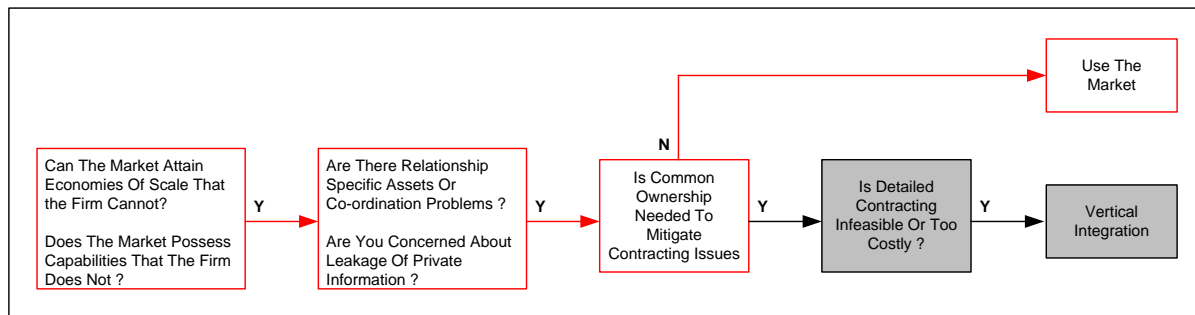


Diagram 20 – The Retail E / M-Commerce Make-Buy Decision

External products available on the market can attain economies of scale and scope by reselling their already developed applications to multiple clients, RA do employ developers with the required web skills, but this is not their core experience, existing suppliers would be concerned about losing their intellectual property and would not allow RA to copy their developments, there would be no need to mitigate contracting issues, therefore analysis would suggest that the appropriate decision would be to use a market partner to provide the ecommerce solution. Due to the scope for opportunity and potential bounded rationality it would be essential that high levels of management control be exercised, with contracts and SLA agreements established to guarantee compliance and quality of service. RA will be in a better strategic position developing interfaces to / from the market products, retaining the core processing and stock handling functions within Merret. Porter's 5 Force analysis suggested that RA have been successful in leading joint developments to create a feature rich product that encompasses many new technologies, e-commerce is used by 87% of the top 100 non-food retailers, m-commerce is expected to grow by 18% in 2013, this is differentiating Merret from more generic products, raising the barriers of entry. This reinforces the demand side benefits of scale, retailers will be more willing to implement Merret if their competitors / peer group members have already made this decision.

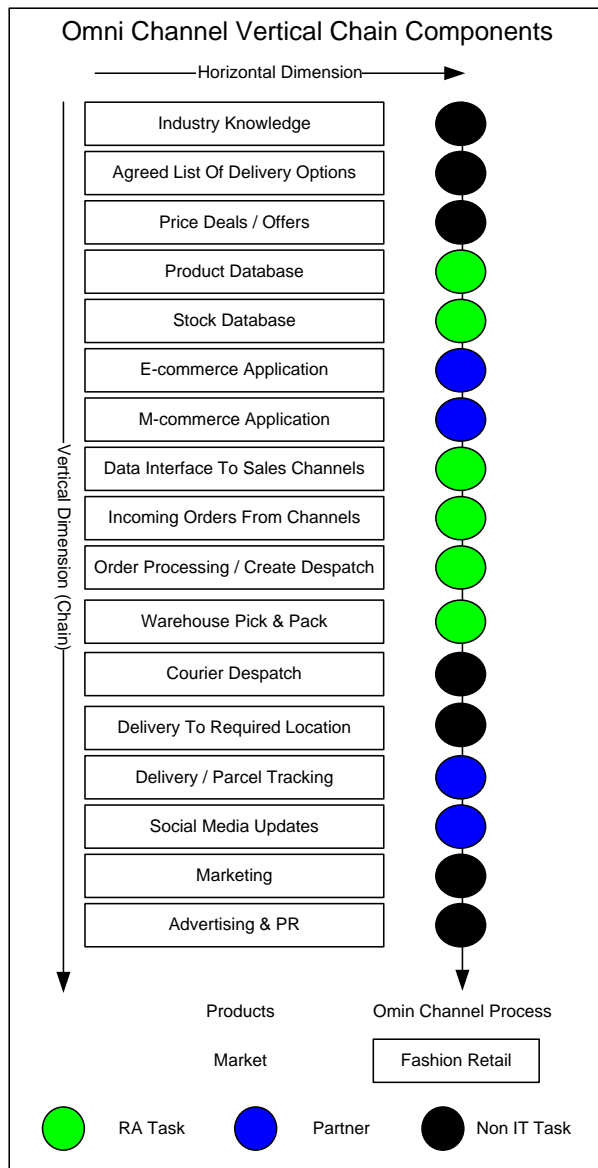


Diagram 21 – Omni Channel Vertical Chain Components

Consider diagram 21, I believe that RA have taken steps in the last year to re-align their vertical chain correctly to find their optimum position in the omni-channel market. The changes applied to Merret have already been proven at Aurora Fashions and provide a feature rich product that has already been linked to several market leading e and m-commerce platforms e.g. BT Fresca and Venda. This approach reinforces the use of Merret's warehousing component, making it an essential tool to manage a retailers supply chain.

Make / Buy Decision Components For The Omni-Channel Service

The make / buy decisions a retailer needs to consider for their omni-channel process. All non-IT tasks have been coloured black in the vertical chain.

Type	Transaction	Example	Economies Of Scope	Number Of Firms	Asset Specificity	Firm Specific Knowledge	Uncertainty Of Future	Scope For Opportunism	Monitoring Costs	Complexity Of Production	Score L=1 M=2 H=3	Ideal In Out Decision
Raw Material	Industry Knowledge	Knowledge of user requirements, new technology options etc	MEDIUM	MEDIUM	HIGH	HIGH	HIGH	MEDIUM	LOW	LOW	N/A	MIX
Raw Material	Agreed List Of Delivery Options	From partner couriers, for UK, Europe and overseas deliveries	LOW	LOW	HIGH	LOW	HIGH	LOW	LOW	LOW	N/A	OUT
Raw Material	Price Deals / Offers	Relationships with 3 rd party sales channels e.g. e-bay or Groupon	LOW	LOW	HIGH	LOW	LOW	MEDIUM	HIGH	LOW	N/A	OUT
Component	Product Database	Central database to manage all product data, descriptions, images	MEDIUM	MEDIUM	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	22	IN
Component	Stock Database	Central database to manage a single stock pool to serve channels	MEDIUM	MEDIUM	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	22	IN
Component	E-Commerce Application	E-commerce service provider	LOW	MEDIUM	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	21	OUT
Component	M-Commerce Application	Mobile commerce provider for Smartphone access	LOW	MEDIUM	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	21	OUT
Assembly	Data Interface To Sales Channels	Passing product and price data to all applications in omni world	LOW	MEDIUM	HIGH	MEDIUM	LOW	LOW	HIGH	MEDIUM	15	IN
Assembly	Incoming Orders From Channels	Receipt of orders from various channels, EPOS, web etc	LOW	LOW	HIGH	MEDIUM	LOW	LOW	HIGH	MEDIUM	15	IN
Assembly	Order Processing Create Despatch	Processing orders, allocation stock from central pool	LOW	LOW	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	20	IN
Assembly	Warehouse Pick & Pack	Order management, pick stock, prepare parcel for dispatch	LOW	LOW	MEDIUM	MEDIUM	LOW	LOW	HIGH	MEDIUM	13	IN
Transport	Goods Despatch – Courier Or Normal	Goods shipment to customer, via store estate or courier	LOW	MEDIUM	MEDIUM	LOW	LOW	HIGH	MEDIUM	LOW	N/A	MIX
Transport	Delivery To Required Location	Delivery process	LOW	MEDIUM	LOW	LOW	LOW	LOW	LOW	LOW	N/A	OUT
Transport	Delivery / Parcel Tracking	Ability to track orders via courier network	LOW	LOW	LOW	LOW	LOW	LOW	MEDIUM	LOW	9	OUT
Retailing	Social Media Updates	Customer interaction via Facebook, Twitter etc, marketing updates	MEDIUM	MEDIUM	LOW	LOW	LOW	HIGH	HIGH	MEDIUM	14	OUT
Retailing	Marketing	Brand awareness, promotion of solution within retail sector	MEDIUM	HIGH	LOW	MEDIUM	LOW	HIGH	HIGH	MEDIUM	N/A	IN
Retailing	Advertising & PR	Press advertising, awards entry etc	LOW	HIGH	LOW	MEDIUM	LOW	HIGH	HIGH	MEDIUM	N/A	OUT

Table 16 – Make Buy Decisions – Omni Channel Vertical Chain Components

5 Summary & Conclusion

This management project aimed to discover if RA had the capabilities to exploit two new IT opportunities, I have used strategic and economic theory to review RA's external environment and internal capabilities, each step of the analysis process used direct observation and theory to reflect on the evidence gathered, then used to define my chosen strategy. This summary will consider my view of the theories applied, summarise analysis of RA's external market and internal capabilities, I will conclude with a review of my chosen strategy. I have found this a very interesting exercise to complete, overseas market data has been difficult to compile but my knowledge of the market and my relationships with UK retailers have provided an essential insight.

5.1 My Appraisal Of The Theories Applied

This section outlines my personal view of the more important theories applied to the RA case study, all theories were applied to the UK market which I understand well, this helped me understand the overseas model. I found PEST useful when reviewing the UK market, however it proved more useful when considering entry into China, especially when combined with Porter's 5 Forces analysis. The model has been updated to include legal and environmental factors to provide a more rounded tool, my analysis did not consider environmental factors, all legal considerations have been included within political. The model did not reveal any issues that I had not expected, however it provided a useful framework to identify important market factors.

Porter's 5 Forces model provided a good starting point to examine industry level forces, it does have limitations in that it is focused at a generic industry and not the firm, it potentially ignores the change in consumers tastes and incomes and how these can be affected, it is also easy to assume that buyers, suppliers and competitors act independently and do not collude. I attempted to use this analysis to produce more than a list of positive and negative comments, I attempted to identify the forces that underpin today's levels of profitability which I believe I completed successfully. The change in consumers tastes and income has had a major impact on retail as outlined in the PEST framework, using these models together has bridged that gap and allowed analysis of an essential market component.

I have found Barney's VRIO framework to be very useful and easy to implement, analysis correctly identified the importance of the decision to buy Merret in 2007, I feel that the framework has allowed me to identify the current rare and valuable resources from the less important, for example

the power and value of the sales team, the importance of Morris' market relationships, the strength of Illingworth's B&M knowledge, finally the core strength of the support team's proceduralisation methodology. Analysis proved that the overall sum of RA's activities is greater than the parts, but it is the less obvious resources that I believe make the largest impact, I had previously not recognized this until I applied the VRIO Model. I found SWOT analysis to be a simplistic method of categorization and of much less use, it presents a list of observations uncritically and without clear prioritization, weak opportunities may appear to balance strong threats. This suggests that it is the user of the model that can really affect the usefulness of the analysis produced, however as a summary ready reckoner I have found some value in using it, I combined the output to the VRIO output to identify the true strengths that I feel drive strategic value.

I found the Transaction Cost and Vertical Chain theories extremely useful when used together, RA had recognized the impact of bounded rationality and opportunism, using organizational forms to provide the required level of service for their clients, creating these long term relationships has allowed RA to exploit economies of scale and scope. RA have created many procedural guidelines to help teams work towards a common goal, supporting Ouchi's analysis, however I believe Douma and Screuder provide a more practical view. I found vertical chain analysis very useful in setting RA's optimum boundary, it was introduced 20 years ago, but still provides a relevant list of characteristics that can be reviewed with limited market and firm knowledge. I used this analysis to review the existing RA markets for Merret and the Helpdesk Solution, then consider the move into overseas markets. Finding detailed market information on China was difficult, using my detailed knowledge of RA and an more limited understanding of China this has still produced interesting results. I have added a review of monitoring costs to this analysis, assessing each stage of the vertical chain against the eight characteristics, the results have helped validate my strategic vision. Finally, my criticism of the Linkage Approach is that it is a fairly simple concept, I am personally interested as it easily explains RA's success in expanding the breadth of services provided by the Support Services teams. That said it is a fairly simple task to look at the strength of individuals and teams within a small organisation, then consider where else those services could be deployed. The theory will probably be more analytically useful in a large or multi-national organisation where linkages would be more difficult to identify, within RA the process is far more simplistic.

The application of these theories has produced very interesting results, these have been summarized below.

5.2 A Summary Review Of The Retail IT Market & RA's Capabilities

UK market analysis shows Retail IT to be a complex sector, RA have built a resilient organization during a difficult 5 year period, I believe they will need to change strategic direction if they intended to exploit the two areas of change, creating alignment between internal capabilities and the external opportunity, described by Dobson et al as "Strategic Fit." (Dobson et al 2004, p.6). PEST analysis has shown a market with low consumer confidence, retailers are downsizing store estates, the UK government have halved the UK's growth forecast for 2013 to 0.6%. Social media changes have opened new channels to market e.g. e-commerce, many retailers are upgrading systems to exploit advances in technology. In summary this is a challenging environment, RA need to be flexible with clear strategic goals and matching resources to be able to compete.

Porter's 5 Forces analysis demonstrates the UK Helpdesk & ERP sectors are attractive places to compete, RA have expanded their client base, provide quality through internal knowledge whilst reducing the threat of potential entrants. They have limited buyer power by forming strategic alliances, managing contracts with 3rd party suppliers to influence downstream purchasing decisions. Contractual growth of 275% since 2008 also suggests that they are able to outperform competitor rivalry by the sale of complementary products, e.g. Merret and RAX, countering the effects of a declining market. Porter's Value Chain demonstrates RA have feature rich product/services, value can again be achieved by exploiting market relationships. The implementation processes of both streams is a strength, however an over reliance on Nigel Illingworth in Merret deployment has created a bottleneck in production which RA have struggled to accommodate. RA have been able to exploit 'unequal access to distribution channels' to influence clients downstream buying decisions and raise entry barriers, analysis has shown that Merret is positioned well against its top 10 competitors.

Barney's VRIO framework has identified assets that are rare, valuable, hard to imitate and have been exploited to achieve sustained competitive and economic advantage, Merret and RAX, the strength of Illingworth and Morris as brand ambassadors. SWOT analysis shows an organization with a strong identity and rich product mix, with a multi-skilled, flexible and mobile workforce. The acquisition of Merret has created a portfolio of products to cover all aspects of Retail IT, increasing RA's ability to cross sell support, technical and implementation services to any new Merret users. The expansion of the client base to 26 clients has also mitigated a major business weakness, a current annuity income of £7.35m provides stability.

In summary, I believe RA are well placed to compete in their existing UK market, this is in stark contrast to the issues that would be experienced when trying to enter the Chinese market, I believe that RA are in no way prepared for this challenge. I have found economic analysis to be very useful in defining the scope of RA's optimum vertical boundary, applying Ferguson's seven characteristics to define the make buy decision. I have applied these tools to the UK Helpdesk and Merret case studies to analyse a successful and well understood model, then reflected the overseas expansion and omni-channel case studies against these.

5.3 Providing Local Helpdesk Services For UK Retailer Stores In China

I believe RA have optimized their Helpdesk vertical chain correctly for the UK and the European markets, I have not identified any additional areas that should be outsourced to the market, or any external tasks that should be brought in-house. RA have correctly outsourced the key tasks that would create logistical or economy of scale challenges, these tasks are outside of RA's core strengths and local partners are used to provide the services.

Analysis has identified numerous difficulties of entering the Chinese Helpdesk market, there is an essential need for local language skills and local market representation. RA will struggle to replicate the forces that underpin the UK market's levels of profitability, e.g. demand side benefits of scale to expand their client base, limiting buyer power by forming strategic alliances and managing contracts with 3rd party suppliers to influence downstream purchasing decisions. The key make/buy characteristics have high asset specificity, firm specific knowledge, scope for opportunism and monitoring costs. Ferguson would suggest that these transaction stages should be retained in-house, I do not believe that RA has the ability to provide these services due to the complex nature of the market and the transaction costs that would be incurred. The scope for opportunism is high, this would require extensive management time to establish contracts and monitor compliance adding additional costs. UK retailers have a limited number of stores in territory making the marginal cost of support very high.

I believe that RA will be more effective by managing the IT element of store expansions for existing clients from the UK, working with trusted local partners in the remote market. RA can still contribute to a number of the transaction stages, however due to the complexity of providing this service in Chinese, I would suggest that an increased number of the transactions are outsourced to the market. This will require new alliances to be formed, establishing contracts and monitoring compliance will add cost, RA have extensive experience of doing this in the UK, this will be a new

challenge in China. This should provide a medium to long term opportunity to grow market share by reselling this capability to other UK suppliers who are moving to Asia, gaining advantage from this intellectual capital.

5.4 Developing Merret For Use Within An Overseas Market

A review of Merret in the UK market shows that RA correctly decided to bring Merret in-house to control downstream supply, RA focused on scarcity, the purchase of Merret reduced this issue and the scope for opportunism. My analysis suggests that RA have not yet reached their optimum degree of vertical integration, I believe the employment of programming resources and management of a Datacenter could be outsourced to the market, placing more emphasis on industry knowledge, R&D and testing, all asset specific tasks. RA will need a strong command and control approach to manage quality in the development of specifications, then test rigorously to ensure a quality output. However, as the development team is currently managed by Nigel Illingworth who is the majority shareholder at RA, they are seen as a positive attribute and I do not believe the Directorate team would be willing to make this change.

Analysis suggests selling Merret into China would be extremely difficult, Merret is UK centric, it would face a costly redevelopment to make it market ready, it would be entering an established market competing against territorially-functionally focused products, in Chinese. This capital investment would need to be funded by RA alone, estimated at £1.5m, this would make RA's exit barriers very high due to the level of sunk investment. Again the key make/buy characteristics have high asset specificity, firm specific knowledge, scope for opportunism and complexity of production, again I do not believe that RA has the ability to provide these services in the Chinese market, the transaction costs required to build these capabilities would be prohibitive. The vertical chain for the Chinese market has only identified 4 transactions where I believe RA could contribute to this relationship, industry / product knowledge, development resource of the core elements of the package, then testing any changes. My analysis suggests that all other transactions would need to be performed by an in-territory partner, reducing RA's income, in my opinion I believe this is an unsustainable model and Merret should not be redeveloped for the China market.

If RA wanted to develop an overseas market I believe a more sustainable model would be to expand into the US, building an alliance with a US based partner would increase Merret's market reach, that US partner would be expected to invest, driving sales with local market knowledge. Finally, I believe the most profitable approach will be to grow their UK market presence, Merret is only used in 4% of

the top 100 retailers in the UK, I believe this is the area where all marketing efforts should be focused, using supply side economies of scale to grow market share. These issues do not exclude Merret from China altogether, RA are currently developing an opportunity to load Chinese characters into their e-commerce portal, for distribution to Chinese text web servers. This estimated 45 day development may be a useful compromise position that works for many UK retailers, supporting their e-commerce growth to Chinese customers.

5.5 Exploring Future Omni-Channel Opportunities

Finally, I believe RA have taken the correct steps re-align their vertical chain to find their optimum position in the omni-channel market. The changes applied to Merret provide a feature rich product that has already been linked to several market leading e and m-commerce platforms e.g. BT Fresca and Venda. This approach reinforces the use of Merret's warehousing tool as an essential component of a retailers supply chain. This functionality can be added to as and when required, however I believe the core functionality is now in place.

I would advocate a change in design strategy within this area, RA used relationships with Aurora Fashions to add omni-functionality into Merret, I suggest a more radical approach be used for future development planning. I believe RA should create a working party of colleagues, friends and clients, with a maximum age of 23, to highlight new ways in which technology can be used in the retail environment, generation Y members are the most technically focused generation and extensively use social media. Validating ideas through more experienced Merret users and the client forum should remove impractical opportunities, however to be a market leader Merret needs to drive functionality. I also believe RA need to build stronger relationships with e-commerce providers, these are the organization that drive change, building next generation functionality into Merret would create differentiation and value. VRIO analysis identified the strength of Alan Morris' industry connections, I feel that he should be instrumental in forging these new relationships.

In conclusion, my strategic vision has been shaped by the results generated from case study analysis, I have referenced this back to the initial objectives set to generate my chosen strategy. Consider table 17, I believe RA's resources and internal capabilities should be directed to deliver the following growth strategy into the Retail IT market, alongside the continued delivery of their existing successful strategy.

Opportunity Identified:	My Chosen Strategy:
Helpdesk Expansion Into Overseas Markets e.g. China	<ul style="list-style-type: none"> • Provide store opening project management to existing clients moving into China • Build partnerships with 'in territory' Chinese partners to deliver local services • Identify UK EPOS providers that can provide Chinese EPOS devices • Start longer term planning to consider opportunities to locate RA services in Beijing
Merret Expansion Into Overseas Markets	<ul style="list-style-type: none"> • No opportunity to sell Merret into China • Start medium term strategy to choose partner to sell Merret into US, start sales and marketing planning to support this strategy • Concentrate Merret sales activity in UK market, increase the existing testing and project management team to ease the implementation process
Exploring Future Omni-Channel Opportunities	<ul style="list-style-type: none"> • Build generation 'Y' planning team members to identify technology trends • Build relationships with e-commerce partners to identify new opportunities • Marketing drive to grow market awareness of new Merret functionality

Table 17 – My Chosen Strategies To Exploit Market Opportunities

26,908 words

6 References

Main Text References

- Amit, R. and Schoemaker PJH. (1993) Strategic Assets And Organisational Rent, Strategic Management Journal. 14 (1) pp33-46 *cited in* Cardeal, N. and Antonio, N. (2012) Valuable, Rare, Inimitable Resources And Organisation (VRIO) Resources Or Valuable, Rare, Inimitable Resources (VRI) Capabilities: What Leads To Competitive Advantage, African Journal Of Business Management Vol 6 (37) pp10159-10170
- Barney, J.B. (2007) Gaining And Sustaining Competitive Advantage, 3rd Edition, Prentice Hall, p138-9
- Besanko D, Dranove D, Shanley M, Schaefer S. (2010) Economics Of Strategy, 5th Edition, John Wiley & Sons, p145-146
- Brandenburger, A. and Nalebuff, B.J. (1996) Co-opetition. Currency Doubleday, New York. *cited in* Henry, A.E (2011) Understanding Strategic Management, 2nd Edition Oxford University Press p83
- Chacarbaghi and Lynch (1999), *cited in*, Grant, R.M. (1998) Contemporary Strategy Analysis: Concepts, Techniques, Applications, 3rd Edition, Blackwell Publishing.
- Chaharbaghi, K. and Lynch, R. (1999) "Sustainable competitive advantage: towards a dynamic resource-based strategy", Management Decision, 37 (1), 45-50
- Coase, R.H. (1937) The Nature Of The Firm. Economica vol 4, p386-405
- Coman, A. and Ronan, B. (2009) Focused SWOT: Diagnosing Critical Strengths And Weaknesses, International Journal Of Production Research, October Vol 47, No 20 pp.5677-9
- Dobson P, Starkey K, Richards J. (2004) Strategic Management Issues And Cases, 2nd Edition, Blackwell Publishing, pp1-32
- Douma, S. & Schreuder H. (2008) Economic Approaches To Organisations, 4th Edition Prentice Hall, pp161-207
- Earl, P. & Wakeley, T. (2005) Business Economics A Contemporary Approach. McGraw-Hill pp308-316
- Ferguson, P.R, Ferguson G.J. & Rothschild, R. (1993) Business Economics: The Application Of Economic Theory. MacMillan p10
- Ferguson, P.R, Ferguson, G.J. & Rothschild, R. (1993) Business Economics: The Application Of Economic Theory. MacMillan pp10-18
- Henry, A.E (2011) Understanding Strategic Management, 2nd Edition Oxford University Press pp49-144
- Ouchi, W.G.(1980) Markets, Bureaucracies And Clans, Administrative Science Quarterly, vol 25 pp 129-41, *cited in* Douma, S. & Schreuder H. (2008) Economic Approaches To Organisations, 4th Edition Prentice Hall p183
- Jobber, D. & Ellis-Chadwick, F. (2013) Principles And Practice Of Marketing, 7th Edition, McGraw-Hill p51
- Kotler P, Wong V, Saunders J, Armstrong G. (2005) Principles Of Marketing, 4th European Edition, Pearson Education Limited p539
- Martec (2011) IT In Non-Food Retail, Martec International Ltd, pp5-11
- Mintzberg, H, Lampel, J., Quinn, J.B, Ghoshal, S. (2003) The Strategy Process: Concepts Contexts Cases, 4th Edition, Pearson Education Limited pp131-2

- Porter, M. E. (1985) *cited in* Dobson P, Starkey K, Richards J. (2004) *Strategic Management Issues And Cases*, 2nd Edition, Blackwell Publishing, pp1-42
- Porter, M. E. (1996) What is strategy? *Harvard Business Review*, November–December, 61-78
- Porter, M. E. (2008) The 5 Competitive Forces That Shape Strategy, *Harvard Business Review*, January 2008, p79-93
- Prahalad, C.K. (2000) Changes In The Competitive Battlefield. In *Mastering Strategy* Prentice Hall pp75-80
cited in Henry, A.E (2011) *Understanding Strategic Management*, 2nd Edition Oxford University Press p82
- Valentin, E.K. (2005) Away With SWOT Analysis: Use Defensive / Offensive Evaluation Instead, *The Journal Of Applied Business Research*, Spring 2005 Vol 21, No 2 pp91-92
- Williamson, O.E. (1971) The Vertical Integration Of Production. *American Economic Review* 66 (2) p112-123

Web References

- Fearn, A. (2013) <http://www.youtube.com/watch?v=mu9TWlciNKK> - Viewed on 23/03/2103
- DTI (2004) <http://www.hmrc.gov.uk/manuals/cirdmanual/cir81900.htm> - Viewed on 16/04/2013
- Guardian (2013) <http://www.guardian.co.uk/uk/2013/mar/21/budget-george-osborne-progress-deficit> - Viewed on 23/03/2103
- IDC Retail Insights (2010) <http://www.retailonlineintegration.com/article/the-omnichannel-shopper-anytime-anyplace-anywhere/1#> - Viewed on 23/03/2103
- Kearney, A.T. (2011) *cited on* <http://chainstoreage.com/article/retail%E2%80%99s-hottest-emerging-markets> – Viewed on 20/02/2013
- McKinsey (2009) *cited on* www.thomaswhite.com/pdf/bric-spotlight-report-china-retail-june-11.pdf - Viewed on 20/02/2013
- Merchant, N. (2012) http://blogs.hbr.org/cs/2012/02/why_porters_model_no_longer_works.html 10:31 AM February 29, 2012) - Viewed on 23/03/2103
- Money Programme (2009) <http://news.bbc.co.uk/1/hi/business/8139877.stm> - Viewed on 23/03/2103
- Retail Gazette (2011) <http://www.aurorafashions.com/sites/aurorafashions.com/files/files/Aurora%2090%20minute%20delivery%20regional%20roll%20out%20phase%202.pdf> - Viewed on 26/03/2103

7 Diagrams & Tables

The following tables and diagrams have been included in this management report:

Table No	Page No	Title
1	5	Technology Changes & Resultant Market Opportunities
2	30	Retail Assist Product Offerings
3	31	Definition Of Product Scope
4	33	Retail Assist Business PEST Analysis
5	35	Mintzberg's Market Types & Characteristics
6	46	Stages Of The Life Cycle
7	46	Stages Of The Life Cycle – Merret Analysis
8	47	Stages Of The Life Cycle – Support Service Analysis
9	48	RA Merret Competitor Analysis
10	50	RA's Resources Plotted Against Barney's Resource Categories
11	50	RA's Resources Plotted Against Barney's VRIO Framework
12	68	Make Buy Decisions – Helpdesk Support UK / US Based Contracts
13	69	Make Buy Decisions – Helpdesk Support Asia / China Based Contracts
14	75	Make Buy Decisions – Merret UK / US Based Contracts
15	76	Make Buy Decisions – Merret Asia / China Based Contracts
16	80	Make Buy Decisions – Omni Channel Vertical Chain Components
17	87	My Chosen Strategies To Exploit Market Opportunities
18	90	Tables & Diagrams Used In The Study
19	92	RA Clients Identifying Product Type
20	98	Merret Value Chain Analysis
21	99	Merret Income And R&D Totals Invested 2007/8 To 2011/12
22	99	Merret Annuity Income 2008 To 2012
23	100	Helpdesk Implementation Costs
24	101	Helpdesk Service Value Chain Analysis

Diagram No	Page No	Title
1	6	The Retail Vertical Chain
2	11	The Omni Channel Market
3	14	Strategic Management Approach
4	15	Strategic Position Analysis
5	31	Kotler's Three Levels Of Product For Retail Assist
6	37	Porter's 5 Forces Review – UK / European Support Industry
7	40	Porter's 5 Forces Review – UK / European ERP Industry – Merret
8	42	Porter's 5 Forces Review – Asian Support Industry
9	44	Porter's 5 Forces Review – ERP Industry – Merret
10	49	A Positioning Map For Retail IT Enterprise Solutions
11	52	Merret Value Chain
12	57	Helpdesk Implementation Value Chain
13	58	RA Internal Strengths & Weaknesses
14	60	RA External Opportunities & Threats
15	62	Questions Influencing The Make-Buy Decision
16	65	Support Services Linked Approach Model
17	66	Helpdesk Support Vertical Chain – All Markets
18	71	Merret Linked Approach Model
19	73	Merret Vertical Chain – All Markets
20	78	The Retail E / M-Commerce Make-Buy Decision
21	79	Omni Channel Vertical Chain Components

Table 18 – Tables & Diagrams Used In The Study

8 Appendix 1 – RA Clients & Products Delivered

The following table identifies all of the RA clients, the services provided and the length of agreed contract.

Customer	Merret / Service ?	Delivered Solutions	Delivered Services	Service Start	Contract Duration	Contract Expiry
A Wear	Helpdesk & Service	Ra-X (Managed Solution)	Helpdesk Application Support Technical Services Data Centre Hosting Project Services Disaster Recovery Hardware Maintenance Service Management	01-Jun-09	Out of Contract	
ASOS	Merret & Support	Merret (MMS Only)	Application Support Technical Services Service Management	22-Nov-10	5	10-Aug-16
Aurora	Service & Merret	Ra-X (Managed Solution)	Full IT Outsourcing	01-Mar-04	10	28-Feb-21
Bidvest	Helpdesk & Service	None	Helpdesk Technical Services Data Centre Hosting Project Services Hardware Maintenance Service Management	04-Jul-11	5	30-Sep-16
Cath Kidston	Helpdesk & Service	Ra-X (Managed Solution)	Data Centre Operations Technical Services Service Management Helpdesk	31-May-12	3	30-May-15
Crew 2000	Merret & Support	Merret (Managed Solution)	Application Support Technical Services Data Centre Hosting Disaster Recovery Hardware Maintenance Service Management	12-Apr-10	3	11-Apr-13
Cybertill	Helpdesk & Service	None	Helpdesk Service Management	18-Jun-11	3	17-Jun-14
Harvey Nichols	Merret & Support	Merret Merret BI	Helpdesk Application Support Technical Services Data Centre Hosting Disaster Recovery? Hardware Maintenance? Service Management	2005	3 Out of Contract 5	06-Aug-2012 02-Jan-2015
Hobbycraft	Helpdesk & Service	None	Helpdesk	08-Oct-12	3	07-Oct-15
Jacques Vert Irisa Group	Merret & Support	Merret	Application Support Technical Services Data Centre Hosting Service Management	16-May-11	5	15-May-16
Jane Norman	Merret & Support	Merret Merret BI	Helpdesk Application Support Technical Services Service Management	18-May-09	5	31-Dec-14
Kitbag	Merret & Support	Merret Merret BI	Helpdesk Data Centre Operations Technical Services 2nd Line Merret Application Support Service Management	[TBA]	3	[TBA]
Marks & Spencer	Helpdesk & Service	None	Helpdesk Service Management	19-Sep-09	1	18-Sep-12
Mint Velvet	Merret & Support	Merret Infinity Epos	Helpdesk Application Support Technical Services Data Centre Hosting Project Services Hardware Maintenance Service Management	21-Oct-09	3	30-Sep-15

Morrisons	Merret & Support	Merret	Helpdesk Data Centre Operations Technical Services 2nd Line Merret Application Support On Call and OOH Support Services Service Management	25-Mar-13	5	24-Mar-18
Odin Retail	Helpdesk & Service	Infinity Epos	Helpdesk Technical Services Data Centre Hosting Project Services Service Management	31-Mar-06	3	30-Nov-13
Paperchase	Merret & Support	Merret	Application Support Technical Services Data Centre Hosting Project Services Disaster Recovery Hardware Maintenance Service Management	12-Jun-08	3	11-Jun-14
Reiss	Project Services	Merret BI	Project Services	2010	N/A	N/A
Selfridges	Technical Services	None	Technical Services Data Centre Hosting Project Services Service Management	23-May-05	8	22-May-13
Signet	Helpdesk & Service	None	Helpdesk Technical Services Service Management	21-Feb-11	4	30-Jun-15
SuperGroup	Helpdesk & Service	None	Helpdesk Technical Services Project Services Hardware Maintenance Service Management	14-Mar-11	3	13-Mar-14
The White Company	Helpdesk & Service	None	Helpdesk Service Management	01-Jun-08	2	31-May-14
Vue Cinemas	Helpdesk & Service	None	Helpdesk Technical Services Project Services Service Management	30-Jun-10	3	29-Jun-13
Whistles	Merret & Support	Merret Merret BI	Application Support Technical Services Data Centre Hosting Project Services Disaster Recovery Hardware Maintenance Service Management	31-Jan-11	3	28-Feb-14
White Stuff	Helpdesk & Service	Ra-X (Managed Solution)	Helpdesk Technical Services Service Management	01-Sep-10	3	20-Apr-14
World Duty Free Group	Helpdesk & Service	None	Helpdesk Service Management	02-Mar-07	(Rolling PO)	01-Mar-10

Table 19 – RA Clients Identifying Product Type

9 Appendix 2 – Merret Implementation Costs & Margin Calculation

This analysis outlines the costing profile of a typical Merret client, in this example the retailer has 105 head office users of Merret, 25 users in the warehouse, 180 highstreet stores (solus), 25 concession stores, e.g. House Of Fraser, 10 Franchise partners, and 2 web stores, these can be used to run websites in £GBP or foreign currency. Data was captured during direct interviews with Alan Morris, Executive Chairman and Head Of Sales, Tim Moxon Chief Financial Officer, and Renny Wadsworth Head Of Delivery for Merret. This will be followed by a calculation of the marginal costs.

9.1 Merret Implementation Costs

This analysis has been used to create an indicative cost price using a core subset of tasks required to implement Merret. Licensing data has been provided by Morris, this has also be used to calculate the software maintenance cost. Morris agreed that software maintenance will always be charged at 21% of the initial license fee, before any discounts are applied, this fee must never be discounted. In the example below, the maintenance fee for B&M users is £33,075 (105 * £1,500) * 0.21, eventhough the final agreed license cost (discounted) is £1,080 per unit.

License Type	Users	Initial License Cost	Final License Cost	Maintenance 21%
B&M Users	105	1,500	113,400.00	33,075.00
Warehouse Users	25	1,500	30,000.00	7,875.00
Solus Stores	180	1,200	146,880.00	45,360.00
Concession Stores	25	1,200	24,000.00	6,300.00
Franchise Licenses	10	1,200	9,600.00	2,520.00
Web stores	2	1,500	2,400.00	630.00
TOTAL:	347		326,280.00	95,760.00

The following section calculates the indicative Merret setup cost, the tasks required to build, configure and implement the solution, RA use a standard resource rate card, these costs have been calculated using the daily charge rates multiplied by the number of estimated days required to complete each task, creating a matrix of effort and cost.

Detailed Task:	Required ?	Build Days:	Rate:	Cost:
Discovery	Y	30	750	22500
Project Management	Y	50	750	37500
Merret technical implementation	Y	65	750	48750
Handover to support	Y	5	750	3750
Standard configuration	Y	25	750	18750
Merret.net	N	0		0
WSSI	Y	5	750	3750
E-mailer	Y	2	750	1500
Print management	Y	3	750	2250
Overnight processing	Y	2	750	1500
Backup	Y	1	750	750
Finance x 3	Y	5	750	3750
TLOG and PLU	Y	10	750	7500
Concessions	Y	5	750	3750
Ticketing	Y	2	750	1500
Purchase orders	Y	2	750	1500

Homeshopping x 6	Y	5	750	3750
Homeshopping delivery providers	Y	5	750	3750
Franchise	Y	5	750	3750
Warehouse	N	0		0
Store audit	Y	5	750	3750
History loading	Y	25	750	18750
Stock loading (store only)	Y	10	750	7500
Products	Y	15	750	11250
Integration testing	Y	50	750	37500
UAT support	Y	25	750	18750
		357		267,750

The final refine of cost will be identified after the technical due diligence and discovery session workshops have been held. Three new areas of cost will be introduced here, new functional developments, non-standard Merret interfaces and the support services required to manage the on-going support of the application. Again an amount of effort has been estimated to complete each task and a cost calculated:

Topic:	Detailed Task:	Required ?	Build Days:	Rate:	Cost:
Interface Dev	Example 1	Y	10	750	7500
	Example 2	Y	10	750	7500
	Example 3	Y	15	750	11250
Functional Dev	Example 1	Y	20	750	15000
	Example 2	Y	20	750	15000
	Example 3	Y	15	750	11250
Functional Support	1st Line Support	Y	35	656	22960
	2nd Line Support	N			0
	3rd Line Support	N			0
	Operational 24x7 Support	Y	35	656	22960
TOTAL:			160		113,420

In this example 3 interfaces were identified to pass data to / from customer systems, plus 3 additional functional developments were required to add existing business functionality into Merret. Finally, the customer chose to take 1st line Helpdesk support from RA, whilst managing 2nd and 3rd line support in house. This has created the overall cost of implementing Merret into a customer:

Cost Element:	Cost:
Total Merret License	326,280.00
Total Software Maintenance	95,760.00
Indicative Merret Setup	267,750.00
Additional Development Costs	113,420.00
TOTAL:	803,210.00

Sales / Profit Analysis:	Value:
Total Sales Income	803,210.00
Total Cost Of Sale	148,110.00
Gross Profit	655,110.00

9.2 Merret Margin & Profit Calculations

One of the key deliverables for this project is the identification of an expected profit margin once the calculation of expected sales income and total cost of sales has been calculated. An example of this cost and margin capture and comparison to create the expected profit can be seen in the following cost summary review. Part of the analysis process required a calculation of the daily resource costs and the apportionment of non-income generating costs to create a true fully absorbed cost margin rate. This analysis was completed with Tim Moxon the Chief Financial Officer at RA.

The accuracy of this calculation will be based on the estimate of the cost of production, then the estimate of the amount of effort it will take to complete the Merret implementation. To validate this, we analyzed how the 'marginal cost rate' and 'fully absorbed cost rates' of the business are estimated, to calculate gross profit and expected margins of return.

The RA sales team need to see the expected operating margin, to understand the boundaries that they can use within the deal negotiation stage, the question is which margin they should be using, the marginal cost rate or the fully absorbed cost margin ? Moxon believes that this should be the '**fully absorbed cost margin**'.

Definition Of Marginal Cost Rate:

The actual resource cost salary plus NI / number of days worked per annum (260). This marginal cost rate is entered into the Sage job costing tool as a day rate per resource.

Definition Of Fully Absorbed Cost Rate:

Direct resource cost plus an additional indirect allocated overhead cost – the fixed and variable cost of business operations being split across all production area staff. This includes physical overheads, buildings and materials, and the cost of administration and non-income generating teams, e.g. Human Resources and Administration. Moxon believes that this will add an additional £17k per annum to each income generating resource cost.

RA had to find an accurate way to apportion the costs incurred by the non-income generating departments onto the income generating teams to absorb all costs fully. An analysis of the 2007/8 budget model was completed to demonstrate how this has been done, extracts have been included below. Resources have been split up into 2 sections called Production Centres (departments that create income) and Services (departments that do not create income, only cost).

Production Centre Departments:	Service Departments:
Application Development	Insurance
Helpdesk	Finance & Admin
Technical Services	Sales & Marketing
Store Systems	Executive / Board
Project Services	Human Resources
Operational Support	Technical Services

Moxon considered 2 different ways in which costs could be reapportioned:

- Method 1 (H) – dept % of heads against the total of production center heads.
- Method 2 (V) – dept % of salary against the total production center salary bill.

Analysis of business operations identified the cost incurred by the service departments including an apportionment of the cost of running the various sites, called space cost. This analysis created an overall cost £1,201,000, to be reallocated across the income generating departments, resulting in the additional £17,000 per person (71 heads) referred to earlier.

Service Department Costs (non-income)	Actual Cost	Space Cost	Actual & Space	Method Of Allocation
Insurance	42	0	42	H
Finance & Admin	212	36	248	H
Sales & Marketing	644	36	680	V
Executive / Board	60	0	60	V
Human Resources	81	0	81	H
Technical Services	90	0	90	H
TOTAL:	1129	72	1201	

H = Heads Allocation

V = Wage Value Allocation

Production Centre Departments	No Of Heads	% Of Heads H - Value	Department Gross Wages	% Of Wages V - Value
Application Development	21	30%	1174	40%
Helpdesk	16	23%	387	13%
Technical Services	9	13%	364	12%
Store Systems	8	11%	376	13%
Project Services	7	10%	367	12%
Operational Support	10	14%	287	10%
TOTAL:	71	100%	2955	100%

It was then a task to consider the method of apportioning those service department costs to the Production Centre departments, either using the H or V percentage value, this was determined by Moxon. For example, the cost of the Human Resources department is linked to the number of heads within the business, the more people employed, then the more HR resources that would be required, using the H value was deemed appropriate.

Consider the 'Cost Apportionment 2007 / 8' extract below, this shows how those costs were apportioned. For example insurance was apportioned using the H method, 30% of the £42,000 insurance bill will be apportioned to the Application Development team, adding £12,000 onto their department cost. This exercise is repeated until the total cost of operation is revealed, £4,988,000. Moxon then calculated the fully absorbed cost rates for two different resource categories:

Project / Technical resource - Application Development, Projects, Store Systems
 Operator / Helpdesk resource - Technical Services, Operations, Helpdesk

This provided a total cost per resource category of:

Project / Technical resource - £3,162,800
 Operator / Helpdesk resource - £1,705,000

Fully absorbed cost rate per day was calculated as:

(Dept cost per head * no of heads) divided by (no of heads * no of working days - 260)

Project / Technical resource - £337.90
 Operator / Helpdesk resource - £187.40

This calculation was run over several years data to create an average absorbed cost rate, this has been applied to the calculation page to determine the total cost of sale. The figures used are:

Project / Technical resource - **£300.00** per day.
 Operator / Helpdesk resource - **£200.00** per day.

RA have a published daily resource rate that is used in all contract negotiations, the current rates for these resources are open to negotiation within the seal stage, however as a standard are:

Project / Technical resource - **£750.00** per day.

Operator / Helpdesk resource - **£656.00** per day.

This would provide a theoretical fully absorbed margin of:

Project / Technical resource - Profit = 450: $450 / 750 = 60\%$ margin.

Operator / Helpdesk resource - Profit = 456: $456 / 656 = 69.5\%$ margin.

9.3 Merret Value Chain Analysis

The following costs have been summarized for a standard Merret implementation, reported by value chain category:

Inbound Logistics		Infrastructure Preparation		Solution Preparation	
Tasks	Days/Value	Tasks	Days	Tasks	Days
Consultancy	30	None		Interface Dev	35
Merret License Fee	326,280.00			Functional Dev	55
TOTAL COST	9,000.00	TOTAL COST		TOTAL COST	27,000.00
TOTAL VALUE	348,780.00	TOTAL VALUE		TOTAL VALUE	67,500.00

Implementation Services		Marketing / Sales		Service & Support	
Tasks	Days	Tasks	Days	Tasks	Days/Value
PM	50	Pre-sales Activity	15	1st Line Support	35
Merret Tech	65	Contract Agreement	10	Operational Support	35
Handover To Support	5			Merret License Fee @21%	95,760.00
General Merret Setup	38				
Interface Deployment	44				
Data Conversion	50				
Testing	75				
TOTAL COST	98,100.00	TOTAL COST	4,500.00	TOTAL COST	14,000.00
TOTAL VALUE	245,250.00	TOTAL VALUE		TOTAL VALUE	141,680.00

TOTAL COST:	152,600.00
TOTAL VALUE:	803,210.00

Table 20 – Merret Value Chain Analysis

9.4 Merret Financial Analysis

9.4.1 Merret Income & Development Costs

The following table shows income derived from Merret sales, plus the amount of R&D that was invested into the product, excluding any development income that can be attributed to customer contracts, therefore true R&D. The largest increase in R&D was a 2 year period, 2009/10 to 2010/11, where £613,500 was invested, representing 18.56% of total Merret sales in that period.

Year	Merret Sales £'s	R&D Expenditure £'s		R&D % Of Merret Sales	
		Total	Qualifying	Total	Qualifying
2007-08	1,499,385	154,800	118,200	10.3%	7.9%
2008-09	1,466,161	231,800	186,650	15.8%	12.7%
2009-10	1,093,500	250,350	166,500	22.9%	15.2%
2010-11	2,210,900	363,150	288,650	16.4%	13.1%
2011-12	2,714,000	192,500	146,050	7.1%	5.4%

Table 21 – Merret Income And R&D Totals Invested 2007/8 To 2011/2

Notes:

- R&D represent direct wage and contractor costs with no additional allocation of fixed overhead costs.
- Qualifying R&D is based upon the HMRC criteria i.e. pure R&D defined as employing new knowledge and significant improvement of software functionality as a consequence of technical innovation.
- All above amounts exclude chargeable development funded by clients.

9.4.2 Annuity Income Analysis

Merret impacts RA's income in 4 forms, these are:

- Project implementation fees.
- Software license costs.
- Deferred income – selected project implementation and support costs pro rata'd across 3 or 5 years.
- Software support.

RA offered a new deal structure in 2009, this allowed retailers to bundle all implementation and support costs into a single monthly charge, spread across a 3 or 5 year term, this type of deal was removed in 2011 when several clients went into administration and projected income was lost, e.g. Jane Norman. This led to increased sales, however the lower capital costs received at project implementation restricted Merret cashflow. Consider table 22, showing an analysis of Merret's annuity Income from 2008 to 2012 is:

Income Type	2008	2009	2010	2011	2012
Deferred Income	0.0	0.0	161.8	636.2	1,033.3
Software Support	363.5	394.9	343.4	352.7	350.6
TOTAL:	363.5	394.9	505.2	988.9	1,383.9

Table 22 – Merret Annuity Income 2008 to 2012

The 2008 figures show the income received from existing clients when GCS and RA were merged, the deferred figures show income that has been received for project and support costs from Merret 'bundled' deals. The overall rise in the total annuity income shows the impact of multiple projects being delivered, this level of income should be retained until 2014 when the deals come to an end, at this point the deferred income will be zero, but the software support costs will increase as new contracts (non-bundled) are agreed on an annual basis.

10 Appendix 3 – Helpdesk Service Implementation Costs

This analysis outlines the costing profile of a typical Helpdesk client, in this example the retailer has 61 stores and has requested a 1st Line Helpdesk service, a facilities management resource to manage property calls, a Client Account Manager to manage the provision of data between RA and the client, and 3 technical resources to provide desktop support, remote network management and IT security services.

The contract costs will be separated into a setup charge, costed at a day rate or a percentage of the annual charge, then an annual cost calculated on a per call basis or an annual cost for FTE – full time employee rates.

Setup Costs:

Component	Days	Rate	Cost
Project due diligence	10	750.00	750.00
1 st Line Helpdesk setup – mixed resource types	30		19,131.00
FM Helpdesk setup – 25% of annual charge			4,956.00
Technical setup – 25% of annual charge			38,750.00
Server, desktop & printer management Network management IT security			
Client Services management – 25% of annual charge			4,688.00
Store Development Services – with hardware maintainer	5	750.00	3,750.00
TOTAL:			78,775.00

Annual Contract Costs:

Component	Cost
1 st Line Helpdesk setup	
Annual call volume upto 8,800 calls, 61 stores @ £1,025.00	62,525.00
FM Helpdesk setup	
Annual call volume upto 2,000 calls	14,000.00
Annual support	
Server, desktop & printer management £60,000.00	
Network management £75,000.00	
IT security £40,000.00	155,000.00
Client Services management	
25% of FTE @ £75,000.00	18,750.00
TOTAL:	270,100.00

Table 23 – Helpdesk Implementation Costs

10.1 Helpdesk Service Value Chain Analysis

The following costs have been summarized for a standard Helpdesk implementation, reported by value chain category:

Inbound Logistics		Infrastructure Preparation		Implementation Services	
Tasks	Days	Tasks	Days	Tasks	Value
Consultancy	10	Network Connect	2	1 st Line Setup	13,227.00
Hardware		Sample Kit Setup	2	FM Helpdesk Setup	4,956.00
Software				Technical Setup	38,750.00
Training	5			Store Dev Setup	3,750.00
TOTAL COST	4,500.00	TOTAL COST	800.00	TOTAL COST	24,582.00
TOTAL VALUE	9,840.00	TOTAL VALUE	2,624.00	TOTAL VALUE	60,683.00

Marketing / Sales		Service & Support	
Tasks	Days	Tasks	Value
Pre-sales Activity	5	CAM Setup	4,688.00
Contract Agreement	2	Annuity Income	270,100.00
TOTAL COST	2,100.00	TOTAL COST	1,875.00
TOTAL VALUE		TOTAL VALUE	274,788.00

TOTAL COST:	33,857.00
TOTAL VALUE:	347,935.00

Table 24 – Helpdesk Service Value Chain Analysis

11 Appendix 4 – Interview Data

Interviews were held with IT representatives from two tier 2 retailers, Karen Millen and Cath Kidston, to analyse the activities required to open a new store in the Chinese market. This analysis will be used to understand the project implementation and supporting processes required to support this implementation process. The interviews were conducted on the 13th March 2013, with:

- Charlotte Ellis – Karen Millen Head of Multi-Channel Business Development
- Mike Padfield – Cath Kidston IT Director

11.1 Excerpts From Charlotte Ellis Interview – 13th March 2013

1 – What was the main driver for entering the Chinese market ?

- Increase in expected sales and an entrance into a new lucrative market.
- Already have a really strong franchise foothold in Hong Kong.
- Really strong business in GLF in Paris which is supposed to be a similar model to China, highest number of Chinese tourists in Europe – feedback from this market indicates a great opportunity for KM.
- Growth in middle class in Chinese market creates an opportunity for ‘bridge brands’ – bridge between high design (approx. \$1k per item and highstreet brand). Michael Kors is a top end bridge brand and they have been very successful.
- Big risk for KM as the Chinese market is very designer focused and this isn’t really KM’s area.
- Very elitist market, locals are put onto a waiting list e.g. in Prada for a handbag, whereas Westerners will get served immediately.
- Other highstreet brands e.g. Zara have entered the market and have been very successful, even though they are looked down on as a lower level brand (highstreet).
- KM believe they have a product that really works in China – many taxi’s in Beijing have an advert for tea, where the model is wearing a KM dress.
- Feedback from franchise in Macao, they are sending their smaller sizes to the market, and this is working well.

2 – What issues did you face in the opening of the store ?

- Legal and accounting were the major issue.
- Needed to be on the ground to understand the legal and compliance issues to be able to trade in China. Need a strong partnership with a local contact who could offer legal advice and who knew the market.
- Understand the order in which these steps need to be achieved.
- KM couldn’t apply for a retail license as they had already purchased a franchise license. Couldn’t transfer the license type until they had a lease they could use, this was again delayed impacting trading time.
- Importing stock – the prep was started 24 months before trading started, products were presented to the authorities and this highlighted a major issue with the fabrics and testing being used – this added cost and complexity. The product teams were the most impacted team by the move to China. The ROI is currently very low because they have to put these new processes into place, if they are selling a single garment or thousands.
- Regionalized differences between Shanghai and Beijing – need to learn lessons to reapply in Shanghai because the rules will be different again.
- Need to transition the relationship between Shaf and the new MD in China – if they remove this relationship then they will find it very difficult to restart.

3 – What support did you need you need from the IT team ?

- Looking at how they communicate with customers – very much looking at social media and how they launch a new store, moving away from more traditional ecommerce approach to social media.
- Kept very separate from UK teams:

- Logistics supply chain, working with the localized teams to manage changes to the IT system to allow for product to be moved around.
 - Localized language – person doing the till training couldn't speak the same version of Mandarin as the store team. The user manual that had been sent across was also in this language, which equally couldn't be read.
 - As a result KM have established a number of local translation relationships via the store manager. Adds high complexity – can't treat the country as a whole – this is regionalized.
- Overall IT spend was approx. £86k, needed to be below £100k. Included all hardware and interfacing etc. Wanted to spend enough money to have a scalable solution, even if they have still just built a single store.
 - IT development needs to focus on the lifecycle of the product, tracking it through all levels of the stock movements etc.
 - Finance and accounting was a nightmare, tax and income accounting was incredibly difficult – this is not completed and the outstanding work will need to be reviewed.
 - Haven't faced all of the operational issues due to the small launch that has been completed, need multi stores etc. to see all opportunities.

4 – How did you build the team – and communicate with the Chinese teams ?

- Did you have to have a different strategy ?
 - Managing the Toll teams – managed by an ex-pat who understood KM's requirements, the Chinese speakers were quite compliant on the phone, but were much stronger on email – they were more willing to say no or be more direct. We needed the conference call with email feedback to confirm the points that had been agreed.
 - UK conf call was for debate and agreement, then sign-off and move on. The Chinese team were in those calls for a notification of what was happening / communication – all agreements with the Chinese had to be formally agreed via email.
- What would you have done differently – definitely gone to market more to see what was happening on the ground.
 - Mistake made by telling Toll to box stock separately to go to store, until this was seen no-one understood the number of boxes that were being shipped around.
 - Also due to the small size of the store backoffice, stock was held in the Beijing hub, the business thought they needed daily replenishment, but there wasn't enough room, stock is currently being held in a shed.
 - Charlotte in future would manage this less closely – engage the workstream leader to manage in detail, not her micro managing.

5 – How did you select the partners to work with in China ?

- On-going relationship with Toll in the UK.
- Existing relationship with Shaf, he worked with many local partners, he pushed Toll and Island Pacific. Most decisions were already made.

6 – What cultural issues did you have to manage ?

- Wanting to please and not being direct – was a problem. However this had a positive slant, always wanted to please.
- You have to be very specific to get to the bottom of an answer, asking several direct question to get through the positive spin, to get to the real problem.
- Politics was an issue, the store team really respected people from the UK, others were ignored. For example a senior person from the UK store team was sent to support the opening, she worked with the store team but did not have a drink for x hours. The store manager had to ask her to have a drink of water, because the rest of the store team wouldn't drink until she had.

- The people sent to site had had no cultural training this was a major issue which was magnified in China.
- Several Chinese people were brought to the UK to attend the KM 'brand awareness training', this is very high energy and is all about the party atmosphere. They initially provided positive feedback, but when questioned further they confirmed that this approach simply wouldn't work in China. They managed from the stockroom out, not on the floor as a UK store manager would.
 - This means the customer wants to see the clothes on the shopfloor but buy a fresh item out of the packet in the stockroom – not have an item that someone else had tried on.

7 – What is your preferred approach to opening stores ?

- Franchise / concession / solus ?
- Very high investment to initially set up the solus side, the KM model in future will be Tier 1 cities having solus and concession stores, managed by KM team.
- GLF is expected to be a slow start (opening own shopping Mall) but will provide exclusivity.
- Opportunities in financial districts in Tier 2 cities (get access to growing middle class) to open with a partner company to reduce the required investment.

8 – How is IT support working (from 32 mins) ?

- Don't really know due to the complexity of linking together Mercatus, Toll and Island Pacific. Delivery receipts is a real problem.
- Chinese team not shouting to identify problems.
- Managed by Australian team, issues with time zone so UK having to attend calls at 8AM, not working well.

9 – General:

- To deliver on the store requirement they store need to sell volume, they are finding that customers want 1 to 1 attention and that they are selling single items. This will not give the volume they want, they want to sell the dress and belt that go with the bag, not just the bag.
- Where are you going next – looking at southern hemisphere e.g. Australia – counter seasonal model, South Africa franchise model, Panama franchise model, Canadian franchise model. China is still a major draw, really want to build brand awareness via social media, however they understand that they need physical sites to be taken seriously.
- Ecom method of working has been superseded by social media, KM are not going to launch the brand with email contact list as they normally would. If they come onto the website they will be pushed out to the social media links – this is almost the traditional method of contact.

Burberry have an iPad application for China, without even creating a website dedicated to the Chinese market, this is seen as not relevant.

11.2 Excerpts From Mike Padfield Interview – 13th March 2013

1 – What was the main driver for entering the Chinese market ?

- Major reason is expanding the brand – China considered a huge opportunity. Have working partnership operations in Japan and the Far East and they are getting great feedback on the brand identity.
- This is still a trial store, very small team in territory handling localized VM work, but again this is directed from the UK operations.

2 – What issues did you face in the opening of the store ?

- Very smooth transition, very aware of the need to use local people to help that setup process.
- Knew that all electrical components had to be 3C approved and certified, used their existing freight forwarding company to manage the movement of all product and supporting materials (IT / shopfit etc.) into market – they were specialists in this area.
- Seiko (freight forwarder)– based in HK / China and UK.
- Localized recommendation of a person in territory (Service 1) who was very cheap and did a great job. Having to work with people they had never met, managed via conf calls etc. For example the EPOS kit was installed for £70, support calls are paid on a time and materials basis, the last call managed only cost £40.
- Had a localized project manager who was on-site all the way through the implementation.
- Already had a hub in HK, high proportion of stock made in China, but the suppliers do not have an import license. As a result the stock is sent to the UK hub, split down and repackaged into retail stock that is shipped back into China, or UK, or Far East etc.
- Pricing based on local knowledge – market positioning.

3 – What support did you need you need from the IT team ?

- Wanted to work with Daisy for VPN link, but they had no local partner. Spoke to an international comms business but they came back with a very high quote. Eventually engaged the country manager to find local partner, remotely established a local ISDN line and this worked fine – created secure VPN, tunnel back to the UK. No performance issues etc.
- All EPOS solutions came from existing supplier – put onto new hardware, cost effective approach, various companies (Cegid / BTE etc.) could offer an OOB Asian option, but needed to use their merch backoffice – these were coming in at approx. £40-50k for a 4 till installation, eventually used their incumbent supplier and this came in at approx. £15k (Eurostop).
- May switch to a full blown MPLS in future – but this is still a 2 store trial.

4 – How did you build the team – and communicate with the Chinese teams ? How did you select the partners to work with in China ?

- Recommended shop fit team and localized PM appointed – based on reputation gained at another retailer in territory.
- Conference calls 3 way between PM, shopfit team and contractor – used Skype but really would have wanted a face to face conversation, unfortunately the budget did not stretch to this.

5 – What cultural issues did you have to manage ?

- Didn't experience many issues, the PM team used for shopbuild and the local PM sorted most issues, regular conf calls kept everyone upto speed.
- Staff retention is a real issue, the store manager accepted another job before he even started, no loyalty – affects training ability and retention of knowledge.
- No cultural or language issues – sent out a UK based person, local person did direct translation at the point of training. Created documentation with a screen shot in the middle, Chinese explanation on left, English commentary on the right. This is very easy to follow in store. Supplier gave screen shots, CK did all other work.

6 – What is your preferred approach to opening stores ? Franchise / concession / solus ?

- Have opted for owned solus stores as they can achieve a much higher margin than if Cath Kidston worked with a franchise partner.
- Tried to follow the UK process as far as possible, want the Chinese operation to be managed out of the UK as CK have such a small management team. All merch and IT support managed from the UK.

7 – How is IT support working ?

- Store managers are English speaking – if they are not available then the store calls the local HO for translation purposes. The time difference has not caused any issues to date, the biggest headache has been the constant changing of store managers (3 to date).
- May have to move to Chinese speaking support as they grow – not a current issue.

8 – General:

- CK also positioning themselves as a higher aspirational brand.
- Took a long time to find the right locations to open stores – have gone for the higher end shopping malls. Working with local estate agents and territory manager, also have an International Director who was locally responsible for choosing sites.
- Started in March 2012 to find IT products, opened the store in Jan 2013, didn't get visibility of the store until July 2012.
- Would have wanted a face to face with the store opening team, probably use Skype more often.
- In-store experience – social media growing rapidly – want to use text messaging, multimedia text marketing. Area manager suggests that 95% of people shopping in Cath Kidston will be using a smartphone, don't have twitter but do use an equivalent.
- Did splash campaigns, put Cath Kidston seat covers on many bicycles to help brand.
- Labeling is an on-going issue not yet resolved. Each product type has a multitude of labeling – before entering the market. This is complex – using their freight forwarded to manage this.
- Pushed products into market 3 months before go-live to resolve lots of these issues.
- Local area manager solved lots of issues – built local relationships (China country manager).