
Access from the University of Nottingham repository:
http://eprints.nottingham.ac.uk/28661/1/602803.pdf

Copyright and reuse:

The Nottingham ePrints service makes this work by researchers of the University of Nottingham available open access under the following conditions.

This article is made available under the University of Nottingham End User licence and may be reused according to the conditions of the licence. For more details see:
http://eprints.nottingham.ac.uk/end_user_agreement.pdf

For more information, please contact eprints@nottingham.ac.uk
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

Nottingham University Business School

Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: a Longitudinal Case Study

Paul Brereton Connor MSc

Thesis submitted to the University of Nottingham

for the Degree, Doctor of Philosophy

December 2012
Abstract

Organisational members need clearer comprehension about value's dynamic nature in a constantly changing networked ecosystem of resource integration and mutual service provision. This is so organisational pursuit of competitive advantage for business success is achievable through better stakeholder value propositions which customers especially value in-use. Empirical studies indicate customer perceptions of value are reasonably well documented, however the same cannot be said of knowledge about changes in customer perceived value where the paucity of research reflects its embryonic state.

This exploratory longitudinal case study in a major blue-chip company setting is the first known research design employing an idiographic interactive approach of three interpretive qualitative methods mixed with descriptive quantitative elements. The UK aerospace industry is considered to be appropriate to study the phenomenon of customer perceived value change, because of its characteristics i.e. periods of cyclical change, innovation, new technologies and its long-term relationship marketing nature.

Research findings highlight customer perceived value changes are determined idiosyncratically and phenomenologically by beneficiaries and manifested at the attribute level of service provision rather than at higher levels of consequences and values. Different macro-environmental and micro-environmental factors influence the organisational climate continuously albeit not as critical incidents having a direct impact on individual perception of value. Value constructs informed by organisational values and personal values did not change per se; however thematic recalibrations within each respondent's values system hierarchy were detected.

Exemplars responses reveal most increases or decreases in value change appear associated with changing positions and roles within the organisation for two individuals. Whereas the least change in value came from the remaining exemplar's supplier development role in providing stability and surety of supply. Key marketing implications are the surfacing and management of tacit customer perceived value change knowledge, facilitated through common language and leading to enhanced external and internal collaborative relationships.
Acknowledgments

There are many reasons why people decide to do a PhD. My reason was that I had a thirst for learning following successful completion of my MSc in Marketing Management in 1997. I duly contacted Professor Caroline Tynan at the University of Nottingham, hopefully to be under her supervision, to explore the possibility of starting PhD study based on customer value having read the quotation “Airplanes are interesting toys but of no value”. Soon after the meeting, which also included Professor Michael Baker, I attended Nottingham University Business School on my first day in 2003 and met Dr Heidi Winklhofer, who became my co-supervisor. I remember the feeling of elation and drew on the words that William Prince of Orange used to address his troops before the Battle of the Boyne in 1690, “Let ambition fire thy mind”. Nine years later, after a number of fantastic highs and some tragic lows in my personal and business life, I was desperately shouting out the other Ulster battle cry of “No Surrender”. I am glad to say I did not.

However I was not the only one shouting that phrase and I pay tribute to each and every one of family members, friends and colleagues who encouraged me to keep going. First and foremost to those who are no longer with me but meant and still mean so much - my lovely Mum and Graham, my father-in-law. Next I would like to say a very special thank you to my father, George, who has always encouraged me to be better at everything I do. A big thank you also goes to my daughters, Amy and Catherine, brothers, George and Mark, son-in-law Dale, and all the rest of the Connor, Kelsey and Smith families.

Thanks too to close friends Andy Callaghan, Paul Copping, Wes Ewing and Wladimir Kovacic for being constant sounding boards, challengers, supporters and all round good chops with lovely families. Thanks go also to marketing education based colleagues Andrew Davison and Andy Young for providing similar support but with more beer. A special thank you goes to Mike Lloyd for providing access to Rolls-Royce plc to conduct the case study setting research. I would like to thank Tanya Cheetham and Pamela Baggaley who looked after me when on site but in particular salvaged the day when access was nearly lost after Mike retired from the company. Thanks too to all the respondents from Rolls-Royce plc who gladly gave of their precious time over the 18 months of research.

I am grateful to fellow students and staff at the University of Nottingham for helping me with my studies during my time there; in particular I would like to say thanks to Andrea Tomlinson, not only for her support but also her compassion towards me when trying to deal with the grief of losing Mum. Naturally it is very hard to put into words how very much indebted I am to Caroline and Heidi who have truly had the patience of saints and could have given up on me several times, but stayed and kept encouraging me to finish. Finally, but not least, I really could not have done this without the love and dedication of my lovely Rachel who has
been fully supportive and given up so much to make sure I did not surrender - I love you.

Contents

1 Research Focus 1

1.1 Introduction 1

1.2 Research Background and Context 1

1.3 Research Purpose and Motivation 4

1.3.1 Theoretical Departure & Scope 4

1.3.2 Objectives and Research Questions 5

1.3.3 Considerations, Boundaries and Limitations 6

1.3.4 Research Setting 7

1.3.5 Researcher's Knowledge Position 9

1.3.6 Relevance and Contribution 10

1.4 Thesis Chapter Structure 12

2 Theoretical Foundations 14

2.1 Introduction 14

2.2 Conceptualising Value 14

2.2.1 Values and Value 14

2.2.2 Value Construct in Marketing 21

2.3 Conceptualising Marketing 28

2.3.1 The Changing Emphasis of Marketing 28

2.3.2 The Emerging Service-Dominant Logic of Marketing 32

2.4 Conceptualising Customer Value 36

2.4.1 Competing theories of Customer Value 36

2.4.2 Customer Perceptions of Value 45

2.4.3 Business-to-Business Customer Perceived Value 55

2.5 Conceptualising Change 59

2.5.1 Change and Organisational Development 59

2.5.2 Drivers, Initiators and Triggers of Change 60

2.5.3 Changes in Organisational Business Processes 64

2.5.4 Impact of Changes on Customer Choices 76

2.6 Conceptualising Business-to-Business Customer Perceived Value Change 82

2.6.1 Critical Review of Existing Research 82
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.6.2 Summary of the Limitations of Existing Research</td>
<td>95</td>
</tr>
<tr>
<td>2.6.3 Business-to-Business Customer Perceived Value Field of Vision</td>
<td>97</td>
</tr>
<tr>
<td>2.6.4 Conceptual Framework</td>
<td>99</td>
</tr>
<tr>
<td>2.6.5 Research Questions</td>
<td>104</td>
</tr>
<tr>
<td>3 Research Design</td>
<td>106</td>
</tr>
<tr>
<td>3.1 Introduction</td>
<td>106</td>
</tr>
<tr>
<td>3.2 Philosophical Foundations</td>
<td>106</td>
</tr>
<tr>
<td>3.2.1 Social Science Research Paradigms</td>
<td>106</td>
</tr>
<tr>
<td>3.2.2 Research Paradigms in Marketing</td>
<td>111</td>
</tr>
<tr>
<td>3.2.3 Researcher's Paradigm</td>
<td>113</td>
</tr>
<tr>
<td>3.3 Strategy of Enquiry</td>
<td>117</td>
</tr>
<tr>
<td>3.3.1 Justification for an Interpretivist Approach</td>
<td>117</td>
</tr>
<tr>
<td>3.3.2 Justification for a Case Study Approach</td>
<td>121</td>
</tr>
<tr>
<td>3.3.3 Justification for Methods of Investigation</td>
<td>124</td>
</tr>
<tr>
<td>3.3.4 Critical Incident Technique</td>
<td>126</td>
</tr>
<tr>
<td>3.3.5 Repertory Grid Technique</td>
<td>131</td>
</tr>
<tr>
<td>3.3.6 Interpretative Phenomenological Analysis</td>
<td>136</td>
</tr>
<tr>
<td>3.4 Practical Considerations and Aspects</td>
<td>139</td>
</tr>
<tr>
<td>3.4.1 Pre-understanding Phase</td>
<td>139</td>
</tr>
<tr>
<td>3.4.2 Case Study Setting Suitability</td>
<td>139</td>
</tr>
<tr>
<td>3.4.3 Negotiating Access</td>
<td>146</td>
</tr>
<tr>
<td>3.4.4 Selection of Respondents</td>
<td>151</td>
</tr>
<tr>
<td>3.4.5 Case Study Protocol</td>
<td>153</td>
</tr>
<tr>
<td>3.5 Conducting the Data Collection and Analysis</td>
<td>154</td>
</tr>
<tr>
<td>3.5.1 Interviewing Respondents</td>
<td>154</td>
</tr>
<tr>
<td>3.5.2 Framework and Process</td>
<td>157</td>
</tr>
<tr>
<td>3.5.3 Data Analysis</td>
<td>168</td>
</tr>
<tr>
<td>4 Empirical Context</td>
<td>171</td>
</tr>
<tr>
<td>4.1 Introduction</td>
<td>171</td>
</tr>
<tr>
<td>4.2 Global Civil Aerospace Market</td>
<td>171</td>
</tr>
<tr>
<td>4.2.1 Overview</td>
<td>171</td>
</tr>
<tr>
<td>4.2.2 Size and characteristics</td>
<td>172</td>
</tr>
<tr>
<td>4.2.3 Civil aerospace market forces</td>
<td>176</td>
</tr>
<tr>
<td>Section</td>
<td>Page</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>4.2.4 Issues and trends</td>
<td>178</td>
</tr>
<tr>
<td>4.3 United Kingdom’s Aerospace Industry</td>
<td>181</td>
</tr>
<tr>
<td>4.4 Rolls-Royce plc</td>
<td>181</td>
</tr>
<tr>
<td>4.4.1 Profile</td>
<td>181</td>
</tr>
<tr>
<td>4.4.2 Market position</td>
<td>183</td>
</tr>
<tr>
<td>4.4.3 Values and strategy</td>
<td>185</td>
</tr>
<tr>
<td>4.4.4 Potential Critical Incidents identified by the Researcher</td>
<td>187</td>
</tr>
<tr>
<td>5 Case Study Findings and Analysis</td>
<td>193</td>
</tr>
<tr>
<td>5.1 Introduction</td>
<td>193</td>
</tr>
<tr>
<td>5.2 Generic Observations from Longitudinal Panel</td>
<td>193</td>
</tr>
<tr>
<td>5.3 Exemplar Embedded Units of Analysis</td>
<td>199</td>
</tr>
<tr>
<td>5.4 Respondent RR001</td>
<td>200</td>
</tr>
<tr>
<td>5.4.1 Conceptualisation of Customer Perceived Value</td>
<td>200</td>
</tr>
<tr>
<td>5.4.2 Customer Perceived Value - Change in Value Attributes</td>
<td>207</td>
</tr>
<tr>
<td>5.4.3 Influences on Customer Perceived Value</td>
<td>209</td>
</tr>
<tr>
<td>5.4.4 Summary</td>
<td>224</td>
</tr>
<tr>
<td>5.5 Respondent RR003</td>
<td>227</td>
</tr>
<tr>
<td>5.5.1 Customer Perceived Value - Change in Value Attributes</td>
<td>233</td>
</tr>
<tr>
<td>5.5.2 Influences on Customer Perceived Value</td>
<td>238</td>
</tr>
<tr>
<td>5.5.3 Summary</td>
<td>250</td>
</tr>
<tr>
<td>5.6 Respondent RR005</td>
<td>254</td>
</tr>
<tr>
<td>5.6.1 Conceptualisation of Customer Perceived Value</td>
<td>255</td>
</tr>
<tr>
<td>5.6.2 Customer Perceived Value - Change in Value Attributes</td>
<td>259</td>
</tr>
<tr>
<td>5.6.3 Influences on Customer Perceived Value</td>
<td>260</td>
</tr>
<tr>
<td>5.6.4 Summary</td>
<td>274</td>
</tr>
<tr>
<td>5.7 Summary</td>
<td>278</td>
</tr>
<tr>
<td>6 Discussion</td>
<td>281</td>
</tr>
<tr>
<td>6.1 Introduction</td>
<td>281</td>
</tr>
<tr>
<td>6.2 Theoretical Implications</td>
<td>283</td>
</tr>
<tr>
<td>6.2.1 Difficulties in Perceiving Customer Value</td>
<td>283</td>
</tr>
<tr>
<td>6.2.2 Issues in Conceptualising Customer Perceived Value</td>
<td>286</td>
</tr>
<tr>
<td>6.2.3 Uncertainty of Causal Links in Customer Perceived Value Changes</td>
<td>290</td>
</tr>
<tr>
<td>6.2.4 Revised Conceptual Framework</td>
<td>294</td>
</tr>
</tbody>
</table>
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

6.3 Managerial Implications 295
   6.3.1 Customer Value Knowledge Management 297
   6.3.2 Using Effective Communication 299
   6.3.3 Revisiting and Implementing Market Orientation 302

6.4 Methodological Implications 305

7 Conclusion 308
   7.1 Introduction 308
   7.2 Answering the Research Questions 308
   7.3 Trustworthiness of the Research 315
   7.4 Researcher’s Reflexivity 317
   7.5 Limitations of the Research 321
   7.6 Future Research Directions 324
   7.7 Final Thoughts 327

References 329

Appendices 364
List of Figures

Figure 1: Customer Desired Value Change 85
Figure 2: Customer Value Tension and Competing Values 93
Figure 3: Five Modes of Value Status Change 94
Figure 4: Customer Perceived Value Field of Vision 99
Figure 5: Conceptual Framework of Customer Perceived Value Change Process 104
Figure 6: Three Component Questions of Customer Perceived Value Change 105
Figure 7: Rolls-Royce plc’s position in the value network 143
Figure 8: Aggregation of Customer Perceived Value 150
Figure 9: Operational Influences on Customer Perceived Value 151
Figure 10: Case Study Panel Respondents 153
Figure 11: Principal Methods of Investigation 158
Figure 12: Illustrative extract of Critical Incident Technique from Case Study Protocol 163
Figure 13: Rolls-Royce strategy 185
Figure 14: Rolls-Royce plc mission, values and ethics 186
Figure 15: Managing growth through a decade of challenges 189
Figure 16: RR001 Mind-Map of Terminal and Instrumental Value @ Mar 2009 218
Figure 17: RR001 Mind-Map of Terminal and Instrumental Value @ Sep 2010 218
Figure 18: RR001 Impact of value system changes on CPV 221
Figure 19: RR003 Impact of value system changes on CPV 248
Figure 20: RR005 Impact of value system changes on CPV 272
Figure 21: Revised Conceptual CPV Change Process 295
List of Tables

Table 1: Service-Dominant Logic Foundational Premises 35
Table 2: Perceived Value Definitions in the Marketing Literature 49
Table 3: Theory Building Status of Business-to-Business Customer Value Change 83
Table 4: Researcher’s Philosophical Paradigm Position 116
Table 5: Qualitative Research Categories 120
Table 6: Personal Construct Theory’s Fundamental Postulate and Corollaries 132
Table 7: Enhanced Research Setting Pre-understanding and Contextualisation 148
Table 8: Rolls-Royce Organisational Values 165
Table 9: Value attributes additions made by respondents 194
Table 10: Average rating of CPV variables by respondent panel at phase 3 195
Table 11: Summary of Changes in Customer Perceived Value 198
Table 12: RR001 Conceptualisation of Customer Perceived Value 201
Table 13: RR001 Value Attribute Changes 207
Table 14: RR001 Individual Terminal Values 214
Table 15: RR001 Individual Value Construct Valence 215
Table 16: RR001 Organisational Value Construct Valence 216
Table 17: RR001 Organisational & Personal Terminal Values 219
Table 18: RR001 Organisational and Personal Instrumental Values 220
Table 19: RR003 Conceptualisation of Customer Perceived Value 229
Table 20: RR003 Value Attribute Changes 235
Table 21: RR003 Individual Terminal Values 242
Table 22: RR003 Individual Value Construct Valence 243
Table 23: RR003 Organisational Value Construct Valence 244
Table 24: RR003 Organisational and Personal Instrumental Values 246
Table 25: RR005 Conceptualisation of Customer Perceived Value

Table 26: RR005 Value Attribute Changes

Table 27: RR005 Individual Terminal Values

Table 28: RR005 Individual Value Construct Valence

Table 29: Organisational Value Construct Valence

Table 30: RR005 Organisational and Personal Terminal Values

Table 31: RR005 Organisational and Personal Instrumental Values

Table 32: Levels of conceptualising and operationalising value within organisations

Table 33: Trustworthiness of the study and findings: interpretative criteria
List of Appendices

1. Competence and Behavioural Instrumental Values 365
2. Case Study Protocol 367
3. Customer Perceived Value Questionnaire 374
4. Interview Schedule Request Form 377
5. Respondents’ Briefing Document 378
6. Sample Repertory Grid (RR001) 381
7. Case Respondents’ Values Mindmaps 383
8. Sample Transcription 396
9. Communicating customer partnerships 410
1 Research Focus

1.1 Introduction

An outline justification for and a statement of the motivation in researching customer perceived value change is provided following a brief examination of the substantive topic’s significance, sourced from the literature. The research’s theoretical aims, methodological aims and central questions are outlined from the perspective of marketing’s domain. A description of the research context and setting, a statement of the researcher’s knowledge claim position and an outline of the remaining chapters complete the chapter.

1.2 Research Background and Context

Covering almost every area of human activity the concept of ‘value’, in its most fundamental sense, i.e. the fair, proper and intrinsic worth of something, or benefits realised in ownership and/or usage, appears to be all around. If people are asked, ‘what is value?’, they are usually familiar with its meaning from their perspective and will be able to proffer an answer in relation to their buying of a product, using a service, being in a relationship, having an experience, or formulating an idea, etc.

Value seemingly governs not only an individual’s activities but also that person’s very being as a controlling and predictive instrument in terms of survival. Value is therefore an aid to low or high involvement decision-making, and can also be
viewed both as a means to an end and for the enrichment of life in an endless searching for substance, and as the ends themselves. Yet even the most advanced academic researchers and philosophers find it difficult to agree on a successful operationalisation of value concepts – how to define them concisely, measure them precisely or be able to identify changes in value as time passes. It appears that the more academic researchers try to measure value or philosophers ponder the nature of ‘value’, the less obvious the answers to its operationalisation become. This may be because of a range of conceptual obstacles, methodological problems and measurement shortcomings (Gallarza et al, 2011).

Value continues to remain baffling in its complexity therefore as the human mind tries to make sense of the large amount of data emerging from an individual’s world view of value in a framework of expectations, experience and knowledge. No matter how humans gauge different types of phenomena they tend to be measured by arbitrary standards of comparison, and there is no global unanimity. It seems likely, therefore, that the measurement of value cannot be some utopian, global set of unanimous criteria that can be applied objectively in all circumstances. Neither, however, can measurement of value be seen at the other end of the scale simplistically as just profit or loss in a ‘bottom line’ economic view of value.

Value is subjective because it allows individuals to have the selective ability to function effectively, efficiently and with economy in a given environment. Therefore all that value is believed to be is unlikely to be complete. Since different environments are always subject to change too, then the realisation of value is
either a constant process of everyday, continuous adaptation to incremental challenges or radical responses to critical incident challenges or indeed both. In addition as both aspects of challenge can be either stepping stones or stumbling blocks, depending on how an individual perceives them, then any decision-making is hard unless individuals know what their values are and how they in turn determine what value is.

Within the business-to-business environment it is claimed that interconnected entities are evolving into a constellation of value-creating service systems, where each organisation renders service for itself and others (Smith, 2012). Service, the application of operant resources as the basis for all exchange, is at the heart of this boundary-shifting, new approach. It assumes the co-creation of value across a complex network of stakeholders, particularly customers and suppliers, where all economic and social actors are ‘resource integrators’, and value is always idiosyncratically and phenomenologically determined by the beneficiary (Vargo & Lusch, 2011).

However, no conceptualisation or measurement of the co-creation of value construct has yet gained universal acceptance, as even knowledge of customer value has not reached full closure, despite 30 years of attempted refinement, and customer perceived value change in particular is deemed to be in its infancy as it has received only scant attention (Smith & Colgate, 2007; Lapierre et al, 2008; Sánchez-Fernandez et al, 2009; Gallarza et al, 2011).
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

1.3 Research Purpose and Motivation

1.3.1 Theoretical Departure & Scope

Utilising the extant value literature, it appears most customer value research focuses on the buyer-seller dyad when investigating how a supplier's selection and retention depends on it successfully meeting a customer's changing perceptions of value. However, such a narrow view of researching customer value may be contributing to two substantial, unresolved issues in the continuing attempts to conceptualise and operationalise customer value.

First, rather than relying on the perspectives of respondents that comprise the traditional purchasing and sales functions in the buyer-seller dyad, it would be more beneficial to have a more comprehensive understanding of customer perceived value by taking into consideration a more diverse, multi-functional perspective from other individual, internal stakeholders within an organisation. This is because those individuals also have a role as customers in determining anticipated, desired or expected value and perhaps, more importantly, the evaluation or judgement of received value, or value-in-use, for that person's organisation.

Second, an understanding of 'how' and 'why' customers' perceptions of value may or may not change following the impact of any external or internal environment influences on an organisation is paramount in ensuring that sought-after benefits
remain at least current and at best cover the future service provision requirements. A new understanding is required, therefore, to facilitate better co-creation of value with stakeholders and in particular suppliers, as current research shows little knowledge of customers’ preconceptions of value before they engage in co-creating value (Woodruff & Flint, 2006).

1.3.2 Objectives and Research Questions

The overall substantive objective of this research is a better understanding of business-to-business customer perceived value change. More specifically the objective is to make a contribution to knowledge about the dynamic nature of customer perceived value change through an investigation of ‘why and ‘how’ customers change what they value, by exploring the differences between individuals in terms of their value orientation and different modes of value change. Value orientation signifies the individual’s beliefs or feeling about value (Kluckhohn, 1951). The five modes of change, shown in Figure 3, page 94, are: subscription, redistribution, rescaling, redeployment and restandardisation (Rescher, 1967).

It is anticipated that any generated theory should facilitate better predictions of the timing and likelihood of changes in value, rather than simply ignoring or second-guessing them, thus facilitating better customer relationship management throughout the industry supply chain (Palmer & Hartley, 2007; Flint, 2004; 2006).

The theoretical objective is therefore to explore customer perceived value change using the ‘three components of change’ framework covering the content, context
and process of change (Pettigrew & Whipp, 1991). Three research questions are thus posited to guide and frame the empirical investigation. The first question is how does an individual conceptualise customer perceived value, be it personally or in an organisational environment? The second question is why does an individual change their conceptualisation of customer perceived value because of any external or internal macro, meso or micro environmental initiators of change? The third question is how does an individual change their conceptualisation of customer perceived value through proactively anticipating, by reacting immediately or after a period of reflection to the impact of changes?

The methodological objective is therefore to then design a small-scale, longitudinal investigation utilising appropriate qualitative and quantitative methods which will gather and measure the changes in perceptions of value over time. The panel of respondents will consist of a number of purposely selected individuals who have the responsibility for assessing value-in-use in their capacity of being ‘the customer’ for their organisation’s suppliers.

1.3.3 Considerations, Boundaries and Limitations

The focal aspect of this research regards conceptualisation, definition and measurement of customer perceived value, and more specifically changes in customer perceived value as a complex phenomenon with alternative interpretations influenced by a range of different disciplines, e.g. strategy, economics, psychology, finance and marketing. However, consideration of a number of key factors needs to be taken into account that may not make it so
straightforward in identifying which aspects of the research's central questions should be investigated in detail, or which theoretical framework, methodology and methods should be chosen.

One of these factors is the alternative approaches to the theory of organisations i.e. the neoclassical production function view; behavioural decision-making process view; contracting solution of transaction costs and agency theory view; resource-based view and value management based view (Becerra, 2009). Such different approaches give rise to the many reasons why organisations exist, and therefore, potentially, influence different perspectives on how each one manages the co-creation of value with its customers and other stakeholders within its organisational and network boundaries, and the available resources at its disposal, whilst interacting or even collaborating with competitors.

Another key factor is the role of corporate culture of the organisation itself in terms of its beliefs, purpose, how it operates and the degree of congruence between an individual's values and the values of the organisation. Furthermore, the application of interrelated, interdisciplinary, cross-functional business processes and the impact of interpersonal relationships and interactions also need to be taken consideration (Narver et al, 2004; Ford 1997; Lindgreen & Wynstra, 2005).

1.3.4 Research Setting

The aerospace industry is an appropriate industry in which to study the phenomenon of customer perceived value change because of its characteristics of
periods of cyclical change, innovation, new technologies and its long-term relationship marketing nature (Doganis, 2006). End-users’ i.e. passengers, airlines and prime platform providers changes in perceived value subsequently impact on manufacturing organisations endeavouring to satisfy the derived demand of intermediary customers’ expectations in the different tiers in the aerospace industry.

The aerospace industry also provides several examples of an innovative response to managing better levels of performance for manufacturing organisations, particularly those experiencing competitive, commoditised market maturity and resultant low margin returns for their products. The innovative response is termed ‘service infusion’, where the original equipment manufacturer’s product is combined with various forms of service provision - be they incremental or through quantum leaps - which are then offered as complete packages (Brax, 2005; Neely, 2008; Kowalkowski et al, 2012). Such service-infused offerings are either the results of new customer demands, or are attempts by manufacturers to improve the financial condition of the organisation, differentiating themselves by sustaining or enhancing their competitive edge whilst also securing customer loyalty through generating superior value for their customers (Karlsson, 2007; Martinez et al, 2010; Smith et al, 2012).

Service infusion thus provides the organisation with novel ways of providing value-in-use, service-driven manufacturing for its stakeholders, and competitive advantage for itself in what appears to be a service-dominant logic mind set (Payne
A good exemplar of this in the aerospace industry is Rolls-Royce plc, which is currently going through a product-service process transition of moving from purely manufacturing and selling aviation gas turbines along with spare parts, i.e. products to airframe manufacturers, to selling ‘Power-by-the-Hour™’ or ‘TotalCare’ solution provision packages to airlines (Payne et al, 2007; Bessant et al, 2008; Teece, 2010; MacDonald et al, 2009). TotalCare packages include services such as predictive maintenance planning and engine health information, with support provided at dollar per flying hour basis, transferring risk back to the manufacturer.

1.3.5 Researcher’s Knowledge Position

A researcher’s personality, philosophical paradigm and pre-understanding or insights into the specific research question and context are key research instruments, particularly as a researcher is rarely a neutral bystander (Gummesson, 2000; Littler et al, 2003). It is important, therefore, for researchers to recognize and understand themselves as best they can in dealing with the conceptual issues and technical aspects in the process of thorough enquiry and rigorous investigation, especially as there are many philosophy definitions and as many different philosophical paradigms as definitions (Hughes & Sharrock, 1997).

The researcher’s philosophical paradigm is a predominantly inductive, constructionist, alternativism knowledge claim position, with an appreciation of the elements of post-positivist and pragmatist positions (Morgan & Smircich, 1980; Cresswell, 2003). Consequently the researcher is comfortable in adopting a multi-
paradigm perspective approach using both qualitative and quantitative methods. Such an approach aids exploration of particularly complex and paradoxical phenomena by helping theorists employ disparate theoretical perspectives (Lewis & Grimes, 1999).

Regarding pre-understanding of the research questions and context, the researcher has long-standing interest and personal experience of marketing issues in the aerospace industry. This has been accumulated through seven years’ employment with Rolls-Royce plc and twenty-four years as managing director of his own strategic marketing consultancy, assisting some of the world’s leading companies with interests in aerospace and other manufacturing sectors. Full professional membership of the UK Chartered Institute of Marketing, the UK Academy of Marketing and the UK Market Research Society also leads the researcher to believe that he possesses the knowledge, skills and personal attributes in professional ability and competency terms to undertake academic research in a management discipline (Easterby-Smith et al, 2008). The attainment of an MSc in Marketing Management with distinction, with a dissertation, “Overcoming the Hurdles to Higher Levels of Marketing Effectiveness amongst Companies in the UK Aerospace Industry”, has led to the publication of two peer-reviewed papers in academic journals (Connor & Tynan, 1999; Connor, 2001).

1.3.6 Relevance and Contribution

Whilst empirical studies show that customer perceptions of value are researched and documented, the same cannot be said when it comes to knowledge about
changes in customer perceived value. Consequently the decision to research this phenomenon is venturing on to new ground through the introduction of concepts completely at variance with most of the beliefs on value change that had largely been established. What little customer value change literature exists is centred on customers’ *desired* value change, i.e. what value is required in the future. This appears to be because the actual process of valuing, i.e. using the moderating impact of individual values and organisational values in order to determine what value is and has become, appears to be a largely neglected area in need of research. This study, an exploratory, idiographic research design using an interactive approach of interpretive, qualitative elements mixed with descriptive, quantitative elements, is the first known initial step in addressing that need.

It is imperative for marketers in supplier organisations to know what value means for their customers, so that value propositions they make to those customers can be crafted more accurately and competitively, rather than being second-guessed. If suppliers can successfully keep to the promises they make in their value propositions so that value fulfilment is realised for and recognised by the beneficiary, then retention as a supplier is potentially deemed to be more achievable.

This qualitative, longitudinal research study, which used the novel combination of three research methods, i.e. repertory grid technique, critical incident technique and interpretative phenomenological analysis, has provided the first, ‘real time’ contribution towards a more comprehensive insight and understanding of the
individual differences in customer perceived value change. Furthermore, the output of the research informs and is of use to both academic researchers and practising managers.

1.4 Thesis Chapter Structure

Chapter Two contains a critical evaluation of the extant literature to ‘frame’ what is currently known about customer perceived value change. Examination of the argument augmentation of people who are conceptualising, researching and advocating the importance of further research into the construct is considered in order to expose research deficiencies and limitations. A conceptual framework is proposed to capture the essence of customer perceived value in a business-to-business context and underpin an argument for why and how the construct changes.

Chapter Three provides a thorough account of the research design for the empirical study regarding procedures and protocols for data collection, data recording, data analysis and interpretation. A statement of the philosophical approach based on the researcher’s knowledge paradigm and position is given and the strategy of enquiry, i.e. methodology and the specific methods employed in conducting the research is presented and defended.

Chapter Four provides the empirical context of the global aerospace industry and the importance of participation for the United Kingdom’s economic well-being and
future. More specifically, the profile of Rolls-Royce, the case setting company, is provided to facilitate understanding of the research problem, research questions and the reading of subsequent chapters.

Chapter Five sees presentation of the research findings together with an explanation of their significance after conducting their re-examination in a reflective manner. The outcome is a suggestion for explanatory and tentative models of customer perceived value and customer perceived value change.

Chapter Six summarises and discusses the research contribution by bringing exploratory, empirically generated theory from Chapter Five together with theoretical findings from literature in Chapter Two. The outcome is a refined conceptual model and definition of customer perceived value and foundational premises for customer perceived value change.

Chapter Seven presents conclusions, including trustworthiness criteria, acknowledgement of the study’s limitations and suggestions of suitable areas for further research.
2 Theoretical Foundations

2.1 Introduction

The ‘opening out’ design of PhD research is adopted to explore and develop new and refined theoretical interpretations of customer perceived value change. Drawing on the extant marketing, organisation development and value theory domains, a deliberately succinct review of the immediate past progress and identification of the future directions of customer value is conducted before a specific critical evaluation of the analysis and arguments of key customer perceived value change conceptual and empirical research. Identification of resultant deficiencies, limitations and gaps of existing research thus provide the conceptual framework for designing and framing of this research study’s objectives and research questions into ‘why’ and ‘how’ customers change what they perceive value to be to them.

2.2 Conceptualising Value

2.2.1 Values and Value

It is imperative to have a clearer meaning of ‘value’ because it is often mistakenly used synonymously with values, attitudes, beliefs, norms and traits (Hitlin & Piliavin, 2004). Beliefs are assumptions about the probability that some object, situation or event exists and has certain characteristics. Attitudes, comprising a

---

1 The advantage of this research design, given the qualitative nature of the research, is that the brief discussion of the most recent and relevant literature allows readers to make contact with the original work much sooner than the traditional ‘focus-down’ approach. Consequently readers encounter the author’s views on previous research after establishing credentials as a serious researcher resulting in more grounded criticisms and suggestions (Dunleavy, 2003).
number of important dimensions, are concerned with negative or positive feelings towards specific objects, situations and events, and are fundamental influencing processes or systems whereby the individual orders his environment and behaviour based on any combined effect of beliefs and values (Kelvin, 1969). Traits are enduring dispositions conceptualised as fixed aspects of personality (Roccas et al, 2002). However, most of the confusion surrounding value occurs because of a failure to note the important distinction between values and value even though both are an integral part of daily life (Agle & Caldwell, 1999; Ramsay, 2005).

'Values' is understood as a verb, adjective or substantive noun and is one of the great words. Like others, such as science, religion, art, morality, philosophy, etc, its meaning is multiple and complex, ambiguous, further complicated by numerous interpretations, biases and emphases, or an insufficient consideration of other definitions (Morris, 1956; Najder, 1975; Huber et al, 2001; Graeber, 2001). This is because values are conflated with other social psychological phenomena along with historical and cultural variability in their content (Hitlin & Piliavin, 2004).

Values, in general, form at an early age (Massey, 1979) and are relatively enduring end states about what is good and bad, what is 'important in life' (Dewey, 1922), anything of 'interest' (Perry, 1954), 'ways to live' (Morris, 1956), 'desire' (Kluckhohn, 1951; Parker, 1957), 'preference' (Pepper, 1958) or 'being useful' (Hornby, 2000). Values are subjective evaluative beliefs forming an underlying framework guiding an individual's construction of the world and orientation within it (Marini, 2000; Palmer & Hartley, 2007, Mattila, 2008), serving as standards for
judging one’s own and others’ behaviour (Hitlin & Piliavin, 2004). Values can therefore be thought of as practical instrumentalities aiding the conducting of life, where their pragmatic aspect lies in the provision of a thought tool in order to achieve satisfying life. By contrast their idealistic aspect enables the achievement of meaningful life (Rescher, 1993).

Although values are believed substantially to influence the behavioural responses of individuals (Rokeach, 1973), and ten motivational, consumer values and lifestyles - VALS - are claimed to be recognised in approximately 70 cultures around the world (Schwartz, 1994), there continues to be a conspicuous lack of agreement on what values are, how they are conceptualised, defined, measured and how they influence individuals (Meglino & Ravlin, 1998; Hitlin & Piliavin, 2004).

A major part of this lack of agreement is considered to be caused by the lack of distinction between three different states: espoused or professed values in terms of what individuals say their values are; felt or in-use values in terms of what an individual actually does value; and real or appropriate values in terms of what the reasonable bystander would think values should be on the basis of what is an individual’s best interest (Rescher, 1993; Meglino & Ravlin, 1998). It is further complicated by three different value interests: what individuals consider their values to be at present; what individuals will regard as values when the time comes; and what individuals’ values would be if individuals knew more, deliberated more carefully and managed to make certain changes personally or in social entities (Rescher, 1993).
Values transcend specific situations guiding action, interaction and selection of behaviour, thus playing an important role in an individual’s consumption activities since purchasing goods, services and experiences help consumers to attain value-related goals (Schwartz & Bilsky, 1987). A person’s, group’s or society’s beliefs guide the behaviour of an individual, organisation or culture, based on a number of competing values that are in constant tension and ranked on relative importance in a hierarchy (Rokeach, 1973; Beckett & Maynard, 2005). A hierarchy of values constitutes a value system linked together, forming explanations and predictions in how individuals and groups construe their world and make decisions about their life, consumption and relationships, thus providing a more complete way of looking at the value concept (Kelly, 1955; Woodruff & Flint, 2003).

A person’s value hierarchy is subject to the important distinction between core or terminal values and peripheral or instrumental values (Rokeach, 1973; Collins & Porras, 1994). Terminal or core values are desired end states of existence, usually expressed as nouns, that are mostly universal and enduring regardless of the external environment, competitive pressures or management fads e.g. wisdom, peace, equality (Rokeach, 1973; de Chernatony & Harris, 2006). Instrumental values are the behavioural modes of conduct, usually expressed as adjectives, as the means to achieving an end state, and are more likely to change over time e.g. ambitious, forgiving (Rokeach & Ball-Rokeach, 1989; Solomon et al, 2002).

*...an enduring organisation of beliefs concerning preferable modes of conduct or end-state of existence along a continuum of relative importance* Rokeach (1973, p.5)
Even though individuals may not necessarily be consciously aware of the values they use in guiding their decisions and actions, instrumental values are often used for rational self-justification to protect self-esteem (Rokeach, 1973). Whilst an individual has a relatively small number of core or terminal values the same individual may have between thirty and forty instrumental values which are the standards of importance used to pursue and means of fulfilling terminal values (Hultman & Gellerman, 2002).

Instrumental values can be positioned in terms of their social or personal focus, plus their nature according to whether they are associated with personal abilities as competences or character i.e. integrity, or behaviour. In addition instrumental values and their motivational characteristics can be classified into defensive, stabilising, or growth types (Hultman & Gellerman, 2002). Defensive instrumental values are ones that protect against a perceived threat so importance is attached to the avoidance of risk and prevention of bad outcomes rather than the creation of opportunities. Stabilising instrumental values are about maintaining the status quo so importance is attached to equilibrium, order, comfort, routine and tradition. Instrumental growth values provide for forward movement and development where importance is attached to people realising their full potential. Appendix 1 depicts a comprehensive, but not exhaustive, matrix of common instrumental values which have been compiled from empirical research over a twenty-five year period by Hultman and Gellerman (2002).
On first appearances organisations cannot have values as such because values are psychological constructs internal to individuals (Hultman & Gellerman, 2002). However values, at an organisation level can be viewed as a constituent part and critical aspect of organisational culture and also thought of as its guiding principles i.e. they exist as a small set of core, essential and enduring tenets by which both individuals and organisations live, in terms of external adaptation and internal integration (Schein, 1985; Collins & Porras; 1994). Although organisations can be considered at twelve different levels, the majority of research in understanding values in business has taken place at the level of either the individual, or the organisation as a complete entity (Perrow, 1986; Agle & Caldwell, 1999). This has been pursued either separately or in terms of value congruence between the organisation’s values and the individuals’ values within it (Meglino & Ravlin, 1998).

It is posited that an individual’s acceptance of an organisation’s values along with the alignment of the individuals’ values as organisational commitment assists the engagement of the hearts and minds of its employees to willingly exert effort in pursuit of the organisation’s core ideology and resultant corporate goals and also provide a standard against which behaviour and actions are evaluated in support of changing circumstances (Porter et al, 1974; Sullivan et al, 2001). Indeed, some of the most critical decisions a manager makes involve the degree of congruence between personal and organisational values, for example where these relate to how much personal relationship emphasis to place on dealing with the immediate interests of the customer whilst taking into account the long-term interests of the company (Posner, 2010).
Values, and hence valuing and evaluation, may be seen as being the core of who people are, based on the characteristics of individuals as well as social collectives. So it is reasonable to expect that organisational values influence an employee's behaviour at work – and possibly outside work (Hofstede, 1984; Cambra-Fierro et al, 2008; Posner 2010). Despite this seemingly fundamental premise, a review of the service-dominant literature, and in particular Madhavaram & Hunt's (2008) paper on the hierarchy of operant resources, reveals that organisational values and individual values appear not to have been considered as intangible, operant resources.

Value theory's three main philosophical conditions are subjectivism (valuable goods and services are subjective states of sentient beings), objectivism (while values must be human related, they exist independently), and rationalism (practical reason) (Thomas, 1998). Science deals with objective facts, and subjective values belong to an entirely different order of discourse, although values are objective in the sense that people holding them are able to report their values verbally. So social scientists do not have to agree or disagree with expressed values but can simply report on them or use them as primary data (Hughes & Sharrock, 1997).

Value\(^2\), on the other hand, deriving common usage from the discipline of microeconomics, is the utility or worth of something, i.e. product or service, and is often, but not always, measured in money, relative to other things both in exchange and

---

\(^1\) "The word value, it is to be observed, has two different meanings, and sometimes expresses the utility of some particular object, and sometimes the power of purchasing other goods which the possession of that object conveys. The one may be called 'value in use' and the other, 'value in exchange" Adam Smith (1776, p.12).
in use. Value is a criterion to determine a choice and is therefore an evaluative process of judgement to justify what people do, and endow it with legitimacy (Trompenaars, 1993; Holbrook, 1994; Best, 2005). However, the experience of value should not be confused with an endorsement of it - 'valuing' is felt as present in experience whilst 'evaluating' is mediating and reflective after inquiry (Dewey, 1991). Values, and therefore valuing and evaluating, are deemed to have a behavioural impact. However because all three aspects involve mental processes "established, maintained and changed in the mind and in the interactions of the mind" (Gephart, 1981 p15) they are not tangible objects that can be observed directly, and so their existence can only be inferred.

There is continued debate about value's metaphysical status, epistemology and value judgements in terms of fact, versus value distinction and value's ontological status regarding value properties (Crisp, 1998; Oliver, 1998). Value appears in everyday speech and philosophical literature in three basic senses which often overlap: value is what a thing is worth, i.e. quantitative; value is a thing or property to which valuableness is ascribed, i.e. attributive; and value is an idea which makes individuals consider given objects, qualities or events as valuable, i.e. axiological (Najder, 1975).

2.2.2 Value Construct in Marketing

An organisation’s stakeholders are broadly divided into two groups: the main group comprises primary stakeholders on whom the organisation depends for survival, i.e. customers, owners, shareholders, employees and suppliers. Secondary
stakeholders are those who influence or affect the organisation but are not necessarily essential for its survival, i.e. government, local communities, trade associations, professional bodies, pressure groups and society in general.

Such a stakeholder approach to business therefore encompasses a diversity of perspectives of values, wants, needs and experiences that need to be accommodated by the supplying organisation. This represents a complex and multi-faceted challenge for organisations driven constantly to reinvent themselves in the provision of appropriate marketplace service offerings for what is termed a “multi-party network approach to marketing” (Gummesson, 2008, p16). The essence of this is captured in the American Marketing Association’s (AMA, 2007) current definition of marketing as an organisational management process in a stakeholder-wide series of networks:

“Marketing is the activity conducted by organisations and individuals that operates through a set of institutions and processes for creating, communicating, delivering, and exchanging market offerings that have value to customers, clients, marketers and society at large”.

Despite the ubiquitous intent of the AMA’s definition of marketing and claims that customer-centricity as marketing’s centrepiece and customer orientation’s raison d’etre no longer needs to be stated (Sheth et al, 2000; Brown, 2005), some people regard marketing of lowly status or hold it in contempt. This is because it is described as a word used by many but understood by relatively few; perceived to
be more about trappings than substance; viewed as manipulative because most recipients deem marketing activities to be in the supplying organisation's self-interest, despite marketing's claims to the contrary that customers' needs are prime; considered to be half-hearted in the application of customer orientation; or portrayed as being in trouble or even dead in the water and no longer seen as the function that understands customers (Smith & Saker, 1992; Ames 1970; Fitchett & McDonagh, 2000; Gummesson, 2008; Tynan, 2009).

Despite the notion of consumers' values being sufficient to keep marketing alive, and value as a word being frequently and loosely in use in marketing, there is surprisingly little known about what it is, its characteristics or how consumers determine value. This causes confusion about its meaning (McCole, 2004; Lovelock, 1991; Day & Crask, 2000; de Chernatony & Harris, 2001). The transaction, often seen as the essence of marketing, is the exchange of values between two parties, where both parties must understand and be sensitive to the value desired by each other (Kotler, 1972; Woodruff & Flint 2006). However, that may be difficult to ascertain because value is approached from a multitude of management perspectives, including exchange, utility and labour theories, accounting, economics, strategy, organisational theory, sociology and psychology (Wilson & Jantrania, 1994; Woodruff, 1997; Payne & Holt, 2001; Ramsay, 2005).

In addition, value continues to be difficult to ascertain as it is frequently confused with different and not particularly well-defined marketing concepts, e.g. perceived price, service quality and customer satisfaction amongst others (Woodruff &
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

Gardial, 1996: Gallarza et al, 2011). This may be because value is viewed as either an antecedent (Storbacka et al, 1994) or partial replacement for both concepts (Sánchez-Fernandez et al, 2009). This is despite claims that both quality and satisfaction are distinct concepts (Eggert & Ulaga, 2002; Woodside et al, 2008).

The confusion regarding value persists when looking at the British Standard on Value Management (BS EN 12973:2000, p13) which has defined value as: “the relationship between the satisfaction of need and resources used in achieving that satisfaction”. The standard defines need as what is necessary or desired by the user and may be composed of several different elements. Resources are defined as everything that is required to satisfy those needs, including finance, time and materials and know-how, all of which can generally be related to a cost. The standard further states (BS EN 12973:2000, p13):

“Value is not absolute, but relative, and maybe viewed differently by different parties in different situations...generally achieving good value requires balancing a series of conflicting parameters to arrive at an optimum position”.

So although value is a concept that appears to be familiar to all, it is contextual, subjective and can be looked at from different stakeholder viewpoints. Arguably value may even be viewed differently by the same stakeholder in different situations and times.
Despite these confusions and having no universally accepted definition, value is a core construct for marketing: an unique, higher-order construct often mistaken with other constructs; perceptually, situationally and temporally bound; created by consumption or possession or both; created through a trade-off amongst various costs and benefits; and requiring explication and validation in terms of risk reduction (Day & Crask, 2000). The last observation in particular fits with Blackburn’s (1994) dictionary definition that to acknowledge some feature of things as a value is to ‘take it into account’ in decision-making, thus influencing preference, choice and guiding oneself and others. The consideration of purely economic perspectives on value, i.e. worth, is limiting. Therefore the adoption of a philosophical perspective too is necessary to understand the concept fully (Woodall, 2003) as it would be impossible to make choices without values and value (Beckett & Maynard, 2005).

Value’s constitution, even in a single product category, appears highly personal and idiosyncratic (Zeithaml, 1988) yet researchers continue to try to find a universal understanding of what value is. Marketers would do well to remember it is customers and not they who define value, which exists only when those customers decide it does, reflecting their priorities, preferences and experiences (Webster, 1991; Piercy, 1997). Therefore, knowing what value is and where value resides from a business-to-business customer perspective has become critical for managers (Ulaga & Chacour, 2001). This is because customers rely on suppliers’ products and services for organisational survival, improving performance, differentiating their market offering, gaining strategic competitive advantage and
enhancing profitability (Hamel & Prahalad, 1994; Woodruff, 1997; Weinstein & Johnson, 1999; Ulaga, 2001; Nickerson *et al.*, 2007). These demand-side notions of value reflect “value for the customer” (Woodall, 2003), and as an organisation’s raison d’etre is its customers, it has no reason to exist unless it can deliver customer value (Tzokas, 2005).

Regardless of such concerns, marketing continues to be commonly charged with the sole or major responsibility of understanding, managing and improving mutually satisfying and meaningful exchanges, be they financial or otherwise, with its customers. As such marketing is seen as an important contributor to an organisation’s business performance through identifying, anticipating and satisfying customers’ needs at a profit (CIM, 2008). However, this perspective of value - value capture or appropriation for the supplying company - i.e. shareholder value, financial return in terms of profit, dividends, etc (Doyle, 2000) – must not be confused with being more important than *what* it is that customers value.

It is arguable that both the misunderstandings of what marketing is or does, and a seemingly unhealthy preoccupation with shareholder interests above other stakeholders’ interests, reflect a predominantly supplier perspective of value that does not adequately take into account what customers actually perceive value to be. Shareholder value may be an end-state for certain organisations but it is difficult to achieve or optimise it without a profitable customer base, because as Drucker (2001, p.17) claims, “customers *pay only for what is of use to them and gives them value*".
Even though it is claimed that the two distinct activities of value creation and value capture have seen little research (Bowman & Ambrosini, 2000; Nickerson et al., 2007), the critical role of marketing in bringing the voice of the customer into an organisation's value creation process is not a new phenomenon. Organisations have always been urged to locate, listen and become involved with their customers. This is because providing customer value is fundamental for marketing activities, regarded as essential for an organisation's survival; creating and regenerating competitive advantage through differentiation; developing and maintaining buyer-supplier relationships; securing better organisational performance in growing margins and profits; increasing customer satisfaction and loyalty; and entering new markets (Butz & Goodstein, 1996; Cannon & Homburg, 2001; Liu et al., 2005; Kim & Mauborgne, 2005; Ulaga & Eggert, 2006; Boztepe, 2007; Busacca et al., 2008; Lapierre et al., 2008; Flint et al., 2011).

As customers seek packaged solutions to help them achieve value, either for an end-state for themselves or for others as part of their intermediary value-creating processes, it is claimed that value is initially defined by customers and co-created with others in a relationship marketing perspective within their multi-stakeholder network (Grönroos, 2000; Vargo & Lusch, 2004; 2008). Suppliers achieve the creation, maintenance and improvement of customer value through taking a much more comprehensive perspective of how customers make choices, based on their perception of value and the capturing of their in-use experience assessments. Both of these aspects need incorporation into the supplier organisation's marketing strategy, policies and value propositions (Ravald & Grönroos, 1996; Prahalad &
Ramaswamy, 2000; Olson et al, 2005; Best, 2005; Ng et al, 2010) because "strategy is the art of creating value" (Normann and Ramirez, 1993, p.32).

Driven by a dynamic environment, caused by such factors as globalisation and the impact of information and computer technologies, which are irreversibly shifting power away from supplying organisations to increasingly demanding customers, many organisations are moving from a primarily supplier ego-centric status to becoming more customer-centric. A recent global survey of 1,700 chief marketing officers identified that if they are to understand and provide value to empowered customers and consumers then they will have to concentrate on getting to know individuals as well as markets (IBM, 2011). As a consequence the operationalisation of customer perceived value is becoming a major focus of interest for marketing practitioners and academics. This is at a time when marketing is under increasing demands to demonstrate more accountability through stronger quantifiable measures to counteract its alleged weakness as a paradigm and its perceived lack of involvement in an organisation’s strategy process (Baxter, 2008; Graf & Maas, 2008).

2.3 Conceptualising Marketing

2.3.1 The Changing Emphasis of Marketing

Predating the last half-century’s intensification of marketing activity, marketing practice has existed since the dawn of commerce in practise, and as a concept or philosophy has been thought about since ancient times (Brown, 1995; Ambler,
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

Marketing has evolved across four distinct eras into an academic discipline in its own right, spread across 10 schools of thought (Gilbert & Bailey, 1990; Wilkie & Moore, 2003; Vargo & Lusch, 2004; Shaw & Jones, 2005). Throughout marketing's evolution there continues to be recurring endless debates about what marketing is (Kotler & Levy, 1969; Crozier, 1975; Hunt, 1992; Gibson et al, 1993; Marion, 2006). This includes its domain, discipline, scope, state and division between theory and practice (Denison & McDonald, 1995; Levy, 2002; Hunt 2003), and whether it is an art or a science (Converse, 1945; Brown, 1996; Hunt 2003). Nevertheless, modern marketing's central tenet of the importance of the customer is rooted in the 'Marketing Concept' (Drucker, 1954; Levitt, 1960; McDonald, 1989) when Drucker claimed:

"...There is only one valid definition of business purpose: to create a customer...the customer is the foundation of a business and keeps it in existence. Any business has only two basic functions...innovation and marketing: marketing is a distinguishing and unique function because it is the whole business as seen from the customer's point of view...what the customer thinks he is buying, what he considers 'value' is decisive..."

(1954, p.35-36)

"...to start out with the customer's utility, with what the customer buys, with what the realities of the customer are and what the customer's values are - this is what marketing is all about" (1985, p.233)
This primacy of the customer perspective asks for organisations to adopt a customer orientation where customers come first, last and always (Levitt, 1960). Whether a separate concept, or subsumed within the context of marketing orientation, i.e. application of the marketing concept, customer orientation is regarded as a pillar of marketing that accentuates the provision of superior customer value (Grönroos, 1989; Kohli & Jaworski, 1990; Narver & Slater, 1990; Despande & Farley, 1998; Jones et al, 2003; Vijande et al, 2005). This is despite there being little consensus in defining marketing orientation or the marketing concept (Deng & Dart, 1994; Pitt et al, 1996).

Relationship marketing, i.e. the collaboration and creation of mutual value for customers, suppliers and others as partners through relationship closeness in a value delivery network (Gummesson, 2004; Srivastava & Singh; 2010), is perhaps best represented by Harker's (1999, p.6) definition after holistic collation of seven relationship criteria:

"An organisation engaged in proactively creating, developing and maintaining committed, interactive and profitable exchanges with selected customers [partners] over time is engaged in relationship marketing".
Although there are five separate schools\(^4\) of thought offering different perspectives of relationship marketing, there is growing consensus that whilst it may not be a new paradigm, it is a genuine focus-shift in traditional marketing with a greater emphasis placed upon the creation of customer value and customer retention (Payne et al, 1997; Brodie et al, 1997). Despite relationship marketing being seen as here to stay (Harker & Egan, 2006), alternative views claim there is little evidence to support that view or that it is for everyone (East et al, 2006; Yau et al, 2000) or even that "relationship marketing has become what it is supposed to be: the epitome of customer orientation" (Fournier et al, 1998, pp.43-44).

Nevertheless, customer value is regarded by a majority as an important core constituent, unique aspect and central process of relationship marketing where value exchange is its cornerstone (R avald & Grönroos, 1996; Velotsou et al, 2002; Grönroos, 2004; Anderson & Narus, 2004). This appears to be the case even if some relationship marketing elements are considered 'pseudo', where customers are locked in, dysfunctional, 'negative and troubled'; not wanting of it; do not consider it to be appropriate; or questionable as to whether it provides a payback (Barnes, 1994; Tynan, 1997; Fournier et al, 1998; Anderson & Narus, 1998; Li & Nichols, 2000; Gummesson, 2004). Considering the disadvantages associated with relationship marketing, and also taking into consideration that its context-specific settings reflect different research perspectives, there is still much to understand

---

\(^4\) Industrial Marketing and Purchasing school, Nordic school, Anglo-Australian school, North American school, and Asian school.
about the phenomenon as it appears that it is in the early development stage (Hakansson & Snehota, 1995; O’Malley & Tynan, 2003, Baxter 2008).

### 2.3.2 The Emerging Service-Dominant Logic of Marketing

Some researchers are claiming that relationship marketing is being subsumed into a new concept of a ‘service-dominant logic of marketing’ which itself is not yet regarded as being a distinct theory or paradigm (Vargo & Lusch, 2004; Lusch & Vargo, 2006). An emerging service-dominant logic perspective sees marketing viewed as a social and economic process with ‘service’ as its dominant logic, where disparate literature streams are unifying and challenging the traditional marketing orthodoxy of purely making and distributing things to be sold. These unifying streams include customer orientation, marketing orientation, services marketing, relationship marketing, quality management, value and supply chain management, resource management and network analysis (Vargo & Lusch, 2004; Ballantyne & Varey, 2008).

Whilst this new perspective appears to be gaining acceptance there are challenges to marketing’s service-dominant logic by alternative logics, competing value theories and models, and different marketing philosophies; it being considered a ‘backward step’ or a different view of the same elephant (Venkatesh et al, 2006; Lehman, 2006, Achrol & Kotler, 2006; Boztepe, 2007; Brodie et al, 2006; Ambler, 2006; O’Shaughnessy & O’Shaughnessy, 2009). Furthermore, service-dominant logic needs revisiting in answering the questions of ‘who creates value’ and ‘who co-creates value’ as customers and suppliers appear to have differing views in
terms of customer solutions, e.g. where transactional suppliers are purely seen as value facilitators (Matthyssens et al, 2008; Grönroos, 2008).

It is claimed therefore that marketing is moving away from a goods-dominant logic ‘market to value-in-exchange’ orientation where value is embedded into the market offering by the supplier and customers are promoted to, targeted and captured. Essentially, goods-dominant logic sees economic exchange in terms of the production and distribution of units of output, which acquire value during the design and manufacturing process (Vargo & Lusch, 2004). Ideally, in goods-dominant logic, this output is tangible, produced away, i.e. separate from the interference of customers, standardisable, and capable of being inventoried until sold – all to enable maximum efficiency in operations (Vargo & Akaka, 2009). In addition, goods-dominant logic mind-sets consider services as an intangible type of good, suggesting that goods production and distribution practices should be modified to deal with the differences between tangible goods and services (Vargo & Lusch, 2008).

Instead, marketing is now being perceived as moving towards a service-dominant logic in a ‘market with value-in-use’ orientation. Service-dominant logic defines ‘service’ as the application of a bundle of competences for the benefit of another entity’s value creating processes, and sees the mutual service provision of a configuration of resources rather than just the exchange of goods or services as the proper subject of marketing (Vargo & Lusch, 2004). Service-dominant logic is where customers and their supply chain partners are collaborative co-creators of value in
the entire marketing process, and where value is not realised until a customer gains the benefits of the offering through usage (Lusch & Vargo, 2006; Vargo & Lusch, 2008; Vargo et al, 2008; Brodie et al, 2009: Ng & Ding, 2010).

However, value-in-use is not a new phenomenon, having its origins and dual status with value-in-exchange in economics and labour theories to explain the differences between production and consumption in feudal and industrial societies (Smith 1776; Marx, 1867). Even Henry Ford (1924), portrayed as the very epitome of value-in-exchange through his famous quote of, “Any customer can have a car painted any colour that he wants so long as it is black” (p.72), recognised the importance of service and value-in-use by declaring, “a manufacturer is not through with his customer when a sale is completed” (p.41) and that “…service comes before profit” (p.271). Given service-dominant logic’s seemingly multi-dimensional complexity and research infancy, it is seen as an important topic for further conceptual discussion and empirical research to see if its foundational premises can be operationalised (Saren et al, 2006; Vargo & Lusch, 2008) - see Table 1.
Table 1: Service-Dominant Logic Foundational Premises

<table>
<thead>
<tr>
<th>FP's</th>
<th>Original foundational premise</th>
<th>Modified/new foundational premise</th>
</tr>
</thead>
<tbody>
<tr>
<td>FP1</td>
<td>The application of specialised skill(s) and knowledge is the fundamental unit of exchange</td>
<td>Service is the fundamental basis of exchange</td>
</tr>
<tr>
<td>FP2</td>
<td>Indirect exchange masks the fundamental unit of exchange</td>
<td>Indirect exchange masks the fundamental basis of exchange</td>
</tr>
<tr>
<td>FP3</td>
<td>Goods are a distribution mechanism to service provision</td>
<td>Goods distribution mechanism for service provision</td>
</tr>
<tr>
<td>FP4</td>
<td>Knowledge is the fundamental source of competitive advantage</td>
<td>Operant resources are the fundamental source of competitive advantage</td>
</tr>
<tr>
<td>FP5</td>
<td>All economies are services economies</td>
<td>All economies are service economies</td>
</tr>
<tr>
<td>FP6</td>
<td>The customer is always a co-producer</td>
<td>The customer is always co-creator of value</td>
</tr>
<tr>
<td>FP7</td>
<td>The enterprise can only make value propositions</td>
<td>The enterprise cannot deliver value, but only offer value propositions</td>
</tr>
<tr>
<td>FP8</td>
<td>A service-centred view is customer oriented and relational</td>
<td>The service-centred view is inherently customer oriented and relational</td>
</tr>
<tr>
<td>FP9</td>
<td>Organisations exist to indicate and transform micro-specialised competences into complex services that are demanded in the marketplace</td>
<td>All social and economic actors are resource integrators</td>
</tr>
<tr>
<td>FP10</td>
<td>Value is always uniquely and phenomenologically determined by the beneficiary</td>
<td></td>
</tr>
</tbody>
</table>


However, prior to any operationalisation of marketing’s service-dominant logic, the customer value construct needs attention in practice and theory (Levy, 2006; Woodruff & Flint, 2006; Winklhofer et al, 2007). Accordingly, “it is time for marketing to contribute more directly to the understanding of value creation and exchange” (Vargo & Lusch, 2008 p.10), particularly as, “the exploration of value co-creation raises as many questions as it answers...means reconceptualising value and
value creation” (Vargo et al, 2008, p151). As customer value is dynamic, ‘why’ and ‘how’ changes in it take place need to be taken into consideration too, “in order to successfully and consistently move with customers over time in helping to create value with all parties involved and not be left behind” (Flint et al, 2011).

The output from the 2011 Otago conference on service-dominant logic has some very interesting points of view on value co-creation as a joint activity between customer and supplier. These notions came from studies of parties involved in dyadic, direct interactions where the value which emerges for one or both party is from an on-going, intensive and continual process that extends beyond individual transactions. Whilst that may be the case, FP 10 of service-dominant logic suggests that every incident of service exchange has the beneficiary uniquely and phenomenologically determining value. Therefore it is important to understand any changes in what individuals as beneficiaries perceive value to be in their role as a customer.

2.4 Conceptualising Customer Value

2.4.1 Competing theories of Customer Value

Customer value surfaces in a variety of conceptual definitions within the marketing domain, each with some merit but none that capture customer value’s complexity (Payne & Holt, 2001; Flint et al, 2002; Jiang & Liu, 2004; Vargo & Lusch, 2004). Payne & Holt (2001) categorised customer value into nine research themes across
three groups: key influences, recent perspectives and newer developments. It is broadly chronological, starting with Rokeach’s (1973) seminal work on value.

For simplicity, though, two distinct research avenues are deemed to have emerged: one based on the objects of exchange, i.e. goods and services, and the other focusing on the process of exchange, i.e. the relationship between buyers and sellers (Lindgreen & Wynstra, 2005). These include ‘creating and delivering superior customer value’, i.e. added value resulting in greater value appropriation for suppliers; ‘value of the customer’ to the supplier e.g. customer lifetime value; and ‘customer perceived value’ i.e. desired and received value as viewed by customers in pre-purchase, purchase and in-use experiences. Some of these definitions predominantly take a supplier’s perspective in the delivering of superior customer value, i.e. ‘added value’ through suppliers’ contributions; the ‘economic value of the customer’ or ‘worth’ to the supplier; or a longer term loyalty-based worth, i.e. customer lifetime value (Brennan et al, 2007).

However, it is customer value in terms of value for the customer, i.e. the making and fulfilment of a supplier’s ‘promise’, that actually solves the customer problem through the provision of desired and received value at pre-purchase, purchase and in-use by customers that is growing in importance (Ford et al, 2003; Blocker & Flint, 2007). This sees a movement from the traditional supplier’s perspective of trying to embed value in a product and then in exchange as a facilitator of value, to a more holistic perspective where value emerges through the supplier’s relationship with
the customer as part of the value creating process (Vargo & Lusch, 2004; Grönroos, 2007).

Customer value is therefore thought to be better for the provision of marketplace service offerings because relying on the measurement of customer satisfaction does not provide the required insight (Payne & Holt, 2001). Even understanding customer value in itself appears problematic, though, since in the literature it is divided into two major categories – customer perceived value and customer desired value. Both differ in their levels of abstraction and focus, yet are not mutually exclusive either, with several customer value approaches being a combination of both concepts, and their dynamic nature still requiring clarification (Sánchez-Fernandez & Iniesta-Bonillo, 2007; Graf & Mass, 2008).

Customer value represents customers' estimates and judgements of a product's or service's overall capacity – generic, expected, augmented and potential forms to satisfy needs, desires and benefits sought – whilst taking into account aspects such as price, time, energy, and feelings, including the costs incurred in finding, purchasing and using products or services (Levitt, 1980; Kotler, 1972: 2003; Slater, 1996). The centrality of customers' experiences is noted in value definition too – provision of goods and services alone are no longer enough as the experience economy gathers pace (Holbrook, 1999, Pine & Gilmore, 1999).

Consumers perceive value both in an encounter, through the total experiential consumption process from search to after-sales, and the subsequent evaluative
memory of that encounter (Ponsonby & Boyle, 2004; Verhof et al, 2009; Ng & Smith, 2012). This is even if experience occurs at locations and time frames not controlled by the service provider, e.g. self-service technology and on-line environments (Heinonen, 2004; Chen & Dubinsky 2003; Chien-Hsin et al, 2005; Meuter et al, 2005).

Most research into experience aspects of value are located in personal consumption encounters situated in leisure, retailing and services business-to-consumer transactions, and in some cases not because what the market offerings do but because of what they signify, i.e. sign value as the experience of social status (Boztepe, 2007; Verhof et al, 2009; Tynan et al, 2010). The application of value as experience is also drawing attention from areas not commonly associated with the experience economy, e.g. manufacturing and other business-to-business settings (Poulsson & Kale, 2004, Ng & Smith, 2012).

Current conceptual research into experience is exploring business-to-consumer and business-to-business customer experience quality related to a customer’s goals and its impact on relationship outcomes (McDonald et al, 2011). Whilst this embryonic research has led to 119 constructs of experience in 15 categories for two broad situational contexts, it is interesting to note that many of them also appear as attributes in other multi-dimensional domains that have a myriad of meanings, e.g. quality and value. Therefore the definition and operationalisation of experience is problematic. In addition, focusing on goals ignores the importance of values as desired end-states in the influencing of behaviour. Experience is having knowledge
of things that have happened to somebody, or a skill somebody gains in doing or using things which then influences the way that they think and behave towards those things in the future.

As such experience fits with service-dominant logic. However, it does not replace the concept of value-for-the-customer, either in exchange or in use, with value-as-experience per se. Rather experience is the valuing process and therefore a component part of the multi-dimensional factors that constitute value, e.g. product, service, dynamic capabilities, money, time etc, used by customers to assess value-in-use and evaluate value propositions.

Rational customers are posited to weigh up value propositions, determining their worth in terms of a price and as value-satisfiers or value-maximisers when they buy from suppliers. Suppliers may be perceived as offering good-enough value or the highest value, compared to reasonable or lowest monetary and non-monetary total costs, using one of several available different equations of benefits and sacrifices (Ravald & Grönroos, 1996; Payne et al, 1997; Cravens et al, 1997; Woodside et al, 2008).

In terms of such judgements, prospect theory states that losses have bigger impact on customer decision-making than benefits in relation to a personal reference point, i.e. through loss aversion. Customers are risk averse above their reference point and risk-seeking below, although this seems more applicable to inexperienced consumers than experienced consumers (Kahneman & Tversky, 1979; List, 2004).
loss is the disadvantage that is caused when something of use or value is not provided, or is taken away, or there is a shortfall in its anticipated benefits. Losses are seen as negative consequences and some researchers have mistakenly aligned these consequences with the uncertainty that these losses may or may not happen, along with the quality versus price, i.e. value for money relationship as a component of sacrifice called perceived risk (Snoj et al 2004). Financial, performance, physical, psychological, social and time loss are different categories of risk, although all six categories are rarely incorporated into a single study (Korgaonkar & Karson, 2007).

The inclusion of risk in the empirical customer value studies has been mixed with some researchers omitting it (Zeithaml, 1988; Sweeney and Soutar, 2001; Petrick, 2002; Chien-Hsin, Sher & Hsin-Yu, 2005) and others including the construct (Sweeney et al, 1999, Chen & Dubinsky, 2003). However, a loss is disadvantage caused by a supplier's poor or non-performance and is therefore not the same thing as a sacrifice, which is something that a customer has to actively forfeit in order to realise the sought benefit. Instead of it being a trade-off of benefits versus sacrifices that constitutes customer perceived value, could it be that it is actually the trade-off of benefits versus risk, i.e. the possibility that something will cause a loss of advantage?
Archival research into marketing and non-marketing literature concludes that customer value\(^5\) is ambiguous, with no clear, theoretical anchor, and still subject to empirical and speculative enquiry (Woodall, 2003). Five notions of customer value and a myriad of customer value sub-forms exist over four distinct, temporal forms. These forms are: ex-ante or pre-purchase, transaction, ex-poste or post-purchase/consumption, and disposition (Woodall, 2003). The five notions are: net customer value - utilitarian balancing of benefits and sacrifices, marketing customer value - concerned with product attributes alone as a way of going to market, derived customer value – outcome-related through use and consumption, sales customer value - based on low price or reduced benefits and rational customer value – with benefits expressed in units of exchange.

Woodall (2003) posits that these customer value notions are not mutually exclusive. Furthermore, by applying Gestalt theory, i.e. the tendency to perceive the whole configuration first and then the separate elements, consumers of value are not necessarily consciously aware how and when the value process works. There is, therefore, a sixth form of customer value, termed ‘aggregated customer value’ (Woodall, 2003). This covers consumers’ overall perceptions of value, based on the mental ability to create relationships between the five types of customer value over its four temporal forms, providing an overall definition of customer value.

\(^5\) Note that Woodall refers to "Customer Value" as "Value for the Customer"
"...as any demand-side, personal perception of advantage arising out of the customer’s association with the organisation’s offering, and can occur as reduction in sacrifice; presence of benefit (perceived either as attributes or outcomes); the resultant of any weighed combination of sacrifice and benefit (determined and expressed rationally or intuitively); or an aggregation, over time, of any or all of these" (Woodall, 2003, p21).

Whilst acknowledging there is still more to do, customer value research and discussion to date partially answers the first of Anderson and Narus’s (1998) two pertinent questions. First, ‘how is customer value defined?’, but less so the second, ‘how is customer value measured?’ However, customer value’s complexity and richness poses a challenge to operationalisation of customer value in its entirety for developing a standard scale capturing all of its nuances (Parasuraman, 1997).

The starting point for understanding value is the observation that value is perceivable by customers in their everyday activities, processes and interactions with suppliers or service providers when consuming or making use of services, goods, information, personal contacts recovery and other elements of on-going relationships (Grönroos, 2007). Suggestions have been proposed for a better understanding, with a focus on in-depth, qualitative, longitudinal research across alternative value assessment paradigms, and the development of psychometrically sound measures and separate scales to measure the different facets of customer value, whether in consumer or industrial contexts (Parasuraman, 1997). However,
others have argued that as customer value is a dynamic, transformational, higher-level construct, it should not be reducible to low-level, operational measurement (Woodall, 2003).

Attempts to operationalise customer value are predominantly consumer focused (Woodruff & Flint, 2003), where the majority of research studies are dominated by the use of consumer samples, consumer products and consumer services (Sweeney & Soutar, 2001; Petrick, 2002; Tam, 2004; Huber et al, 2007) and can be criticised on a number of limitations. For example, PERVAL (Sweeney & Soutar, 2001), a 19-item measure covering four distinct consumption value dimensions (emotional, social, quality/performance, and price), although deemed reliable and valid in pre-purchase and post-purchase situations for a consumer durable product at the brand level, most notably did not take into consideration Sheth et al’s (1991) aspects of conditional and epistemic values. The SERV-PERVAL (Petrick, 2002) model based on PERVAL but adapted for service provision also has limitations as its 25-item instrument did not cover adequately its five value dimensions comprising behaviour, monetary price, emotional response, quality and reputation.

Having price as the only aspect of sacrifice is a major limitation too because the raising or lowering of price alone to differentiate amongst competitors only changes customers’ incentive to purchase, not necessarily what they value (Wang et al, 2004; Anderson & Narus, 2004; Hinterhuber, 2008). Even one of the most recent research attempts to operationalise a full, multi-dimensional structure of
consumer value is limited because Holbrook's (1999) typology is claimed not to capture fully the domain of customer value (Sánchez-Fernandez et al, 2009).

2.4.2 Customer Perceptions of Value

Perception, comprising both sensing and intuition, is the extraction and use of information from the complicated weaving together and interpretation of stimuli in the external world, involving all the ways of becoming aware of things, people, happenings or ideas. Perception is complemented by judgement, which involves all the ways of coming to conclusions about what has been perceived (Myers et al, 2003). Utilising the instant, the immediate past and long experience, perception provides a useful view and knowledge of the world, where useful means being able to interact safely and effectively within the environment by being able to distinguish the desirable from the undesirable. This allows individuals to predict the consequences of their actions, a critical skill in a constantly changing world (Blake & Sekuler, 2006).

The brain plays a central role in perception, whether its goal is action or simply recognition. Because one's conception of reality is so intimately determinable by subjective experience, it seems unnatural to distinguish between one's perception of the world and the world itself (Pike & Edgar, 2005; Blake & Sekuler, 2006). Additionally, perception is variable amongst individuals and is subject to compromise by inherited disorders, disease, injury, illusion, delusion. The complexity of perception was summarised by Bartlett (1932) in his valuable book, remembering:
"Inextricably mixed with perception are imaging, valuing and those beginnings of judging which are involved in response to plan, order of arrangement and construction of the presented material" (Young, 1988 p.81).

Consequently subjectivity, complexity and the need to construct perceptions from incomplete information means perception of even the same simple objects is variable and difficult for individuals (Pike & Edgar, 2005), let alone reification of concepts like value where people are trying to visualise the unseeable. If value is generally taken for granted, yet remains inherently ambiguous, and perception is not always perfect, e.g. because of illusions, myopia, how can researchers be sure that the right meaning is attributed to the concept of customer perceived value?

Perhaps the problem with value conceptualisation is caused by the seemingly group-think mentality and predominant view of value as value-in-exchange, adopted by most researchers. In this case the concept of value, i.e. utility, is conflated with the need for profitability in the transaction between two parties, reflecting a trade-off of benefits and sacrifices in managerial economics terms. Rather it should be seen as the case of the marketer attempting to get value from the market through offering value to it (Kotler, 1972, p.69), where:
"A transaction is the exchange of values between two parties. The things of value need not be limited to goods, services, and money; they include other resources such as time, energy, and feelings".

The above definition represents an exchange of 'value packages', where the configuration of a supplier's resources is seen as advantageous in providing benefits for a customer's value-creating processes, worthy of monetary compensation and any other benefits that are deemed advantageous for the supplier (Lemke et al, 2003). If benefit is actually seen as 'advantage' then value determination may not be solely the trade-off of benefits versus sacrifices as suggested by Flint et al (1997). Rather it is also trade-off, on a construed continuum, between the advantages sought and the disadvantages in terms of losses or risks that prevent the achievement of value in the organisation's pursuit of sustainable competitive advantage. As both parties attach importance to these aspects then taking a service-dominant logic, value-in-use perspective may enable a better understanding of value, resulting in better value propositions for customers and better value appropriation in terms of sustainable competitive advantage for the supplier.

Although a considerable divergence of academic and practical opinion exists about the best way to conceptualise customer value over the phenomenon's long history, customer perceived value has four main approaches. All of the approaches are based on the preferential judgement of an actor who, as the beneficiary, uniquely and phenomenologically determines the idiographic meaning of value in their capacity of being the customer (Vargo & Lusch, 2012). The four main approaches
are: value is seen as net benefit, i.e. the actor’s trade-off evaluation of the outcome as net differences between sought benefits (Zeithmal, 1988). Value is seen as a means to an end, i.e. the actor’s evaluation of attribute offerings and sought-after consequences in the pursuit of desired end states, e.g. organisational values (Woodruff & Gardial, 1996; Woodruff, 1997). Value is seen as a net worth score, be it ratio or summation, i.e. the actor’s trade-off in terms of received sought benefits and the sacrifices made by the actor in acquiring them (Lapierre, 2000; Ulaga, 2003; Woodside et al, 2008). Value is seen as an integrated experience, i.e. the actor’s evaluation of the before-use choice, raw in-use experience and in-reflection consideration of the offering, affordance, context, agency and individual resources (Ng & Smith, 2012).

However, it is the trade-offs between functional and relational benefits received and monetary and non-monetary sacrifices that are the cultural hegemony for nearly all customer value definitions – see Table 2. This is the case even though there is continuing disagreement over a few aspects: the elements that comprise both components (Hinterhuber, 2008); making allowances for customer value’s different contexts, purposes and research fields be they consumer (Zeithaml, 1988) or business-to-business (Busacca et al, 2008); and the emerging argument about the paradox of value as a raw experience through phenomenal consciousness driving the choice of value ex-ante and the evaluation of value ex-post (Ng & Smith, 2012). Although this body of research, some of which appears complementary, overlapping and competing, has given rise to differing ways of identifying and
defining value from the customer’s viewpoint, it is Woodruff’s (1997, p.142) definition that is considered to be the most comprehensive (Payne & Holt, 2001):

“Value is a customer’s perceived preference for and evaluation of those product attributes, attribute performances, and consequences arising from use that facilitate or block achieving the customer’s goals and purposes in use situations”

However, even this definition appears to contribute to the confusion over conceptualisation and the defining of value because goals and purposes are given equivalence with values. This is acceptable in terms of an organisation’s core purpose, because it is “a raison d’etre, not a goal or business strategy” (Collins & Porras, 1996, p.69) and a part of its enduring core ideology along with its enduring core values. Goals, on the other hand, are ever-changing milestones and short-term objectives designed to motivate and control employees, within the constraints of policies and rules, towards a desired state of affairs which an organisation attempts to realise through the application of strategy, plans and activities (Etzioni, 1964).

Table 2: Perceived Value Definitions in the Marketing Literature

<table>
<thead>
<tr>
<th>Author</th>
<th>Value Definition</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zeithaml 1988, p. 14</td>
<td>“ [...] perceived value is the consumer’s overall assessment of the utility of a product based on perceptions of what is received and what is given. Though what is received varies across consumers (i.e. some may want volume, others high quality, still some</td>
<td>Consumer Products</td>
</tr>
</tbody>
</table>
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

<table>
<thead>
<tr>
<th>Source</th>
<th>Citation</th>
<th>Text</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monroe 1990, p. 46</td>
<td>“[...] buyer’s perceptions of value represent a trade-off between the quality and benefits they perceive in the product relative to the sacrifice they perceive in paying the price.”</td>
<td>General</td>
<td></td>
</tr>
<tr>
<td>Bolton &amp; Drew 1991, p. 376</td>
<td>Defines service value according to Zeithaml’s (1988) definition and continues: “If perceived service value is analogous to the concept of perceived product value, then Zeithaml’s work suggests that service value can be considered to involve a trade-off between a customer’s evaluation of the benefits of using a service and its cost. [...] a customer’s assessment of value depends on sacrifice (i.e. the monetary and non-monetary costs associated with utilising the service and the customer’s frame of reference.”</td>
<td>Consumer services</td>
<td></td>
</tr>
<tr>
<td>Berry &amp; Parasuraman 1993, p. 153</td>
<td>“To the customer, value is: ‘What I get for what I have to give up.’ It is benefits received for the burdens endured. Burdens include both monetary costs and non-monetary costs, for example, an inconvenient location, unfriendly employees, or an unattractive service facility”.</td>
<td>Consumer services</td>
<td></td>
</tr>
<tr>
<td>Anderson et al 1993, p. 5 &amp; p. 25</td>
<td>“We define value in business markets as the perceived worth in monetary units of the set of economic, technical, service and social benefits received by a customer in exchange for the price paid for the product, taking into consideration the available suppliers’ offerings and prices.” “[...] We regard benefits as ‘net’ benefits that subsume costs other than acquisition price (e.g. life-cycle costs) and use ‘received’ to reflect performance in a given usage situation”.</td>
<td>Business-to-Business</td>
<td></td>
</tr>
<tr>
<td>Gale 1994, p. xiv</td>
<td>Market-perceived quality is the customer’s opinion of your products (or services) compared to those of your competitors’. Customer value is market perceived quality adjusted for the relative price of your product”.</td>
<td>Business-to-Business</td>
<td></td>
</tr>
<tr>
<td>Liljander &amp; Strandvik 1995, p. 144</td>
<td>Value: Episode/relationship quality compared to episode/relationship sacrifice. Quality: Customers’ cognitive evaluation of the service of one episode/across episodes compared to some explicit or implicit comparison standard. Sacrifice: Perceived sacrifices (price, other sacrifices) connected to the service episode compared to some explicit or implicit comparison standard reference price/across all service episodes in the relationship compared to some explicit or implicit comparison standard.</td>
<td>Consumer markets</td>
<td></td>
</tr>
<tr>
<td>Source</td>
<td>Quote</td>
<td>Context</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>-------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>Ravald &amp; Grönroos 1996, p. 23</td>
<td>&quot;In a customer-supplier relationship we would like to use the term 'total episode value', which would then could be described as a function of both episode value and relationship value; Total episode value = Episode benefits + relationship benefits/Episode sacrifice + relationship sacrifice&quot;.</td>
<td>Consumer markets</td>
<td></td>
</tr>
<tr>
<td>Woodruff 1997, p. 142</td>
<td>&quot;Customer value is a customer’s perceived preference for and evaluation of those product attributes, attribute performances, and consequences arising from use that facilitate (or block) achieving the customer’s goals and purposes in use situations&quot;.</td>
<td>General</td>
<td></td>
</tr>
<tr>
<td>Anderson &amp; Narus 1998, p.54</td>
<td>&quot;Value is the worth in monetary terms of the technical, economic, service, and social benefits accustom the company receives in exchange for the price it pays for a market offering&quot;.</td>
<td>Business-to-Business</td>
<td></td>
</tr>
<tr>
<td>Lapierre, 2000, p. 123</td>
<td>&quot;Customer perceived value can [...] be defined as the difference between the benefits and the sacrifices (e.g. the total costs, both monetary and non-monetary) perceived by the customers in terms of their expectations, i.e. needs and wants&quot;.</td>
<td>Business-to-Business</td>
<td></td>
</tr>
<tr>
<td>Parasuraman &amp; Grewal 2000, p. 168</td>
<td>&quot;It is widely known that perceived value [...] is composed of a ‘get’ component – that is, the benefits a buyer derives from a seller’s offering – and a ‘give’ component – that is, the buyer’s monetary and non-monetary costs of acquiring the offering.</td>
<td>General</td>
<td></td>
</tr>
<tr>
<td>Ulaga &amp; Chacour 2001, p. 530</td>
<td>&quot;[...] we define customer perceived value in industrial markets as the trade-off between the multiple benefits and sacrifices of a supplier’s offering, as perceived by key decision makers in the customer’s organisation, and taking into consideration the available alternative supplier’s offerings in a specific-use situation. [...] In this study, the criteria were grouped into ‘quality-related aspects as an expression of perceived benefits and ‘price-related’ aspects as an expression of perceived benefits and ‘price-related’ aspects representing the perceived sacrifices&quot;.</td>
<td>Business-to-Business</td>
<td></td>
</tr>
<tr>
<td>Walter et al 2001</td>
<td>&quot;Value is the perceived trade-off between multiple benefits and sacrifices gained through a customer relationship by key decision-makers in the supplier’s organisation&quot;.</td>
<td>Business-to-Business</td>
<td></td>
</tr>
<tr>
<td>Ulaga 2003, p.678</td>
<td>&quot;Customer value is generally defined as the trade-off between the benefits [...] and the sacrifices [...] in a market exchange&quot;.</td>
<td>Business-to-Business</td>
<td></td>
</tr>
<tr>
<td>Woodall 2003</td>
<td>&quot;Value for the customer is any demand-side, personal perception of advantage arising out of the customer’s association with the organisation’s offering, and can occur as reduction in sacrifice; presence of benefit</td>
<td>General</td>
<td></td>
</tr>
</tbody>
</table>
(perceived either as attributes or outcomes); the resultant of any weighed combination of sacrifice and benefit (determined and expressed rationally or intuitively); or an aggregation, over time, of any or all of these”.

<table>
<thead>
<tr>
<th>Heinonen 2004 p.205</th>
<th>“...a function of benefit and sacrifice of technical, functional, temporal and spatial value dimensions”.</th>
<th>Business-to-Consumer Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author(s)</td>
<td>Quote</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>Menon et al, 2005, p 5</td>
<td>&quot;...as a customer’s overall assessment of the utility of a relationship with a vendor based on perceptions of benefits received and sacrifices made&quot;.</td>
<td></td>
</tr>
<tr>
<td>Ulaga &amp; Eggert, 2006, p.128</td>
<td>&quot;We define customer perceived value in a key supplier relationship as a formative higher order construct that represents the trade-off between the benefits and costs perceived in the supplier’s core offering, in the sourcing process, and at the level of a customer’s operations, taking into consideration the available alternative supplier relationships&quot;.</td>
<td></td>
</tr>
<tr>
<td>Woodside et al, 2008 p.4</td>
<td>&quot;Value, from the perspectives of customers and marketers, is a multi-dimensional concept representing a net score that includes measurement of total benefits perceived or realised and total cost of acquiring, using and disposing of a product or service&quot;.</td>
<td></td>
</tr>
<tr>
<td>Busacca et al, 2008 p.158</td>
<td>&quot;... Value for the customer is a synthetic cognitive construct originating from the ratio between the functional and symbolic benefits that the product offers in given usage situations, and the various costs (e.g. purchasing, information finding, learning, maintenance, obsolescence and conversion costs) that the customer bears to obtain these benefits&quot;.</td>
<td></td>
</tr>
</tbody>
</table>

Interestingly, confusion still reigns as Zeithaml (1988), the researcher who originally set the cultural hegemony of benefits and sacrifices trade-off in motion by defining the ‘get’ and ‘give’ aspects of the perceived value concept, later excluded perceived value from a study of customer metrics’ impact on financial performance. The reason for this is stated as, "it is the most ambiguous and idiosyncratic customer metric ...whose operationalisation and measurement has proven difficult" (Gupta & Zeithaml, 2003, p.718). This may also be why consumer perceived value, modelled as ‘value-for-money’, did not feature in the UK Marketing Council’s Marketing Metrics research project, despite the perceived need to prepare for the...
forthcoming ‘value-for-money’ cost innovation driven revolution that could lead to new business models (Ambler, 2000; Williams, 2010).

Recent researchers, therefore, continue to claim that customer value remains limited conceptually and empirically, is multifaceted, fragmented, unsettled, confusing, complicated by numerous interpretations, biases and emphases, and even sometimes self-contradictory across a multitude of different definitions, models and measurement approaches. This demonstrates that no single conceptualisation or measurement has won universal acceptance (Parasuraman & Grewal, 2000; Khalifa, 2004; Wang et al, 2004; Lin et al, 2005; Menon et al, 2005; Sánchez-Fernández & Iniesta-Bonillo, 2007; Graf & Maas, 2008; Sánchez-Fernández et al, 2009).

These researchers have identified a number of limitations, including acknowledgment of key debates around means-end chain versus benefit-sacrifice approaches, reflective versus formative indicators, and uni-dimensional versus multi-dimensional measurement issues. It seems surprising then that the same researchers advocate synthesis of all of the different research streams into a single integrative framework and a configuration that reflects customer value’s richness and complexity. This is especially so as segmentation theory, a mature and accepted concept in marketing, stipulates that customers’ needs, preferences and values are heterogeneous, and the multidimensional complexity of the value construct suggests that no single measurement scale is able to capture it (Slater, 1997; Blocker & Flint, 2007).
2.4.3 Business-to-Business Customer Perceived Value

Although relatively neglected compared to consumer marketing (Homburg & Rudolph, 1997), customer value is gaining attention by academics and practitioners in business-to-business settings (Woodruff, 1997; Lapierre, 1997:2000; Ulaga & Chacour, 2001; Ulaga, 2003; Bovik, 2004; Ulaga & Eggert, 2006; 2008). With increasing attention on multi-stakeholder customer approaches, including shareholders, employees and others, business-to-business success depends on continuation of good relationships and interaction in industry networks and across cultures (Christopher et al, 1997; Gummesson, 1995: 2006; Peck et al 1999; Payne et al, 2001; Ford et al, 2003; Menon et al, 2005). This is especially so between customers and suppliers because the ability to predict future changes in customer value is as important as the mere longitudinal monitoring of it. Knowing where value resides from customers’ viewpoints has become critical in providing differentiators for suppliers in gaining and sustaining key supplier status (Parasuraman, 1997; Ulaga & Chacour, 2001; Ulaga & Eggert, 2006; Smith & Colgate, 2007).

Most business-to-business customer value research is under investigation by Industrial Marketing and Purchasing Group (IMP) researchers from different perspectives, at different levels and units of analysis, and in response to one of three contexts (Ulaga, 2001; Bovik, 2004). These are seller, i.e. supplier (Flint & Woodruff, 2001; Hogan, 2001), buyer, i.e. customer (Walter et al, 2001), and buyer-seller with the increase in co-creation, collaborating and alliances (Sharma et al, 2001). Nevertheless, few researchers have investigated customer value and its
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

operationalisation in business-to-business settings, including little investigation of customer perceived value and other core marketing concepts, such as trust, commitment, satisfaction and loyalty (Ulaga, 2001; Lapierre 2008).

Quantitatively demonstrated in business services and industrial companies respectively, customer perceived value is a key determinant for customer satisfaction, which in turn influences loyalty in terms of repurchase intentions, despite being distinct but complementary constructs (Patterson & Spreng, 1997; Eggert & Ulaga, 2002). However, customer value variables had to be dropped in order to predict satisfaction, loyalty and market performance in the hybrid veterinary pharmaceuticals market (Spiteri & Dions, 2004).

Attempts at holistic quantification of customer perceived value have been made by using double-scale, multiple-item measures in a large Canadian IT enterprise (Lapierre, 1997), a major German chemical manufacturer (Ulaga & Chacour, 2001), and a cross-section of mid-west USA component manufacturing companies (Ulaga, 2003; Ulaga & Eggert, 2006). Lapierre's (1997) case study conceptualises customer perceived value dimensions in 13 value drivers related to points in time in the value creation process. Ulaga & Chacour's (2001) grounded theory study investigates customer perceived value as a multi-attribute construct derived from a function of quality related to product, service, promotional components and price, operationalised by industry-specific attributes which are measured compared with competitors. Ulaga's (2003) grounded theory approach identifies eight relationship drivers – six on the benefits side and two on the sacrifice side – each consisting of
three or four sub-dimensions. Ulaga & Eggert (2006) use a qualitative approach to define customer perceived value, prior to quantitative measurement of relationship value, consisting of three benefits, i.e. core, sourcing and operations, and three costs, i.e. direct, acquisition and operation.

All of these studies’ scale development, combining value literature, focus groups and individual in-depth interviews, were pre-tested and tested in customer segment-specific settings, accommodating both customer and supplier perspectives (Lapierre, 1997; Ulaga & Chacour, 2001), supplier-only perspective (Ulaga, 2003), and customer-only perspective (Ulaga & Eggert, 2006). These studies’ further research suggestions recommend testing the scales in other business-to business products and markets. This is partly because of the need to conduct similar research in the manufacturing sector rather than the purely service-based IT sector in the case of Lapierre’s (1997) study, and partly because of the exploratory nature and small samples in the others (Ulaga & Chacour, 2001; Ulaga, 2003).

Apart from Lapierre’s (1997) study, another limitation of the other studies is that they were cross-sectional customer perceived value evaluations, sharing common ground in market offerings composed of goods and service elements (Lapierre, 2000; Ulaga & Chacour, 2001; Ulaga, 2003; Ulaga & Eggert, 2006). The studies have also all been criticised in that their scales describe what creates value, rather than its manifestation and definition (Baxter, 2008).
A pure services conceptualisation of customer perceived value through an abductively-explored, dyadic case study in the commercial aircraft maintenance segment of the aerospace industry uses value maps built from value attributes, aggregated into value drivers and then value features (Bovik, 2004). Value emerges at three levels - product, partnership and psychological - where benefits and sacrifices associated with six identified dimensions of customer perceived value are affected by the notion of ‘flow’, e.g. goods, information, risk, etc. Bovik (2004) claims the ‘flow’ process is built and filtrated by trust, during which customers’ perception and understanding of value comes into being. Apart from recommendations to validate the maps, verify the ‘flow’ and trust aspects, investigate service design, and use different methodological approaches, Bovik (2004) pleas for extended customer perceived value investigations in other business-to-business settings.

Recent research is presented in twelve papers to be found in volume 14 of the ‘Advances in Business Marketing and Purchasing’ series which specifically looks at the creating and managing of superior customer value (Woodside et al, 2008). Key topics include: intangible value in buyer-seller relationships (Baxter, 2008); the value of the final customer in business networks (Henneberg & Mouzas, 2008); customer value metrics (Buscacca et al, 2008); the total cost of ownership and customer value in business markets (Piscopo et al, 2008) and linking of customer value to customer share in business relationships (Ulaga & Eggert, 2008), amongst others. Despite their contribution to knowledge, these business-to-business customer perceived value research studies, be they conceptual or empirical, are
static perspectives and do not take into account how changes in customer perceived value may enhance knowledge of customer value.

2.5 Conceptualising Change

2.5.1 Change and Organisational Development

Organisation Development Theory has long recognised Change\(^6\) as an important sub-discipline in its own right (Holbeche, 2006). That change is, is evident, but what change is neither evident nor easily defined because it is often transient, intangible and above all appears to be processual (Adler, 1986; Wilson, 1992). Change occurs in objects and subjective states over time and cannot occur independently of any form of temporal measurement, understood either in blocks of time or happening instantaneously (Pettigrew, 1985; Wilk, 1990). Change, the state of impermanence or flux from which no organisation is immune, is everywhere and inevitable, and as an integral part of strategy is not only seen as a source of danger or threat but also as a source of opportunity (Nystrom & Starbuck, 1984).

Unless organisations continually adapt to change, they can enter a 'strategic drift' phase characterised by lack of clarity, confusion and deteriorating performance (Johnson, 1988). Conversely, an organisation's capacity to handle change strategically can be a critical source of sustainable competitive advantage (Pettigrew & Whipp, 1991). Organisations and individuals must adopt positive

\(^6\) The word change generally refers to a transformation or modification of something over time (Rensink, 2002, p248) and needs to be distinguished from motion, difference and whether the change is dynamic or completed.
attitudes towards change, therefore, even though some things do not change, some changes are not worth attempting, only some changes are possible or sustainable, and there may be cynicism or Machiavellian motivation associated with such changes (Cunningham, 1999; Wanous & Reichers, 2000; Buchanan et al, 2005; McQuire & Hutchings, 2006).

Despite questions about the exact nature of organisational change, coping with change is today's single most important element of successful business performance as management provides strategic flexibility in trying to move organisations to some future desired state, usually based on competitive advantage (Ashburner et al, 1996; Pettigrew et al, 2001). Change management is the renewing process of organisational direction, structure, and capabilities by redirecting resources and knowledge management to serve and add value for the ever-changing needs of the marketplace, customers and employees (Eisenhardt & Brown, 1999; Moran and Brightman, 2001; Goll et al, 2007).

2.5.2 Drivers, Initiators and Triggers of Change

Change detection is the recognition of sources of change in the world from a myriad of macro-economic factors, i.e. STEEP\(^7\), meso-economic factors, i.e. industry forces\(^8\), and micro-economic factors, i.e. internal organisational culture, resources, functions, and departments. Such multiplicities of factors are inextricably linked.

---

\(^7\) Social, Technological, Economic, Environmental, Political factors

\(^8\) Five Forces Model of Industry Competitiveness i.e. power of suppliers, power of customers, competitive rivalry, new entrants and substitute products (Porter, 1985)
They may be known factors, hypothetical factors, for example based on a hypothetical scenario or possible occurrence, and unpredictable, unforeseeable factors that cause customer value to change (Woodruff & Gardial, 1996; Johnson & Scholes, 1999; Rensink, 2002).

For the purpose of Organisational Development⁹, organisational change has been conceptualised, studied and analysed in a wide variety of ways, but principally in two categories: how change occurs, i.e. process, and what change is, i.e. content, be it classed as incremental or transformative, first-order versus second order, transformational, transitional or transactional, episodic versus continuous, and caused by external or internal triggers¹⁰ (Dibella, 2007). A trigger can be a singular event or culmination of a series of events, with some events being predictable and others not, and divided into three types – supplier located, customer located and environmentally located (Flint et al, 1997).

The causes of change exerted upon an organisation appear to be a combination of both internal and external triggers, as a longitudinal research case study into change influences within a UK multi-national manufacturing organisation suggests (Bamford, 2006). Other research considers internal initiators of change always to be a manifestation of external initiators of change, i.e. a second order change. An example of this is where the external aspect of customers' changing demands leads

⁹ Organisational Development is a systematic process for applying behavioural science principles and practices and is directed at organisational improvement (Holbeche, 2006 p.233).

¹⁰ "a stimulus in the customer's environment that is perceived by the customer to be relevant to his/her goals, which results in some form of change in values - personal and/or organisational - desired values, and/or value judgements" (Flint et al, 1997 p. 165) adapted from Gardial et al's (1996) definition.
to internal initiators of change for supplier organisations, through the consequential need to improve the quality of products and services or key business processes in order to provide new value propositions to their customers (Oakland & Tanner, 2007). Failure to detect environmental changes caused by myopia (Levitt, 1960) and conversely excessive over-attention to the diversity of environmental changes can make it impossible for management to focus on the relevant factors that vary from industry to industry, business to business and indeed from customer to customer.

Nevertheless, 21st century customer-centric marketing has suppliers recognising that customers are increasingly shaping relationships proactively through their ability to influence and interact with changes occurring in external and internal environments, rather than making their traditionally reactive responses to those changes (Sheth et al, 2000). Coping with the ‘incessant change’ of demanding and knowledgeable customers with complex value requirements, aggressive competitors, turbulent markets, disruptive new technologies and escalating globalisation therefore determines an organisation’s effectiveness in implementing marketing strategy successfully (McGuinness & Morgan, 2005; Cravens 2006).

A multi-level, longitudinal case study of discontinuous change (Gilbert, 2006) showed that management’s response to initiators of change or trigger events creates a paradox of threat and opportunity cognitive frames coexisting simultaneously. This is because opportunities create problems for strategic renewal as there seems to have to be performance decline before an organisational
response is triggered, whilst threats trigger organisational responses but only after creating intense individual, group or organisational rigidities (Gilbert, 2006). The application of complexity theory is seen as a better way of understanding change in organisations, despite a claim of it not being fully developed as a theory and not yet moving beyond the stage of a metaphor (Burnes, 2005). The complexity of relationships between environmental turbulence, management’s perception of the external environment, attitudes to change, management actions and business success shows successful organisations being those that welcome change and less successful ones as being the victims of change (Mason, 2008).

As customer value is considered to be the linchpin of organisational change, an organisation must really understand its customers’ changing needs as it is customers who select the proposition they consider to be the best value (Goodstein & Butz, 1998; Doyle, 2000). Otherwise suppliers will find that their internally-derived perceptions of customer value propositions are not deemed to be of value, or distinguishable enough from others in the marketplace, with the result that customers will simply drift away to the competition (Wilson, 1999; Smith & Colgate, 2007). Consequently, close involvement with customers, the ability of organisations to continually see drivers, initiators and triggers of change through the eyes of their customers, and the dissemination of collected, pertinent customer information within the organisation, is not an option but an imperative in the proposition and provision of customer value (Cillo & Verona, 2008).
2.5.3 Changes in Organisational Business Processes

Customer value is not only created in the harnessing of resources for the design and delivery of a usable service-offering for use in a customer’s own value creating services, but is also created through the successful application of cross-functional business processes (Narver et al, 2004). Such an expanded, resource-based view suggests organisations compete on the basis of accumulated capabilities, competencies, experience, knowledge and skills through the choice and application of crucial, dynamic business processes and models. These can determine an organisation’s capacity for value co-creation and capture through value appropriation (Lambert & García-Dastague, 2006, Golhetto et al, 2008; Teece, 2010). If we assume that pursuit of a marketing orientation is the first fundamental, foundational model and requirement for a business, guiding and influencing its processes, there are additionally five key, interrelated and interdisciplinary business processes which determine an organisation’s state of customer value. These can be impacted by first order changes mentioned in 2.5.2, and are: business model management, knowledge management, innovation management, customer relationship management and supply chain management (Nasution & Mavondo, 2008).

Business Model Management

A business model, although not always properly understood and rarely subjected to academic scrutiny, is a value system template of practices in how an organisation links dynamic capabilities and other resources with markets to co-create value to all
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

stakeholders or actors, most noticeably with customers and suppliers, within a value constellation or network (Baden-Fuller & Morgan, 2010; Teece, 2010; Yunus et al, 2010; Storbacka et al, 2012). Improved value co-creation can entail managing a single model, or even contradictory business models for those organisations that have different value configurations, for specific market segments, within a single market or multiple markets and product/service offerings (Smith et al, 2010: Zott & Amit, 2010).

Business models transcend the traditional dissonance-creating linking of competing, resource-based or market-led corporate, marketing and manufacturing strategies perceived to reside within organisational boundaries (Brown & Blackmon, 2005; Deflorin et al, 2007; Wirtz et al, 2010). This transcendence is achieved by taking an 'outside-in' rather than an 'inside-out' perspective by focusing on putting the 'value-to-the-customer' consideration first. This is then followed by value appropriation for the supplier or focal actor (McGrath, 2010). Such a perspective still requires accepting the dynamic nature of competitive advantage and the need for adaptation because of changing environmental conditions (Teece, 2010). For example, one proposed business model design framework identifies 12 elements within a three by four matrix. Design layers of principles, resources and capabilities are mapped against design dimensions of the market, offerings, operations and organisation which need to be considered when modelling how to be an extension of customers’ value-creating processes, and ‘open’ so other network actors can be involved in the construction and usage (Storbacka et al, 2012).
Although a business model appears to be the same as strategy, it is claimed that they are in fact two distinct concepts. Business models refer to the different logics and design for delivering value to customers, whilst strategy refers to the choices between different business models (Casadesus-Masanell & Ricart, 2010). Furthermore, the integration of both choices of business model and strategy with choice of tactics, i.e. the residual choices of the detailed operational methods, enabled within each business model, lead to the view that a business model is reflection of an organisation’s realised strategy (Casadesus-Masanell & Ricart, 2010). It can be seen, therefore, that a business model is the articulation of inter-functional co-ordination of dynamic capabilities and resources designed to produce compelling value co-creation propositions to customers (Chesbrough & Rosenbloom, 2002: Demil & Lecocq, 2010; Teece, 2010).

The extant literature reveals several independent, sometimes overlapping conceptual approaches by different researchers on the trend for manufacturing companies to move beyond simply complementing their core product offerings with services as add-ons, towards the provision of full service over the life of an offering in its own right. Of these differing approaches there are two principal concepts: servitisation (Vandermerwe & Rada, 1988) and product-service systems (Mont, 2002; Tukker, 2004). Building on Vandermerwe & Rada’s (1988, p.314) original definition of servitisation as, “an offer of integrated packages of products, services, support, self-service and knowledge to add value to a company’s core business offerings", Baines et al (2009) have defined servitisation as:
"The innovation of an organisation's capabilities and processes to shift from selling products to selling integrated products and services that deliver value in use".

Mont (2002, p.78) defines product-service systems as,

"A system of products, services, supporting networks and infrastructure that is designed to be competitive, satisfy customer needs, and have a lower environmental impact than traditional business models".

There are several categories of product-service system business models, including: product-based, where ownership of a major, tangible product is transferred to a customer and additional services are provided, e.g. maintenance contracts; use-based, where the supplier retains ownership of a traditional product and provides a major service, e.g. leasing; and result-based, where customer and supplier agree a result and no pre-determined product is involved, e.g. voicemail replacing an answering machine (Neely, 2008; MacDonald et al, 2009). These models can be used to guide and transform product-centred, value-in-exchange manufacturing organisations of a goods-dominant logic mind-set into the value-in-use service provision organisations of the service-dominant logic mind-set.

Servitisation's emphasis is on the innovation and transition of adding services to products, whereas product-service systems takes the concepts forward with an emphasis on ownership – be it the manufacturer or customer – and, ultimately, the
possibility of replacing products with services. However, servitisation or product-service systems do not appear to represent a panacea for all manufacturers (Baines et al., 2009). Both approaches come with a number of design, cultural, financial and operational challenges to successful implementation (Biege et al., 2012). In particular an organisation embracing either concept needs to recognise that each concept is not a single template but actually comprises a number of new business models with the features differing for each, positioned along a continuum (Baines et al., 2009; Ng & Briscoe, 2012).

In highly competitive markets, both constructs are becoming increasingly recognised as providing manufacturers with a mechanism to maintain or enhance revenue streams and profitability, and differentiate those product offerings which would just qualify them to bid, with order-winning services (Lockett et al., 2010). Consequently there is a growing interest by academics in the operationalising of servitisation and product-service system constructs and in defining their domains (Ren & Gregory, 2007). At the same time practitioners are advocating servitisation as a new future for manufacturing in a service economy, and a new priority for chief executives (IBM, 2006; Sissons 2011).

In a transition to a potentially more complex and involved provision of service, the provider may have more scope to deliver value in use, but arguably a greater need to understand customer perceived value in this new environment. In terms of relevance to this thesis, both the conceptualisation of customer perceived value in this regard and understanding of how an event, such as transition to a new model,
may change customer conception of desired value for its suppliers, are central themes.

Knowledge Management

Knowledge Management is defined as: “the discipline of creating a thriving work and learning environment that fosters the continuous creation, aggregation, use and reuse of both organisational and personal knowledge in the pursuit of new business value” (Cross, 1998, p.11). Building on the premise that organisational knowledge is a fundamental and sure source of superior competitive advantage, it is a prerequisite for an organisation's knowledge base to contain its best available understanding of the organisation's chosen marketplace. Explicit and tacit knowledge are developed by individuals then articulated and amplified by the organisation (Nonaka, 1991; Grant, 1996; Vargo & Lusch, 2006). Organisations may be viewed, therefore, as a number of internal, overlapping knowledge systems in a much wider collection of external business network partners, which are all held together through moderating properties of relationships, competences, trust, performance and information (Squire et al, 2009; Lusch et al, 2010; Peters, 2012).

Arguably one of the most significant elements of marketplace knowledge is an organisation's learning and understanding about customers as key participants. Supplying customers' changing value-based wants, needs, priorities and buying

11 Defined as "the tangible creations of human intellect which include technical expertise, problem solving capability, creativity and managerial skills which are embodied in the employees of the organisation" (Schlegelmilch & Penz, 2002 p.6)
behaviours must be the reason for the firm’s existence, and certainly its success (Slater, 1997; Peters, 2012). These changes are driven by the influences of the dynamic macro-environment, industry micro-environment and, more importantly, by individuals, as humans have become more independent, autonomous and have greater choices in both leisure and work (Beckhard, 1969). The customer, therefore, cannot be considered as simply having one, collective conceptualisation of value, or a single need or want, and it is incumbent on suppliers to understand influences at these different levels.

In turn, as knowledge is not just the asset of the supplying organisation, this understanding and learning must also be transferred to the network of partners and other stakeholders in the same service ecosystem so they too can understand customer perceived value as an operant resource, and understand how that value can be co-created for the customer (Johnston & Peters, 2011). Equally, such knowledge transfer enables more organisational learning for the customer based on the experience that the customer has during the relationship with their suppliers, which further impacts on how the customer will engage in future value co-creation activities (Payne et al, 2007).

Although many organisations today consider themselves to be market driven, market driving and customer oriented, there are few organisations really managing well perhaps their most precious resource: the knowledge residing in their customers, as opposed to knowledge about their customers (Gibbert et al, 2002). Nowhere is this more noticeable than in most suppliers’ traditional and relatively
poor comprehension of what their customers actually perceive as constituting value, be it functional\(^{12}\) (Kluckhohn, 1951) or meaningful\(^{13}\) (Rokeach, 1973). The supplying organisation more often has its own internally-derived perspective of what value is or may be for customers (Huber et al., 2001). This is because the primary concern for suppliers is not the value goals of their customers in terms of maximising the benefits sought, or reducing the total cost of ownership per se, but value appropriation, i.e. their ability to extract value from the marketplace to meet their own goals of revenue share, earnings and profitability (Cox et al., 2004).

It is pertinent to note also that customers and suppliers may not share the same knowledge and understanding about value, even if customer and supplier roles are no longer so distinct and delineable as they were (Golfetto & Gibbert, 2006; Kalaignanam & Varadarajan, 2006). For example, a recent case study into two buyers' perception of what constitutes good supplier performance did not mention the provision of customer value per se, although a small number of the concept's attributes, e.g. product quality, innovation, etc, appeared as either short or long term evaluation criteria (Freytag & Grübaum, 2008). Such knowledge gaps can be overcome by ensuring an appropriate, analytical customer relationship management process is in place to enhance a supplier's ability to interact, attract and maintain relationships with customers. This should be built on the ability to

\(^{12}\) "...a value is the conception, explicit or implicit, distinctive of an individual or characteristic of a group, of the desirable, which influences the selection from available modes, means and ends of action" (p.395)

\(^{13}\) "...an enduring belief that a specific mode of conduct is personally or socially preferable to an opposite or converse mode of conduct or end state of existence" (p.5)
gain and maintain knowledge of customers, and on the knowledge possessed by customers (Rowley 2002; Xu & Walton, 2005).

**Innovation Management**

Innovation management is linked to supply chain management because organisations need to access external knowledge and expertise as well as rely on their internal resources and activities in order enhance and cause changes in the co-creation and capturing of value through new market offerings, whether their innovation management is classed as conservative or entrepreneurial\(^1\) (Miller & Friesen, 1982; Flint *et al*, 2005; Nasution & Mavondo, 2008).

Recognizing that the market demand of customers is only one innovation driver and that no single organisation has all the answers in an increasingly competitive world, the management of innovation involves the balancing of co-operative and competitive forces. Such multi-party collaboration is drawn from a dense network of external relationships inside and outside of an organisation’s industry network, e.g. suppliers, competitors, research centres, universities etc (Brusoni *et al*, 2001; Möller; 2006; Cassiman *et al*, 2009).

\(^1\) Conservative innovators perform innovation reluctantly, mainly in response to serious competitive environmental challenges that are sensed by their scanning devices. Their information processing, decision-making variables and structural control mechanisms help them to recognise and cope with these challenges. In contrast, Entrepreneurial innovators always aggressively pursue innovation and are in danger of excessive and wasteful activity unless decision-makers are warned to slow down (Miller & Friesen, 1982).
Innovation is variously defined as the creation and diffusion of any idea, practice, material, artefact, product, service, process, policy, structure, method, or opportunity that is perceived to be new and consistent with the values, experience and needs of the unit of adoption (Rogers, 1995; Zaltman et al, 1973; Tushman & Nadler, 1986; Nohria & Gulati, 1996; Flint 2006). Utilising Schumpeter's (1934) pioneering theory of innovation types sees the innovation literature distinguishing between lower-level continuous incremental innovation, i.e. cost reduction and product or process improvements, and higher-level complex disruptive discontinuous radical innovation, i.e. fundamental changes to practice and markets or even their replacement (Tidd, 2001). For instance, engineering companies are now facing challenges around adopting and adapting innovative business models such as “total package” solutions through the application of the ‘razor – razor blade model’ and ‘risk and revenue sharing’ over the lifetime of commercial aircraft jet-engines. In this regard, Rolls-Royce plc now derives over 50 per cent of its revenue from customers in providing services surrounding the supply of its core product, the gas turbine (Bessant et al, 2008; Teece, 2010).

Customer Relationship Management

Customer Relationship Management is defined as, “a customer focused business strategy that dynamically integrates marketing, sales and customer service in order to create and add value for the company and its customers” (Chalmeta, 2006 p.1015). Five key, cross-functional customer relationship management processes: strategy development, value creation, multichannel integration, information
management, and performance assessment facilitated by IT infrastructures, help organisations to understand and create value for customers through flexibility and the ability to respond quickly and reliably to changing requirements (Payne & Frow, 2005). Naturally it is important that the customer relationship management process is interlinked with the organisation's supply chain management process to ensure the physical aspects of product or service availability for their customer's customer or end-user demands.

Supply Chain Management

Supply Chain Management is defined as (Mentzer et al, 2001, p.18):

"The systemic, strategic coordination of the traditional business functions and the tactics across these business functions within a particular company and across businesses within the supply chain\(^{15}\), for the purposes of improving the long-term performance of the individual companies and the supply chain as a whole".

Successful supply chain management integration and implementation entails taking a holistic view of the different types of purchasing strategies, whether transactional or relational, set in the complexity and structural embedding of relationships in supply networks (Power, 2005; Svahn & Westerlund, 2009; Choi & Kim, 2008). Of

\(^{15}\) "...a set of three or more entities (organizations or individuals) directly involved in the upstream and downstream flows of products, services, finances, and/or information from a source to a customer" (Mentzer et al, 2001 p 4).
particular note is the contribution that a supplier can provide to its customer, be it through derived direct value or indirect value functions based on increased benefits, reduced sacrifices, effectiveness, efficiency, partnership and network dimensions (Mentzer et al., 2001; Walter et al., 2001; Lemke et al., 2003; Möller & Törrönen, 2003: Terpend et al., 2008).

Supply chain management is an emerging critical arena that can add value to stakeholders and lead to superior customer value, providing that customers foster a supply chain orientation and carefully select the ‘right’ suppliers using evaluation systems based on comprehensive sourcing metrics (Flint, 2004; Lambert & García-Dastugue, 2006; Min et al., 2007; Pressey et al., 2007). The importance of measuring supply chain performance is also acknowledged but it seems that a number of issues, e.g. classifying the development stages of supply chain management, the need to improve visibility gaps, goal incongruence, etc, are factors that can affect or delay its successful implementation (Bales et al., 2004; Shepherd & Günter, 2006; Bartlett et al., 2007; Rossetti & Choi, 2008). Perhaps this situation is made worse through the belief by some of those involved in supply functions that it is only supply chain management that will lead to the ultimate success of the single organisation (Lambert & García-Dastugue, 2006).

Furthermore, the use of ‘lean’ supply chain strategic planning tools such as SCOR\(^\text{16}\) and SC21\(^\text{17}\), developed by the Supply Chain Council of the USA and the Society of

\(\text{16}\) Supply Chains Operations Model
\(\text{17}\) 21st Century Supply Chains
British Aerospace Companies of the UK respectively, may actually lead to value dilution, despite their best intentions. This is because such standard format approaches, designed to simplify the complexity of supply chain management, are overly reliant on a very small number of performance metrics centred on cost, delivery, quality and responsiveness, which are usually administered by the purchasing department (Huan et al, 2004, Lockamy III, 2004). Although filtering is recognised as a vital process in helping to prioritise the phenomena under consideration in a given situation, it comes at a cost and can significantly bias any judgements made. In judgement terms the four dimensions of cost, delivery, quality and responsiveness do not adequately reflect the multi-dimensional richness of customers’ perceptions of value.

Nor is the situation helped much by claims that it is the purchasing department which is the main unit of business-to-business markets’ systems through which customer perceived value is created across the six-stage levels of the purchasing process, and that supplier logisticians are actually uniquely placed - better than marketers - to understand changes in customers’ perceptions of value (Ozkan-Tektas & Wilson, 2010; Flint & Mentzer, 2000).

2.5.4 Impact of Changes on Customer Choices

As customers’ definitions of value keep changing in response to shifting needs, buying decision processes, competitors’ offerings and experiences of previous purchases, so value propositions become less effective over time as value migrates (Webster, 1991; 2002; Piercy, 1997; Slywotsky, 1996). Shifts in desires and
importance of differing components of marketplace offerings mean value drivers and determinants might differ from those evidenced at purchase, in use and over the long term (Parasuraman & Grewal, 2000; Lapierre, 2000). Almost everyone agrees that customers change what they value from suppliers over time, and anticipating the value customers want in the future is a matter of survival for suppliers facing continuous change in the rapidly challenging and high velocity environments (Woodruff & Flint, 2003, Wirtz et al, 2007).

Customer value change provides reasons for customers to seek, maintain or move away from relationships with suppliers based on embedded organisational cultural aspects of supplier relationship orientation, although this may take time because of the lagged effect of changes on value evaluation (Flint et al, 2002; Winklhofer et al, 2006; Ivens & Blois, 2004). Although suppliers must respond to customer requests for value change to avoid dissatisfaction developing in the relationship, responses are not deemed enough on their own if relationship dissolution prevention is sought (Beverland et al, 2004). Therefore suppliers must actively seek to improve relationships through implementing driving market actions and differentiation (Ulaga & Eggert, 2006).

Even though customers and other suppliers are unlikely to hold the same view of the purpose, scope and involvement of their relationships, customer relationships are deemed to be the most important relationship of any in an organisation’s business networks (Ford et al, 2003). Furthermore, the realisation of other stakeholders’ interests can only occur when customers are satisfied because value
is marketplace-defined by customers and not by the other stakeholders, and certainly not by suppliers, despite what they think (Webster, 2002).

Building on Gale’s (1994) view that the most important concept and target in business management is what customers value, high-performance companies are seen as successful because they see customers as valued intangible assets and put customers first to ensure change does not disadvantage them (Maitland, 2002, Gupta & Lehmann, 2003). Woodruff (1997) counters the change phenomenon of ‘customer drift’ by arguing for dynamic customer value provision to be the focus of organisations’ business activities in the pursuit of competitive advantage, using Woodruff & Gardial’s (1996, p.54) definition of customer value:

"The customer’s perception of what they want to have happen, i.e. the consequences, in a specific use situation, with the help of a product or service offering, in order to accomplish a desired purpose or goal".

With the provision of quality, a concept distinct from value, now taken for granted and there being little difference between competing offers in this regard, the study of customer value from a customer’s perspective is becoming more important (Woodside et al, 2008). This is seen in the serious attempts both by academics in research and by suppliers in practice (Bovik, 2004; Graf & Maas, 2008). It also includes the more prescriptive ‘dose-of-good-medicine’ insights and reflections of management gurus and consultants whose values-based frameworks (Evans, 2002)
and award of 'Value Medals' (de Bono, 2005) purportedly will guarantee success for organisations.

Suppliers tend to view a solution for a market offering as a customised and integrated combination of, principally, goods and accompanying services to meet their customer’s needs through “added value”, i.e. product centric (Tuli et al, 2007). Customers seem constantly to be bombarded with all kinds of marketing and sales communications and jargon from suppliers which is used as a cover for what they think customers value in the absence of knowing what it is they actually value. Such a myopic approach should be of concern for suppliers because it is customers who decide ultimately whether suppliers’ market offerings are of value to them, even if that value is realised through either co-creation or co-production, and be it through consumption or by co-design (Treacy & Wiersema, 1996). In contrast, customers tend to view a solution as a set of customer-supplier relational processes comprising customer requirements definition, customisation and integration of goods and services, their deployment, and post-deployment customer support, all of which focus on meeting customers’ needs, i.e. relational centric (Tuli et al, 2007).

Suppliers can therefore only make value propositions, i.e. implicit promises to deliver a particular combination of value, based on their perception and understanding of what customers value (Treacy & Wiersema, 1996, Vargo & Lusch, 2008). Indeed, in some instances - particularly in a business-to-business environment - customers demand that suppliers develop value propositions from their own customer specifications, albeit this varies between build-to-print, design,
and design and manufacture offerings (Gummesson & Polese, 2009). Suppliers may do the wrong things in pursuit and achievement of their own organisational goals and purposes if they do not fully understand customer perspectives of values and value (Woodruff, 1997).

Suppliers should not therefore over- or under-estimate customers' perceptions of value when determining their market offerings, whether they are potential suppliers seeking new business or existing suppliers pursuing continuation of business. Consequently, a comprehensive understanding of changes in customer perceived value is a fundamental prerequisite for suppliers to deliver their best customer perceived value based propositions. Only then can other customer value dimensions be realised, i.e. supplier's capability in determining 'added value' or 'superior value' and the seller's need for value appropriation in calculating the 'lifetime value of the customer'.

Within the services-dominant logic of marketing, the customer contribution is value actualisation, whilst the supplier contribution is value proposition (Gummeson, 2008). A call for development of a measurement instrument as a starting point to help capture service-dominant logic practice, based on the Contemporary Marketing Group's existing tool using the customer-supplier dyad as a relevant unit of analysis (Winklhofer et al, 2006), although valid arguably shows a flaw in service-dominant logic. On the one hand suppliers are advised to treat customers as a resource and co-creator of value, yet suppliers need to be aware that 'value is
uniquely and phenomenologically determined by the beneficiary’ (Vargo & Lusch, 2008, p.7).

If that is so, contrary to the established practice and continued proposals that the buyer-seller dyad be considered as the starting point for customer value research, it should rather be that it is the customer’s perception of value which is the first port of call, given the likelihood that both parties’ perceptions are not congruent in theory or practice.

If suppliers are unaware of, ignore or are arrogant towards the customer’s roles of being both the expert and arbitrator on value, then suppliers may be limiting their understanding of customers’ value orientations, composition and behaviour. The ability of suppliers to develop winning value propositions that lead to successful selection and retention could be therefore compromised, either for market offerings bought externally or in consideration against customers’ internal sourcing of manufacture. This is particularly the case when customers change what they perceive to be of value. The reality of increasing customer choice is therefore causing organisations to seek better knowledge of how their market offerings need to change in line with changes in customer value. This is so that suppliers can continue to provide superior value to customers compared with next best alternatives, even though focusing on customers’ perceptions of value is frustrating and costly (Anderson et al, 2006; Holbeche, 2006).
2.6 Conceptualising Business-to-Business Customer Perceived Value Change

2.6.1 Critical Review of Existing Research

The customer value change research agenda notes requirements for knowledge on ‘how’ customers change what they value, with little or no research focusing on understanding ‘why’ customers change what they value (Flint et al, 1997; Lapierre et al, 2008). Using the six questions of ‘what’, ‘how’, ‘why’, ‘who’, ‘when’ and ‘where’ as a starting point to pinpoint existing research, along with the three theory building approaches of research focus and purpose in terms of description, exploration and prediction, reveals that customer value change research is embryonic – see Table 3. This is because it is either conceptual (Flint et al, 1997; Flint & Woodruff, 1997; Flint & Blocker, 2004; Beverland et al, 2004; Woodruff & Flint, 2006; Blocker & Flint, 2007) or initial empirical research (Flint & Mentzer, 2000; Flint & Woodruff, 2001; Flint et al, 2002; Beverland & Lockshin, 2003, Beverland et al, 2004; Lapierre et al, 2008).
Table 3: Theory Building Status of Business-to-Business Customer Value Change

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus and Process</td>
<td>Identification of key constructs and variables. Studies are usually based on observation and/or interviewing.</td>
<td>Establish relationships amongst constructs and theoretical rationale for them. Studies based on observation and/or interviewing.</td>
<td>Examine the boundary conditions of a theory. Studies use surveys and interviewing.</td>
</tr>
<tr>
<td>Conceptual Papers</td>
<td>'Customer Value Change in Industrial Marketing Relationships' (Flint, Woodruff and Gardial, 1997) AND 'Issues in a Grounded Theory Study of Customer Desired Value Change' (Flint &amp; Woodruff, 1997)</td>
<td>None the researcher is aware of</td>
<td>None the researcher is aware of</td>
</tr>
<tr>
<td>Wholly or partly * Customer Value Change based</td>
<td>'Strategic Marketing in Global Supply Chains: Four challenges' (Flint, 2004)*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>'Expanding on Emotional and Symbolic Interactional Aspects of Business Customer Desired Value Change' (Flint &amp; Blocker, 2004)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>'Marketing’s Service-Dominant Logic and Customer Value' (Woodruff &amp; Flint, 2006)*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>'Customer Segments as Moving Targets: Integrating Customer Value Dynamism into Segment Instability Logic' (Blocker &amp; Flint, 2007)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dyadic cross-sectional in-depth interviews</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cross-sectional survey of purchasing managers</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Whilst these customer value change thoughts, research and findings have led to some understanding of ‘what’ changes affect customer value, the theory-building methodologies and methods employed in the empirical studies of customer value change - grounded theory (Flint & Woodruff, 2001; Flint et al, 2002), longitudinal case studies (Beverland & Lockshin, 2003; Beverland et al, 2004) and face-to-face survey (Lapierre et al, 2008) - have a number of limitations.

A qualitative, grounded theory study approach in the USA automotive industry is the first known study, albeit individual rather than organisational, providing a theoretical model of initiators of change on customers’ perceptions of desired value...
(Flint & Mentzer, 2000; Flint & Woodruff, 2001; Flint et al., 2002). Although requiring further validation through large samples and longitudinal studies, the research study yielded a speculative means-end causal model, rather than an attribute-based concept, presenting customer desired value change as a complex phenomenon encompassing three interrelated sub-phenomena – see Figure 1.

**Figure 1: Customer Desired Value Change**


The three aspects are: Form, comprising value hierarchy level, newness, bar raising and priority change; Intensity, comprising rate, magnitude and volatility of changes; and Tension Management, comprising properties of affective strength, perceived extensiveness and temporal dynamism. Corresponding dimensional ranges that
customers try to reduce are through learning, improving and controlling efforts, and action and interaction strategies involving locating, relationship building, motivating and co-ordinating of suppliers.

Consequently, business-to-business customers' perceptions of tension, reflected by heightened sense of urgency, anxiety, and even panic, creates the motivation for them to change what they want from suppliers to reduce or relieve tension. Tension derives from externally and internally driven event pressures grouped in five categories: changes in customers' customer demands, changes internal to customer organisations, moves made by customers' competitors, changes in suppliers' performance and/or demands, and changes in the macro-environment (Flint & Mentzer, 2000; Flint & Woodruff, 2001; Flint et al, 2002).

Although the study's fourteen hypotheses contribute to customer perceived value in part by incorporating relationships into customer value theory, limitations are acknowledged in some aspects or even all of the model and its resultant hypotheses because of its single industry perspective through twenty-two in-depth interviews, with only purchasing related professionals (Flint & Mentzer, 2000; Flint & Woodruff, 2001; Flint et al, 2002). Noting the exploratory stage of the study, and with no other qualitative research having generated any other theories specifically addressing customer value change, the researchers repeat Flint et al's (1997) challenge for a better understanding of how and why such changes take place. Flint (2004) adds to this by suggesting there is also a need for better processes for the prediction of future customer perceived value to facilitate competitive advantage.
Flint & Mentzer's (2000), Flint & Woodruff's (2001) and Flint et al's, (2002) research employed grounded theory\textsuperscript{18} because of the early stages of research in this area and the need to generate a depth of understanding when little is known about a phenomenon.

Grounded theory has seen growing usage within the discipline of management, and more recently marketing, despite criticism that it is not a new research paradigm (Reason & Rowan, 1981; Goulding, 2001). Flint & Woodruff (2001) acknowledge four limitations in their application of grounded theory: theoretical sampling saturation, data weighted heavily towards the interviews, interviewer prejudice through industry experience - more so than grounded theory recommends, and the inability to generalise from the authors' interpretations.

However, another apparent and possible serious limitation is that the authors are not explicit about which of the two versions of grounded theory they subscribe to or have applied, i.e. the two distinct versions that differ on the grounds of theory forcing versus theory emergence (Goulding, 2001).

The study also appears to have the misunderstandings or misuse of the method where the major problems lie in glossing over epistemological assumptions and the relationship between subjectivist and objectivist realities and levels of explanation

\textsuperscript{18} Deriving a theory that links participants' perspectives based on observations and theoretical sampling which the researcher gains inductively, the researcher then deductively turns away from the data and thinks rationally about missing data and forms conclusions based on logic to form hypotheses to be investigated more fully at later date (Glaser & Strauss, 1967; Strauss & Corbin, 1990).
that remain unclear (Charmaz, 2000). Furthermore, are Flint & Woodruff's (1997) claimed resolutions of using a combination of phenomenology, ethnography and holistic transcript readings in their grounded approach viable, when other qualitative researchers claim each of those specific methodologies is quite distinct in its purpose and procedures for data collection, interpretation and theoretical development (Goulding, 2005). For example, can a purposive, theoretical, saturated sample of 22 influential decision makers in purchasing and supplier management, representing diversity along several dimensions and levels, drawn from nine separate organisations across the USA's automobile manufacturing supply chains, fulfil the purpose of ethnography, i.e. to understand the relationship between behaviour and 'culture'?

Beverland & Lockshin (2003) conducted a phenomenological, longitudinal study into relationships between buyers and sellers in the New Zealand wine industry, employing an embedded case design (Yin, 2009) involving 141, two hour interviews in four phases, quantitative surveys, industrial histories and secondary information, e.g. company literature, press articles, etc, with data collected and analysed over a six year period. This research is claimed to be the first dyadic approach in customer desired value change and it has provided support for and built on others' research (Flint & Mentzer, 2000; Flint & Woodruff, 2001; Flint et al, 2002) in identifying the means by which suppliers manage the phenomena over time, linked to strategy and performance (Beverland & Lockshin, 2003). Additionally, Beverland & Lockshin (2003) identify the changing relative importance that relationships and transactions
have on customer desired value change through a proposed four-stage model of market evolution comprising pre-take off, take off, consolidation and maturity.

Beverland et al’s, (2004) qualitative research into the role of value change in the relationship dissolution was based on 17 dyadic, in-depth interviews covering eight advertising client and agency dyads in Australia to compare the views of the agency and the customer, i.e. client. Whilst the study generally found support for customer desired value change (Flint et al, 1997), and in particular that suppliers needed to take actions to reduce tension and curb dissatisfaction (Flint et al, 2002), it also discovered that this was not enough to retain the relationship with clients, i.e. it was a hygiene factor. Moreover it was proactive, supplier-initiated value change activities that motivated customers to continue relationships with their suppliers.

Whilst neither study formally acknowledges any limitations or actual measurement of changes in value, customer desired value change research is claimed to remain in its infancy with further research, both qualitatively and quantitatively for scale development, needing to be conducted across a range of industries and settings (Beverland & Lockshin, 2003; Beverland et al, 2004). Nevertheless there appears to be a serious and perhaps philosophical limitation to Beverland & Lockshin’s (2003) longitudinal, phenomenological case study of buyers and sellers in the New Zealand wine industry. It is not clear whether the study started as pure investigation of customer value change, or changes to approaches to export markets which then was retro-fitted with support for the value change of form and intensity findings of
Flint & Woodruff’s (2001) earlier study. Maybe the same limitation can even be made regarding Beverland et al.’s (2004) multiple case study in the role of value change management in relationship dissolution, where only tacit support for Flint & Woodruff’s (2001) earlier study is made and the emphasis is on the contributions made to the extant literature on advertising agency-client dissolution and the importance of supplier-initiated value change.

More recent customer desired value change research has been conceptually-based, with researchers identifying: the need to explore the emotional and symbolic interaction aspects of customer value; the influence of tension in the value change process; how desired and received value judgments arise and change over time; and how the dynamism of customer value change integrates with segment instability logic (Flint & Blocker, 2004; Woodruff & Flint, 2006; Blocker & Flint, 2007). All of these continue to build on Flint & Mentzer’s, (2000), Flint & Woodruff’s (2001) and Flint et al.’s, (2002) original recommendations for further inductive, in-depth field investigations based on qualitative methods, e.g. grounded theory, interviews, case studies, etc, to assess whether the theory provides a sufficiently parsimonious yet comprehensive explanation for customer desired value change. Outcomes sought include definition and operationalisation of customer perceived value and trigger event constructs, including scale development for future empirical testing through validation studies with other kinds of business-to-business customers and in other industries.
Taking up this challenge, Lapierre et al's (2008) theoretical model, based on Woodruff's (1997) value hierarchy\(^{19}\), saw empirical assessment of the antecedents of customers' desired value change from 389 respondents in the information, communication and technology (ICT) professional services sector in Quebec, Canada. The study empirically validates that the three hierarchy levels of value are closely related and also that changes in customer desired value end-states, i.e. company goals, are concomitant with changes in both desired consequences and desired attributes. In addition, the results allow the observation that desired end-states change even more because of deteriorating financial performance and organisational changes. These are also deemed to be a mediating variable between the external environment and changes in desired end-states as organisations seek to adapt to their environment. The research also partly addresses and tests Flint et al's (2002) causal model and has therefore made a further contribution to knowledge of customer desired value in terms of 'why' customer value changes.

However, the study has some limitations, such as lack of generalisability due to place, industry sector and single profession choices. Perhaps the most notable limitation is that although the research is cross-sectional, i.e. taken at one point in time, the respondents were asked both to remember what they had valued three years previously and forecast what they would value in three years' time. In addition to the obvious problems of recall and speculation, all the respondents are assumed to be in agreement with Flint & Woodruff's (2001) definition of customer

\(^{19}\) The hierarchy model of desired value consists of three levels: at the top - desired end states; in the middle - desired consequences in use situations; and at the bottom - desired attributes and attribute performance.
desired value\(^{20}\) and the researchers' operationalisation of the desired corporate goal end-states, consequences and measures for attributes of value. It must be remembered that interpretation of the same data can lead to very different conclusions if respondents have different assumptions about world views, or conclusions reached ignore the tentative and uncertain nature of the information.

Another limitation is that the choice of Woodruff's (1997) value hierarchy model with desired value end-states as corporate goals ignores the issue of how organisational and individual values combine to evoke and determine a set of value criteria for business-to-business customers which guides behaviour, impacts on strategy implementation and drives evaluation of consequences of the behaviours, e.g. supplier selection and retention (Flint et al, 1997). Even a customer-supplier dyad is limited, though, in that it does not take into account the wider complexities of the other internal and external arenas in which customer value decisions are influenced and made.

When making a decision about specific situations, constrained by real-world options, an individual will experience tension as they struggle with personal feelings, limitations in skills and knowledge, as well as with a multitude of competing values, be they social, personal, professional or organisational (Beckett & Maynard, 2005). Drawing on an original application in a social work environment, the researcher has adapted Beckett & Maynard's (2005) model which

\(^{20}\) "...the customer perceives what he or she wants to have happen in a specific use situation, with the help of a product or service offering, in order to accomplish a desired purpose or goal". (Flint & Woodruff, 2001, p.322)
suggests there are competing values in the wider picture. This model has been applied to the customer perceived value context to illustrate how an individual's decisions about customer value are subject to tension from different areas, in Figure 2.

![Customer Value Tension and Competing Values](image)

**Figure 2: Customer Value Tension and Competing Values**  
Adapted by Author from (Beckett & Maynard, 2005, p.23)

Equally, the understanding of the measurement of change over time is a complex subject full of critical methodological issues and fallacies that, if left ignored, can lead to errors and incorrect conclusions (Cronbach & Furby, 1970; Zmud & Armenakis, 1978; Gottman & Rushe, 1993; Wanous et al, 2000; Bergh & Fairbank, 2002). Measurement of changes in perceived value are claimed to manifest themselves in the upgrading or downgrading of the value status ascribed by an individual through five different modes of value change (Rescher, 1967). The five modes of value status change are manifested as: value subscription as acquisition
or abandonment, value redistribution as a change in the extent or pattern of its
distribution throughout an organisation, value re-scaling as a re-positioning in their
hierarchy of value, value redeployment as in the context of its domain of
application, and value restandardisation as the degree of implementation. The
researcher has summarised conclusions from Rescher's (1967) paper to illustrate
the five modes of value change in the form of Figure 3.

Rescher's (1967) limited pilot study into the envisioned changes in American values
to the year 2000, comprising 58 respondents, produced no weighty conclusions.
Despite the potential contribution that the model could bring towards a better
understanding of how customer perceived value may change, there is no evidence
of the model's application in customer value change research.

Figure 3: Five Modes of Value Status Change
Adapted by P.B. Connor from Rescher, N. (1967)
2.6.2 Summary of the Limitations of Existing Research

There is a paucity of research into changes in values, let alone value change (Hitlin & Piliavin, 2004). This in turn gives rise to five major limitations that impede knowledge of customer perceived value change. First, the conceptualisation and empirical study of value change to date focuses solely on customer desired value, principally from a perspective of the short-term expediencies of corporate goals (Flint & Mentzer, 2000; Flint & Woodruff, 2001; Flint et al, 2002; Beverland & Lockshin, 2003; Flint & Blocker, 2004: Overby et al, 2005; Lapierre et al, 2008). As such it has ignored how values play an important part in the functioning of every organisation and in particular how customer value is manifested from organisational and individual core values which are claimed to lead to desired value (Watson et al, 2004; Flint et al, 1997). Also ignored is clarification of the confusion between what constitutes values as opposed to attitudes and beliefs, both of which are the consequences of adhering to a particular value.

Second, measurement has largely excluded customer received value, i.e. value-in-use, on which most recent customer value research has been based. Both desired and received aspects are relevant for the management of value in networks, where the preferences of the final customer define the concept of the network customer for all other actors in the industry supply chain (Henneburg & Mouzas, 2008). This impacts on the variability of indicators across conceptual and empirical research, the ranking versus rating measurement of value controversy, and the issue of whether the indicators and dimensions comprising customer perceived value are considered to be formative (causal) or reflective (effect), thus possibly rendering
the existing conceptualisations and empirical research of customer value unsound (Zenzen & Hammer, 1978; Diamantopolous & Winklhofer, 2001; Hitlin & Piliavin, 2004; Baxter, 2008).

Third, the need to understand 'why' and in particular 'how' customers change what they value is not fully understood. This is because the emphasis of research to date is on determining the characteristics of change in the attributive and quantitative aspects of value, e.g. form, intensity etc, rather than seeking also to provide an understanding of value's axiological modes of change, e.g. acquisition, abandonment, re-distribution etc. In addition most of customer value change research has been cross-sectional and the only longitudinal study of value change claimed to have been conducted simply does not stand up to scrutiny in terms of these modes of change.

Fourth, the research has only investigated customer value change from the narrow perspectives of either buyers, i.e. purchasing only (Flint & Mentzer, 2000; Flint & Woodruff, 2001; Flint et al, 2002; Lapierre et al, 2008), or the buyer-supplier dyad, i.e. purchasing and marketing only (Beverland & Lockshin, 2003, Beverland et al, 2004). Whilst research findings have led to some understanding of conceptualising customer perceived value change, it can be argued that the existing knowledge does not fully capture its essence from a wider customer perspective because it does not take into account the customer's other organisational, internal stakeholder influences and contributions in determining and assessing customer perceived value. Nor does it take into account the practicalities and tensions of
marketing having to work alongside the dominance of other organisational functions (Shugan, 2004).

Fifth, the extant literature generally assumes organisations are run as rational economic and financial units, in market conditions that are as close to perfect competition as is possible. These assumptions ignore the behavioural aspects encountered for most industries and business networks. The overall research challenge, therefore, is for theoretically sound and practically useful research into the content, context and process of change in order to explore and explain the differences in individuals’ changes in customer perceptions of value.

2.6.3 Business-to-Business Customer Perceived Value Field of Vision

Whilst desired value approaches to customer value change have helped to facilitate a better understanding of ‘what’ changes impact on what customers value, they are of limited use in theory and practice. This is because ‘what’ is only a narrow perspective of value change and does not fully address ‘why’ or ‘how’ customer perceived value changes.

The word ‘perceived’ has meaning in two ways: to notice or become aware of something, and to understand or think of something in a particular way (Hornby, 2000). In the first meaning of perceived, i.e. first noticing or becoming aware of value, there is a desirable or ‘ought’ aspect of what value should look like in terms of conceived value for an individual. Value subscription is realised after
determining both value orientation and value hierarchy, based on importance and as means to an end, comprising both desired and expected value.

In the second meaning of perceived, i.e. terms of understanding about value in a particular way, there is also an assessed value or ‘is’ aspect in judgment terms. This assessment is split between immediate impressions of value on delivery, i.e. received value, followed by a judgement of value in use. The value assessment takes into consideration advantage versus risk, and benefits versus sacrifices. Both of the conceived and assessed aspects of value take place in a pre-order and post-order environment where the anticipated value is negotiated, for example worth in terms of price, over transactional, episodic and relational exchanges.

The ways of perceiving value are characterised in Figure 4 which shows the customers’ conceived, desired, expected, negotiated, received and in-use value concepts in a wider field of vision comprising changes in the macro-environment, customer and end-users, suppliers, competition and internally. Researchers and practitioners need both a long distance and short distance lens to get the most comprehensive perspective of value, because changes can occur at any time in any part of the field of vision. Long distance lenses may be especially important at the periphery where an organisation’s dominant logic may act as a blinker to value creation (Day & Schoemaker, 2004; Prahalad, 2004).
Given the complexity of value aspects as viewed through these lenses it is not surprising that there has been no concerted attempt to measure changes in customer perceived value in its entirety.

Figure 4: Customer Perceived Value Field of Vision
Source: P.B. Connor

2.6.4 Conceptual Framework

Customer value change is recognised as an important construct warranting further investigation, as the existing literature from different customer value perspectives indicates that far too little research is underway to even suggest either description or theory about value and valuation processes, and in particular ‘why’ and ‘how’ they change (Woodruff & Flint, 2006; Lapierre, 2008).
This proposed research is predicated on the concept that supplier selection and retention is dependent on the successful assessment of customers' changing perceptions of value associated within the requirements of the given industry's business-to-business, derived-demand environment. The overall objective is a better understanding of business-to-business customer perceived value, based on newly generated theory about customer perceived value change.

The points of departure for this customer value research are, first, the conceptualisation of customer perceived value for an organisation from a multi-functional internal stakeholder aspect in its role as a customer, rather than the traditional research buyer-seller dyad or purchasing function only perspective. This is a substantial, unresolved issue in the conceptualisation of customer value, where there are multiple perspectives that both determine desired value and evaluate received value (Brennan et al, 2007). Second, research into the measurement of changes in customer perceived value shows little knowledge of how customers engage in co-creating value (Woodruff & Flint, 2006). This research is based on the congruence of organisational values and individual values as the organisation makes the transition from being a traditional product manufacturer to a co-created solution package provider, and where new understanding is required in managing changes in the co-creation of value.

The aerospace industry is an appropriate industry in which to study the phenomenon of Customer Perceived Value Change because of its characteristics of periods of cyclical change, innovation, new technologies and its long-term
relationship marketing nature (Doganis, 2006). Although the aerospace industry is currently experiencing problems caused by the after-effects of global recession following a period of good trading with civil and military aircraft sales peaking together, these sectors are traditionally cyclical in nature and a series of good and hard times is inevitable. The findings from this research will hopefully assist organisations to prepare better for the forthcoming troughs and peaks and to retain their competitive positions in an increasingly turbulent global environment.

Specific objectives are threefold: first, identifying customer perceived value’s composition from the customer’s perspective in the business-to-business market management parameters of UK aerospace manufacturing companies. This has not yet seen investigation, although exploration of customer perceived value revealed some insights from a dyadic case study of one airline customer and an engine maintenance provider in the maintenance, repair and overhaul segment of the commercial aircraft marketplace (Bovik, 2004). It is believed that this study’s output, based on co-created solution provision packages, would extend understanding and definition of business-to-business customer perceived value in general. It is also believed this would extend findings and contribution both deeper and wider in the aerospace industry specifically by including the servitization element in the co-creation of value provided by original equipment manufacturers (OEMs) throughout the different tiers of the industry’s network of relationships, rather than Bovik’s (2004) perspective of purely third-party service provision.
Second, knowledge contribution about customer perceived value change's dynamic nature through a deeper understanding of 'why and 'how' customers change what they value by exploring value subscribers' different value change modes. Generated theory should facilitate better prediction of the timing and likelihood of change actions on behaviour rather than ignoring or second-guessing it thus facilitating better customer relationship management throughout the supply chain (Flint, 2004; 2006). This may also offset a lament, after reviewing the major marketing academic texts, that little has changed in forty years in organisational buyer behaviour and decision-making (Baker, 2005). Third is marketing's knowledge progression in terms of whether customer perceived value can contribute to the service-dominant logic becoming a theory or paradigm (Vargo & Lusch, 2004; Lusch & Vargo, 2006).

The formation of a conceptual framework addresses the current, theoretical limitations and deficiencies, identified in section 2.6.2, and aims at gaining a better understanding of Customer Perceived Value and Customer Perceived Value Change in a business-to-business context. Briefly, these limitations are: focus to date on customer desired value in the study of change, lack of consideration of customer received value, little understanding on why or how change occurs, researching from a narrow stakeholder perspective, and little consideration of wider business and market context in influencing change.

More specifically, observations, made throughout the review of the literature and captured in Figures 2, 3 and 4, are integrated to show a conceptual framework of
customer perceived value change at Figure 5. Detail at the top level of the framework shows initiators of changes in the macro-environment, customer and end-users, suppliers, competition and internally, as identified in Figure 4.

These changes are shown influencing and impacting competing social, personal, professional or organisational values identified in Figure 2 at the middle level of the framework. The impact of changes in values are then shown to influence and impact on customer perceptions of value at States A and B as conceived, desired, expected, negotiated, received and in-use value concepts, as identified in Figure 4. Finally changes in customer perceived value, i.e. the upgrading or downgrading of the value status ascribed by an individual through five modes of value change - subscription, redistribution, re-scaling, redeployment and restandardisation – are incorporated, as identified in Figure 3.
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

2.6.5 Research Questions

Having constructed a conceptual framework of customer perceived value change in a business-to-business context the research needs to capture assessing and analysing change. The issue of asking questions about change over time can be approached longitudinally in methodological terms of Pettigrew & Whipp’s (1991) analytical model covering the content, context and process of change, where individuals have high experience levels of the phenomena under study (Pettigrew, 1990). Considering this approach, three research questions are posited, formulating research objectives and contributing to knowledge of customer perceived value change. The first question guides the empirical investigation by
conceptualising business-to-business customer perceived value – the *content*. The second and third questions set out the frame for investigating customer perceived value change by exploring its *context*, i.e. why it changes, and then its *process*, i.e. how it changes.

![Diagram of Three Component Questions of Customer Perceived Value Change](source)

**Figure 6: Three Component Questions of Customer Perceived Value Change**

3 Research Design

3.1 Introduction

The purpose of research design is provision of an appropriate methodology blueprint and logical plan in fulfilment of a study’s objectives and answering of its research questions. The intention behind this chapter is to make the research design for customer perceived value change transparent to fellow researchers and other interested audiences. The research design is located in the context of social science debates that inform research into organisations in general and into marketing in particular. In the first section of the chapter the philosophical foundations of conducting research and the researcher’s influences on the research process are addressed. Next, the limitations of existing customer perceived value change research methodologies are examined, followed by a justification of the chosen strategy of enquiry. In the third section the practical considerations and realities of preparing, conducting and writing up the research are described and discussed.

3.2 Philosophical Foundations

3.2.1 Social Science Research Paradigms

Research is an idealised, systematic investigation process and a logical plan for answering questions concerning the proof of ‘truth’, be it unequivocal or relative (Kuhn, 1962; Burns, 2000; Gill & Johnson, 2002; Baker 2003; Leedy & Ormrod, 2005;
Creswell, 2009). Truth, however, rarely corresponds with ‘actuality’ because it is subject to constant revision as knowledge progresses by gradual accumulation from possible, to plausible, to probable and then to actual worlds (Boisot & MacMillan, 2004; Sandberg, 2005).

Organisational research is part of the Social Sciences because along with related concepts, e.g. strategy, management, marketing, etc, it shares the concerns of understanding and explaining human behaviour through explicit and implicit views of society in general and in-situ practice, specifically within organisational environments. Research approaches in Social Science are contested, however, as they are underpinned by different philosophical paradigms to explain and present the social world. Each philosophical paradigm has its own ontology, i.e. what constitutes reality or being of the social world, epistemology, i.e. what constitutes knowledge of the social world’s reality, and methodology, i.e. approach and methods for examining and understanding reality by the listing, describing and classifying of things, relations or processes in the social world (Kuhn, 1962; Lincoln & Guba, 1988).

Consequently different social scientists’ understanding and framing of the world means there are differing decisions on how to conduct research and a range of possible interpretations of evidence for uncovered ‘facts’, meanings and conclusions for the phenomenon under investigation (Hughes & Sharrock, 1997; Hart, 1998; Smith, 1998; della Porta & Keating; 2008; Denscombe, 2010). Furthermore, variations and inconsistencies within one preferred philosophical
exploring customer perceived value change in an UK aerospace manufacturing company: a longitudinal case study

paradigm means even all of its researchers do not hold exactly the same view on what is possible to know and what is important to know (Denscombe, 2008).

as there are competing, perhaps even incompatible philosophical approaches to the social world that generate intense debate, it is imperative for researchers to know their position relative to alternative approaches (Buchanan & Bryman, 2007; Morgan, 2007; Denscombe, 2010). Debates about which of the paradigms is best are incommensurable because all approaches provide answers to important research questions and there is no right or wrong way (Anderson, 1986). Additionally the debates manage inconveniently invisible the contributions to knowledge made by the diversity of the many other research paradigms through, “important insights which elude other perspectives” (Morgan, 1990, p.28). Consequently no single philosophical paradigm can be deemed to be superior to others in providing a holistic overview of reality as there is no one best way of framing, producing, disseminating and using knowledge (Parkhe, 1993; Carson et al, 2001; Pettigrew et al, 2001; Denzin & Lincoln, 2008).

Whilst acknowledging multiple viewpoints exist, social scientists continue to conduct research through one of four major paradigm research traditions: positivism, critical realism, interpretivism and pragmatism. The four major paradigms do not share a common criterion for ‘good’ research, nor define each other in terms of what each is not, yet each paradigm has strict logic, criteria and advantages and disadvantages for what makes ‘good’ research (Yin, 2009). As Pinchin (2005, p.331) observes:
"There is no absolute vantage point in which to survey all areas of human activity. There are just the vantage points themselves and you cannot judge one by using the standards of another".

A research design's operationalisation should be based, therefore, on the contention that methodological choice is a consequence of a researcher's philosophical paradigm and perspective on the phenomenon under investigation, rather than allowing a strategy of enquiry's methodology and methods to lead the research (Holden & Lynch, 2004). Otherwise researchers may risk deceiving themselves and others about what it is they are actually researching through potentially poor conceptualisation of the phenomenon's constructs and theories (MacKenzie, 2003). Researchers may also be precluded from investigating phenomena thoroughly if the selected methodology, methods or measures that are supposed to faithfully represent the particular phenomenon's domain are not relevant, appropriate, applied correctly or complete. This is because any conclusions drawn are only as good as the practices that underlie the research (Gummesson, 2000; Holden & Lynch, 2004; Ketchen Jnr et al; 2008).

To overcome the limitations of each of the four paradigm research traditions, there is a shift by some researchers to look towards informed eclecticism which can be achieved by drawing from disciplines and worlds outside of the researcher's world in order to learn from each other (Barker et al, 2001; Benton & Craib, 2001; Franklin, 2001). Furthermore, in light of postmodern challenges to social science research driven by trans-disciplinary concerns, it is claimed by some that new
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

approaches may offer potentially more appropriate, useful and relevant models of the link and gap between theory and practice (Transfield & Starkey, 1998; Aram & Salipante Jnr, 2003; Starkey & Whittington, 2003). Contemporary social science studies, facilitated through mixed-method research (methods, methodology, practice and triangulation\textsuperscript{21}) rather than being purist, are therefore tending to become either predominantly positivist or interpretivist in nature (Creswell & Tashakkori, 2007; Denscombe, 2008).

Research into organisational theory currently, therefore, displays a variety of perspectives based on trends of widening boundaries, multi-paradigmatic perspectives on theory building, meta-triangulation and methodological inventiveness (Gioia & Pitrie, 1990; Lewis & Grimes, 1990; Buchanan & Bryman, 2007). Research, when embracing an array of practices, though, can give rise to confusion when evaluation criteria constituted by particular philosophical conventions are universally applied to the heterogeneous management field (Johnson \textit{et al}, 2006).

Methodologies may be triangulated because they are not always tied to specific philosophical assumptions and the triangulation of methods is more usual because the methods can be adapted to different research designs. However, it is virtually impossible to synthesise competing philosophical paradigms or validate research

\textsuperscript{21} "the combination of methodologies in the study of the same phenomenon" (Barker \textit{et al}, 2001)
because different paradigms draw on different assumptions about reality and knowledge (della Porta & Keating, 2008).

Some researchers are therefore now basing knowledge claims on pragmatic grounds by drawing liberally from quantitative and qualitative assumptions. Through this they claim to be moving closer to obtaining a ‘truer’ picture by taking multiple measurements, using multiple methods or by examining a phenomenon at multiple levels of analysis (Greene, 2008; Wolfram-Cox, 2008). However, using the term pragmatic as a byword for expediency or a common-sense, ‘anything goes’ approach (that which creates fragmentation and inconsistency by not dealing with the barriers to true integration in the combining of quantitative and qualitative methodologies), should not be confused with Pragmatism (Bryman, 2007, Denscombe, 2008, Brandi & Elkjaer, 2008).

3.2.2 Research Paradigms in Marketing

Research in Marketing currently reflects the general paradigm diversity and controversy of the Social Sciences in that the discipline is far from being a grand marketing theory as it has fuzzy and overlapping definitions, concepts and categories and because truth is ambiguous (Gummesson & Polese, 2009). Some marketing research attempts explanation, understanding and prediction of marketing phenomena through a positivist paradigm (Hunt, 2002). Conversely, it is argued, qualitative methodology provides powerful tools for research in management, including marketing, amongst other sub-divisions (Gummesson,
2000). For example, a social constructionist\textsuperscript{22} perspective is considered to contribute better to marketing knowledge as it does not stand apart from other fields of human inquiry but arises directly in and explicitly out of them (Hackley, 2001).

Even so, it is also claimed that positivist and interpretative approaches have created relatively little new knowledge in the marketing discipline (Palmer & Ponsonby, 2001) because of the absence of an agreed paradigm (Franklin, 1998), an absence of a shared mental model (Varadarajan & Jayachandran, 1999), the usurping of marketing by adjacent academic disciplines, e.g. strategy (Brown, 2001), and the preoccupation with erroneously chosen methodologies that lead researchers in marketing astray (Gummesson, 2001).

In response to these arguments, and in line with the general move to more mixed-methods research, there has been a call for multiple-paradigm research through ‘paradigmapping’ to be the emergent form for the development for marketing theory (Tadajewski, 2004; Lowe \textit{et al}, 2004). Whilst some marketing scholars increasingly recognise that multiple viewpoints may exist, other researchers remain unconvinced by the new eclectic multi-paradigm argument and instead advocate pluralism of individual paradigms through interactive relationships (Brown, 2003; Gummesson, 2005). For example, in terms of customer value, the Contemporary Marketing Practice Group avoids taking a particular theoretical perspective by

\textsuperscript{22} Social Construction means that social realities, identities and knowledge are created and maintained in interactions and are culturally, historically and linguistically influenced. People’s conception of reality are therefore constructed and embedded in the institutional fabric of society (Berger & Luckmann, 1966)
advocating a framework that allows for multiple perspectives (Brodie et al, 2006). Nevertheless, marketing research currently appears to retain its positivist centrality along with a burgeoning interpretivist approach (Arndt, 1985; Palmer & Ponsonby, 2002; Tadajewski, 2004).

3.2.3 Researcher’s Paradigm

Conventionally a researcher is the subject and the phenomenon under investigation is the object, but in Social Science the researcher is both subject and object of analysis and knowledge so there are no detached, objective observations, only those situated within and between the social worlds of the observer and observed (Smith, 1998; Denzin & Lincoln, 2008). As researchers are rarely neutral bystanders it is important for researchers to recognize themselves as an important research instrument (Gummesson, 2005). Researchers also need to understand that their personalities, personal interests, pre-understanding, intuition and experiences into the specific research question and context, previous training and skills are key research instruments in managing, crafting and shaping management research thereby influencing any findings they produce (Watson, 1994; Gummesson, 2000; Littler et al, 2003; Buchanan & Bryman, 2007). Consequently researchers need to be open-minded, self-reflexive and to explicitly acknowledge their paradigms, social values, background, any vested interests or obligations that may prejudice the research findings in terms of bias, impartiality, and ethics (Denscombe, 2010). There are two types of reflexivity: personal and epistemological (Willig, 2001).
The researcher is a 58 year old British male born in Belfast, Northern Ireland, currently living in Cheshire, having had a middle class upbringing mainly in Warwickshire. He is married and has two adult daughters. It is assumed that all of these personal factors will have had some impact on the research, particularly with regards to the researcher's values. In pre-understanding of the research questions and context, the researcher has a long-standing interest in and personal experience of marketing issues in the aerospace industry through employment with Rolls-Royce plc (1974–1981). After two years’ employment with GEC plc, another UK blue-chip company, the researcher, a Chartered Marketer, has spent 31 years as founder and managing director of Mycon Marketing Services Ltd, a strategic marketing consultancy assisting companies with interests in aerospace and other business-to-business and government-to-business markets, including both suppliers and partners to Rolls-Royce plc.

The researcher’s MSc in Marketing Management (Distinction) in 1997 with a dissertation, “Overcoming the Hurdles to Higher Levels of Marketing Effectiveness amongst Companies in the UK Aerospace Industry”, led to two peer-reviewed papers in academic journals (Connor & Tynan, 1999; Connor, 2001). Since guest lecturing in strategic marketing on the Nottingham Trent University’s MSc in Marketing Management in 1998 the researcher has become increasingly involved in lecturing at postgraduate level in marketing for UK MSc/MBA programmes. These part-time lecturing posts are at the Open University Business School, University of Leicester, University of Reading (Henley), and the University of Warwick (Manufacturing Group). He also delivers the Chartered Institute of Marketing’s
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

Professional Postgraduate Diploma in Marketing for Oxford College of Marketing and Warwickshire College. Part of the motivation for this research study is to secure tenure in lecturing by attaining a PhD that contributes to theoretical knowledge of customer perceived value change. In part it is anticipated that the research will advance management knowledge and practice in marketing. It is further anticipated that the research area will be a third domain of expertise providing commercial opportunities in the consultancy marketplace alongside the researcher’s existing interests in marketing effectiveness and customer satisfaction.

Using the Myers-Briggs Type Indicator, a personality instrument (Myers et al, 2003), the researcher acknowledges his general personality to be an ENFP type, even though every individual is unique as a product of heredity and environment. ENFP’s are personable persuasive innovators who are keenly perceptive about people and how groups work, insightful about the present and future through finding meaning and significance readily, and seeing connections that others do not. Primarily making decisions by applying their personal values through identification and empathy with others, ENFP’s feel confident moving ahead based on their insights with their resulting enthusiasm tending to bring others along with them. More likely to be attuned to the values and feelings of others ENFP’s try to understand people by anticipating and taking into account the effects of the decision at hand for the people involved in those issues that are important to them. In terms of implications for conducting this research the researcher acknowledges that ENFP’s can sometimes overextend themselves in having trouble saying no to interesting possibilities and people. Under stress ENFP’s struggle with deadlines and
procedures by failing to take in enough information, accepting other’s perceptions too quickly and may lose their normal perspective and sense of options on occasions (Myers et al, 2003).

In terms of epistemological stance the starting point is a declaration of philosophical paradigm position. The adoption of Morgan & Smircich’s (1980) continuum of six major philosophical perspectives in Table 4 helps to establish this researcher’s philosophical paradigm.

Table 4: Researcher's Philosophical Paradigm Position

<table>
<thead>
<tr>
<th>Core Ontological Assumptions (Reality)</th>
<th>Nominalism</th>
<th>Interpretivism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reality as a projection of human imagination</td>
<td>To obtain phenomenological insight and revelation</td>
<td>Man as pure spirit, consciousness, being</td>
</tr>
<tr>
<td>Reality as a realm of symbolic discourse</td>
<td>To understand how social reality is created</td>
<td>Man as a social constructor, the symbol creator</td>
</tr>
<tr>
<td>Reality as a field of information</td>
<td>To map contexts</td>
<td>Man as an actor, a simple user</td>
</tr>
<tr>
<td>Reality as a concrete process</td>
<td>To study systems, process, change</td>
<td>Man as an information processor</td>
</tr>
<tr>
<td>Reality as a concrete structure</td>
<td>To construct a positivist science</td>
<td>Man as an adaptor</td>
</tr>
</tbody>
</table>

The self-report results show the researcher is not in either of the extreme positions of the two main paradigms of knowledge claims, i.e. positivism and interpretivism and thus acknowledges that some existing knowledge generated by other approaches may be deemed to be valid and reliable. Nevertheless the researcher is predominantly interpretivist through taking a social constructionist perspective.
This perspective entails greater integration between the phenomena and the specified inductive, critical and ethnographic approaches to capturing the rich descriptions of an individual’s point of view within the complexity constraints of the multi-dimensional everyday social world (Denzin & Lincoln, 2008).

Social reality is therefore construed through individual consciousness with meaning and the evaluation of events seen as personal and subjective construction (Mertens, 1998; Burns, 2000; Denzin, 2001; Aram & Salipante Jnr, 2003). The interpretivist approach focuses on qualitative, i.e. non-statistical research methods using inductive logic, analysis and interpretation of individual cases by gaining insights into aspects of social existence which otherwise remain unnoticed, rather than general law-making (Spiggle, 1994; Smith, 1998; Sandberg, 2005).

3.3 Strategy of Enquiry

3.3.1 Justification for an Interpretivist Approach

Differences in researchers’ orientations between theory-testing versus theory-building reflect another important aspect of research design. Theory testing captures the degree to which existing theory is applied in an empirical study as a means of grounding a specific set of a priori hypotheses using quantitative research. Theory building clarifies or supplements existing theory or introduces relationships and constructs that serve as the foundations for new theory using qualitative research as an exploratory design (Colquitt & Zapata-Phelan, 2007). However, adopting one or other of these two approaches to theory are in the main limiting
because previous theory relating solely to *a priori* explanation ignores discovery of new variables and relationships, and research beginning with no theory in mind is in danger of ‘re-inventing the wheel’ (Parkhe, 1993). Consequently a taxonomy combining the two approaches of theory building and theory testing on respective continua places a research’s theoretical contribution into one of five discrete categories: reporters and qualifiers, which tend to be higher in theoretical contribution; and builders, testers and expanders which tend to be lower in theoretical contribution (Colquitt & Zapata-Phelan, 2007).

In light of claims that value is a social construction created in complex and adaptive networks (Edvardsson et al, 2011; Lusch *et al*, 2010), the limitations of existing customer value change research methodologies outlined in section 3.2.1 and the embryonic status of customer perceived value change in business-to-business situations, implies that further research needs to adopt an interpretative approach, using an appropriate qualitative methodology, requiring inductive theory building that, “represents the voice of the customer” (Baron *et al*, 2010, p.255) when “assessing such an elusive and complex concept” as customer value (Gallarza *et al*, 2011 p.188). This is because deduction from existing principles of a paradigm is difficult as accepted concepts have not yet been fully established or are inadequate (Perry, 1998). However, as already posited, contributing to knowledge by building and developing theory should not be started from scratch. Therefore building customer perceived value change theory should be achieved by combining new qualitative data gathered in the field with existing theories from customer perceived value research (Matthyssens & Vandenbempt, 2003).
Whilst qualitative research is a broad umbrella term for a range of interpretivist methodologies, and is regarded by some as having its own field of enquiry, it does not place a single, methodological approach above others nor does it have a distinct set of methods and practices that are entirely its own (Pratt, 2007; Denzin & Lincoln, 2008). Consequently there is “potential dissensus about regarding what qualitative management research might entail, as well as regarding its provenance and its academic status” (Johnson et al, 2007, p.23). The same authors have posited eight different and often interrelated categories of qualitative management research embedded in a complex context of other management disciplines reflecting its long distinguished evolution across eight moments in time (Milliken, 2001; Denzin & Lincoln, 2008). The researcher concurs with the observation of interrelatedness across the eight definitions of qualitative research and in particular definitions two, four, five and eight presented in Table 5.

A researcher has to be aware also of the limitations associated with qualitative research. These are: issues of adequate validity and reliability and thus generalisability of the findings; the time required for data collection, analysis and interpretation; access and the mere presence of the researcher and any reactive effects on the participants in the study; participants may represent their world according to the language and concepts that the researcher gives them because they are the only ones available, possible bias from the viewpoints of researchers and the participants; and anecdotalism (Watson, 1994; Burns, 2000; Silverman 2000). In addition there is a lack of consensus about the standards on which to evaluate qualitative research. In their absence, quantitative standards of
objectivity, trying to capture universal truth of complex social phenomena using a single measure, are inappropriately applied, even though predictive theories and universal truths cannot be found in the study of human affairs (Flyvbjerg, 2006; Pratt, 2007).

Table 5: Qualitative Research Categories

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Qualitative research as 'Verstehen'(^23) i.e. developing an understanding of the meaning a set of actions has to an individual through some form of contact with how they experience their experience in everyday social contexts.</td>
</tr>
<tr>
<td>2</td>
<td>Qualitative research as 'Verstehen' but with reflexivity i.e. as in 1 above and including the involvement and interpretation of the researcher which also needs to be reflected upon and analysed.</td>
</tr>
<tr>
<td>3</td>
<td>Qualitative research as a general bag of tools i.e. rapprochement between quantitative and qualitative methods as complementary partners rather than competing ones that can inform different phenomena in the same study.</td>
</tr>
<tr>
<td>4</td>
<td>Qualitative research as a specific bag of tools with a distinctive role in management research: accessing organisational back-stages i.e. as in 3 above but with specific emphasis on what phenomena qualitative methods are especially good at enabling researchers to access in the field.</td>
</tr>
<tr>
<td>5</td>
<td>Qualitative research as exploratory research with regard to little understood phenomena prior to other (i.e. quantitative) research i.e. only relevant to facilitating hypotheses for subsequently to test in or informing the design of quantitative measures of phenomena.</td>
</tr>
<tr>
<td>6</td>
<td>Qualitative research as a disposal category i.e. not compatible with proper management research or having a role as it inherently lacked rigour and is unreliable due to its objective, unsystematic, impressionistic and often anecdotal nature.</td>
</tr>
<tr>
<td>7</td>
<td>Qualitative research as what it is not i.e. an umbrella term for research that is not quantitative and which produces findings not arrived at by statistical procedures or other means of quantification.</td>
</tr>
<tr>
<td>8</td>
<td>Qualitative research as specific non-quantitative data collection techniques e.g. case studies, focus groups, in-depth interviews etc.</td>
</tr>
</tbody>
</table>

\(^23\) Verstehen means 'understanding' and refers to the unique human capacity to make sense of the world because humans have purposes, emotions, make plans, construct cultures and hold values that affect behaviour (Johnson & Onwuegbuzie, 2004).
3.3.2 Justification for a Case Study Approach

Qualitative research is a broad term encompassing a variety of interpretative approaches in providing useful insights, ideas and opinions from respondents’ meanings, expressed through their own words. Nevertheless, researchers still need to be clear about the unique qualities of alternative qualitative methodologies in choosing an appropriate research design. Amongst others, four of the most common research qualitative methodologies are case study (Stake, 2000; Yin 2009), ethnography (Wolcott, 1990), phenomenology (Moustakas, 1994) and grounded theory (Strauss & Corbin, 1990; 1998). All four of these qualitative methodologies differ in their focus, purpose, data collection and analysis methods and reporting formats even though there are some overlaps as methodologies cannot be understood in a vacuum (Goulding, 2001; Piekkari et al, 2009).

For example, both ethnography and case study research involve studying systems. However, ethnography concentrates on describing and interpreting an entire culture or social entity over a prolonged period in a natural setting, whilst case study focuses on an in-depth analysis of a single case or multiple cases of events, activities, organisations or individuals using a variety of data collection techniques over a sustained period of time. Another example is that phenomenology and case study research can involve studying values and value. Phenomenology is an attempt to understand what a specific experience is like as it appears to the individuals living it, whilst case study is an attempt to understand a particular phenomenon.
The key difference between case study and the other three common, qualitative methodologies is that whilst ethnography, grounded theory and phenomenology presuppose that theoretical perspectives are grounded in and emerge from the first-hand field data, case study is open to the use of theory and conceptual categories to guide the research and data analysis (Meyer, 2001). Case study is therefore based on a theoretical stance about seeking explanations, rather than testing explanations. It is not a methodological choice but a choice of what is to be investigated, which is anything whose definition is contained in a specific, unique, bounded system (Hartley, 1994; Churchill, 1995; Stake, 2000). Case study research is used in industrial marketing to attack complex problems, e.g. networks and relationships (Järvensivu & Törnroos, 2010). This is despite a number of issues: claimed misunderstandings and limitations of a lack of rigour; ambiguity in the unit of analysis and the case itself; it being confused with teaching case studies and record-keeping; little basis for generalisation from a single case, containing a bias towards verification, time consumption and summarisation difficulties resulting in massive unreadable documents; and being primarily verbal (Yin, 2009; Baker, 2003; Flyvbjerg, 2006; Ruddin, 2006; Grünbaum, 2007; Gummesson, 2008).

Case study's limitations, however, are outweighed by its advantages. These include: being appropriate when conducting exploratory, complex or contextualised research involving process, for example organisational change and network theory; allowance for retention of context and complexity in describing phenomena; pilot study usage for future more detailed or quantitative research; allowance for mixed methods within the case study itself; and allowing subconscious, on-going thinking
to surface using multiple techniques on a number of occasions over a bounded time-frame and for generating theory (Bonoma, 1985; Gummesson, 1987; Eisenhardt, 1989; Perry, 2001; Scholz & Tietje, 2002; Woodside & Wilson, 2003; Yin, 2009; Gummesson 2007). Moreover, case study’s major advantage is in understanding the ‘how’ and ‘why’ questions of phenomena situated in realism or constructivist paradigms as Yin (2009, p.18) notes:

“As a general matter the more that your question seeks to explain ‘how’ and ‘why’ events occur, the more the case study will be relevant” (Yin, 1988 p.233) ... “Case study research is an empirical enquiry investigating contemporary phenomenon within its real life rich context and emerging body of knowledge especially when boundaries between phenomenon and context are not evidently clear and in which the intervention being evaluated has no clear single set of outcomes”.

Case study is not sampling research but a unit of analysis where accurate yet limited understanding of a phenomenon not sufficiently understood leads to maximising knowledge, at that point in time for that one case (Yin, 2009). Consequently, there is a need to pick cases that provide distinctively rich contexts, which are easily accessible and hospitable to enquiry (Stake, 1995).

Given the ability to build on the ‘grounded theory’ initial empirical research on customer desired value change (Flint & Woodruff, 2001; Flint et al, 2002), and that the three purported empirical case studies in customer value change (Beverland &
Lockshin, 2003; Beverland et al, 2004, Lapierre et al, 2008) are not robust enough inquiries into customer value change per se, it appears that case study in this instance is a preferred approach in creating or advancing the conceptualisation and operationalisation of theory (Dooley, 2002).

A single case study is the preferred framework for this study for six reasons, derived from: acknowledged advantages of being appropriate when conducting exploratory, complex or contextualised research involving articulated, insightful stories embedded in a chosen social context; understanding 'how' and 'why' questions of phenomena situated in realism or constructivist paradigms; allowance for retention of context and complexity in describing phenomena; pilot study usage for future, more detailed or quantitative research; allowance for multiple methods within the case study itself (i.e. two or more research processes within one methodology); and generating theory (Van Maanen, 1983; Bonoma, 1985; Gummesson, 1988; Eisenhardt, 1989; Perry, 2001; Scholz & Tietje, 2002; Yin, 2009).

3.3.3 Justification for Methods of Investigation

The use of multiple sources of extensive data collection is an important aspect of case study and evidence comes from six major sources: documents, archival records, interviews, direct observation, participant observation, and physical artefacts (Yin, 2009). A good case study will use as many sources as possible, although not all sources may be relevant in a single case.
The strength of case study research therefore centres on 'triangulation', be it data, investigator, methods, theory or interdisciplinary, to see if some or all of the evidence demonstrates convergence on one meaning and provides support for drawn conclusions (Denzin, 1978; Janesick, 1994; Johnston et al, 1999). These five approaches continue to be the traditional triangulation procedures, even though there has been a recent call for triangulation’s re-presentation as a reflexive, practitioner stance in organisational research situations (Wolfram-Cox & Hassard, 2005).

As this study’s purpose is to explore customer perceived value change in answering the questions of how customer perceived value is determined, and ‘why’ and ‘how’ customer perceived value changes, it is necessary to use method triangulation. This is particularly so because change in a customer’s perception of value can occur both incrementally on a day-to-day basis and randomly as a result of significant occurrences. Triangulation, through employing multiple methods, is an aid to data capture, gives stronger validity substantiation of constructs, and is regarded as both best practice in practice and innovative practice (Jick, 1979, Eisenhardt, 1989; D’odorico McDonald, 2008; Piekkari et al, 2010). Primary data collection, therefore, utilises three complementary methods to explore the knowledge structure of a customer’s perception of value and how and why it may change. Critical incident technique (Flanagan, 1954) is employed to address the radical aspect of customer perceived value change as it is well-suited when it is considered as an exploratory method for which little is known, and is specifically, “an appropriate and useful
method for studying marketing questions and assessing customer perceptions” (Bitner et al, 1990, p.83).

Repertory grid technique (Kelly, 1955) and interpretative phenomenological analysis (Giorgi & Giorgi, 2003) facilitate understanding how respondents construe and actively engage daily in interpreting customer value change – see Figure 11. Both these interpretive methods have been generally ignored as complementary research methods to critical incident studies (Coverly et al, 2002). This is despite critical incident technique being criticised for focusing on incidents in isolation, resulting in only partial understandings and minimal contextualisation of the phenomenon (Gremler, 2004).

Using a combination of interpretative phenomenological analysis with critical incident technique (Flanagan, 1954; Butterfield et al, 2005) will facilitate respondents' elicitations of ‘why’ their perception of what they value as customers changes. Additionally, combining interpretative phenomenological analysis with repertory grid technique (Kelly, 1955) will facilitate respondents' elicitations of ‘how’ their perception of value changes both in terms of the characteristics and the modes of change.

3.3.4 Critical Incident Technique

Critical incident technique (CIT), originating from a pragmatist paradigm, is an effective and widely used research method or set of procedures for collecting evidence. Originally it was conducted by direct observation of individuals in order
to facilitate the usefulness of their behaviours in solving practical problems (Flanagan, 1954). The technique has also seen later development within interpretative, social constructionist paradigms, even though it can be argued that this goes against the method's original ontological basis (Chell, 2004). Critical incident technique is an interview, observation or questionnaire based research method. It is used for first-hand collection from direct reports of any significant or crucial, i.e. critical, contribution to an activity or phenomenon, where something unexpected has happened or may happen in an immediate or future setting (Bitner et al, 1990; Miles & Huberman, 1994). Although some critical incidents may be an occurrence of nature, in general they describe specific principles, performance and practice of effective or ineffective human behaviours which demonstrate the differences between success and failure within a specific role (Dean, 2000).

Modifications of traditional CIT studies have been driven by a need to understand critical incidents better by taking into account the external and internal context, thus revealing new insights into the role of critical incidents (Edvardsson & Roos, 2001). Examples of these variations are: sequential incident technique, which takes the process and episodic perspective of experience into consideration (Stauss & Weinlich, 1997); switching path analysis technique, which focuses on capturing customers' perceptions of the processes leading to actual changes in purchasing behaviours (Roos, 1999); and criticality critical incident technique, which focuses on intended behaviour in on-going relationships (Edvardsson & Roos, 2001).
It is important to distinguish between ‘incidents’ and ‘critical incidents’, otherwise a research study essentially becomes an empty signifier because the critical incident technique is merely used to look at any incidents and any way of approaching them methodologically. Whereas an incident is defined as a complete, observable human activity that permits inferences and predictions to be made about the individual performing the act, a critical incident is one that positively contributes or negatively detracts from the aim of the activity in a significant way (Flanagan, 1954; Bitner et al, 1990).

The critical incident technique facilitates investigation of significance occurrences or turning points, i.e. events, incidents, processes or issues identified by the respondent, the way they are managed, and outcomes in terms of perceived effects of usefulness in addressing practical problems. Even so it cannot automatically be assumed that a critical incident has been the cause of anything in terms of behaviour (Roos, 2002). This is particularly the case where the overall objective is to gain understanding of the criticality of the incident from the perspective of an individual, taking into account cognitive, effective and behavioural elements whilst at the same time trying to overcome unhelpful generalisations and personal bias (Flanagan, 1954; Chell, 1998; Gremler, 2004: Butterfield et al, 2005). It is important to note that a critical incident is not an end-point; it is merely something that produces different behaviours depending on the context in which it occurs.

Critical incidents cannot be fully understood or assessed to be critical by researchers unless they are contextualised and judged to be critical by individual
respondents, who are deemed to be the persons qualified to make accurate observations using clearly defined criteria about their experiences of actual situations (Fivars & Gosnell, 1966; Edvardsson & Roos, 2001). Indeed, from a social constructionist perspective, a critical incident may not be universally agreed upon; its perception may be rather a matter of degrees in that it is dependent on different respondents' worldview and their understanding of the phenomenon in relation to the general aim of an activity (Choularton, 2001). Some individuals within an organisation, therefore, may see an occurrence as critical whereas others see the same thing as an only an incident or indeed nothing at all because:

"There is rarely one person or group of persons who constitute an absolute, authoritative source on the general aim of the activity ... it is not possible to say that one of these groups knows the correct general aim and the other is wrong" (Flanagan, 1954 p.336)

Critical incident technique has five major steps: ascertaining the general aims of the activity being studied, making plans and setting specifications, collecting the data, analysing the data, and interpreting the data reporting the results (Flanagan, 1954; Butterfield et al, 2005). The usual criteria for critical incidents' inclusion in a study are threefold: they consist of antecedent information, they contain a detailed description of the event, activity, etc, and they describe the outcome of the incident (Butterfield et al, 2005).
There are number of benefits associated with the use of critical incident technique, despite potential disadvantages on issues of reliability and validity, misinterpretation or misunderstanding by the researcher on how questions are asked, and a participant's memory of a previous time-period not being representative of the feelings and thoughts at the time or prone to recall errors (Chell, 1998; Edvardsson & Roos, 2001; Zhang et al, 2010). First, data collected from the respondent's perspective offers a rich source of information by allowing respondents to identify critical incidents that are most relevant or meaningful to them. Second, the technique’s flexibility means the researcher can modify or alter its structure in order to meet the requirements of the phenomena being researched. Third, its inductive method provides rich data upon which hypotheses can be formulated, the emergence of patterns and the generation of concepts and theories (Kokkalis, 2008).

This study’s longitudinal approach concerning customer perceived value builds on a proposal to reframe and widen the scope of traditional critical incident to include time, context-related dimensions and business relationship dynamics following observations about Flint et al’s (2002) and Beverland & Lockshin’s (2003) and Edvardsson & Strandvik’s (2000) studies. In effect, all of the respondents must demonstrate a change in value linked to contextual external and internal environmental initiators of change (Roos, 2002).
3.3.5 Repertory Grid Technique

People can be considered to be adventurers and scientists in that they perceive, anticipate and predict events in the world by constructing hypotheses and testing them against reality, in conjunction with stored knowledge (Kelly, 1955, Aranda & Finch, 2003). Since the world continually changes, so understanding must adapt and change too (Walker & Winter, 2007). The need to elicit such perceptions and knowledge and capture understanding of change is central to this thesis, and requires a suitable research tool.

A repertory grid is a powerful, flexible cognitive mapping tool that can be integrated into various knowledge-seeking programmes to elicit and assess how people make sense of their everyday experiences, where their construed views of the world and anticipated future experiences are confirmed and/or revised (Borell et al, 2003; Benjafield, 2008; Wright, 2008). Kelly's (1955) personal construct theory, consisting of a fundamental postulate and 11 corollaries – see Table 6 – provides the grounded rationale for repertory grid technique.
Table 6: Personal Construct Theory’s Fundamental Postulate and Corollaries

<table>
<thead>
<tr>
<th>Fundamental Postulate</th>
<th>Psychological processes are directed by the ways in which an individual anticipates events</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Corollary</td>
<td>Because repeated events are similar, individuals can predict or anticipate how they will experience such an event in the future</td>
</tr>
<tr>
<td>Individuality Corollary</td>
<td>Individuals perceive events in different ways</td>
</tr>
<tr>
<td>Organisation Corollary</td>
<td>Individuals arrange their constructs in patterns, according to their view of their constructs similarities and differences</td>
</tr>
<tr>
<td>Dichotomy Corollary</td>
<td>Constructs are bipolar; for example, if an individual has an opinion about honesty, it includes the concept of dishonesty</td>
</tr>
<tr>
<td>Choice Corollary</td>
<td>Individuals choose the alternative for each construct that works best for them in predicting the outcome of anticipated events</td>
</tr>
<tr>
<td>Range Corollary</td>
<td>Individuals’ constructs may apply to many situations or people, or they may be limited to a single person or situation</td>
</tr>
<tr>
<td>Experience Corollary</td>
<td>Individuals continually test their constructs against life’s experiences to make sure they remain useful</td>
</tr>
<tr>
<td>Modulation Corollary</td>
<td>Individuals may modify their constructs as a function of new experiences</td>
</tr>
<tr>
<td>Fragmentation Corollary</td>
<td>Individuals may sometimes have contradictory or inconsistent subordinate constructs within their overall construct system</td>
</tr>
<tr>
<td>Commonality Corollary</td>
<td>Although constructs are unique to individuals, people in compatible groups or cultures may hold similar constructs</td>
</tr>
<tr>
<td>Sociality Corollary</td>
<td>Individuals try to understand how others think and predict what they will do, and modify their own behaviour accordingly</td>
</tr>
</tbody>
</table>

Source: P.B. Connor, based on Kelly (1955)

Personal constructs, an idiosyncratic system of interconnected evaluative, bi-polar dimensions that illustrate respondent’s individual meanings, are organised in a hierarchical way to form explanations and predictions thus providing a lens to perceive the objective reality of the ‘out there’ world (Miel & Dallos, 1996). An individual's construct system may contain thousands of such groupings, each with hundreds of constructs with core constructs, generating the largest number of
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

predictions, at the top of the hierarchy. The linking of these construct groupings provides the individual with a complete system for assessing people, objects, issues and events that confront them (Kelly, 1955). The people, objects, issues and events are domains of interest called ‘elements’ – the items of a topic from which comparisons are drawn - which need to satisfy four key requirements of grid protocol by being homogenous, representative, discrete and either supplied to or elicited from the respondent (Wright, 2008).

Whilst eliciting elements ensures capturing a respondent’s relevant based understanding of the world it may not be a complete picture, and sometimes supplying elements offers other advantages. These are, being better for busy executives in terms of time and effort, providing focus on the phenomenon, and allowing commonality in terms of analysis across organisational levels, industries and especially across time-frames (Stewart & Stewart, 1981).

The need for longitudinal research to examine changes in customers’ construct systems reflects the essence of the repertory grid technique in capturing change as and when it happens (Marsden & Littler, 2000; Aranda & Finch, 2003; Wright, 2008). Kelly’s (1955) philosophy of ‘constructive alternativism’, i.e. the idea that a person is not controlled by their constructs but is free to revise or replace them with alternatives...periodically as situations change, is noted in this regard.

In applying repertory grid technique the interviewer explores aspects of the individual’s construct system through three basic stages (Cassell et al, 2000). The
first stage is eliciting elements from individuals, or providing a set of elements to them. Secondly, the interviewer elicits 'constructs' which are the qualities the individual uses to describe and differentiate between the elements. The respondent is asked to compare and contrast elements in triads then focusing on two of them to give a word or phrase, i.e. a meaning as to why both of them are linked. This word or phrase forms an anchor point on the construct continuum and the respondent is then asked to give a word or phrase that illustrates the opposite anchor to complete the continuum. Thirdly, a grid matrix of elements and constructs – the manner in which data is collected and presented - is created where each element is rated against each of the constructs. This can be completed in several ways, but is usually done by determining the position of the element on a rating scale, often five or seven points, between the poles of each construct (Jankowicz, 2004).

Repertory grid technique is both a qualitative and quantitative precise representation of an individual's perceptions derived from a conversational, semi-structured interview which is largely free of bias, uncontaminated by the interviewer's own viewpoint (Cammock et al, 1995; Jankowicz, 2004) thus allowing "researchers to see the world as their respondents see it" (Embacher and Buttle, 1989, p.7). Put this way, there is something 'out there' but hidden in the person's words and ratings, awaiting discovery by the investigator through credulous listening (Taylor, 1990, Hair et al, 2009).
If one accepts the repertory grid technique as part of the hermeneutic process then the investigator is relieved from the purist position of positivism as repertory grid technique can be seen to be much more than just a set of numbers that ignores the conversational process that repertory grid was designed to engender (Hair et al, 2009). This appears to be a phenomenological position, then, congruent with the emerging interpretative paradigm in marketing research, despite attempts to incorporate repertory grid technique into the dominant positivist paradigm through a growing emphasis on statistical analysis packages (Fransella & Bannister, 1977, Marsden & Littler, 1998; Cassell et al, 2000). However, perhaps Taylor (1990, p.17) best encapsulates the repertory grid technique’s mixed methods’ capacity to facilitate triangulation: "It is a framework for the patterning of subjective experience that has the advantage of being available for statistical analysis".

Despite criticisms and alleged limitations of: being meaningless, having a rigid protocol in using homogeneous elements in a world where heterogeneity of issues is the norm, user inexperience, a specific grid being only a partial discovery of a person’s constructs, and validity and reliability, making comparison difficult (Harmon-Brown, 1969; Felixas et al, 1992; Spengler & Strohmer, 1994; Jankowicz, 2004; Wright, 2008), repertory grid technique’s usefulness and theoretical coherence has been established. Considered to be one of the most relevant methods available for exploring knowledge structure of consumers, its diversity and flexibility is shown across a number of consumer applications over the last thirty years (Marsden & Littler, 1998). Its usefulness is seen also in organisational application, e.g. management performance, human resources, strategy, clarifying
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

comppany values and charting organisational change (Cassell et al, 2000; Huber et al, 2001; Fransella, 2005).

Repetory grid technique also has business-to-business contextual application in exploratory studies of barriers to higher levels of marketing effectiveness; investigating the meaning and attributes of supplier-manufacturer partnerships; and assessing perceived value-in-use (Connor & Tynan, 1999; Connor, 2001; Lemke et al, 2001, MacDonald et al, 2011). Repertory grid technique also has advantages of encouraging self-reflection on the part of the respondents, and reflexivity of researchers in challenging and clarifying their own perceptions and understanding of the situation (Cassell et al, 2000).

3.3.6 Interpretative Phenomenological Analysis

Despite being recently judged to be one of the least demanding qualitative psychology methods, having traditional limitations of phenomenological methods, and findings of subjective accounts (concerns of generalisability, reliability and replicability associated with interpretive enquiry), interpretative phenomenological analysis (IPA) is a particularly useful, flexible and accessible approach when examining process and change in exploring the experiences of individuals and groups (Larkin et al, 2006; Dunworth, 2008).

The central focus for interpretative phenomenological analysis is how individuals as ‘self-interpreting beings’ are actively engaged in interpreting the events, objects, ideas and people in their lived experiences through ‘Sense-making in
Organisations" (Taylor, 1985; Smith & Eatough, 2006; Weick, 1995). Sense-making, interpretative phenomenological analysis has even been likened to cognitive psychology because of the co-creation of understanding between the respondent and the researcher (Smith, 2004). If true, this puts interpretative phenomenological analysis into the cognitive approaches to personality which is the domain of repertory grid technique (Kelly, 1955) and therefore a potential complementary method for triangulation in certain research circumstances.

Interpretative phenomenological analysis studies are more often than not concerned with issues of significant consequence for the participants, either on an on-going basis or at a critical juncture in their lives (Smith & Eatough, 2006). Interpretative phenomenological analysis’s commitment is to an idiographic case study level of analysis, dealing with individuals’ personal perceptions or accounts of phenomena rather than striving to arrive at objective statements regarding these phenomena. That is, trying to understand an individual’s world and describe what it is like in relation to a wider social, cultural or theoretical context (Larkin et al, 2006). So, for example, a researcher studying customer perceived value change is not primarily concerned with the nature of customer perceived value change per se, but with a particular respondent’s understanding and their experiences of customer perceived value change.

24 "... the creation of reality as an on-going accomplishment that takes form when people make retrospective sense of the situations in which they find themselves-shaping organisational structure and behaviour".
If a researcher is interested in exploring a respondent’s personal and lived experiences in looking at how they make sense and meaning from those experiences, and is at the same time pursuing a detailed idiographic-based case study, then interpretative phenomenological analysis is a suitable contender as a research approach (Smith, 2004). An advantage of this type of interpretative approach is that it can be informed by direct engagement of existing theoretical constructs (Larkin et al., 2006). Although the majority of interpretative phenomenological analysis studies are found in health related areas, one study has been conducted into relationship break-ups (Larkin et al., 2006). Clearly there is an analogy here with relationship marketing, both in terms of what relationships are or are not and relationship dissolution following changes in customers' changes in value (Tynan, 1997; O'Malley & Tynan, 2003; Beverland et al., 2003).

In terms of existing, theoretical constructs in support of this study, it is using Hultman and Gellerman’s (2002) classification of instrumental values as both a reference point for characterisation of instrumental values for the researcher and to support analysis of the types of values that respondents form in their constructs during the repertory grid analysis. This will clearly be useful in interpreting respondents’ value constructs to indicate if they have an emphasis, and whether that is common or idiosyncratic to the individual.
3.4 Practical Considerations and Aspects

3.4.1 Pre-understanding Phase

There are three important tasks to complete in order to ensure pre-understanding of the purpose of conducting research into the phenomena under investigation, and reciprocity for both the researcher and those who are being researched, as both parties need to gain from their cooperation (Gummesson, 2000; Pettigrew, 1997). The first of these tasks is to assess the suitability in context terms for an organisation to provide the case study setting in researching customer perceived value change.

The second task is to convey the researcher’s interest, seriousness and dedication in making a contribution in knowledge terms to both science and practice whilst promising to be ethical, acting with integrity and maintaining confidentiality on sensitive commercial and personal revelations by respondents during and after the investigation. The third task is the identification and selection of individual participants who not only have been purposely chosen because of their appropriateness concerning the phenomena, but also have the interest, free choice and willingness to speak openly and without duress.

3.4.2 Case Study Setting Suitability

In this particular investigation the real life context case setting is Rolls-Royce plc, a global power and energy solution provider active in the UK’s aerospace industry. Rolls-Royce plc, in particular its Gas Turbine Supply Chain Unit, was selected based
on its fit with six unique characteristics of the case study phenomenon, i.e. customer perceived value change in a UK manufacturing company.

First, Rolls-Royce plc is a world-leading provider of power systems and services operating in four global markets - civil aerospace, defence, marine and energy - in a dynamic changing external environment. The company has a broad customer base of 600 airlines, 4,000 corporate and utility aircraft and helicopter operators, 160 armed forces, 2,000 marine customers, including 70 navies, and energy customers in 160 countries. There is an increasing dependency on the external supplier network by Rolls-Royce plc in order to co-create value in for its customers. Rolls-Royce plc’s global purchasing current spend is £5.8 billion in the supply chain, with employees working in 10 countries across Europe, Asia and North America. 10,000 production suppliers and 5,000 indirect suppliers 200,000 active parts and 100,000 legacy parts with around 8,000 parts being added each year. The majority of suppliers are contracted through long term agreements however there is an increasing trend towards risk and revenue sharing partnerships.

Supplier performance is co-ordinated through Rolls-Royce plc’s Gas Turbine Supply Unit which comprises eight units that have the responsibility for developing and implementing the supply chain strategy for their commodity groups including the vision for the commodity strategy, integrating product and technology strategy and where applicable the manufacturing strategy, in line with Rolls-Royce plc’s global supply chain strategy. The Gas Turbine Supply Unit also has a cross-functional management team with standardised roles which are accountable for meeting the
cost, quality and delivery commitments for their commodity groups whilst complying with process set by the central functions. These central functions include Corporate Development, Corporate Security, Engineering, Engineering & Technology, Finance, Group Property, Human Resources, Information Technology, Quality, Purchasing, Supply Chain Planning and Controls. At the same time therefore Rolls-Royce plc is also a customer in the value network as the performance of its supply base is critical to Rolls-Royce plc's competitive advantage.

Given the above parameters it appears that Rolls-Royce plc meets the four core foundational premises (FP) of service-dominant logic: FP1, service is the fundamental basis of exchange. The application of operant resources (knowledge and skills), i.e. "service," is the basis for all exchange, where service is exchanged for service. FP6, the customer is always a co-creator of value, i.e. implying value creation is interactional. FP9, all economic and social actors are resource integrators, which implies the context of value creation is networks of networks (resource integrators). FP10, value is always uniquely and phenomenological determined by the beneficiary, i.e. value is idiosyncratic, experiential, contextual, and meaning laden. Consequently, Rolls-Royce plc is chosen as the organisation in which to explore a case of customer perceived value change using a theoretical purposive sample of respondents drawn from its Gas Turbine Supply Chain Unit and central functions.

Second, current academic research is focusing on the phenomenon of 'servitization', i.e. the transition of manufacturers from goods-dominant logic to
service-dominant logic marketing, based on co-created customer value from the integration of operand and operant resources used for the benefit of another party in the form of product-service systems value propositions (Baines et al., 2009; Durugbo et al., 2009; MacDonald et al., 2009). Concurrently, Rolls-Royce plc has been shifting from selling aviation gas turbines, i.e. products from a predominantly ‘value-in-exchange’ perspective to selling ‘Power by the Hour™’ or ‘TotalCare’, i.e. co-created ‘value-in-use’ solution provision packages. This shift in emphasis is a way of providing maintenance, repair and overhaul services based on previously supplied manufactured goods is an outcome-based contract. It allows the customer to pay when the supplier has provided value-in-use outcomes, as opposed to value-in-exchange activities and tasks (Ng & Nudurupati, 2010). Rolls-Royce plc now derives over 50 per cent of its annual revenue from customers in providing services surrounding the supply of its core product, the gas turbine (Payne et al., 2007; Bessant et al., 2008; Teece, 2010; MacDonald et al., 2009).

Third, current academic research is focusing on the conceptualisation of customer perceived value in value networks where service is exchanged for service and is facilitated through the integration of marketing and supply chain management practices, and research programmes of network actors where supply chain management is posited as having a lead role (Metz, 1998; Lusch et al., 2009). In this regard Rolls-Royce plc’s gas turbine supply chain management unit needs to determine what it perceives value to be in its capacity as a customer with its own upstream supplier base. Rolls-Royce plc, at the same time, has also to take into account its customer relationship management position as a supplier in offering
different business model based value propositions to Rolls-Royce plc's various downstream customers, i.e. airframe manufacturers, airlines and third party or joint venture parts and service providers, plus other value network stakeholders' interests and perceptions of value. Figure 7 highlights that for the purpose of this study Rolls-Royce plc's perception of customer value is being considered in terms of its role as customer. It also shows Rolls-Royce plc's position in the meso-environment in relation to its suppliers and customers.

![Diagram](image)

Figure 7: Rolls-Royce plc's position in the value network

Source: P.B. Connor

Fourth, current academic research has not covered customer perceived value, or changes to it, for an organisation from a multi-functional, internal stakeholder perspective in its role as a customer, rather than the traditional research buyer-
seller dyad or purchasing function perspective. Furthermore, current academic research suggests that value is experiential, contextual and meaning-laden and is therefore idiosyncratic in that it is uniquely and phenomenologically determined by the beneficiary (Vargo & Lusch, 2008). This appears to be the situation even if value is co-created through ‘prosumption’, i.e. the merging of production and consumption as a means of supplier companies facilitating customers’ participation in value co-creation processes (Toffler, 1980). One of the pre-conditions for achieving prosumption is thought to be the persuasion of customers to accept and share organisational values (Guido & Peluso, 2008). However, organisations cannot have values per se but are rather the shared values of individuals within the organisation that then shape culture, behaviour, direction and ultimately the organisation’s development (Hultman & Gellerman, 2002).

As noted in Chapter 2, values are crucial in providing individuals with choices, making decisions, setting priorities based on what they value in their personal lives and also in the attainment of customer perceived value for their organisation, even though there may be tension caused by the misalignment between both sets of values. To date academic research into customer perceived value change does not appear to cover this aspect. Rolls-Royce plc’s stated organisational values of Reliability, Integrity, Innovation, Trust and Excellence appear to provide the basis of desired organisational behaviour and how employees construe value in this regard. An exploratory or revelatory case study is therefore the chosen approach because there is the opportunity to investigate a phenomenon that appears to be previously inaccessible (Yin, 2009). In addition an embedded case approach offsets the
problem of a ‘holistic’ single case design creating the likelihood that the research may be conducted at unduly abstract level and it provides the advantage of significant opportunities for extensive analysis, thus enhancing insights into the single case through its sub-units, i.e. different individual internal stakeholders within the organisation (Gall et al, 1996; Scholz & Tietje, 2002).

Fifth, current academic research posits that value is a multi-dimensional concept, and because phenomenon and context are not neatly distinguishable in real life situations there is a need to conduct research of the same case over two or more different points in time. A longitudinal approach is therefore preferred to a cross-sectional design in order to permit the study, analysis and interpretation of customer perceived value changes, because they occur over time (Wancevich & Matteson, 1978; Beverland & Lockshin, 2003).

The sixth and final characteristic is based largely on the researcher’s previous employment with and personal network of contacts within Rolls-Royce plc, his consultative work with both suppliers and partners to Rolls-Royce plc and his membership of the UK’s Midlands Aerospace Alliance in which Rolls-Royce plc is a major participant. Rolls-Royce plc’s involvement with several of the University of Nottingham’s faculties, e.g. Engineering, also played a part in creating the opportunity to talk with the then Director of Manufacturing when he addressed students at the Business Leaders seminar in 2008 and subsequently agreed to sponsor and champion the research inside the organisation.
All of these aspects were instrumental in facilitating access to the necessary case study data, especially commercially sensitive data on Rolls-Royce plc's strategy and strategic initiatives over the research period. Other practical issues associated with pursuing the research - funding, time-tabling, anonymity, confidentiality, personal safety, politics, and ethics (Baker 2003) were clear, understood and did not present obstacles to successful completion.

3.4.3 Negotiating Access

Following an initial, tentative agreement to sponsor the research in May 2007 by the then President of Gas Turbine Operations, it took from June 2007 to October 2008 for the researcher to negotiate access to Rolls-Royce plc. The negotiations started with a meeting at the company's site in Derby on 21st June 2007. The purpose was both to inform the research sponsor about the objectives of the research and assess its applicability to the case and for company. Permission to start data collection was agreed in principle at the meeting even though it was acknowledged the research interviews would not start for some time, despite the research being seen as valuable for both parties.

The next meeting was held on 4th March 2008 at Nottingham University, which included the researcher, the internal research sponsor and one of the researcher's supervising professors from the Nottingham University Business School. The purpose was to ensure all parties understood each other's sought outcomes and to reach agreement about the mutually practical, commercially sensitive and ethical obligations that arise when conducting research. An explanatory meeting with the
research sponsor next took place at the company’s site in Derby during July 2008 and included the company’s executive vice-president (EVP) of Business Development.

The Business Development EVP attended because he was to take the responsibility for discussing the research project with the internal heads of function in order to identify appropriate candidates for the longitudinal panel and to assess the value of the research to the company. During the last week in August 2008 and first week in September 2008, the researcher met with the heads of six functions from the Gas Turbine Supply Chain unit who had the responsibility for the following areas: EVP Turbines; EVP Transmissions, Structures and Drives; EVP Supply Chain Planning and Control; EVP Operations Engineering and Technology; Director of Global Purchasing and the Director of Risk and Revenue Partnerships.

Whilst this stage of company engagement was prior to the conducting of research interviews, it was nevertheless an important part of the investigation in that it helped to update the researcher’s pre-understanding of the company’s values and how it operated in pursuit of customer perceived value for itself. It also facilitated extra, indirect access to the experience of other individuals outside the research’s longitudinal panel of respondents. Consequently the meetings were in part a briefing about the research and in part a set of unstructured interviews offering qualitative descriptions which provided contextual understanding of the phenomenon and context. This was invaluable pre-understanding for the interviews at the forthcoming data collection phases. Key insightful comments are
presented in Table 7, based on the discussion of themes rather than as a result of asking specific, detailed questions.

Table 7: Enhanced Research Setting Pre-understanding and Contextualisation

<table>
<thead>
<tr>
<th>Theme</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerospace Industry</td>
<td>“The aerospace industry is ‘collegiate’ with friendly partnerships, even with our competitors, over long periods”. “The aerospace industry is macho...it’s about personalities”. “Airframe manufacturers and airlines have different values and are looking for different solutions. Airframers want the product; airlines are more interested in the life-cycle cost and want flexible solutions to situations that can change fast, and want fast reactions to situations”.</td>
</tr>
<tr>
<td>Servitisation</td>
<td>“Our primary function is products. Good products create opportunities to build service. Service without a product doesn’t work”. “Customer perceived value is of us as an organisation, and service rather than just the product. We have a deepening relationship with airlines in being predictable to deliver total care and help solve problems. When I started 20 years ago it was just about selling the product - get on with it - but now it’s about selling solutions and service...the solution provider concept in equipment is a big thing for me”.</td>
</tr>
<tr>
<td>Customers</td>
<td>“In a way a customer doesn’t care what you don’t make as long as you manage it. The game is to judge what customers value that you do make and then have confidence in that you can deliver the big picture”. “You set a performance parameter before setting a price and then it is easier to come to an agreement. Customers don’t always say what they really want or should really want”. “You can spend a lot of time telling customers the advantages of change but it’s the real experience that counts. You need to demonstrate value added”. “We like a boring relationship with customers, i.e. no problems. Because of important safety factors we are wary of change, of unexpected consequences and the huge costs of testing and the validation”.</td>
</tr>
<tr>
<td>Customer Perceived Value</td>
<td>“Customer perceived value in its crudest form is expectations and the ability to meet those expectations”. “It opened our eyes...Singapore Airlines flew one hundred Rolls-Royce executives out to Singapore for a specific conference on how Rolls-Royce needed to understand the perspective of Singapore Airlines’ customers, i.e. passengers, in terms of what it is that they value”.</td>
</tr>
<tr>
<td>Supply Chain</td>
<td>“Customers value a reliable supply chain but overall it is QCD [Quality, Cost, and Delivery]”.</td>
</tr>
</tbody>
</table>
Taking the above comments, linked to theory on customer perceived value, plus two specific comments from employees about the practical and operational aspects of how Rolls-Royce plc conducts its business, the researcher produced two diagrams. They portray holistic aspects of the phenomenon's context as pictorial aids following the pre-research discussions. The two diagrams were utilised by the researcher with respondents in the forthcoming interviews to confirm with respondents that the situational context was understood by the researcher. In addition they served to establish a non-threatening rapport with participants in order to put respondents in the right frame of mind by setting the scene (Woodruff & Gardial, 1996).

The first pictorial aid, depicted in Figure 8, concerned the informants of initiators of change that influence values, and thus value, from the wider macro-environment at the value horizon. It also took into account changes at the meso-environment, i.e. the value peripheral field of vision, whilst taking into account Rolls-Royce plc's organisational values and how the organisation processed information through impressions, interrogation, integration and interpretation. Finally, it depicted how customer perceived value is brought into focus at the micro-environment level, after aggregation of stakeholder values and perceptions of value:

"Rolls-Royce acts as an interpreter, integrator and aggregator of values and the value it gets from the supply chain needs to be integrated with the bigger Rolls-Royce...but value definitions can vary because of
different industries we are involved in and the length of relationships” (respondent RR004).
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

“It is complex deciding what to make in-house and what to get from suppliers, judging it across new production phase, fleet phase, across four sectors and translating that to our supply base. At any instance customer value can change ...and trends vary” (respondent RR009).

![Operational Influences on Customer Perceived Value](image)

**Figure 9: Operational Influences on Customer Perceived Value**
Source: P.B. Connor

### 3.4.4 Selection of Respondents

As mentioned in section 3.3.1, interpretivist research and qualitative data gathering into customer value is typically conducted on a small scale, using non-probability sampling, which may be through a convenience, judgement, or quota sample. This is so that information can be maximised about strategically critical customers and
to expose the differences in value hierarchies that may exist between individuals (Woodruff & Gardial, 1996). As such, those individuals comprising the non-probability sample should be drawn from three broad categories of role players. The first are direct-contact customers who have hands-on experience of the context and situation as users of the product or service. The second are influential, decision-making customers who determine supplier selection criteria and the third are indirect-contact customers who facilitate the flow of goods and service as a support function of those who are users of the product.

Given the longitudinal approach to the research objectives and the long-term nature of Rolls-Royce plc's business, it was deemed appropriate for a case study panel to be repeatedly measured over an 18-month period at three datum points. This was because of the likelihood of being able to identify any external and internal triggers of changes that a fixed sample of respondents would maybe experience over the time frame. Consequently a panel of fifteen 'key informants', i.e. those with knowledge, experience, and familiarity of customer perceived value, was selected. The purposive sample of respondents was drawn from various functions and levels in Rolls-Royce plc's gas turbine supply chain unit and supporting functional group executive. The panel members were nominated by the heads of the six functions from the Gas Turbine Supply Chain unit in conjunction with the EVP of Business Development, not on the basis that they were representative of a cross section of opinion but were able to offer the perspective and contributions sought on the research questions. Nomination of respondents was also based on their perceived availability to participate. Figure 10 provides
details of where the respondents were positioned in the organisation, and their associated job titles.

3.4.5 Case Study Protocol

A case study protocol is an imperative formal document comprising the entire set of procedures and behaviours to be followed by researchers in the collection of data from the case study respondents (Yin, 2009). The full protocol can be found in Appendix 2 and covers an overview of the case study project, field procedures, case study questions and a guide for the case study report. The researcher acknowledges the importance of the Case Study Protocol to ensure that lessons from practice, not
just methodological literature, has a role in ensuring that common practice, best practice and innovative practice are reflected in producing a good case research in this industrial marketing setting (Piekkari et al, 2010). In addition the protocol keeps the researcher focused on the target of the case study topic, helps in anticipating any problems that might decrease the reliability of the case study research, and enhances the skills required in being a good case study investigator i.e. by asking good questions, being a good listener and interpreter, exercising adaptiveness, flexibility and reflection, avoiding bias and protecting the subjects directly or indirectly participating in the research (Yin, 2009).

3.5 Conducting the Data Collection and Analysis

3.5.1 Interviewing Respondents

The first set of formal interviews took place over a two week period from 9th - 20th March 2009 on Rolls-Royce’s site at Moor Lane in Derby. The interviews were held in offices in G1, Moor Lane, because all the respondents were familiar with the location and it would help minimise downtime for participants. The official release of Rolls-Royce plc’s results at the beginning of March 2009 for the year ending on 31st December 2008 meant the timing of the interviews was considered to be most appropriate. It was envisaged that the dissemination of the latest financial results and annual report would facilitate respondents' reflection on why and how their perceptions of value may have changed over the past 12 months.
Prior to interviews taking place the individuals, who had been approached previously in 2008 and had indicated their willingness to participate, were sent a formal letter of invitation by the internal research study sponsor on 19\textsuperscript{th} February 2009. This approach is in line with Darke \textit{et al}'s (1998) suggestion for a researcher to identify what is in it for the case study organisation along with clarity of key deliverables and expected timeframes. The letter had a PowerPoint briefing document attached to it explaining the purpose of the research along with details of the interviewing process and topics, and a statement of how the organisation would benefit by taking part - see Appendix 5.

The personal assistant to the President of Gas Turbine Operations also notified respondents to complete a meeting request form to facilitate the requirement to interview each respondent for about an hour on three separate occasions, or alternatively a two or three hour block on one specific day to accommodate any other commitments.

Although the majority of the individuals who had agreed previously to take part did so, there were some alterations at the last moment. For example, because of unforeseen pressing commercial commitments, one head of department had to withdraw but managed to seek out an appropriate replacement from other members of his team. Nevertheless, the full panel of fifteen respondents was eventually realised.
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

The second sets of interviews took place between 16th and 27th November 2009 and followed the same format as the first set of interviews in terms of process and venue. However, there were a few changes since the first data collection phase, in particular the loss of the project sponsor, respondent RR009, who had suddenly decided to take early retirement and had not yet been replaced. This necessitated seeking continuing access and support which the personal assistant to the original sponsor successfully managed to secure from the President of Gas Turbine Supply Chain, who was also Rolls-Royce’s Chief Operating Officer. In addition, respondent RR008 had also decided to take early retirement. Respondent RR004 was promoted within the company but in a different role as Director of UK Operations for Civil Aerospace and fortunately elected to remain on the panel.

The third and final set of interviews took place from 27th September to 8th October 2010 and followed the same format as the previous sets of interviews in terms of process and venue. Once again there were a few changes since the second phase of data collection. RR006 had left the United Kingdom to start a new job and a different role for the company’s Energy group in the USA. RR014 had left the company to progress his career elsewhere and RR015 had taken the opportunity of early retirement. A new Director of Manufacturing had recently joined the company at the beginning of the year and inherited the role of sponsor for the research investigation. So yet again there was a need to obtain approval for continued access. This was secured initially through an internal briefing by the original personal assistant and another senior secretary. Final and full approval was
given following a meeting between the researcher and the new Director of Manufacturing just before the interviews started on 27\textsuperscript{th} September. An offer to the Director of Manufacturing to take part, even though he would be unable to complete three sessions but would gain some first-hand experience of the process, was declined on the grounds of being too busy.

3.5.2 Framework and Process

The researcher has adopted Woodruff & Gardial's (1996) hierarchical view of value framework in addressing the three research questions in a rich and meaningful way i.e. conceptualising customer value and in order to understand why and how changes in customer perceived value occur. The framework is predicated on the means-end theory assumption that higher level values i.e. desired end-states play a dominant role in guiding behaviour (Gutman, 1982). The framework also assumes that individuals are consistent with their values by simplifying the multidimensional aspect in the decision-making of value choices at the product attribute lower level and consideration of positive or negative consequences associated with instrumental values at the middle level that result from product or service usage (Manyiwa & Crawford, 2001).

As this research is focused on value change it is important, right from the outset, to set an initial baseline from which further observations can be made about whether value change has or has not occurred. The interview process followed the same format in all three phases of data collection in order to record any changes in a
respondent’s conceptualisation of customer perceived value. The collection of data on the elements that may affect, influence and indicate why and how changes in an individual’s perception of customer value may occur was facilitated, therefore, by using the following four data collection instruments: value definition questionnaire; value attribute questionnaire; critical incident questionnaire; repertory grids. Figure 11 illustrates how the research techniques and data sets support the development of knowledge against the three research questions.

![Figure 11: Principal Methods of Investigation](image)

Source: P.B. Connor
Change in customer perceived value definition

The literature suggests that even when organisations aspire to understand, co-create and deliver value there is very little verification of what they understand value to be or of its dynamic nature in terms of changing customers’ preferences triggered by initiators of change. Customers, for whatever reason, may not be able to articulate fully or at all their perceptions of value. It is useful, therefore, to give research respondents both prompted (choice of customer perceived value definitions and customer perceived value variables from the literature) and unprompted instruments (repertory grids, critical incidents and interpretative phenomenological analysis as construed and experienced by respondents) in order to surface the phenomenon. For example, if respondents change their understanding of the prompted definition of the customer perceived value construct then change will be deemed to have occurred. Output from the use of unprompted instruments was also deemed to reveal any changes in the conceptualisation of value.

Respondents were asked to consider each definition and either select one definition, several definitions, or provide a definition of customer perceived value of their own if they wanted to or thought that the prompted definitions were meaningless, inadequate or not appropriate. This was to establish whether change in an individual’s knowledge position, based on updated, academic value definition, had informed respondents’ Customer Perceived Value position. For example, some of the respondents had or were in the process of completing post-graduate Masters Degrees which had included strategic marketing modules.

**Change in the conceptualisation of customer perceived value attributes**

A questionnaire was administered as the principle measurement instrument and framework, derived from the business-to-business customer perceived value literature and covering 55 attributes in seven factors. Each of the variables was sourced from the extant academic literature and/or industry standards on business-to-business customer value and supply chain selection criteria. For example, *service – pre & post service support* (Menon et al, 2005), *product/service innovation*, and *global capability* (Ulaga & Chacour, 2001), *social interaction*, and *anticipate future needs* (Flint & Woodruff, 2001), *engagement in daily operations* (Flint & Blocker, 2004), *professional staff* (Baxter, 2008), *competitive price, joint problem solving*, and *total cost of ownership* (Lapierre et al, 2008), *understanding your customer’s needs*, and *cost reduction* (Flint & Mentzer, 2000), *meeting delivery requirement* (Ulaga, 2002), and *trust, and commitment* (Ulaga & Eggert, 2006).
Instead of presenting the attribute variables as a list, the researcher decided to group them under the determinants of customer value factors identified by Kotler (2003) to facilitate ease of understanding and completion by respondents. These were: product, service, personnel, image, monetary, time and effort. The ‘personnel’ factor was relabelled by the researcher as ‘relationships’, considered to be more relevant for this organisational context. Respondents had the option to present their own value attribute variables within the existing factors. Another factor category, called ‘other’, was added so respondents could record their value attribute variables if they were deemed to be outside the existing factors.

At each phase of the research, respondents were able to assign an attribute the status as being of no value or a value. If it was not a value it was recorded as zero. If an attribute was declared to be a value, it was rated on a seven point Likert scale, as a ‘desired’ value if rated between one and four, and an ‘expected value’ if rated five to seven. This split scale was used after consultation with the respondents in acknowledgment that not all value attributes are equal i.e. expected attributes are ‘must have’ items that seriously detract from value-in-use if they are not met, whereas desired attributes contribute overtly to value-in-use if achieved.

In the case that prompted value variables were recalibrated by the respondent in terms of whether they are expected or desired attributes of customer perceived value, change would have been considered to have occurred. Change would also be revealed if respondents added their own self-generated, unprompted value variables to the same instrument.
Changes in customer perceived value due to initiators of change

Given the purpose, questions and longitudinal nature of this research study into customer perceived value change, the extant critical incident technique literature, covering behavioural switching consequences discussed in section 3.3.4, has been used to provide a definition of critical incidents for the research setting and context. To delimit the situation, ensure objectivity of the observations, and avoid the approach becoming an empty signifier, all reported incidents are classified as critical by the respondents themselves, based on their own life experiences. (Flanagan, 1954; Roos, 2002). Therefore, a critical incident has been defined by the researcher using the following criteria:

- A positive or negative event, activity, issue or situation
- Occurred in the past financial year/six months for Rolls-Royce plc
- Had a direct, i.e. a specific, attributable cause and effect outcome
- Led to pro-active or re-active reconsideration and change in a respondent's perception of value as a customer.

Apart from the individual being able to identify the critical incident, it is important that they are able to self-assess and verify the criticality of the critical incident, rather than it being just a claim, an assertion or fallible in some way, e.g. partial or mistaken explanations. It is also very important for the researcher to be able to have confidence in the findings and conclusions of the research and provide a
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

mechanism, therefore, to allow individuals the opportunity for revision in terms of more accuracy.

As a consequence, and in line with Miles & Huberman's (1994) suggested explanations about causality, the researcher produced a guide sheet as part of the case study protocol which depicted the definition of a critical incident for this particular research setting and context. This was complemented by a set of fourteen questions covering degree of impact of the critical incident, nature of the changes, respondent involvement, interventions if any, outcomes and reflection – see Figure 12.

**Critical Incident Technique**

<table>
<thead>
<tr>
<th>Critical Incident Technique</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please provide a description of either a positive or negative event, incident, issue or situation that has occurred in the past financial year which has led to you reconsidering what Rolls-Royce plc perceives to be its own state of Customer Value</td>
</tr>
<tr>
<td>What external and/or internal factors can you attribute to the incident?</td>
</tr>
<tr>
<td>Why did these external and/or internal factors lead to a change in what RR values?</td>
</tr>
<tr>
<td>In what ways has RR changed what it values following the impact of initiators of change?</td>
</tr>
<tr>
<td>How were you involved?</td>
</tr>
<tr>
<td>What specific contribution/interventions did you make?</td>
</tr>
<tr>
<td>What were your feelings at the time?</td>
</tr>
<tr>
<td>What were you trying to achieve?</td>
</tr>
<tr>
<td>Why did you intervene as you did?</td>
</tr>
<tr>
<td>How could you have dealt with the incident differently?</td>
</tr>
<tr>
<td>What choices did you have to do things differently?</td>
</tr>
<tr>
<td>What tension in terms of competing values, if any, did you experience?</td>
</tr>
<tr>
<td>What has happened since the incident?</td>
</tr>
<tr>
<td>How do you feel now about this experience?</td>
</tr>
<tr>
<td>What have you learned about yourself and how you deal with similar situations?</td>
</tr>
</tbody>
</table>

Figure 12: Illustrative extract of Critical Incident Technique from Case Study Protocol

Source: P.B. Connor

163
This was supplemented during respondent interviews with wider discussion on environmental, organisational and functional climates to elicit whether events or situations impacted customer perceived value, which were not deemed to be critical incidents.

**Changes in customer perceived value consequences and instrumental values**

Two sets of repertory grids were completed, one at the start of the first phase and one at the end of the third phase, to assess whether any changes in values and consequences of them had an impact on the respondent’s perceptions of customer value across the research period. The congruence between and influence of an individual’s values and the organisation’s values were also assessed. Consistent with Rokeach’s (1973) value theory, organisational values are a few core, essential, enduring tenets of an organisation that change seldom, if ever (Collins & Porras, 1996). They are classed as terminal values in terms of preferred end-states and thus are crucial because they are the guides to action and criteria used by employees to set priorities, develop strategies and make decisions and choices in what constitutes value. They also guide how to evaluate what is of importance or preferred, in that one mode of conduct is better than the opposite mode of conduct (Hultman & Gellerman, 2002).

Roll-Royce plc’s organisational values, shown in Table 8, are taken from its Values Statement and Brand Promise Statement. They are included in the company’s
quality manual, which also states, "We all have an important role in upholding the company values. We are expected to act in a way that is consistent with them".

Table 8: Rolls-Royce Organisational Values

<table>
<thead>
<tr>
<th>Reliability</th>
<th>“Our customers trust us implicitly. We are committed to delivering and to responding to the needs of those we work for and with. Whatever we do will be at a high standard and provide value for money. When our customers look us in the eye, they must feel assured that we can always be relied upon to do what we say we will do, to be focused on their needs and to be driven to create the right solutions for them”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrity</td>
<td>“At the heart of the way we operate and behave and also in the quality of the products and services we deliver. Our knowledge and experience combined with integrity gives us a competitive edge. Our openness and honesty encourages strong and profitable partnerships with suppliers and customers alike”</td>
</tr>
<tr>
<td>Innovation</td>
<td>“We must all strive to be open-minded and flexible in our work. Our forward thinking culture will create a well-managed and contemporary organisation that is always seeking to improve. Never be content to be part of the crowd, our ability to encourage new ideas and adopt creative solutions will stand us apart from the competitors”</td>
</tr>
<tr>
<td>Trust</td>
<td>“Something that is never assumed – it must be earned. It comes because we act with integrity and treat our customers as our partners”</td>
</tr>
<tr>
<td>Excellence</td>
<td>“A way of life and a way of thinking. It relies on innovation, which comes through collaboration and co-operation in the belief that, through teamwork, good can always be bettered. It is this that will keep us ahead”</td>
</tr>
</tbody>
</table>

Although the brand promise values statement has the core value element, “Trusted to deliver Excellence”, the researcher took the decision to remove ‘to deliver’ because elements which are nouns - particularly concrete nouns rather than
abstract nouns - are easier than verbs for respondents to handle (Jankowicz, 2004). In addition, the focus is on ‘Excellence’, i.e. content, rather than the process aspect of delivering. Furthermore, the inclusion of ‘to deliver’ in the elements would have resulted in a doubling of the constructs from 10 to 20 which might have severely impacted on respondents’ willingness to participate through possible frustration. It might also have compromised the time limit agreed and the researcher assessed the trade-off of access and the need of respondents to do their job.

In line with Jankowicz’s (1995) guidance on conducting repertory grid, the following methods were used and explained to respondents. At the top of the repertory grid form is a box which both informs and reminds the respondent of the agreed topic under investigation, i.e. “Using Rolls-Royce plc’s values as desirable end-states, what do you perceive value to be?” Next are the ‘elements’ which are examples of, occurrences of the topic. In this particular grid these are supplied rather than elicited from respondents as they represent Rolls-Royce’s five organisational values. 1 = Reliability; 2 = Integrity; 3 = Innovation; 4 = Trust; 5 = Excellence. At this stage it was explained to the respondent that the researcher wished to find out how the respondent construes customer perceived value using the elements, and also provided reassurance that there was no correct answer, just the respondent’s way of seeing them. Respondents were asked to compare systematically the elements by selecting different combinations of three elements at a time from the list of triads on the left-hand side, e.g. 1, 2 and 3, and asking, ‘which two of these three elements are the same in some way and different from the third?’ And, ‘what do these two elements have in common, as opposed to the third element?’ At this
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

point the respondent recorded in the 'Pair' box which two elements were put together and also recorded the third element they saw as different in the 'Third' box.

The respondent then wrote a word or short phrase that demonstrated the reason or justification why the two elements selected were considered similar, in the 'Similar Construct' box on the first row on the left-hand side of the repertory grid form. The respondent was asked to write a word or short phrase which expressed the contrast or converse of the reason/justification on the right-hand side in the 'Contrast Construct' box in the same row. This provided one continuum of the respondent's construct of customer perceived value. The researcher then checked, using the respondent's words as much as possible, to see what the respondent meant or, in exceptional circumstances, helped clarify meaning through negotiating a form of words that make sense to both parties. Once again the respondent was reminded that there is no correct answer. This was continued for each possible triad combination of the five elements.

Next, each completed row of constructs was presented as a continuum on which respondents were asked to rate each of the five elements on a scale of 1 to 5 and record these in the ratings boxes. The respondents were informed that the words/short phrases in the 'Similar Construct' boxes represented the 1 point end of the scale and words/short phrases in the 'Contrast Constructs' boxes represented the 5 point end of the scale. At all times checks were made by the researcher to ensure that the directionality of the scaling was being preserved. Once again the
explorer explained also that there was no correct answer. It was further explained to respondents that nothing could be interpreted from looking at the completed grid at this stage because a detailed analysis of the grid needed to take place using a mathematical formula which facilitated the production of hierarchies of elements and constructs plus their individual combinations of constructs that show how they think of and give meaning to the topic.

In understanding that a) individual values and organisational values and b) degree of organisational commitment may not be aligned, the researcher also included a repertory grid of the respondents' individual values to explore the extent of congruence between their own values and those of Rolls-Royce plc. The same process was utilised for completion of the respondent's individual grids where the topic was, "Using your values as desirable end-states, what do you perceive value to be?" In this instance the elements comprising desirable end-states were elicited from the respondents. The rest of the process of generating constructs and rating the grids was the same. The only noticeable issue was the increased amount of time taken for respondents to complete their grids.

3.5.3 Data Analysis

The analysis of the individual respondents' repertory grids was based on looking for the relationships, whether similar or different, between the both the elements and also the constructs associated with the topic. This was achieved by taking constructs in pairs, finding the absolute differences between the ratings on each and summing the differences down the grid across all the constructs. For the
‘element pairs’ the lowest sum indicates the most similarly construed elements and the highest the most differently construed. For the ‘constructs pairs’ the lowest sum indicates the most similarly construed constructs and the highest the most differently construed.

It is possible therefore to create a hierarchy of elements based on values and a hierarchy of constructs that illustrate how value, in terms of sought consequences, is uniquely different and phenomenologically determined by individual respondents. Those elements and constructs that receive the same scores at the differing levels of the individual respondents’ hierarchies reveal that value elements may not determined independently, but have a thematic link. This occurs where several value elements are combined through equivalence of importance.

Successive administration of the repertory grids reveals if there are any changes to the individual respondents’ values hierarchy or thematic perceptions. Reproducing these elements in terminal and instrumental values hierarchies as cognitive maps provides a simplified, pictorial representation of repertory grid outcomes.

As stated in the literature review in section 2.2.1, there are existing, empirically identified, theoretical constructs of instrumental values that can be used in this research study. The use of Hultman and Gellerman’s (2002) classification of instrumental values proved an invaluable reference point for assessing the nature and coding of surfaced instrumental values for the researcher. In particular it was considered useful to a) see if any new or new types of instrumental values could be
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

identified, b) assess whether changes in the types and hierarchies of respondents' instrumental values that form in their constructs could be supported, c) explain individual differences in changes in instrumental values and d) incorporate into data display matrices and an explanatory framework of customer perceived value change.

Miles & Huberman (1994) recommend the use of data display format matrices “as a visual format that presents information systematically so the user can draw valid conclusions and take needed actions” (p. 91)...“to help analysts summarise, begin to see themes, patterns and clusters” (p101) in their qualitative output data of the phenomenon under study. The researcher, using Carney's (1990) ladder of abstraction, constructed several time based and thematic conceptually ordered displays based on changes in organisational and individual terminal values, instrumental values and value attributes. These displays have then facilitated the integration of the output data into one explanatory framework of how an individual’s changes in customer perceptions of value are made over time and are, or are not, linked at the three levels, i.e. desired end-states, consequences and attributes, of the hierarchical view of value (Woodruff & Gardial, 1996).

In this research study the idiosyncratic responses were not aggregated to a group level using data display matrices because the exploratory research objectives were to understand exemplar individual differences in customer perceived value change in terms of most positive changes, most negative changes and least amount of change.
4 Empirical Context

4.1 Introduction

The information in this chapter provides the context framing the research study setting with the aim of facilitating reading the following chapters. A background overview of the global civil aerospace market and the United Kingdom's aerospace industry's contribution to the economy is outlined before a more detailed review of the case study setting organisation is presented.

4.2 Global Civil Aerospace Market

4.2.1 Overview

The invention of the aeroplane, pioneered by Wilbur and Orville Wright between 1899 and 1905, and the development of the jet engine by Frank Whittle in the middle of the twentieth century have led to air travel by large jet powered aircraft to many parts of the globe becoming commonplace and affordable to the masses (Grant, 2010). Since 1957 more people have crossed the Atlantic by plane than by boat and today aviation remains a critical tool for reshaping the contours of contemporary civilisations, improving the human condition and a powerful instrument of positive change (Batteau, 2001). Since its inception the global civil aerospace market has seen consistent, long-term growth, driven by sustained increases in air passenger traffic numbers. This is the case despite some notable
high profile troublesome episodes – for example, the economic downturn of the early 1990s and the fallout of 9/11 between 2001 and 2003 (Newhouse, 2008). Even as economic markets crashed again in 2009, civil aerospace remained buoyant, benefitting as a late cycle industry from trading out orders placed years before, and having a record year of aircraft deliveries. However, profits crashed by 17%, impacted by oil and financing costs, and in the same year orders for aircraft fell to 413 from 1,439 in 2008. Despite this, by 2010 the aerospace industry recovered to 2% growth and average 16% profit increase (Thisdell, 2011), increasing a further 5% in 2011.

This growth is forecast to continue as demand for air traffic – both passenger and freight – outstrips current capacity. Over the next 10 years, the highest growth will come from markets such as China, India and Brazil (UKTI, 2012). Aviation is now a vital part of our society and infrastructure (PwC, 2012), with an expectation and high dependency that it can move people and goods quickly over long distances for economies to function.

4.2.2 Size and characteristics

Aviation

The global aviation market is characterised by a large number of airlines providing transportation services to consumers for their communication, business and leisure needs, and by airlines and logistics companies providing freight services to
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

Market segments align with applications including air passenger, regional, corporate/business, private, and transport or freight.

Classification of airlines is based on three tiers according to size and focus, the former heavily influencing the latter. A first tier incorporates the largest operators, for example British Airways, Qantas, Virgin, Singapore Airlines, Emirates, and United Airlines, with large, modern fleets. Some started life as state-owned, national carriers but privatised and developed to be large business, often with their own MRO businesses. This tier focuses increasingly on network coverage and passenger service (comfort, frequency, in-flight entertainment and facilities). Whilst there has been a high degree of deregulation (in Europe, for example in 1997 (Shaw, 2007), there are still international restrictions on routes available to airlines which limits international market development.

A second tier of smaller national and private airlines typically has older aircraft and/or smaller fleets and network (for example, Air Austria, TAP, Iran Air) and doesn’t have the scale or resource to compete in the first tier with the major airlines. A third tier comprises short-haul airlines, for example the regional specialists (Northwest Airlines) and, increasingly ‘no frills’ budget airlines (Jet2). Regional airlines may often operate in alliance with tier one airlines to cover a domestic route, particularly in the USA (for example, SkyWest coded as United Airlines). Interestingly, some of the larger budget airlines (EasyJet, Ryan Air) are arguably moving towards tier two as they broaden their networks and fleets.
As a result of some of the economic pressures and to increase access to routes, there has been a period of acquisition and consolidation by tier one airlines (Air France of KLM; British Airways of BMI and Iberia).

Whilst far fewer airlines are now state-owned, the state is still very visible in both aviation and aerospace, both through taxation and subsidies. This has particularly been the case in the US where subsidies, especially post-9/11 in 2001, have shored up the market, with most major US airlines also operating within the protection of 'Chapter 11', affording them protection from bankruptcy and insolvency whilst they restructure and seek to return to profit. The significance of this is that it underlines the fragility of the market, the drive to reduce costs throughout aerospace, and the fact that government subsidies may be a vital revenue stream and another 'customer' to the industry with influence.

Aerospace

The global civil aerospace industry, which supports aviation through equipment and services, is worth an estimated $260 billion (Clearwater, 2011) and is characterised variously by sectors describing aircraft type, aircraft size, propulsion technology and market application, with maintenance, repair and overhaul (MRO) services also representing a significant part of the industry. So at the highest level, sectors comprise fixed wing and rotary wing aircraft types (i.e., aeroplanes and helicopters). Sub-sectors include wide- (twin aisle) and narrow-body (single aisle) aircraft. Aircraft types are also sometimes described and defined in terms of the
engine type – jet, turbo-prop (propeller), and large and increasingly powerful turbofan engines.

The market has typically been dominated by US and European suppliers, although emerging markets – particularly China and Russia – have significant indigenous civil aerospace programmes which may in future pose a major threat (or opportunity) to the established original equipment manufacturers (OEMs) and their supply chain as new supply chains are established. There has already been a trend towards globalisation of the supply chain based on geographic proximity to airframers, technical specialisms or scale.

Activity is characterised by companies supplying airframes (for example wing specialists, composite material providers), aero power (engines, thrust reversers) and aircraft systems (landing gear, avionics, etc). This then extends to a substantial, global supply chain providing associated services, sub-systems and components to each of these areas.

In an almost perfect Pareto situation, the top 20 companies in the aerospace industry by revenue dominate the top 100 companies, representing 79% of revenue in the industry, and making an average 9.4% profit in 2010 (Thisdell, 2011). The industry is structured with a small number of airframe (aircraft) manufacturers, dominated by giants Airbus and Boeing.
4.2.3 Civil aerospace market forces

The global civil aerospace market is, by necessity of safety, a highly regulated environment. Technical competence, regulatory compliance, traceability and control are demanded of the industry, enforced and managed by the European Aviation Safety Agency (EASA), Civil Aviation Authority (CAA) and Federal Aviation Authority (FAA). These factors mean that barriers to entry are relatively high for industry participants, particularly at OEM and Tier 1 levels.

High costs of research and development (R&D), test and validation for new aircraft and engines in particular are the most significant barriers to entry and a substantial threat to existing OEMs. Despite the high cost of R&D, it remains vital for industry participants to continue to invest to remain competitive, and with prevalence of satellite, communication and network technologies, the pace of change is increasing. For this reason there are a large number of alliances, joint ventures and partnerships where the burden and risk of R&D investment can be shared, and the past twenty years has also seen a number of mergers and acquisitions (M&A) as the industry has consolidated, with the value of M&A deals in the aerospace industry growing from $10.9 billion in 2009 to $20.2 billion in 2010 (Thisdell, 2011). In terms of alliances and partnerships, the same is true for airlines which are using alliances to extend their global networks in a service extension to their customers, and to share the burden of infrastructure and service costs.

Being long-cycle industries characterised by high value capital equipment (aircraft and engines), costly infrastructure (airports, air traffic control, passenger services)
and high operational costs (fuel, maintenance and levies), aviation and aerospace have also seen some of the most innovative and complex financing, cost modelling, fleet and asset management, customer loyalty programmes and commercial arrangements, including equipment leasing specialists and an active ‘second hand’ market, bearing in mind aircraft may be in service for 20-30 or even 50 years. Industry average for aircraft age is 160 months (Heracleous & Witz, 2010).

Despite the barriers to entry, the market is an increasingly competitive environment, driven by price sensitive and increasingly sophisticated end users - air passengers and organisations using freight (cargo) logistics services. Participants are struggling to manage cost and ultimately attract and secure passenger loyalty (airlines) and fleet dominance (airframers). To minimise seat mile costs (Newhouse, 2008) assets are ‘sweated’ intensively by airlines to reduce fleet size and minimise lifecycle costs, with a high emphasis on the sophistication of maintenance and support services to extend equipment life, minimise MRO costs themselves, and avoid costly ‘aircraft on ground’ scenarios where assets are unable to generate revenue and reputations are damaged.

However, cost leadership and meeting consumer value needs through service leadership are not necessarily contradictory strategies. Singapore Airlines, for example, is recognised as one of the market’s highest rated service providers but is consistently one of the most cost-effective operations, with its costs per available seat kilometre 4.58 cents compared with European airlines costs of 8 to 16 cents and US airlines at 7 to 8 cents (2001-2009). Indeed it was cheaper than many
budget airlines (Heracleous & Witz, 2010). Singapore attributes this to investment in people, innovation, and in new aircraft with lower MRO costs and reliability problems than its competitors, whose older fleets and poorer service have a higher cost of non-quality and customer churn.

For consumers too, time is of the essence. In terms of competing alternative forms of transportation aviation has a clear differentiation advantage, particularly over long-haul journeys. Expectations about timely delivery of the service to consumers are high (both punctuality and journey time), and the aerospace and aviation industries recognise this value to their customers. For these reasons, and relevant to some of the customer perceived value concepts that are explored in this study, there is a high degree of emphasis on performance, reliability, longevity and safety. Values such as these for customers through the market are similar, albeit with different emphasis on drivers and relative importance. Safety, for example, may be a value for end users for peace of mind, and for airlines and aerospace companies in terms of moral responsibility, reputation and risk.

4.2.4 Issues and trends

Aviation claims some substantive statistics: 2.5 billion passengers and 50 million tonnes of freight annually. Growth is forecast at 6 billion passengers by 2026 and the long-term forecast for commercial OEM aircraft is more than 30,000 deliveries in the next 20 years at a value of around $4 trillion (PwC, 2012). A total of 141,182 engines are forecast to be delivered between 2009 and 2028, worth some $822 billion, and MRO services will be worth $65 billion by 2020 (Clearwater, 2011). 5.5
million workers are employed worldwide generating over $1 trillion in revenue (Oxford Economics, 2009).

It is possible that communication technology developments, such as video conferencing and Skype will impact growth as acceptable alternatives to face-to-face contact proliferate. Volatility around fuel and oil prices continues to be a threat to the industry, as does availability of finance, both of which are key to its health and success. In the aftermath of terrorist attacks, security will also continue to be an important issue for aviation, impacting the aerospace market too, both in terms of technology, consumer confidence and market forecasts. Whilst passengers are now arguably used to enhanced security measures, threat of another attack is ever-present.

With growth continuing to be forecast and order books to be fulfilled and delivered, challenges will also exist for the industry’s complex supply chain. Previous periods of growth have revealed programme management challenges, for example in securing raw materials and on-time deliveries, impacting on industry profits (PwC, 2012) which risk being repeated.

Particularly relevant to this study will be the importance of engine design and efficiency – not least, clearly, from a safety perspective, but also in terms of fuel consumption, environmental impact and – most relevant to the end customer – the ‘reach’, or ability for an aircraft to fly further for longer, opening up non-stop, long-haul routes and reducing journey times. The biggest affect that environmental
issues are likely to have will be in terms of potential legislation on e.g. emissions – of significance to engine manufacturers particularly – and consumer and shareholder perceptions of aerospace and aviation companies. As a result there will be greater emphasis on companies to demonstrate their corporate social responsibility and ethical credentials, and to visibly invest in fuel-efficient technologies, alternative fuels, etc.

As new extra wide body, high capacity aircraft (A380, B787) enter into service the fight for market share between Airbus and Boeing is set to continue as airlines look to replace their fleets. In addition, the prolific narrowbody Boeing 757 aircraft is now reaching the end of its lifecycle and is set to be replaced having ceased production in 2004 (Flight Global, 2012). Boeing has launched a replacement study as it considers whether to continue its strategy of relying on new versions of the re-engined 737 MAX extended range (ER) to cover the gap (CAPA, 2012) or to invest the vast amounts of money required – around $10 billion (Economist, 2010) – for a new aircraft. Airbus seeks to cover the gap through its A321 aircraft. Clearly Boeing's decision will impact engine manufacturers as they consider airline and airframe requirements and whether they in turn need to invest to replace ageing engine families. Whilst these examples of what lies ahead for the industry may appear to be run of the mill business decisions, their significance in terms of developing the right strategies to meet customer value needs, in which stock markets have confidence and which ensure business survival, should not be underestimated.
4.3 United Kingdom’s Aerospace Industry

The UK’s aerospace industry (both civil and military) comprises over 3,000 companies operating in the UK employing over 100,000 people, and including blue chip names with a global presence, such as Airbus, BAE Systems, Cobham, AgustaWestland, Boeing and Rolls-Royce (UKTI, 2011).

70 per cent of UK aerospace revenues are derived from export sales, and the UK has a 17 per cent share of the profitable, global maintenance, repair and overhaul aerospace market (UKTI, 2011). Recognising the importance of the civil aerospace industry to the UK economy, the government and trade bodies, such as ADS, are sponsoring a number of initiatives to support the UK’s competitiveness at an international level, for example SC21 (Supply Chain 21) and Lean. Having already acknowledged in this chapter the complexity of aerospace industry supply chains, this is further demonstrated by the fact that in the UK alone over 400 companies are suppliers on the Airbus A380 aircraft programme (UKTI, 2011).

4.4 Rolls-Royce plc

4.4.1 Profile

Rolls-Royce is a “global company providing power solutions for customers in civil and defence, aerospace, marine and energy markets” (Rolls-Royce, 2012, p1). With a presence in 50 countries, it employs 40,400, of which half (20,600) is engaged in civil aerospace.
In terms of 2011 performance, order book was £62.2 billion, with profit of £1.2 billion and revenues of £11.3 billion, of which £5.6 billion represented civil aerospace activities, with civil aerospace order book standing at £52 billion. More than 50 per cent of its revenue is derived from services, with a focus on long-term service agreements which cover 68 per cent of its installed engine base, of which 13,000 are civil aerospace engines (Rolls-Royce, 2012, p13). Just under five per cent of revenue is dedicated to private venture research and development. The 2011 turnover position represents a doubling in revenues in the past ten years, and the company forecasts that it will double again in the same period (Rolls-Royce, 2012, p.3).

Including these statistics in this thesis demonstrates the opportunities and challenges which lie ahead, putting into context a background of what may be influencing its customer perceived value conceptualisation, not least in terms of how the business’ operations have changed in scale and the extent to which they are forecast to change in the coming ten years. Delivering this substantial growth will require significant investment and a shift in productivity, including doubling current production rates of Trent civil aerospace engines within five years; this will clearly demand a supply chain that can support this target, recognised by Rolls-Royce:

"Close collaboration with our suppliers is critical to our continued success. Around 70 per cent of our manufacturing is conducted within
our supply chain... Our relationship is open, analytical and collaborative. We estimate that our supply base is currently investing at around twice the level of Rolls-Royce in order to accommodate growth and deliver greater efficiency” (Rolls-Royce, 2012, p.29).

The company has recently undertaken some notable market activity in terms of its joint venture (JV) business interests, entering into a multi-billion pound JV with Daimler to acquire German-based Tognum, a provider of diesel engines in support of its marine and energy business; and selling its equity stake in International Aero Engines to competitor and consortium partner, Pratt & Whitney, for $1.5 billion after a long-standing, successful venture to supply the V2500 engine. It also entered into a new JV with Pratt & Whitney to develop an engine for the next generation of mid-sized aircraft, such as the B757 replacement.

4.4.2 Market position

Rolls-Royce is the second largest civil engine manufacturer in the world to US-based General Electric (UKTI, 2011). Along with Pratt & Whitney, the three companies dominate the market. Rolls-Royce is supported by a supply chain of some 8,000 companies.

In terms of customers, Rolls-Royce supplies civil aerospace equipment to aircraft manufacturers, notably Boeing and Airbus but also a number of regional and corporate jet and helicopter manufacturers. In all it powers 30 types of commercial aircraft, including the B787 Dreamliner, launched in 2011.
The company ideally seeks an exclusive supply agreement with an aircraft manufacturer on a platform. For example, Rolls-Royce signed a deal with Airbus in 2011 for the exclusive supply of Trent engines for the A350-1000 aircraft. However, where there are dual engine options on an aircraft, an airline may express a preference (commonality across the rest of its fleet, historic preference, regional preferences), and act as either a direct or indirect customer.

Where maintenance, repair and overhaul services are concerned, airlines or their MRO subsidiaries are most frequently customers. Services or spare parts may also be supplied to independent MRO companies. Rolls-Royce has also undertaken a number of joint ventures with such companies, for example Singapore Aero Engine Services Ltd (SAESL).

Rolls-Royce has been a leader in developing innovative service support solutions, a model which has been emulated in the market. The Power by the Hour® performance-based concept and TotalCare® service package principles mean that engine operators pay for the time they are consuming power ‘on wing’, when engines are running and doing their job. Risk is transferred back to Rolls-Royce to maximise reliability since the company is not rewarded for carrying out repairs if they fail. Relevant to this thesis, it promotes depth and open relationships with customers, sharing of information, plans, and provides value in predictability for customers in support costs.
4.4.3 Values and strategy

Rolls-Royce has a long-standing ‘brand promise’, Trusted to Deliver Excellence, which sits at the heart of its value proposition. Both this and its values – integrity, reliability and innovation – are well disseminated and embedded within the company’s management systems. Whilst its strategy has remained unchanged for a number of years, it is this consistency and delivery of forecasts which has given the business a reputation of dependability on the stock markets, especially around the predictability of its long-term service contracts. Interestingly the strategy includes the concept of ‘adding value’ through services, although it links those back to its products (Rolls-Royce, 2012, p.4):

1. Addressing four global markets: civil aerospace, defence aerospace, marine and energy
2. Investing in technology, capability and infrastructure;
3. Developing a competitive portfolio of products and services;
4. Focusing on growing market share and our installed product base;
5. Adding value for our customers through product-related services.

**Figure 13: Rolls-Royce strategy**

The following extract from the 2011 annual report gives some insight into Rolls-Royce perception of what its customers and shareholders value, and what it in turn values and expects from its suppliers:

“Our customers are supportive and enthusiastic about our technology and, of course, they want even better performance both from our products and our team. Our suppliers are excited by the opportunity for
growth and understand our requirement for better quality, on time delivery and lower cost. Investors express support for our strategy and naturally share our desire for still better financial performance in the future” (Rolls-Royce, 2012, p.4).

When working with suppliers, it is also “guided by the Supply Chain Relationships in Aerospace (SCRIA) initiative. It seeks the best possible terms from suppliers and when entering into binding purchasing contracts, gives consideration to quality, delivery, price and the terms of payment” (Rolls-Royce, 2012, p68).

<table>
<thead>
<tr>
<th>Principles</th>
<th>We will:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• We treat all our suppliers with fairness and integrity and build mutually beneficial relationships, regardless of the value of our transaction or the length of our association.</td>
<td>• draw our suppliers’ attention to the principles of this Code;</td>
</tr>
<tr>
<td>• We expect our suppliers, their employees and their supply chains to operate to the highest standards of quality and integrity, in their relationship with us.</td>
<td>• communicate honestly and openly with our suppliers;</td>
</tr>
<tr>
<td>• We respect any supplier information which they provide to us and use it appropriately.</td>
<td>• contract our terms of business with suppliers clearly and operate in accordance with them;</td>
</tr>
<tr>
<td>• We do not tolerate any form of forced or child labour, and promote the observance of human rights.</td>
<td>• work with our suppliers to find mutually beneficial solutions to problems that arise;</td>
</tr>
<tr>
<td>• seek to understand the requirements of our customers and satisfy these requirements by submitting realistic proposals on performance, cost and schedule;</td>
<td></td>
</tr>
<tr>
<td>• communicate honestly and openly with our customers, seeking to fully understand their requirements and to meet our commitments to them.</td>
<td>• ensure that in bid preparations and contract negotiations, all statements and communications are current, accurate and truthful;</td>
</tr>
<tr>
<td>• We provide a high standard of after-sales service to build and maintain customer satisfaction.</td>
<td>• follow Rolls-Royce quality and safety management procedures to ensure the integrity of our products;</td>
</tr>
<tr>
<td>• We respect any customer information to which they provide access and use it accordingly.</td>
<td>• design, manufacture, warehouse and distribute our products to meet the appropriate inspection, test and quality criteria of our customers;</td>
</tr>
</tbody>
</table>

Figure 14: Rolls-Royce plc mission, values and ethics
Business sustainability, corporate social responsibility and business ethics are seen as increasingly important, and an environment strategy is supported by independent ratings on indices including Dow Jones Sustainability and Business in the Community Responsibility. Rolls-Royce has a *Global Code of Business Ethics* (Rolls-Royce, 2009) which sets out its behavioural principles with both suppliers and customers (Figure 14).

"Over the past five years we have invested over £150 million improving the knowledge and skills of our people. In order to maintain the highest standards of ethical behaviour and business integrity, we review continually our procedures and training programmes, which are mandatory for all staff" (Rolls-Royce, 2012, p.2).

Rolls-Royce also refers to value in terms of the manufacturing value chain (where activity is undertaken across the supply chain), and value stream mapping where value-added/non-value-added activities are identified, commonly used in manufacturing to recognise areas of productivity and waste. This may have potential for value to be associated mainly with transactions and costs within the company, especially within the supply chain function.

### 4.4.4 Potential Critical Incidents identified by the Researcher

Rolls-Royce has a mature and visible strategy and process for risk management, openly communicating potential risks and mitigation and treatment strategies in its annual reports to stakeholders. For example, it mentions potential critical events:
"Significant external events affecting demand for transportation such as terrorism, political change, global pandemic, natural disaster or continued and deeper economic retrenchment" and "Failure to minimise the environmental impact of the Group's products and operations leading to reputational damage and ultimately loss of market share" (Rolls-Royce, 2012, p.34).

Since a focus of this thesis is to evaluate the impact of any critical events in influencing change in customer perceived value, for context outlined below are some significant events that related to Rolls-Royce over the course of the research period and any insight into how these events were perceived and managed corporately. These were discussed with study respondents, who were also encouraged to propose their own.

Recession and economic environment

As referenced in 4.2, aviation saw a drop in numbers of air passenger traffic in 2008-2009. A growing concern in the aerospace industry lies in the fact that any subsequent cutting back of orders from aircraft companies has a delayed impact that is not felt for a few years.

"strong performance has been achieved against a background of macro-economic weakness and uncertainty...Fiscal imbalances, austerity programmes, disruption in the Eurozone and political tensions in the Middle East continue to affect world markets, undermining confidence
about future macro-economic expansion even in Asia and South America. It is a tribute to everyone who works at Rolls-Royce that the Group has continued along its path of long-term growth despite these testing times” (Rolls-Royce, 2012, p.2).

The challenges of the past decade were highlighted to Rolls-Royce investors in 2010, seeking to underline that the business had performed in spite of a backdrop of volatility and major events – see Figure 15 (Terrett, 2010).

Moreover, as it looked ahead during the downturn, wanting to anticipate and avoid future shocks whilst still preparing itself for the challenges of growth, Rolls-Royce undertook some measures, recognising that it needed to balance future demand with today’s availability of cash (Morrison, 2009).
From a market-led perspective, it identified and evaluated ‘catalysts for change‘ – growth (investment options), environmental concerns and CSR and focus (managing the balance of day-to-day and long-term needs) and identified competences, ability to meet requirements through better and more informed understanding of its position, and initiation of targeted discussion as areas for further focus (CIM, 2008).

Picking up on the focus catalyst for change, Rolls-Royce introduced a ‘Match Fit’ concept during the course of this research, a programme to manage cost and performance, minimise the cost of non-quality and be in a healthy position to invest in facilities and capabilities to deliver growth for the future. As a new initiative to be implemented internally and through the supply chain, this had the potential to be considered a key event which could impact value perceptions.

Retirement of Chief Executive

Sir John Rose, former Rolls-Royce chief executive, had been with Rolls-Royce plc for 27 years and had held the top position for 15 years when he retired at the end of March 2011, succeeded by John Rishton. His tenure as chief executive saw the establishment of the long-standing strategy which is still in place today, and covered the period of impressive growth and restructuring which gave Rolls-Royce a global presence.
Whilst change of a chief executive may be considered the norm in turbulent business environments, the length of his tenure and the strong, visible presence, in Rolls-Royce and in business, government and international communities, meant that it was big news – this from the Financial Times:

"Sir John has become one of the best connected and most influential men in his industry and arguably the most powerful advocate of manufacturing in Britain. Rarely does the retirement of a chief executive prompt a statement from the country's business secretary... With such clout some observers wonder what will happen when the lion exits the building, especially now the company faces several significant challenges" (Hoya, 2010).

So with the media speculating on the disruption and impact of this event, it could be considered that it might be critical enough to impact perceptions of value. However, it was also acknowledged that the transition to the new chief executive was “carefully planned and executed”, and that “bringing in an outsider rather than promoting from within will cause less disruption amongst the ranks”.

**Engine safety incidents**

The importance of safety and management of this in terms of risk and reputation has been discussed in this chapter. The most significant event – an engine exploding mid-flight on a Qantas A380 aircraft in November 2010 – fell right at the end of the data collection phases. However, it also followed two headline-making
engine-failure incidents in 2008 and 2009 on Boeing 777 aircraft, which happened just before the start of the data collection. One, arriving at Heathrow airport in January 2008 memorably missed a built-up area during its emergency landing; the second in November 2008 in the USA regained power. Both were attributed to a fault in the fuel system. During the course of interviewing respondents, investigations were still on-going and making the news.

It was considered by the researcher that the effect of these incidents should be explored and might be critical enough to influence customer perceived value, particularly through the supply chain (quality, performance, etc).
5 Case Study Findings and Analysis

5.1 Introduction

The findings from the case study research into business-to-business customer perceived value change are presented in this chapter. The account of the research findings begins with a brief review of the recorded changes in customer perceived value attributes gathered from the research panel members over three datum points which provides the background for the selection of three individuals for more in-depth investigation. In the second section the findings from the selected exemplar individuals' responses to the three research questions are presented: how is business-to-business customer perceived value conceptualised, how does it change and why does it change?

5.2 Generic Observations from Longitudinal Panel

Whilst the research in this case study is idiographic and focused on embedded units of analysis represented by three exemplar individuals, nevertheless a number of generic observations can be made from all the panel members across the three phases. The first of these is about the value status of the 55 pre-selected value attribute variables in that they were all recognised by respondents, although not by every individual. Furthermore, five individuals added nine more attributes, listed in Table 9, although none was mentioned by more than one respondent. As might be
imagined, they include some variables that appear to relate to job function, e.g. Risk & Revenue Sharing.

Table 9: Value attributes additions made by respondents

<table>
<thead>
<tr>
<th>Factor</th>
<th>New Variable</th>
<th>Respondent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Value</td>
<td>Safety</td>
<td>RR015</td>
</tr>
<tr>
<td>Relationship Value</td>
<td>Credibility</td>
<td>RR001</td>
</tr>
<tr>
<td>Relationship Value</td>
<td>Cultural awareness</td>
<td>RR002</td>
</tr>
<tr>
<td>Relationship Value</td>
<td>Long-Term Partnership</td>
<td>RR015</td>
</tr>
<tr>
<td>Monetary Value</td>
<td>Meets Whole Business Case</td>
<td>RR001</td>
</tr>
<tr>
<td>Monetary Value</td>
<td>Business Case Alignment</td>
<td>RR001</td>
</tr>
<tr>
<td>Other Value</td>
<td>Risk Flow-Down</td>
<td>RR001</td>
</tr>
<tr>
<td>Other Value</td>
<td>Transparency</td>
<td>RR001</td>
</tr>
<tr>
<td>Other Value</td>
<td>Early Engagement</td>
<td>RR004</td>
</tr>
<tr>
<td>Other Value</td>
<td>Enhanced Ability to Earn Revenue</td>
<td>RR012</td>
</tr>
</tbody>
</table>

The second generic observation is the spread and range in rating of the original 55 value attributes by the panel of respondents into no value, desired value and expected value categories. Using average ratings all of the 55 attributes were recognised as being of value with product and time value factors being the highest rated overall. 31 attributes, representing over just over half of variables, are classified as 'expected' based on the importance ratings range of 5 to 7, with the remaining 24 attributes classified as 'desired', based on importance ratings ranging from 1 to 4 – see Table 10.

On average, at the third phase of data collection, the three highest rated attributes are *product quality, competitive price, and professional and competent staff.* So in
terms of customer perceived value unsurprisingly across the panel, there was a view that they expect a product or service offering that is of a good standard, delivered by people who know what they are doing at a reasonable price. These factors, surely, represent the foundation of the supplier-customer exchange as the core functionality of service is being provided and acquired, and importantly would not be considered as a trade-off.

Table 10: Average rating of CPV variables by respondent panel at phase 3

<table>
<thead>
<tr>
<th>Code</th>
<th>CPV Variable</th>
<th>Spread</th>
<th>Ave Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>PV01</td>
<td>Conformity</td>
<td>5 7</td>
<td>6.4</td>
</tr>
<tr>
<td>PV02</td>
<td>Reliability</td>
<td>4 7</td>
<td>6.3</td>
</tr>
<tr>
<td>PV03</td>
<td>Durability</td>
<td>3 7</td>
<td>5.2</td>
</tr>
<tr>
<td>PV04</td>
<td>Performance</td>
<td>4 7</td>
<td>5.7</td>
</tr>
<tr>
<td>PV05</td>
<td>Quality</td>
<td>6 7</td>
<td>6.8</td>
</tr>
<tr>
<td>PV06</td>
<td>Availability</td>
<td>0 7</td>
<td>5.1</td>
</tr>
<tr>
<td>SV01</td>
<td>Innovation</td>
<td>0 7</td>
<td>3.8</td>
</tr>
<tr>
<td>SV02</td>
<td>Process systems alignment</td>
<td>0 5</td>
<td>2.3</td>
</tr>
<tr>
<td>SV03</td>
<td>Meeting delivery requirements</td>
<td>5 7</td>
<td>6.6</td>
</tr>
<tr>
<td>SV04</td>
<td>Pre and after sales technical support</td>
<td>4 7</td>
<td>5.8</td>
</tr>
<tr>
<td>SV05</td>
<td>Contract management and control</td>
<td>3 7</td>
<td>5.3</td>
</tr>
<tr>
<td>SV06</td>
<td>Pre and after sales commercial support</td>
<td>3 7</td>
<td>4.9</td>
</tr>
<tr>
<td>SV07</td>
<td>Key account management process</td>
<td>2 7</td>
<td>4.3</td>
</tr>
<tr>
<td>SV09</td>
<td>Service failure recovery plan</td>
<td>1 7</td>
<td>6.1</td>
</tr>
<tr>
<td>RV01</td>
<td>Innovation</td>
<td>0 5</td>
<td>3.3</td>
</tr>
<tr>
<td>RV02</td>
<td>Trust</td>
<td>3 7</td>
<td>5.2</td>
</tr>
<tr>
<td>RV03</td>
<td>Commitment</td>
<td>4 7</td>
<td>6.6</td>
</tr>
<tr>
<td>RV04</td>
<td>Joint problem solving</td>
<td>0 7</td>
<td>5.1</td>
</tr>
<tr>
<td>RV05</td>
<td>Risk minimisation and sharing</td>
<td>3 7</td>
<td>5.0</td>
</tr>
<tr>
<td>RV06</td>
<td>Knowledge transfer</td>
<td>0 7</td>
<td>3.9</td>
</tr>
<tr>
<td>RV07</td>
<td>Loyalty</td>
<td>3 7</td>
<td>5.0</td>
</tr>
<tr>
<td>RV08</td>
<td>Exclusivity</td>
<td>0 4</td>
<td>2.2</td>
</tr>
<tr>
<td>IV01</td>
<td>Leading organisation</td>
<td>2 7</td>
<td>4.6</td>
</tr>
<tr>
<td>IV02</td>
<td>Global capability</td>
<td>0 7</td>
<td>4.2</td>
</tr>
<tr>
<td>IV03</td>
<td>End-user perspective</td>
<td>3 7</td>
<td>5.1</td>
</tr>
<tr>
<td>IV04</td>
<td>Long-term profit focus</td>
<td>1 7</td>
<td>4.8</td>
</tr>
<tr>
<td>IV05</td>
<td>Respected by industry network</td>
<td>2 7</td>
<td>4.1</td>
</tr>
<tr>
<td>IV06</td>
<td>Aware of industry developments</td>
<td>2 7</td>
<td>4.8</td>
</tr>
<tr>
<td>IV07</td>
<td>Corporate social responsibility</td>
<td>4 7</td>
<td>6.2</td>
</tr>
<tr>
<td>IV08</td>
<td>Governance and ethics</td>
<td>5 7</td>
<td>6.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>CPV Variable</th>
<th>Spread</th>
<th>Ave Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>MV01</td>
<td>Competitive price</td>
<td>5 7</td>
<td>6.8</td>
</tr>
<tr>
<td>MV02</td>
<td>Lowest capital cost</td>
<td>0 7</td>
<td>4.9</td>
</tr>
<tr>
<td>MV03</td>
<td>Alignment of terms and conditions</td>
<td>1 7</td>
<td>4.8</td>
</tr>
<tr>
<td>MV04</td>
<td>Minimising of liquidated damages</td>
<td>0 6</td>
<td>3.5</td>
</tr>
<tr>
<td>MV05</td>
<td>Lowest cost of ownership</td>
<td>2 7</td>
<td>5.3</td>
</tr>
<tr>
<td>MV06</td>
<td>Appropriate terms of payment</td>
<td>2 7</td>
<td>4.7</td>
</tr>
<tr>
<td>MV07</td>
<td>Keeping within budget</td>
<td>3 7</td>
<td>5.8</td>
</tr>
<tr>
<td>MV08</td>
<td>Cost reduction programmes</td>
<td>0 7</td>
<td>4.4</td>
</tr>
<tr>
<td>TV01</td>
<td>Responding to requests on time</td>
<td>4 7</td>
<td>6.3</td>
</tr>
<tr>
<td>TV02</td>
<td>Information right first time</td>
<td>4 7</td>
<td>6.1</td>
</tr>
<tr>
<td>TV03</td>
<td>Dealing with complaints</td>
<td>4 7</td>
<td>6.1</td>
</tr>
<tr>
<td>TV04</td>
<td>Contact right person first time</td>
<td>1 6</td>
<td>3.9</td>
</tr>
<tr>
<td>TV05</td>
<td>Keeping to project schedule</td>
<td>4 7</td>
<td>6.1</td>
</tr>
<tr>
<td>TV06</td>
<td>Flexibility</td>
<td>4 7</td>
<td>5.8</td>
</tr>
<tr>
<td>TV07</td>
<td>Fast turn-round when required</td>
<td>4 7</td>
<td>6.4</td>
</tr>
<tr>
<td>TV08</td>
<td>Anticipation of future needs</td>
<td>2 6</td>
<td>4.3</td>
</tr>
<tr>
<td>EV01</td>
<td>Professional &amp; competent staff</td>
<td>5 7</td>
<td>6.7</td>
</tr>
<tr>
<td>EV02</td>
<td>Treated with politeness &amp; respect</td>
<td>3 7</td>
<td>6.2</td>
</tr>
<tr>
<td>EV03</td>
<td>Communication in your language</td>
<td>1 7</td>
<td>3.9</td>
</tr>
<tr>
<td>EV04</td>
<td>Geographical proximity</td>
<td>2 4</td>
<td>3.0</td>
</tr>
<tr>
<td>EV05</td>
<td>Engagement in daily operations</td>
<td>0 7</td>
<td>2.8</td>
</tr>
<tr>
<td>EV06</td>
<td>Understand your customers’ needs</td>
<td>4 7</td>
<td>6.1</td>
</tr>
<tr>
<td>EV07</td>
<td>Social interaction</td>
<td>0 6</td>
<td>2.9</td>
</tr>
<tr>
<td>EV08</td>
<td>Keeping of promises</td>
<td>5 7</td>
<td>6.6</td>
</tr>
</tbody>
</table>

Key:
- Desired or no value only, all respondents
- Expected value only, all respondents
- Spread from no value to expected

195
Interestingly however the panel results also highlight there is a range of individual differences when rating customer perceived value at the attribute level. For example, 13 attributes were considered of no value by some respondents, of which 12 were deemed to be of expected value by other respondents and one was deemed to be desired value by other respondents. The desired value attribute was exclusivity and the twelve expected value attributes were: *product availability*, *product innovation*, *process systems alignment*, *service innovation*, *joint problem solving*, *knowledge transfer*, *global capability*, *lowest capital cost*, *minimising of liquidated damages*, *cost reduction programmes*, *engagement in daily operations and social interaction*. Such variance underlines the idiosyncratic and phenomenologically determined nature of customer perceived value by individuals.

Even so, there are examples too of a high degree of consensus right across the research panel individuals in that eight of the attributes show little variation on the high level of importance ratings for expected value. These attributes are *product conformity*, *product quality*, *meeting delivery requirements*, *commitment*, *governance and ethics*, *competitive price*, *professional and competent staff*, and *keeping of promises*. Still, in terms of consensus, not one respondent rated exclusivity or geographical proximity as expected value, preferring instead to see these two attributes as being of either no value or, at the most, only desired value. Interestingly, respondents who attribute lowest ratings to value to those two variables seem to imply there has to be a very close or binding organisational alignment between customer and supplier. Paradoxically, however, individual respondents did not collectively appear either to value much the attributes of
process systems alignment, engagement in daily operations or geographical proximity having rated them on average as the lower end of desired value.

Consideration of the lower rated variables provokes some question about the extent to which a close partnering approach is required of suppliers and no doubt depends on the nature of what is being supplied. Staying with this point, however, it might also be the case that whilst some attributes are perceived to have comparatively low levels of value, it is precisely those variables that distinguish the excelling suppliers, those who are able to offer such attributes within their value propositions in order to co-create value with their customers. For a supplier that means never forgetting the highly-rated customer perceived value attributes, but enhancing the service package with a range of less important elements that serve to both differentiate, embed and maintain themselves as suppliers. So whilst a customer may not value highly a supplier being aligned in terms of process and being located close by it still may give a supplier the edge depending on cost implications.

Over the three data collection phases and for all panel respondents the total number of attribute changes in terms of increases and decreases was 75 and of these 45% occurred at the second data collection phase in November 2009, with the remaining 55% having occurred at the third data collection phase in October 2010. 82% of the 75 attribute changes were increases in the importance rating of customer perceived value attributes and 18% were decreases in the rating of customer perceived value. The total number of changes per individual respondent,
per value factor, and the direction of change per value status and importance are illustrated in Table 11.

**Table 11: Summary of Changes in Customer Perceived Value**

<table>
<thead>
<tr>
<th>Value</th>
<th>R0801</th>
<th>R0802</th>
<th>R0803</th>
<th>R0804</th>
<th>R0805</th>
<th>R0806</th>
<th>R0807</th>
<th>R0808</th>
<th>R0809</th>
<th>R0810</th>
<th>R0811</th>
<th>R0812</th>
<th>R0813</th>
<th>R0814</th>
<th>R0815</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>13</td>
<td>17.3</td>
</tr>
<tr>
<td>Service</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td>Relationship</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Time</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>Monetary</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>Effort</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total-Oct 10</strong></td>
<td>12</td>
<td>5</td>
<td>19</td>
<td>2</td>
<td>1</td>
<td>11</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>as at nov 09</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>11</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

**NV = Not Value, Des = Desired Value, Exp = Expected Value**

- NV > Exp: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0.0
- NV > Des: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0.0
- Des > Exp: 2 2 2 2 1 1 0 1 0 0 1 4 2 3 1 35 46.7
- Exp > Exp: 0 1 3 0 0 0 1 2 0 0 0 0 2 2 1 0 0 12 18.0
- Des > Des: 0 0 1 0 1 0 0 2 1 0 0 0 0 0 0 5 6.7

Table 11 shows the second highest number of value changes at 13. Over the course of the study, overall, all CPV factors increase in importance, with monetary value increasing the most in terms of value importance (average 4.3 to 5.0). Whilst there is not one clear consolidated view on the reason for this change from the discussions, the study did cover a sustained period of economic downturn and commercial pressure.

Finally, in terms of CPV changes during the interviews, respondents were often found to speculate and hypothesise about their CPV in previous phases and then...
recalibrate, and it was clearly challenging sometimes to recall specific rationale behind ratings. This is explored in more detail in individual cases.

5.3 Exemplar Embedded Units of Analysis

The process for selecting exemplar units of analysis from the longitudinal research panel was based on one respondent demonstrating the largest amount of attribute change with increases in value, one respondent with the largest amount of attribute change with decreases in value and one respondent with the least amount of attribute change in value.

Respondent RR001 had the second highest number of value changes at 12 attributes, of which 84% represented decreases, and thus had the largest amount of attribute change with decreases in value. Respondent RR003 had the most number of value changes recorded at 19 attributes, which was 25% of the total and all were increases. He is therefore the individual with the largest amount of attribute change with increases in value. RR005 had the least number of value changes at just one attribute, this being a small increase in the same category of desired value.
5.4 Respondent RR001

Profile

Exemplar respondent RR001 represents the largest amount of attribute change with decreases in value across the three research phases.

RR001 has spent his entire career with Rolls-Royce, having started in 1980 straight from university where he graduated with a BSc in Mathematics. He later achieved a MSc in Noise & Vibration. As Director of Risk and Revenue Sharing Partnerships he was in his first substantial role and by the end of the third data collection phase had been in the role for three years.

5.4.1 Conceptualisation of Customer Perceived Value

Table 12 illustrates RR001’s conceptualisation of customer perceived value at each of the data collection phases, based on his rating of preselected variables in the questionnaire, the blue shading indicating where change occurred.
Table 12: RR001 Conceptualisation of Customer Perceived Value

<table>
<thead>
<tr>
<th>Code</th>
<th>Vs = Value Status; Im = Importance</th>
<th>PRODUCT VALUE</th>
<th>SERVICE VALUE</th>
<th>RELATIONSHIP VALUE</th>
<th>IMAGE VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mar-09</td>
<td>Nov-09</td>
<td>Sep-10</td>
<td>Mar-09</td>
<td>Nov-09</td>
</tr>
<tr>
<td>PV01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PV02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PV03</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PV04</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PV05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PV06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SV01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SV02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SV03</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SV04</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SV05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SV06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SV07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SV08</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RV01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RV02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RV03</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RV04</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RV05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RV06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RV07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RV08</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV03</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV04</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV08</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

**MONETARY VALUE**

<table>
<thead>
<tr>
<th>Code</th>
<th>VS = Value Status; Im = Importance</th>
<th>Mar-09</th>
<th>Nov-09</th>
<th>Sep-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>MV01</td>
<td>Competitive Price</td>
<td>D 4 4 E 5</td>
<td>D 4 4 E 5</td>
<td>D 4 4 E 5</td>
</tr>
<tr>
<td>MV02</td>
<td>Lowest Capital Cost</td>
<td>D 4 4 E 5</td>
<td>D 4 4 E 5</td>
<td>D 4 4 E 5</td>
</tr>
<tr>
<td>MV03</td>
<td>Alignment of Terms &amp; Conditions</td>
<td>E 5 5 E 5</td>
<td>E 5 5 E 5</td>
<td>E 5 5 E 5</td>
</tr>
<tr>
<td>MV04</td>
<td>Minimising of Liquidated Damages</td>
<td>E 5 5 E 5</td>
<td>E 5 5 E 5</td>
<td>E 5 5 E 5</td>
</tr>
<tr>
<td>MV05</td>
<td>Lowest Cost of Ownership</td>
<td>D 3 3 D 3</td>
<td>D 3 3 D 3</td>
<td>D 3 3 D 3</td>
</tr>
<tr>
<td>MV06</td>
<td>Appropriate Terms of Payment</td>
<td>D 4 4 D 4</td>
<td>D 4 4 D 4</td>
<td>D 4 4 D 4</td>
</tr>
<tr>
<td>MV07</td>
<td>Keeping within Budget</td>
<td>D 4 4 D 4</td>
<td>D 4 4 D 4</td>
<td>D 4 4 D 4</td>
</tr>
<tr>
<td>MV08</td>
<td>Cost Reduction Programmes</td>
<td>0 0 0 0 0 0</td>
<td>0 0 0 0 0 0</td>
<td>0 0 0 0 0 0</td>
</tr>
<tr>
<td></td>
<td>Meets Whole Business Case</td>
<td>E 7 7 E 7</td>
<td>E 7 7 E 7</td>
<td>E 7 7 E 7</td>
</tr>
<tr>
<td></td>
<td>Business Case Alignment</td>
<td>E 7 7 E 7</td>
<td>E 7 7 E 7</td>
<td>E 7 7 E 7</td>
</tr>
</tbody>
</table>

**TIME VALUE**

<table>
<thead>
<tr>
<th>Code</th>
<th>VS = Value Status; Im = Importance</th>
<th>Mar-09</th>
<th>Nov-09</th>
<th>Sep-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV01</td>
<td>Responding to requests on time</td>
<td>E 6 6 E 6</td>
<td>E 6 6 E 6</td>
<td>E 6 6 E 6</td>
</tr>
<tr>
<td>TV02</td>
<td>Information right first time</td>
<td>D 4 4 D 4</td>
<td>D 4 4 D 4</td>
<td>D 4 4 D 4</td>
</tr>
<tr>
<td>TV03</td>
<td>Dealing with complaints</td>
<td>D 4 4 D 4</td>
<td>D 4 4 D 4</td>
<td>D 4 4 D 4</td>
</tr>
<tr>
<td>TV04</td>
<td>Contact Right Person First Time</td>
<td>D 3 3 D 3</td>
<td>D 3 3 D 3</td>
<td>D 3 3 D 3</td>
</tr>
<tr>
<td>TV05</td>
<td>Keeping to Project Schedule</td>
<td>E 7 7 D 4</td>
<td>E 7 7 D 4</td>
<td>E 7 7 D 4</td>
</tr>
<tr>
<td>TV06</td>
<td>Flexibility</td>
<td>E 6 6 E 6</td>
<td>E 6 6 E 6</td>
<td>E 6 6 E 6</td>
</tr>
<tr>
<td>TV07</td>
<td>Fast Turn-round when required</td>
<td>E 7 7 E 7</td>
<td>E 7 7 E 7</td>
<td>E 7 7 E 7</td>
</tr>
<tr>
<td>TV08</td>
<td>Anticipation of Future Needs</td>
<td>D 4 4 D 4</td>
<td>D 4 4 D 4</td>
<td>D 4 4 D 4</td>
</tr>
</tbody>
</table>

**EFFORT VALUE**

<table>
<thead>
<tr>
<th>Code</th>
<th>VS = Value Status; Im = Importance</th>
<th>Mar-09</th>
<th>Nov-09</th>
<th>Sep-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>EV01</td>
<td>Professional &amp; Competent Staff</td>
<td>E 6 6 E 6</td>
<td>E 6 6 E 6</td>
<td>E 6 6 E 6</td>
</tr>
<tr>
<td>EV02</td>
<td>Treated with Politeness &amp; Respect</td>
<td>D 4 4 D 4</td>
<td>D 4 4 D 4</td>
<td>D 4 4 D 4</td>
</tr>
<tr>
<td>EV03</td>
<td>Communication in your Language</td>
<td>E 7 7 E 7</td>
<td>E 7 7 E 7</td>
<td>E 7 7 E 7</td>
</tr>
<tr>
<td>EV04</td>
<td>Geographical Proximity</td>
<td>D 2 2 D 2</td>
<td>D 2 2 D 2</td>
<td>D 2 2 D 2</td>
</tr>
<tr>
<td>EV05</td>
<td>Engagement in Daily Operations</td>
<td>0 0 0 0 0 0</td>
<td>0 0 0 0 0 0</td>
<td>0 0 0 0 0 0</td>
</tr>
<tr>
<td>EV06</td>
<td>Understand your customers' needs</td>
<td>D 4 4 D 4</td>
<td>D 4 4 D 4</td>
<td>D 4 4 D 4</td>
</tr>
<tr>
<td>EV07</td>
<td>Social Interaction</td>
<td>0 0 0 0 0 0</td>
<td>0 0 0 0 0 0</td>
<td>0 0 0 0 0 0</td>
</tr>
<tr>
<td>EV08</td>
<td>Keeping of Promises</td>
<td>E 6 6 E 6</td>
<td>E 6 6 E 6</td>
<td>E 6 6 E 6</td>
</tr>
</tbody>
</table>

**OTHER VALUE**

<table>
<thead>
<tr>
<th>VS = Value Status; Im = Importance</th>
<th>Mar-09</th>
<th>Nov-09</th>
<th>Sep-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Flowdown</td>
<td>E 7 7 E 7</td>
<td>E 7 7 E 7</td>
<td>E 7 7 E 7</td>
</tr>
<tr>
<td>Transparency *</td>
<td>D 3 3 D 3</td>
<td>D 3 3 D 3</td>
<td>D 3 3 D 3</td>
</tr>
</tbody>
</table>

During the first data collection phase RR001 recorded four of the 55 pre-selected value attributes as being of 'no value': *global capability, cost reduction programmes, engagement in daily operations, and social interaction*. He maintained this view of 'no value' status for those four attributes at each data collection point throughout the research period. In terms of *global capability* the rationale for this was that it was up to the supplier to decide what was of value to that supplier in terms of trading on a worldwide basis, and not what Rolls-Royce plc
valued per se. Whether or not the supplier outsourced production or owned factories overseas or were solely based in the UK was of no value:

"I guess my personal perception of value would be if the right answer was Joe, who happened to live in Ilkeston a few miles from Derby, then that's fine...and if the total costs in the business drove us there [China] through dollarization or low cost or added value, then that would be the answer".

A key point about this comment, however, is that it is clearly seen from the customer perspective of CPV regarding the supply chain. RR001 doesn’t assign value to a supplier having a global capability, but does recognise that economic and market conditions might necessitate or favour the company having a local supply chain. This might therefore imply that it is an important business factor which impacts a supplier’s ability to be selected or retained, and so it is important for the supplier to understand. However, it is still not perceived as part of CPV for this respondent.

Other ‘no value’ attributes were explained as not comprising CPV because if the supplier was doing what they had contracted to do there would be no need for them. That is, cost reduction programmes and engagement in daily operations are seen as interventionist or preventative tools used to address lacking performance, rather than as providing value.
Both of these discussions with the respondent were interesting in that he was able to articulate the distinction between the attributes that he did want to comprise value (positive attributes) and those which he knew he did not want because they were associated with managing corrective action or negative consequences (e.g. having to micro-manage a supplier). As a reflection, it might be useful to explore what customers do not want – what suppliers should avoid doing – as much as we determine what they do want through customer perceived value – how suppliers contribute to creation of value.

So RR001 maintains that cost reduction programmes do not comprise his customer perceived value throughout all phases of the study, but he did later recognise that they might be relevant for non-risk and revenue sharing suppliers, and therefore for other colleagues (see 5.4.2). This emphasises the role-dependent nature of customer perceived value, a theme which continues to emerge throughout the cases in this study.

**CPV is dependent on role**

During the data collection interviews the respondent weighed up the difficulty of placing a rating on value attributes, noting that it is often dependent on different programmes, customers, programme phases, nature of the scope of supply, and an individual’s job role and priorities:
"The whole thing is about perception, so I’m probably in a role where I see quite a big part of the business and I tend to think about it from a business helicopter view perspective. If I was running a factory then I’d probably have a slightly different perspective, certainly in terms of hierarchy."

He also continues on the theme of role idiosyncrasies:

"If [named colleague from finance department] was here he would probably put more emphasis than I would...that’s interesting isn’t it?"

Adding new variables to CPV conceptualisation

RR001 classified the remainder of the value attributes into 21 of ‘desired value’ (rated less than five) and 30 of ‘expected value’ (rated five to seven). The respondent added five new value attributes to the original 55 presented in the preselected value attribute questionnaire, giving his baseline conceptualisation of customer perceived value 60 value attributes for future measurement. One of the added value attributes was ‘credibility’, under the Relationship Value factor, and was rationalised as being important during the respondent’s deliberations over the rating of trust:

"...erm and trust I’m going to give that a seven. If you don’t have trust you don’t have anything. It’s a bit like credibility"..."can I add that to
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

"...you see at the end of the day the only thing you have is trust and credibility".

The other four additions were 'meets whole business case' and 'business case alignment' under the Monetary Value factor, and 'risk flow-down' and 'transparency' under the Other Value factor. These were rationalised by having to ensure that the joint commercial parameters and sought outcomes associated with working in collaborative partnerships were recognisable as valuable by all parties, in the sense of being equitable and as fair as possible for all partners: "it's to arrive at a mutual business case rather than Rolls-Royce benefitting". This appears to be a significant point, that the respondent felt that a collaborative element was missing from the CPV conceptualisation and needed to be added in.

**Expected CPV variables**

The highest rated (E7) value attributes comprising RR001's CPV at the final data collection phase in September 2010 were 'quality', 'service failure recovery plan', 'trust', 'fast turn round when required', 'communication in your language', 'credibility', 'meets whole business case', 'business case alignment', and 'risk flowdown', of which the latter four value attributes were added by the respondent. There is apparently correlation here between the variables that RR001 has added to conceptualise his CPV, and his role (Director Risk & Revenue Sharing Partnerships) where business case risk assessments are intrinsic.
5.4.2 Customer Perceived Value - Change in Value Attributes

It can be observed in Table 12 that RR001 did not change his scoring of expected and desired value for the value attributes between the first and second phases of the interviews.

At the third phase of data collection RR001 made twelve changes in the scoring of value attributes, two of which were increases and 10 of which were decreases – see Table 13.

Table 13: RR001 Value Attribute Changes

<table>
<thead>
<tr>
<th>Value Attribute Changes</th>
<th>Code</th>
<th>Description</th>
<th>T1</th>
<th>T2</th>
<th>T3</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 = No Value, D = Desired Value (1 - 4), E = Expected Value (5 - 7)</td>
<td></td>
<td>Respondent:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decreases ( - )</td>
<td></td>
<td>RR001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Value &lt; Expected</td>
<td>MV04</td>
<td>Minimise LDs</td>
<td>E5</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td>No Value &lt; Desired</td>
<td></td>
<td>No Value &gt; Desired</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desired &lt; Desired</td>
<td></td>
<td>Desired &gt; Desired</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desired &lt; Expected</td>
<td></td>
<td>Desired &gt; Expected</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PV02 Product reliability</td>
<td></td>
<td></td>
<td>E6</td>
<td>-</td>
<td>D4</td>
</tr>
<tr>
<td>PV05 Product quality</td>
<td></td>
<td></td>
<td>E7</td>
<td>-</td>
<td>D4</td>
</tr>
<tr>
<td>PV06 Innovation</td>
<td></td>
<td></td>
<td>E5</td>
<td>-</td>
<td>D3</td>
</tr>
<tr>
<td>RV05 Risk minimising &amp; sharing</td>
<td></td>
<td></td>
<td>E6</td>
<td>-</td>
<td>D4</td>
</tr>
<tr>
<td>TV05 Keep to project schedule</td>
<td></td>
<td></td>
<td>E7</td>
<td>-</td>
<td>D4</td>
</tr>
<tr>
<td>Increases ( + )</td>
<td></td>
<td>MV01</td>
<td>D3</td>
<td>-</td>
<td>E6</td>
</tr>
<tr>
<td>Expected &lt; Expected</td>
<td></td>
<td>Comp price</td>
<td>D4</td>
<td>-</td>
<td>E5</td>
</tr>
<tr>
<td>Expected &gt; Expected</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expected &lt; Expected</td>
<td>SV02</td>
<td>Technical sales support</td>
<td>D3</td>
<td>-</td>
<td>E6</td>
</tr>
<tr>
<td>Expected &gt; Expected</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expected &lt; Expected</td>
<td>IV07</td>
<td>Corp social responsibility</td>
<td>D4</td>
<td>-</td>
<td>E5</td>
</tr>
<tr>
<td>Expected &gt; Expected</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expected &lt; Expected</td>
<td>IV08</td>
<td>Governance &amp; ethics</td>
<td>D4</td>
<td>-</td>
<td>E5</td>
</tr>
</tbody>
</table>
CPV change rationale and recall

RR001’s interviews during the second phase continued to explore issues in more depth, being more of a review revisiting the previous judgements. This was done by recalling or sometimes speculating on the rationale behind his first set of scoring decisions through reflection on his original rationalisation for their given scores, rather than treating it as an exercise in changing or recalibrating the first phase scoring. This speculation underlines the issues with recall of CPV and CPV change over time:

“I am just back from this conference we’ve just had on cost reduction where [Chief Executive] has told the whole supplier base that cost reduction is hugely important, and I rated it as zero! That’s interesting. My logic was probably, get it right in the first place”.

He continues to rationalise on changing a CPV variable, actually reacting to the value the company experiences to adjust his expectations:

“And if I’ve marked something here as essential, number seven, there’s a recognition that we’re not achieving that. So, if it’s an essential number seven and we’re not achieving it, why are we still in business? And the answer is because it can’t be a number seven.”
CPV changes dependent on supplier relationship

Whilst RR001 recognised that although there would be alternative perspectives by the other respondents rating value attributes, it was important for him to keep his own perspective: "I'm going to keep [the scores] the same, but only from the perspective I come from". The importance of portraying only his perspective continued in recognising that others may have alternative views on, or may be more exposed to the impact of change in the external environment, e.g. the economic crisis and the organisation's response on customer perceived value as it relates to different types of suppliers:

"In a RSP [Revenue Sharing Partnership] it lasts for the life of the programme and the partners are responsible for their own cost containment so I don't expect them to give me cost reductions"...

"For the rest of the supply base in a typical purchase relationship if the world changes the customer sort of reserves the right to come back and say 'Guys, we need your help because the world has changed' so there's something about cost reduction programmes"

5.4.3 Influences on Customer Perceived Value

As argued in Chapter 0, an individual's understanding of a particular concept is open to change through a number of different influencing factors. Four of these are considered here: the impact of enhanced knowledge and learning; the impact of the applicability of Service-dominant Logic's foundational premises; changes in
the status, hierarchy and degree of congruence between organisational and individual values; and the impact of critical incidents and day-to-day experiences involving initiators of change from external and internal sources.

**CPV knowledge and learning**

The first of these influencing factors is enhanced knowledge and learning about a specific concept with the resultant consequence of any new or revised understanding of it then possibly influencing and impacting on the respondent’s perception of change and hence measurement of change in the construct. For this study, definitions of customer perceived value were provided (see Appendices), updated across the course of the study in line with latest academic thinking.

From the preselected definitions presented to him RR001 recognised the difficulty in rationalising or selecting just one definition of customer perceived value. At the end of the three phases of data collection RR001 claimed:

"I still think they’re all valid in some way... all of these [definitions] have something to say that is true and the answer is kind of in all of them - it’s very difficult"

On being asked by the researcher if the process of looking at different definitions had made RR001 think differently about customer perceived value he responded:
"I think it makes the question harder because the more you think about, the more things come into play, Paul...so the more all of these seem like the right answer; because it just makes you ...question it and think that bit more deeply so it makes it very difficult just to capture in one sentence which is probably why you can write a whole thesis, or something."

**Service-Dominant Logic**

The second influencing factor is based on the four core foundational premises of service-dominant logic of marketing. One of these is that the customer is always co-creator of value thus implying value creation is interactional. In being questioned on whether co-creation of value between customers and suppliers exists in relation to the concept of customer perceived value there is some recognition that co-creation of value exists. However this has different emphases in different types of relationships. RR001's view is that it is limited to the deeper risk and revenue sharing partnerships rather than across the transactional approach used by the traditional purchasing function in the supply chain:

"it gets closer on an RSP framework because I think we look at a more holistic and more total business case. The purchase world is geared around what parts cost and what is a minimal margin that we can get away with paying for it. I think that we don't actually get total cost ...
perception of value...and we've no idea how you trade these things...I don’t think anyone is this smart”.

Interestingly from a Service-dominant Logic perspective, respondent RR001 felt that the term ‘product’ was missing from the various CPV definitions being reviewed and discussed. He also felt that ‘service’ was too much of a “big word because it can mean anything”. It appears that those that are involved in co-creation of value, delivering or getting value-in-use do not necessarily have the vocabulary or knowledge of the theories and concepts to recognise it, or indeed to comment on it to the extent that it is scrutinised in the context of academic research. This might indicate that, despite an attempt by service-dominant logic advocates to impose a new lexicon to gain acceptability of the theory, customers and suppliers in a business to business context will continue to recognise and talk in their own terms or the lexicon of other concepts e.g. lean manufacturing about the tangible elements of ‘delivering value’ as in a product:

“...the language of added value is used all the time because it’s a ‘lean’ phrase as well, so lean manufacture talks about added value. There’s only ever added value or waste, so it’s in the vocabulary”... “the trouble with these words is...I’m rapidly learning that we use words all over the place and you can interpret any blooming meaning you like on words”...“What the hell, we have this all the time, what on earth does our language mean?”
The observations about service-dominant logic and the use or rather the misuse of language brought RR001 back to the issue of value definitions in that some of definitions, whilst containing elements that were correct, had some aspects that made them too ‘clever’: “...far too clever for me, the synthetic cognitive construct and the symbolic benefit. I think they’re either benefits or not benefits” or too convoluted: “it feels like it’s a combination of all the words you can think of, one giant sentence”. If academic research is to ultimately be of value in constructing relevant theories for performance improving practitioners in industry, then researchers should not confuse or over-complicate in its lexicon.

Terminal and instrumental values

The third influencing factor for customer perceived value change is the possible impact of changes to the individual’s set of values and value system hierarchy. Coupled with this are changes in the degree of influence of the organisation’s values on the individual’s perception of customer value in a set of values and a value system hierarchy. Changes in the extent of congruence between both sets of individual and organisational values and value system hierarchies also need to be taken into account.

The application of repertory grid technique facilitated the establishment of the respondent’s value sets and value systems hierarchies. RR001’s elicited terminal values are provided in Table 14 His instrumental value constructs, in terms of valence, are provided in Table 15. His instrumental value constructs derived from
Rolls-Royce’s organisational terminal values are provided in Table 16. All three tables have a definition added by the author for clarity.

**Table 14: RR001 Individual Terminal Values**

<table>
<thead>
<tr>
<th>Terminal Values - Individual Personal Values</th>
<th>Respondent: RR001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consistency</td>
<td>Always behaving in the same way, of having the same opinions, standards, performance</td>
</tr>
<tr>
<td>Meeting promises</td>
<td>Doing what you said you would definitely do or realisation of something would happen</td>
</tr>
<tr>
<td>Loyalty</td>
<td>Being faithful in support of somebody or something</td>
</tr>
<tr>
<td>Fairness</td>
<td>Treating people equally in a way that is reasonable, acceptable and appropriate in a particular situation</td>
</tr>
<tr>
<td>Enthusiasm</td>
<td>Strong feeling of excitement and interest in something and a desire to become involved in it</td>
</tr>
</tbody>
</table>
### Table 15: RR001 Individual Value Construct Valence

<table>
<thead>
<tr>
<th>Individual Value Construct Valence</th>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Phrase</strong></td>
<td><strong>Meaning</strong></td>
<td><strong>Phrase</strong></td>
</tr>
<tr>
<td>Dependable</td>
<td>Be relied upon and trusted to provide what is wanted or needed</td>
<td>Unpredictable/cannot plan</td>
</tr>
<tr>
<td>Meeting commitments</td>
<td>Achieving promise to do something in particular</td>
<td>Inconsistent achievement of objectives</td>
</tr>
<tr>
<td>Delivery reputation is not a one off</td>
<td>Consistent opinion about the ability to ensure delivery when required</td>
<td>Failure to deliver is a stigma</td>
</tr>
<tr>
<td>Gaining credit</td>
<td>Receiving praise or approval for responsibility in something good happening</td>
<td>Put on notice</td>
</tr>
<tr>
<td>People stay if treated correctly</td>
<td>Honest behaviour towards others convinces them to be loyal</td>
<td>Not treating fairly means people move</td>
</tr>
<tr>
<td>Trust</td>
<td>Belief that somebody or something is good, honest, sincere and reliable</td>
<td>Will not repeat</td>
</tr>
<tr>
<td>Reasonable objectives</td>
<td>Some aim or intention that is appropriate, fair, and practical to achieve</td>
<td>Aspirational goals</td>
</tr>
<tr>
<td>Reliability</td>
<td>Likely to be correct or true, trusted, dependable</td>
<td>Mercurial</td>
</tr>
<tr>
<td>Implied longevity</td>
<td>Suggested feeling or thinking that something lasts for a long time</td>
<td>Flits like a butterfly</td>
</tr>
<tr>
<td>Drive</td>
<td>Desire, determination, effort, and energy to do something</td>
<td>Lazy</td>
</tr>
</tbody>
</table>
Table 16: RR001 Organisational Value Construct Valence

<table>
<thead>
<tr>
<th>Organisational Value Construct Valence</th>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Phrase</strong></td>
<td><strong>Meaning</strong></td>
<td><strong>Phrase</strong></td>
</tr>
<tr>
<td>Dependability</td>
<td>Reliable and trusted in being certain and sure of something and doing the right thing</td>
<td>Inconsistency</td>
</tr>
<tr>
<td>Proven validity</td>
<td>The state of legally or officially acceptable by being logically true</td>
<td>Sounds good only</td>
</tr>
<tr>
<td>Keeping promises always</td>
<td>Always doing what you say you will definitely do</td>
<td>Inconsistent excuses</td>
</tr>
<tr>
<td>Best in class product quality</td>
<td>Very high standard compared to other things like it</td>
<td>Unreliable performance</td>
</tr>
<tr>
<td>Successful advances</td>
<td>Progress and achievement of aims or intentions</td>
<td>New product failure</td>
</tr>
<tr>
<td>Leading supplier</td>
<td>Most important or successful provider</td>
<td>Always doubting second-best</td>
</tr>
<tr>
<td>Continuous innovation</td>
<td>Constant introduction of new things, ideas, way etc</td>
<td>Not the best company</td>
</tr>
<tr>
<td>Joint problem solving</td>
<td>Collaborating or working with others to deal with a difficult problem or situation</td>
<td>Getting stuck</td>
</tr>
<tr>
<td>Product durability</td>
<td>Likely to last for a long time without breaking or getting weaker</td>
<td>Faulty (real or perceived)</td>
</tr>
<tr>
<td>Honest and credible</td>
<td>Believed and trusted to always tell and not hide the truth</td>
<td>Unethical</td>
</tr>
</tbody>
</table>

The ‘positive’ construct word or phrase, i.e. the respondents’ values, are opposed by a ‘negative’ construct pairing in the repertory grid tool. This helps us to give an insight into the risk or impact of those values not being attained and can help to provide further insight into the respondent’s intent behind the ‘positive’ construct.
For example, the opposing pair to ‘Reliability’ as an instrumental value is ‘Mercurial’, implying that the concepts are associated with reliability in the sense of dependability and steadfastness, rather than reliability in the sense of lack of failure – the former being moreover an attitudinal behaviour, the latter a technical competence.

Repertory grid technique facilitates the construction of a network cognitive map representing the respondent’s constructs and their relationships in a hierarchy. The mind-map is beneficial in providing an holistic understanding of the context by removing the complexity that would be encountered using a matrix display, especially over time. To summarise the value constructs elicited from the repertory grid research, Figures 16 and 17 are mind-maps representing RR001’s individual terminal values and instrumental values at the beginning of data collection in March 2009 and at the end in September 2010. The shading indicates the level at which the construct first appears. Larger versions of these and other respondents’ mind-maps are provided in Appendix 7.

Perhaps, as might be expected, terminal values appear largely enduring with only integrity changing its position in the hierarchy across the timeframe in the last phase.
RR001 has a high level of thematic similarity across both organisational values and individual terminal values – see Table 17 – but no direct congruence. Core terminal values for RR001 include reliability, consistency, trust, meeting promises and integrity, all highly similar constructs. Reliability and integrity were considered similar and able to refer to products and services as well as people. In distinguishing
between trust and integrity RR001 notes: "integrity’s about something that’s demonstrated...whereas trust is something that you develop". However issues around trust were considered easier to manage in business, “because in your business life you can always escalate issues”.

Table 17: RR001 Organisational & Personal Terminal Values

<table>
<thead>
<tr>
<th>Level</th>
<th>Organisational &amp; Personal ‘Terminal Values’</th>
<th>Respondent: RR001</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Grid indicates at what level ‘values’ first appear and if there are changes in status or hierarchy across research timeframe.</td>
<td></td>
</tr>
<tr>
<td>Level</td>
<td>RR Organisational Values</td>
<td>Individual Personal Values</td>
</tr>
<tr>
<td></td>
<td>Mar 2009</td>
<td>Sept 2010</td>
</tr>
<tr>
<td>Core</td>
<td>Reliability</td>
<td>Reliability</td>
</tr>
<tr>
<td></td>
<td>Trust</td>
<td>Trust</td>
</tr>
<tr>
<td>1st level</td>
<td>Integrity</td>
<td>Integrity ↑</td>
</tr>
<tr>
<td></td>
<td>Excellence</td>
<td>Excellence ↑</td>
</tr>
<tr>
<td>2nd level</td>
<td>Innovation</td>
<td>Innovation</td>
</tr>
<tr>
<td></td>
<td>Excellence</td>
<td></td>
</tr>
</tbody>
</table>

In terms of instrumental values, there is a slightly higher degree of congruence with two values appearing both at an organisational and individual level, seen in the blue shaded cells in Table 18. The table also shows change in hierarchy with just two core constructs for both organisational and individual value systems by the end of the study. Whilst there are changes in hierarchy of constructs, there were no significant, fundamental changes in values over the 18 months of the research study.
### Table 18: RR001 Organisational and Personal Instrumental Values

<table>
<thead>
<tr>
<th>Level</th>
<th>Individual 'Organisational' Value</th>
<th>Individual 'Personal' Value</th>
<th>Respondent: RR001</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mar 2009</td>
<td>Sept 2010</td>
<td></td>
</tr>
<tr>
<td>Core</td>
<td>Keeping promises always</td>
<td>Dependable</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Best in class product quality</td>
<td>Meeting commitments</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Honest and credible</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dependability</td>
<td>Dependability</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Leading supplier</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Product durability</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Proven validity</td>
<td>Proven validity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Continuous innovation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Joint problem solving</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st level</td>
<td>Successful advances</td>
<td>Successful advances</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Delivery reputation</td>
<td>Delivery reputation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Keeping promises always ↓</td>
<td>Gaining credit</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Best in class product quality ↓</td>
<td>Reasonable objectives ↑</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Leading supplier ↓</td>
<td>Trust ↑</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Continuous innovation ↓</td>
<td>Reliability</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Product durability ↓</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Joint problem solving ↓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2nd level</td>
<td>Treating people correctly</td>
<td>Treating people correctly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trust</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reasonable objectives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3rd level</td>
<td>Honest and credible ↓</td>
<td>Reliability</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Implied longevity</td>
<td>Implied longevity</td>
<td></td>
</tr>
</tbody>
</table>
Finally, as any potential link or change impact between values and CPV is examined, terminal and instrumental values and CPV attributes whose importance or hierarchy rating changed over the phases of the study are pulled together in Figure 18. There are arguably some loose links – 'product durability' decreased in hierarchy as an organisational instrumental value, and 'product quality', 'reliability' and 'performance' attributes also decreased in importance as components of CPV; similarly a decrease in hierarchy for 'keeping promises' has a degree of thematic similarity with a drop in importance of CPV attributes 'keeping to project schedule' and 'meeting delivery requirements'. However, the most significant point remains that there is less change across values than there is in components of CPV. This respondent also saw little change at a personal level, and most of his hierarchy and importance changes saw decreases.

Figure 18: RR001 Impact of value system changes on CPV
Critical incidents and environmental factors

The fourth influencing factor is the impact of critical incidents and day-to-day experiences involving initiators of change from external and internal sources. Despite some significant, some may say critical, external and internal incidents impacting on the company over the research timeframe e.g. the failure of engines in-flight; the economic crisis and the retirement of the long-serving, high profile Chief Executive, RR001 does not believe any of these are critical incidents. This is at least in terms of impacting customer perceived value, because it does not affect his day to day working life. RR001 acknowledges, however, that incidents make employees contemplate consequences, and it may be the lower profile ones that have a big impact:

"...a leadership programme that has caused us all to think. I think that’s the problem ... I wouldn’t have said that was a critical issue for me but it’s made me think, in the same way as your interviews make you think".

RR001 also comments on having sat on a customer-focused panel that week, which turned out to have a relatively high degree of influence on him because: "it made me think differently, which is, rather than think RSP [risk sharing partnership], just think Rolls-Royce". Consequently there is some evidence of greater differentiation being seen to be appropriate when scoring, to distinguish between desired and the highest expected values.
Events make the respondent reflect, and it seems that the reflective mood can have just as much impact on CPV mood as the event itself. It also appears that the event does not have to be major, or a critical incident:

"I think it depends what mood you’re in doesn’t it? Yes, it depends what I’ve done this week... So, I guess my perception of doing this is I’m actually being more gentle on this than I was last time. I find myself scaling stuff back"...

RR001 also notes the influence of a specific day-to-day event relating to the supply chain, although there is a suggestion that this has caused the respondent to reflect only on what value is rather than initiating a change in value:

"I guess you get conned by what’s currently happening - so one of the current things that’s happening is we’ve done a supplier survey which we’ve not done for about five years...and so I guess last week we were having a debate about the results of that. And it’s a perception because it’s how suppliers perceive Rolls-Royce to be and they’re clearly looking at values in that the relationship brings value...and it’s difficult to pinpoint exactly what it is about that relationship that brings value which takes in your multi-dimensional aspect [Value Definition] of this".
However, the potential for personal career change appears to potentially have a greater impact on making individuals examine what it is that they value both personally and on a company basis:

"I'm getting to the point now where the organisation is thinking about what I do next, so that has a little bit of influence on how I think... So, personally it's time for a change but the organisation's come to the conclusion as well".

5.4.4 Summary

The key points from respondent RR001's case are that: customer perceived value conceptualisation is idiosyncratic and role-dependent, that is important to reflect on what is not wanted as much as what customer perceived value comprises, that minor events and mood may more obviously provoke reflection about customer perceived value and hence impact customer perceived value change more than major events, and that reasons for customer perceived value conceptualisation and change may be difficult to recall.

The inevitability and impact of change on value at macro, meso, micro and personal levels are acknowledged by RR001, reflecting that the challenge and value will reside in the flexibility of how customer-supplier relationships can adapt to accommodate and manage change:
"If you and I have a deal and the world never changes and everything that we thought was going to happen happens, then we have a deal... But the problem is the world changes, the market changes, the economy changes, you and me change. So, I think change is risk because something will change. And then the value becomes how flexible is what we've done and how flexible are you and I having come to that arrangement. I think that's the most significant issue."

Some interesting observations:- that change in two examples (new Chief Executive, low impact; career change, higher impact) were both considered by RR001 in terms of impact on personal values, not just organisational ones. This reiterates perhaps the need for greater on-going engagement at a personal level with customers to understand their values and what they value.

It may also be possible, therefore, to assert that it would be difficult for a supplier to consolidate one organisational view in support of understanding customer perceived value because of the number of individual interpretations. RR001 provides a notable comment in this regard: "Yes, but this is why life is fun because it's full of contradictions and it's why your thesis is so difficult because there is no answer!"
Respondent’s Reflections on the Research Process

Being asked to comment about the research process, particularly the use of the repertory grid technique and whether he had struggled with it or warmed to it, RR001 commented:

“I think I’ve said it a couple of times on here, you made me think about things in different ways, probably standing back a little bit, you’ve linked some things up. I’ve enjoyed it; it’s been almost a free consultation in some ways and a little bit of a coaching session. You’ve introduced some concepts that I’ve not thought about. I think you have a good process.

It’s a bit of a drain on time but it’s not that bad. And the fact that you’ve done it over a long period has helped with that. There were a couple of times when we were filling the forms in when I was kind of running out of ideas, especially when you have ... some of the things we looked at today with the constructs, because a lot of the wording is very similar and sometimes it is hard to sort of think ... it’s the bit where you have to think in your own words something that isn’t just those words and the negative isn’t just to say the word ‘not’ in the front, or ‘no’. I struggled a little bit with some of that. But, no, I’ve enjoyed it.”
Continuing this theme that it is difficult to bring to mind and articulate value constructs, he suggests that product-related concepts — the more tangible constructs such as quality — may prevail because they are easier to conceive, e.g. reflecting on scenarios and situations at work:

“But the problem with one of my main concepts, as I go down this, what I’ve started to do is to have a theme and the theme has been product. And I think it’s because it’s a concept that’s come into my mind and made it easier to answer some of the questions because you’re thinking about things and events” (RR001, T3).

5.5 Respondent RR003

Profile

RR003 is the individual with the largest amount of attribute change with increases in value.

He joined Rolls-Royce plc in 1990 with a first class honours degree in engineering. After a solid and progressive career he joined a global team to restructure Rolls-Royce plc’s Supply Chain and then moved to the role of Business Development & Improvement Executive across Rolls-Royce Operations Engineering. With the subsequent initiation of a new organisation in the Engineering Function, he then led the formation and integration of this international group of almost 1000
employees, and is now Head of Business Development and Improvement – Engineering Systems and Services.

Conceptualisation of Customer Perceived Value

Table 19 shows respondent RR003’s CPV conceptualisation across the three datum points in the research study. The conceptualisation was based on RR003’s rating of value attributes, from eight pre-defined categories with a total of 54 variables.

In phase 1, RR003 rated 14 of the variables at zero, that is not considered to be either a desired or expected attribute of CPV. These variables were spread across all categories, except Product Value, of which all variables were considered to be desired or expected attributes of CPV. Looking at these variables they may indeed be considered not to be so core to the exchange or relationship.
### Table 19: RR003 Conceptualisation of Customer Perceived Value

<table>
<thead>
<tr>
<th>Code</th>
<th>Vs = Value Status; Im = Importance</th>
<th>Mar-09 vs</th>
<th>Nov-09 vs</th>
<th>Sep-10 vs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PRODUCT VALUE</td>
<td>PV01</td>
<td>PV02</td>
<td>PV03</td>
</tr>
<tr>
<td></td>
<td>Conformity</td>
<td>E 6</td>
<td>E 7</td>
<td>D 4</td>
</tr>
<tr>
<td></td>
<td>Reliability</td>
<td>E 7</td>
<td>E 7</td>
<td>E 7</td>
</tr>
<tr>
<td></td>
<td>Durability</td>
<td>D 4</td>
<td>D 4</td>
<td>D 4</td>
</tr>
<tr>
<td></td>
<td>Performance</td>
<td>E 6</td>
<td>E 6</td>
<td>E 7</td>
</tr>
<tr>
<td></td>
<td>Quality</td>
<td>E 7</td>
<td>E 7</td>
<td>E 7</td>
</tr>
<tr>
<td></td>
<td>Availability</td>
<td>D 4</td>
<td>D 4</td>
<td>E 5</td>
</tr>
<tr>
<td></td>
<td>Innovation</td>
<td>D 3</td>
<td>D 3</td>
<td>D 4</td>
</tr>
<tr>
<td></td>
<td>SERVICE VALUE</td>
<td>SV01</td>
<td>SV02</td>
<td>SV03</td>
</tr>
<tr>
<td></td>
<td>Process Systems Alignment</td>
<td>0 0</td>
<td>0 0</td>
<td>0 0</td>
</tr>
<tr>
<td></td>
<td>Meeting Delivery Requirements</td>
<td>E 7</td>
<td>E 7</td>
<td>E 7</td>
</tr>
<tr>
<td></td>
<td>Pre &amp; After Sales Technical Support</td>
<td>D 4</td>
<td>D 4</td>
<td>D 4</td>
</tr>
<tr>
<td></td>
<td>Contract Management &amp; Control</td>
<td>E 7</td>
<td>E 7</td>
<td>E 7</td>
</tr>
<tr>
<td></td>
<td>Key Account Management Process</td>
<td>D 3</td>
<td>D 3</td>
<td>D 3</td>
</tr>
<tr>
<td></td>
<td>Service Failure Recovery Plan</td>
<td>E 6</td>
<td>E 6</td>
<td>E 6</td>
</tr>
<tr>
<td></td>
<td>Innovation</td>
<td>0 0</td>
<td>0 0</td>
<td>D 1</td>
</tr>
<tr>
<td></td>
<td>RELATIONSHIP VALUE</td>
<td>RV01</td>
<td>RV02</td>
<td>RV03</td>
</tr>
<tr>
<td></td>
<td>Mutuality of Goals</td>
<td>D 4</td>
<td>D 4</td>
<td>D 4</td>
</tr>
<tr>
<td></td>
<td>Trust</td>
<td>E 7</td>
<td>E 7</td>
<td>E 7</td>
</tr>
<tr>
<td></td>
<td>Commitment</td>
<td>E 7</td>
<td>E 7</td>
<td>E 7</td>
</tr>
<tr>
<td></td>
<td>Joint Problem Solving</td>
<td>0 0</td>
<td>D 4</td>
<td>D 4</td>
</tr>
<tr>
<td></td>
<td>Risk Minimisation &amp; Sharing</td>
<td>D 4</td>
<td>D 4</td>
<td>D 4</td>
</tr>
<tr>
<td></td>
<td>Knowledge Transfer</td>
<td>0 0</td>
<td>0 0</td>
<td>0 0</td>
</tr>
<tr>
<td></td>
<td>Loyalty</td>
<td>D 4</td>
<td>D 4</td>
<td>D 4</td>
</tr>
<tr>
<td></td>
<td>Exclusivity</td>
<td>0 0</td>
<td>0 0</td>
<td>0 0</td>
</tr>
<tr>
<td></td>
<td>IMAGE VALUE</td>
<td>IV01</td>
<td>IV02</td>
<td>IV03</td>
</tr>
<tr>
<td></td>
<td>Leading Organisation</td>
<td>E 6</td>
<td>E 6</td>
<td>E 6</td>
</tr>
<tr>
<td></td>
<td>Global Capability</td>
<td>D 4</td>
<td>D 4</td>
<td>D 4</td>
</tr>
<tr>
<td></td>
<td>End-user Perspective</td>
<td>E 5</td>
<td>E 5</td>
<td>E 6</td>
</tr>
<tr>
<td></td>
<td>Long-Term Profit Focus</td>
<td>E 7</td>
<td>E 7</td>
<td>E 7</td>
</tr>
<tr>
<td></td>
<td>Respected by Industry Network</td>
<td>D 4</td>
<td>D 4</td>
<td>D 4</td>
</tr>
<tr>
<td></td>
<td>Aware of Industry Developments</td>
<td>0 0</td>
<td>0 0</td>
<td>D 2</td>
</tr>
<tr>
<td></td>
<td>Corporate Social Responsibility</td>
<td>E 7</td>
<td>E 7</td>
<td>E 7</td>
</tr>
<tr>
<td></td>
<td>Governance &amp; Ethics</td>
<td>E 7</td>
<td>E 7</td>
<td>E 7</td>
</tr>
<tr>
<td>Code</td>
<td>VS = Value Status; Im = Importance</td>
<td>Mar-09</td>
<td>Nov-09</td>
<td>Sep-10</td>
</tr>
<tr>
<td>-------</td>
<td>-----------------------------------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VS Im</td>
<td>VS Im</td>
<td>VS Im</td>
</tr>
<tr>
<td>MO5A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MV01</td>
<td>Competitive Price</td>
<td>E 7</td>
<td>E 7</td>
<td>E 7</td>
</tr>
<tr>
<td>MV02</td>
<td>Lowest Capital Cost</td>
<td>D 4</td>
<td>D 4</td>
<td>D 4</td>
</tr>
<tr>
<td>MV03</td>
<td>Alignment of Terms &amp; Conditions</td>
<td>0 0</td>
<td>0 0</td>
<td>D 1</td>
</tr>
<tr>
<td>MV04</td>
<td>Minimising of Liquidated Damages</td>
<td>0 0</td>
<td>0 0</td>
<td>D 2</td>
</tr>
<tr>
<td>MV05</td>
<td>Lowest Cost of Ownership</td>
<td>D 4</td>
<td>D 4</td>
<td>D 4</td>
</tr>
<tr>
<td>MV06</td>
<td>Appropriate Terms of Payment</td>
<td>D 4</td>
<td>D 4</td>
<td>E 7</td>
</tr>
<tr>
<td>MV07</td>
<td>Keeping within Budget</td>
<td>D 4</td>
<td>D 4</td>
<td>E 5</td>
</tr>
<tr>
<td>MV08</td>
<td>Cost Reduction Programmes</td>
<td>0 0</td>
<td>0 0</td>
<td>0 0</td>
</tr>
<tr>
<td>TV01</td>
<td>Responding to requests on time</td>
<td>D 4</td>
<td>D 4</td>
<td>E 6</td>
</tr>
<tr>
<td>TV02</td>
<td>Information right first time</td>
<td>D 4</td>
<td>D 4</td>
<td>E 5</td>
</tr>
<tr>
<td>TV03</td>
<td>Dealing with complaints</td>
<td>E 7</td>
<td>E 7</td>
<td>E 7</td>
</tr>
<tr>
<td>TV04</td>
<td>Contact Right Person First Time</td>
<td>0 0</td>
<td>0 0</td>
<td>D 1</td>
</tr>
<tr>
<td>TV05</td>
<td>Keeping to Project Schedule</td>
<td>E 6</td>
<td>E 6</td>
<td>E 6</td>
</tr>
<tr>
<td>TV06</td>
<td>Flexibility</td>
<td>E 6</td>
<td>E 6</td>
<td>E 6</td>
</tr>
<tr>
<td>TV07</td>
<td>Fast Turn-round when required</td>
<td>E 7</td>
<td>E 7</td>
<td>E 7</td>
</tr>
<tr>
<td>TV08</td>
<td>Anticipation of Future Needs</td>
<td>0 0</td>
<td>0 0</td>
<td>D 3</td>
</tr>
<tr>
<td>EV01</td>
<td>Professional &amp; Competent Staff</td>
<td>E 7</td>
<td>E 7</td>
<td>E 7</td>
</tr>
<tr>
<td>EV02</td>
<td>Treated with Politeness &amp; Respect</td>
<td>E 7</td>
<td>E 7</td>
<td>E 7</td>
</tr>
<tr>
<td>EV03</td>
<td>Communication in your Language</td>
<td>D 4</td>
<td>D 4</td>
<td>E 5</td>
</tr>
<tr>
<td>EV04</td>
<td>Geographical Proximity</td>
<td>0 0</td>
<td>0 0</td>
<td>D 2</td>
</tr>
<tr>
<td>EV05</td>
<td>Engagement in Daily Operations</td>
<td>0 0</td>
<td>0 0</td>
<td>0 0</td>
</tr>
<tr>
<td>EV06</td>
<td>Understand your customers' needs</td>
<td>E 7</td>
<td>E 7</td>
<td>E 7</td>
</tr>
<tr>
<td>EV07</td>
<td>Social Interaction</td>
<td>0 0</td>
<td>0 0</td>
<td>D 2</td>
</tr>
<tr>
<td>EV08</td>
<td>Keeping of Promises</td>
<td>E 7</td>
<td>E 7</td>
<td>E 7</td>
</tr>
</tbody>
</table>

**Expected CPV variables**

The variables whose rating increased over the course of the research are shaded in blue. At the final phase in the study, 19 out of the 55 variables were rated at E7 and represent the highest rated value attributes comprising RR003’s customer perceived value. Of these, only three attributes had increased in importance over the course of the research phases, so there was a fairly high degree of constancy in the most important aspects of customer perceived value. In addition to some key Product Value attributes (for example quality and delivery), customer perceived
value for RR003 relates strongly to behaviours rather than competences – trust, commitment, keeping promises, etc). Indeed, discussion about relationships and ethical issues were quite dominant for this respondent, and are reflected in his Individual Value Constructs (for example, Integrity, Fairness, Ethics).

In contrast, just five variables were zero rated, that is considered not to be of value at the final phase, compared with 14 variables being zero rated in the first phase. This issue will be explored more under this respondent’s change profile in the next section. RR003 did not elect to add any new variables to define his customer perceived value system.

**CPV focused on meeting core commitments**

In terms of value categories, the most important factors, i.e. those with a high degree of expectation, are those where there has been an *agreement* or perceived agreement or commitment for them to be provided, for example within a contract (delivery, etc), as opposed to the less tangible factors or those considered to be external to the scope of the contract (innovation).

There was some discussion about innovation; whilst ‘product innovation’ was desired, ‘service innovation’ was zero rated and innovation was not considered to be closely related to the delivery by suppliers of their contracted commitments – a sense of ‘just give me what I’ve asked for’. On the face of it this seems to be a short term view, with no consideration of how past supplier innovation may have already...
played a role in achieving today’s performance, or how it may contribute to value creation in the future. It is also interesting since Innovation is considered to be an Organisational Value Construct for Rolls-Royce.

“Sometimes [Product Innovation] might be [of value]; I mean let’s say I was a customer for some scientific programme on telly, I need to know there’s some innovation in there, so you can think of some circumstances can’t you?... Why would I need Service Innovation? I think as a customer it’s not even in the desirable category but if someone brought you an innovative way of doing that service that was going to be beneficial to you, actually you’d grab onto it but I wouldn’t have any expectations at all on that, I’m sure”. (RR003, T3c)

This train of reasoning is fairly typical of RR003’s rationale with lots of conditional tense and hypothetical situations, so it does not always give a sense of his current perception of value in use.

**CPV is dependent on role**

The respondent appears to recognise the vagaries of an individual’s perceived value and preference, which indicate the need for suppliers to engage closely with the customer organisation at multiple points to create value, not just depend on product features and functionality:
"As a customer...it might just be because I've been made happy, so it might actually be my perceived preference; actually what I wanted has given me no functionality but I did want it in silver, or whatever it was".

The importance of suppliers in creating value for customers is also recognised:

"I think in order to add the value, we try and get enough information so that even if [customers] don't know what they want, we'll ...anticipate what they want and then try and define what we would actually need as an integrator"

5.5.1 Customer Perceived Value - Change in Value Attributes

Overall, RR003 made a high degree of change over the course of the research compared with the other case respondents, although this principally only occurred during the third phase. During phase two, only one variable's rating changed – 'joint problem solving' – from zero to four (Desired), although this reverted to zero by phase three. However, from phase two to phase three, one third (18) of the variables changed. Of these, all but one increased in importance.

Table 20 below summarises the respondent's change in value attributes across the three research phases. The high number of 'no value' to 'value' changes can be seen, and in contrast to RR001 whose decreases reflected a need not to be unrealistically demanding, RR003 was moreover concerned of the implications of
omitting attributes of value because it would imply they simply did not matter, and
wanted his customer perceived value to reflect expectations on suppliers:

"There's two I think, maybe three that I've taken from a zero to a low D,
which means that I can see some level of value in those so maybe I'm just
thinking a bit wider... it's just really my expectations are maybe just
slightly higher." (RR003, T3a).
**Table 20: RR003 Value Attribute Changes**

<table>
<thead>
<tr>
<th>Value Attribute Changes</th>
<th>Respondent:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RR003</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>T1</th>
<th>T2</th>
<th>T3</th>
<th>Code</th>
<th>Description</th>
<th>T1</th>
<th>T2</th>
<th>T3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Value &lt; Expected</td>
<td>No Value &gt; Expected</td>
<td>No Value &gt; Expected</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Value &lt; Desired</td>
<td>SV08 Innovation</td>
<td>0</td>
<td>-</td>
<td>D1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>RV04 Joint problem solving</td>
<td>0</td>
<td>D4</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IV06 Aware of industry developments</td>
<td>0</td>
<td>-</td>
<td>D2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MV03 Alignment of T&amp;C's</td>
<td>0</td>
<td>-</td>
<td>D3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MV04 Minimise LDs</td>
<td>0</td>
<td>-</td>
<td>D2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TV04 Contact right person 1st time</td>
<td>0</td>
<td>-</td>
<td>D1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TV08 Anticipation of future needs</td>
<td>0</td>
<td>-</td>
<td>D3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EV04 Geographical proximity</td>
<td>0</td>
<td>-</td>
<td>D2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EV07 Social interaction</td>
<td>0</td>
<td>-</td>
<td>D2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desired &lt; Desired</td>
<td>Desired &gt; Desired</td>
<td>Desired &gt; Expected</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PV06 Innovation</td>
<td>D3</td>
<td>-</td>
<td>D4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desired &lt; Expected</td>
<td>Desired &gt; Expected</td>
<td>Expected &gt; Expected</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PV05 Quality</td>
<td>D4</td>
<td>-</td>
<td>E5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MV06 Appropriate terms of payment</td>
<td>D4</td>
<td>-</td>
<td>E7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MV07 Keeping within budget</td>
<td>D4</td>
<td>-</td>
<td>E5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TV01 Timely response to requests</td>
<td>D4</td>
<td>-</td>
<td>E6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TV02 Information right first time</td>
<td>D4</td>
<td>-</td>
<td>E5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EV03 Communication in your language</td>
<td>D4</td>
<td>-</td>
<td>E5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expected &lt; Expected</td>
<td>Expected &gt; Expected</td>
<td>Expected &gt; Expected</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PV01 Conformity</td>
<td>E6</td>
<td>-</td>
<td>E7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PV04 Performance</td>
<td>E6</td>
<td>-</td>
<td>E7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IV03 End-user perspective</td>
<td>E5</td>
<td>-</td>
<td>E6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In terms of suppliers creating value for customers, innovation is discussed, but there is also a sense that consistency and dependability may be less exciting but equally or more valued by customers. Indeed, innovation is a factor which is reduced in importance by this respondent over the course of the study. In explaining this change, the respondent related that a customer of the company had advocated that they should be more ‘boring’ – less focused on exciting innovation, more focused on doing the basics well, perhaps understandable in a long-cycle industry where safety standards call for predictability and repeatability. At the end of the day, on a practical level, the respondent sees the basics boiled down to a product or service:

“I might deliver excellence but you know, delivering excellence through what? I can’t just hand somebody excellence, you know, I’ve got to hand them an excellent something... I haven’t been able to come away from the product or service things yet... If I’m providing some resources and some capabilities, unless it’s an actual physical thing that I’m giving somebody, it’s a service I’m providing to them I think.”

CPV change rationale and recall

RR003 ‘depends on the circumstance’ rationale for change is mentioned for most variables. But when specifically asked about reasons for change, RR003 suggests the following:
"I think I'm thinking of it a bit more from a customer point of view actually, maybe than a supplier point of view than maybe last time. I don't know, I can't really remember my state of mind particularly."

(RR003, T3a)

Continuing this reflection:

"I think the previous time I'd been influenced by what we do rather than what we should do". (RR003, T3a)

RR003’s rationale for changing customer perceived value change is therefore highly scenario based, as we can see in these two examples:

"I mean [technical support] is just circumstance specific, so I can see that ranging from what I've written before, D4, maybe even lower than that, D3 or D2 or something, and I could see some circumstances where it could go to £7 but I'm happy with what I've written". (RR003, T3a).

"Knowledge transfer? Not necessarily, but I can see some circumstances where it may be [value], just put it low D. I put zero before. Yeah, I'd be happy to put low D because there are some circumstances where that's perfectly reasonable." (RR003, T3a).
In rating CPV, by the third interview respondent 003 introduced some minor hierarchy changes. However, the changes were not attributed to events or triggers, moreover a reflection over time and a consideration that there should be a greater spread in importance ratings:

"Performance, E6. I think I'm being too generous on that with a six. The problem will be in my mind here because I don't want to end up so that they're all seven, but equally if they are all seven then maybe it should reflect that."

5.5.2 Influences on Customer Perceived Value

CPV knowledge and learning

RR003 didn't feel that any one of the definitions of customer value provided was perfect. Over the three phases of the research he consistently selects the following definition as a good 'generic' definition:

"Customer value is a customer's perceived preference for an evaluation of those product attributes, attribute performances, and consequences arising from use that facilitate (or block) achieving the customer's goals and purposes in use situations".

By phase three he has ticked two additional definitions, less generic and more 'business' specific which refer to 'benefits and sacrifices' in the 'business-to-
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

business context’. One also refers to ‘total costs (both monetary and non-monetary)’, and he agrees with that concept.

In reflecting on the different definitions of customer value provided, the respondent comments on the issue that behaviours (e.g. trust and commitment) are important factors and that we cannot solely look at product attributes; something that a service-dominant approach would recognise:

"Well let's go back and have a look at what I've ticked. "Customer value is a customer’s perceived preference for and evaluation of those product attributes, attribute performances and consequences arising from use that facilitate or block achieving the customer’s goals and purposes in use situations."...What that doesn’t talk about is how you act. Mind you, maybe none of them do. I can’t really see...that it relates to...some of the things that I think are very high in the values or principles terms which are the professional respect, the ethical...keeping your promises."

The respondent considers the definition of value in terms of immediate satisfaction or delivery of value versus longer-term value and enduring relationships and ethical considerations in receiving that value. Interestingly the comments imply that value is not a passively-received thing (receipt of a service) but involves core value constructs:
“So [suppliers] might have actually created some monetary value or something for me. But actually might have...been very unprofessional, so there's something there; maybe it's a short term versus long term thing...I might not go back again there...even if it had created value...So actually I might then decide, well, OK, it's created me value, but next time I've got to make a decision over am I really prepared to go and change those things that we talked about, like principles”

Rather than asserting any attributable change on his customer perceived value, the definitions seem to help to clarify for RR003 his sense of the importance of behaviours and relationships in CPV and he considers that most definitions are delinquent in considering these issues.

**Service-Dominant Logic**

Interestingly, it is recognised that value is provided by ‘suppliers’ through an extended process, right back to universities educating future engineering staff, for example. However, when reflecting on co-creation of value with the company’s supply chain, the respondent’s interpretation is that this may not always be relevant, depending on the offering:

“That's a co-creation because... I'm sharing my requirements...But here's the other way of dealing with it; actually, this particular element of what I'm going to integrate... I don't need to bother with co-creation because
there's something on the shelf that somebody's already delivered to somebody else and they don't even know that I'm buying it. So I might just go and buy a bolt or something like that. So that one, I've done without any co-creation, somebody may have anticipated that people like me might need this kind of bolt in the future. But they've not done it in any liaison so I don't think it has to be co-creation, I think co-creation's a subset."

He continues that co-creation of value may depend on the duration and depth of the customer-supplier relationship, and sees it more as a process step than a mindset:

"So I think the co-creation isn't the necessity, it can be a means to it. It may be a way of achieving that product or service. And I can look at that, it's probably a good way of doing it, but I don't think you'd use it in all circumstances. If I'm a customer to a strategic supplier or if I'm a strategic supplier to one of my customers then co-creation will be one of the ways that I'll want to work"

Terminal and instrumental values

There are some common themes in core value constructs (fairness, for example) across the different respondents, although it is clear that individual respondents' values are, of course, both different and personal. Respondent 003, for example,
has a deep faith which is reflected in his terminal and instrumental value systems (fairness, sharing experiences, faith, ethics and integrity) and attitude to relationships.

Table 21 summarises RR003’s individual terminal values, with some definition provided by the author. Similarly, valence of his individual and organisational instrumental values, elicited from the words and phrases used to construct his values in the repertory grid exercises, follows in Table 22 and Table 23.

<table>
<thead>
<tr>
<th>Terminal Values - Individual Personal Values</th>
<th>Respondent: RR003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faith</td>
<td>Trust in somebody’s ability, knowledge and behaviour in doing the correct thing</td>
</tr>
<tr>
<td>Integrity</td>
<td>Being honest, wholesome and having strong moral principles</td>
</tr>
<tr>
<td>Fairness</td>
<td>Treating people equally in a way that is reasonable, acceptable and appropriate in a particular situation</td>
</tr>
<tr>
<td>Ethics</td>
<td>Possession and application of moral principles that control and influence behaviour</td>
</tr>
<tr>
<td>Sharing experiences</td>
<td>Equally involved in being able to relate to the same feelings, ideas and experiences that affect you and others</td>
</tr>
</tbody>
</table>

The pairings from the repertory grid usefully indicate not only the instrumental value constructs, but with the inclusion of an opposing ‘negative’ construct alongside the value in each pair, it gives us greater clarity or insight to the idiosyncratic nature of values. For example, the opposing construct to ‘Trusted’ is given as ‘Isolated’. It is useful to think of these opposing constructs in terms of
disadvantages or risks associated with values not being satisfied that drive the importance of the constructs in the value system.

### Table 22: RR003 Individual Value Construct Valence

<table>
<thead>
<tr>
<th>Individual Value Construct Valence</th>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equality and respect</td>
<td>High opinion and admiration of somebody because of their good qualities and achievement</td>
<td>Uncaring of others</td>
</tr>
<tr>
<td>Honest and true</td>
<td>Always telling the correct, real and accurate version of something without cheating or stealing</td>
<td>False and devious</td>
</tr>
<tr>
<td>Unbiased</td>
<td>Fair, impartial and not influenced by just own or just others opinions</td>
<td>Discriminatory</td>
</tr>
<tr>
<td>Equal treatment</td>
<td>A way of behaving towards others on the basis of same rights and without difference</td>
<td>Prejudiced</td>
</tr>
<tr>
<td>Principled</td>
<td>Strong beliefs about what is right and wrong based on rules or truths</td>
<td>Inconsistent way of acting</td>
</tr>
<tr>
<td>Trusted</td>
<td>Belief that someone is honest, sincere, reliable and responsible</td>
<td>Isolated</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>Doing the right thing in producing an intended or successful result</td>
<td>Do standard, wrong or anything</td>
</tr>
<tr>
<td>Scrupulous</td>
<td>Honest and careful about paying attention to what is right in every detail</td>
<td>Abstention</td>
</tr>
<tr>
<td>Guidance</td>
<td>Helpful advice that is given by people who have considerable experience</td>
<td>Non interference</td>
</tr>
<tr>
<td>Wanting inclusiveness</td>
<td>Desiring input from a wide range of people</td>
<td>Hermit/Insular</td>
</tr>
<tr>
<td>Organisational Value Construct Valence</td>
<td>Respondent: RR003</td>
<td>Positive</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Principled to pursue the best that you can, trusted to do so</td>
<td></td>
<td>Trusted by others to be ethical</td>
</tr>
<tr>
<td>Striving for the best gives rise to innovation</td>
<td></td>
<td>Aiming for perfection allows the introduction of new things, ideas, ways</td>
</tr>
<tr>
<td>True to self &amp; principled to do the best that we can</td>
<td></td>
<td>Strong beliefs about what is right and wrong based on rules or truths in aiming for perfection</td>
</tr>
<tr>
<td>Consistent in approach and results</td>
<td></td>
<td>Always behaving in the same way in undertaking the task and delivering output</td>
</tr>
<tr>
<td>Exciting</td>
<td></td>
<td>Causing interest, happiness and enthusiasm</td>
</tr>
<tr>
<td>Using the means of striving for the best possible</td>
<td></td>
<td>Trying hard for the highest level of outcome</td>
</tr>
<tr>
<td>Pursuit of excellence will imply that I am trusted</td>
<td></td>
<td>Trying to be the best indicates honesty, sincerity, reliability and responsibility</td>
</tr>
<tr>
<td>Doing a solid job well</td>
<td></td>
<td>Good and steady efficiency in completing a task</td>
</tr>
<tr>
<td>Open and honest, nothing hidden, fair, consistent</td>
<td></td>
<td>Always behaving truthfully and with equality in an acceptable and appropriate way in a particular situation</td>
</tr>
<tr>
<td>Transparency</td>
<td></td>
<td>Quality of something e.g. argument, situation, decision etc that makes it easier to understand.</td>
</tr>
</tbody>
</table>
The two mind-maps in Appendix 7 compare RR003's individual instrumental values at the beginning of the research in March 2009, and the final phase in September 2010 and sum up the relative hierarchy changes of the constructs between the two datum points, outlined in the tables in this section.

Having established RR003 terminal and instrumental values, both at an individual, personal level and organisational level, the focus of evaluating any impact on customer perceived value change is first to assess any congruence between values and value. RR003 comments on the link between values and value:

“I think those are principles and therefore values that I hold. Or that hopefully we hold as a company. Am I creating customer value out of those? Well actually, not directly, but without them, long term, it will bite me, but that’s not the reason for holding them as values. We need to hold them as values anyhow and they might spawn some longer term benefits for us; maybe have short term penalties - we might not take some of the short term opportunities because we hold those values”.

Table 24 maps both RR003 perception of organisational instrumental values, and his individual (personal) instrumental values across first and last research phases, indicating tier status and any hierarchy change. In terms of congruence between organisational and personal values, there is a common thread with ‘trust’, ‘honesty’, ‘principled’ and ‘effectiveness’/‘doing a job well’. However, where albeit
minor hierarchy changes appear at, e.g. an organisational level ('principled' hierarchy moves from 'core' to '1st tier'), this change is not reflected in the individual's personal values.

RR003 recognises there may also be some tension between organisational and individual personal value systems. He reflects on some of the differences between organisational and individual values and the extent to which personal relationships facilitate organisational achievement.
So whilst the respondent feels his own and organisational values are broadly aligned, he recognises the possibility that over time shorter-term (or indeed strategic) organisational needs may be in conflict with relationships, or at the very least organisations use personal relationships to help business goals to be achieved, and these change differently over time. In other words, does a cultivated, valued, long-term personal business relationship have value beyond its organisational customer perceived value in, say, achieving a short-term objective?

"The businesses want those quality relationships. But why does the business want it? It wants to improve its bottom line in five years' time. It wants to protect itself because there's some goodwill there, in case of hard times or something like that, it wants to realise some better strategic opportunity and all these kind of things."

Having looked at the status and congruence of organisational and personal values, it is important to map these alongside customer perceived value attributes to see if there is any apparent link between status and hierarchy changes in values and changes in customer perceived value. Figure 19 shows only those values and customer perceived value attributes that changed over the course of the study. Terminal values saw the least change, with a few hierarchy adjustments in instrumental values, so with a low degree of change in values it is not surprising there is not a high degree of customer perceived value change that can be linked.
Hypothetically, of course, this may be different within different industry contexts and dynamics.

Critical incidents and environmental factors

Respondent RR003 considered why his value expectations might have gone up over the phases of the study and whether it was owing to external factors. Whilst a change in 'minimising liquidated damages' was attributed to the economic climate, his view was that change related to his own perception whether expectations sometimes reflect what we have come to expect rather than what we are striving for:
“The question in my own mind is...if I was marking lower before, why was I putting up with something a bit worse, if I didn't really need to? Was I just being too generous, of a low standard? That's what I feel like at the moment, and you kind of feel like you're raising some kind of mark”.

In considering changes in value hierarchies, the respondent is able to reflect on the first research interview as a baseline. Where the rating for innovation changed, for example, there is not a sense that innovation is inherently less important, i.e. that something has happened to change its importance, but rather that it is seen in relation to the other value constructs more clearly, and the respondent is able to consider different scenarios and recognise that value hierarchies may change according to the application or environment and the value in use:

“You won't reject the value. I think actually effectively what you'll do is you'll say, 'Right, in the circumstance this is the one that I'm going to decide is the principle operation and where I'm applying it'...So eventually I might have to say, 'so you're going to do that in a conservative boring, very predictable way, because that's actually what I need you to do'...whereas actually this other one, 'it's a slightly innovative environment, I need you to come up with some new ideas'...So I think at point of application you've still got to be able to make a decision between all of those. When you're thinking about this in the early stages you probably do need all of these things in mind. And
what you’re doing is, you’re suspending judgement, I think, at that point.”

Value importance ratings are often noted to be dependent on circumstances, and changes in ratings therefore occur depending on different scenarios or examples the respondent considers, rather than on one specific and critical change event.

“I think I’ve said that most times it’s going to be D4 or something like that. But actually there’ll be some circumstances where it’s nothing other than some high level E7. So I’m going to put D4. But I’m going to put in the comments, circumstances with high costs or risks were E7”

5.5.3 Summary

Key points from this respondent, who exhibited the largest amount of attribute change with increases in value relating to customer perceived value and reflections on change, are that: customer perceived value is highly scenario, role or situation dependent, recall on customer perceived value conceptualisation and change over time is difficult, and there is some confusion on whether customer perceived value expectations should reflect experienced value or desired value.

In terms of the situational impact on customer perceived value he remarks:

“It kind of depends upon the scenarios around you. It depends on the environment. Well it depends on the risks maybe that we talked about earlier.”
Even within that role, an individual may have a different customer perceived value depending on whether the individual is considering the end customer needs or just the organisation’s internal needs.

“I’m thinking of it a bit more from a customer point of view actually, maybe than a supplier point of view than maybe last time.”

As can be seen from the extract below, there is recognition of the weakening impact of time on value experience and perceptions, where RR003 had to make assumptions and speculate on earlier customer perceived value status rationale.

“I don’t know I can’t really remember my state of mind particularly... there’s a few that I’ve increased in score. There’s two I think, maybe three that I’ve taken from a zero to a low D [desired] which means that I can see some level of value in those so maybe I’m just thinking a bit wider. There’s one that crossed over the line from being a D to an E [expected] ...The others there, I think they’ve gone up but within the same category so maybe it’s just really my expectations are maybe just slightly higher.”

RR003’s widespread reflection that customer perceived value is highly dependent on situation means there may be benefits to suppliers in understanding customers’ value hierarchies across different stages and types of project or requirement, being
able to offer a breadth of capability to satisfy value expectations. Fundamentally, though, we might say that understanding customer value and drivers is simply a key, long-standing tenet of relationship marketing:

“If [suppliers] give me just consistency, they might only be able to operate in one of the things that I expect that group to. If they do operate in the innovation side of things, but actually they’re inconsistent I’m not going to be that interested in them either particularly, unless I can only use them in one field. But actually I’d like a supplier to be doing both [Consistency and Innovation]. So the better supplier will be the ones that can actually cope with a balance of both of those things.”

Finally, in this case, there was a particular awareness of both the potential for congruence and tension between organisational and individual value systems, and the impact that this might have on customer perceived value change. If, for example, individual instrumental values proved to be more stable and enduring over a longer timeframe than this research study affords than organisational values, we might see greater disconnect and impact on customer perceived value change:

“I’m not saying there is, but if there was something in the Rolls-Royce values that actually people are expected to operate to but on a personal basis they couldn’t because that conflicts with where they were, then that might be the cause for concern because either you’re employing the
wrong people or the business has got the wrong values, and maybe
something else as well. I was ... so we're looking for broad alignment".

Respondent's Reflections on the Research Process

RR003 felt it can be difficult for the customer to recognise or have awareness of
his/her own conception and perception of value, not consciously going through a
cognitive evaluation process:

"The difference between the benefits and the sacrifices which, actually
to myself as a customer, sometimes the actual difference between those
might not be apparent to me"

This clearly is quite significant – with little structured self-awareness of value it is
difficult both to determine whether value has been received, and if and how
changes occur. This must be especially true for a third party trying to make this
assessment:

"I'll probably need a week to be able to really write [values] down
properly which is stupid because I have been living them for many
years...so you are unconsciously doing them without being explicit... and
you think is that really exactly what it is? So I don't know whether I've
met the end state... I still wonder whether I've not quite tapped all the
things because you suddenly realise that quite a lot of these you're
running around kind of unconsciously with them and actually there's the
other unconscious ones I've not told you about yet because actually I've not even quite tapped them”.

RR003 acknowledged the process made him reflect, not just in terms of his customer perceived value and value systems, but in terms of how this is structured, communicated and shared. Taking this theme on, this is certainly a significant point in challenging, both at an organisational and individual level, that if customer perceived value is not part of a structured, recognised process, and there is little awareness, then it is unlikely to be effectively communicated within or outside the organisation. We must presume it is also less likely to be fulfilled, not least co-created, if it cannot be articulated effectively.

“So I'm kind of thinking actually my expectations weren't good enough, and then you start thinking about yourself and you think well actually maybe I was not being, just on an individual level, as clear in my expectations with people as I could have been or should have been.” (RR003, T3a)

5.6 Respondent RR005

Profile

RR005 was the respondent with displaying the least amount of change to his conceptualisation of customer perceived value over the course of the research.

He is a Supplier Development Executive within the Quality function. At the end of the third data collection phase, he had been in Rolls-Royce for five years, from
when the role was created. Previously he worked for a major car manufacturer, Toyota, and had worked in a purchasing function for 14 years.

5.6.1 Conceptualisation of Customer Perceived Value

Expected CPV variables

RR005's customer perceived value conceptualisation is summarised in Table 25. The variables that were subject to change over the course of the research are shaded in blue. Just four of the total attributes are rated as not being of value (zero); in contrast 22 of attributes are rated with the highest level of expectation, E7.

Interestingly RR005 places relatively low importance on Product and Monetary factors than some other respondents, with more E7-rated variables sitting in Service Value and Image Value factors.
Table 25: RR005 Conceptualisation of Customer Perceived Value

<table>
<thead>
<tr>
<th>Code</th>
<th>PRODUCT VALUE</th>
<th>SERVICE VALUE</th>
<th>RELATIONSHIP VALUE</th>
<th>IMAGE VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Vs = Value Status; Im = Importance</td>
<td>Mar-09</td>
<td>Nov-09</td>
<td>Sep-10</td>
</tr>
<tr>
<td>PV01</td>
<td>Conformity</td>
<td>E 6</td>
<td>E 6</td>
<td>E 6</td>
</tr>
<tr>
<td>PV02</td>
<td>Reliability</td>
<td>E 7</td>
<td>E 7</td>
<td>E 7</td>
</tr>
<tr>
<td>PV03</td>
<td>Durability</td>
<td>E 6</td>
<td>E 6</td>
<td>E 6</td>
</tr>
<tr>
<td>PV04</td>
<td>Performance</td>
<td>E 5</td>
<td>E 5</td>
<td>E 5</td>
</tr>
<tr>
<td>PV05</td>
<td>Quality</td>
<td>E 7</td>
<td>E 7</td>
<td>E 7</td>
</tr>
<tr>
<td>PV06</td>
<td>Availability</td>
<td>D 4</td>
<td>D 4</td>
<td>D 4</td>
</tr>
<tr>
<td>PV07</td>
<td>Innovation</td>
<td>D 1</td>
<td>D 4</td>
<td>D 4</td>
</tr>
<tr>
<td></td>
<td>SERVICE VALUE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SV01</td>
<td>Process Systems Alignment</td>
<td>0 0</td>
<td>0 0</td>
<td>0 0</td>
</tr>
<tr>
<td>SV02</td>
<td>Meeting Delivery Requirements</td>
<td>E 7</td>
<td>E 7</td>
<td>E 7</td>
</tr>
<tr>
<td>SV03</td>
<td>Pre &amp; After Sales Technical Support</td>
<td>E 7</td>
<td>E 7</td>
<td>E 7</td>
</tr>
<tr>
<td>SV04</td>
<td>Contract Management &amp; Control</td>
<td>E 7</td>
<td>E 7</td>
<td>E 7</td>
</tr>
<tr>
<td>SV05</td>
<td>Pre &amp; After Sales Comm Support</td>
<td>E 7</td>
<td>E 7</td>
<td>E 7</td>
</tr>
<tr>
<td>SV06</td>
<td>Key Account Management Process</td>
<td>D 2</td>
<td>D 2</td>
<td>D 2</td>
</tr>
<tr>
<td>SV07</td>
<td>Service Failure Recovery Plan</td>
<td>D 1</td>
<td>D 1</td>
<td>D 1</td>
</tr>
<tr>
<td>SV08</td>
<td>Innovation</td>
<td>D 3</td>
<td>D 3</td>
<td>D 3</td>
</tr>
<tr>
<td></td>
<td>RELATIONSHIP VALUE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RV01</td>
<td>Mutuality of Goals</td>
<td>E 6</td>
<td>E 6</td>
<td>E 6</td>
</tr>
<tr>
<td>RV02</td>
<td>Trust</td>
<td>E 7</td>
<td>E 7</td>
<td>E 7</td>
</tr>
<tr>
<td>RV03</td>
<td>Commitment</td>
<td>E 7</td>
<td>E 7</td>
<td>E 7</td>
</tr>
<tr>
<td>RV04</td>
<td>Joint Problem Solving</td>
<td>D 4</td>
<td>D 4</td>
<td>D 4</td>
</tr>
<tr>
<td>RV05</td>
<td>Risk Minimisation &amp; Sharing</td>
<td>D 3</td>
<td>D 3</td>
<td>D 3</td>
</tr>
<tr>
<td>RV06</td>
<td>Knowledge Transfer</td>
<td>D 4</td>
<td>D 4</td>
<td>D 4</td>
</tr>
<tr>
<td>RV07</td>
<td>Loyalty</td>
<td>E 7</td>
<td>E 7</td>
<td>E 7</td>
</tr>
<tr>
<td>RV08</td>
<td>Exclusivity</td>
<td>D 1</td>
<td>D 1</td>
<td>D 1</td>
</tr>
<tr>
<td></td>
<td>IMAGE VALUE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV01</td>
<td>Leading Organisation</td>
<td>E 7</td>
<td>E 7</td>
<td>E 7</td>
</tr>
<tr>
<td>IV02</td>
<td>Global Capability</td>
<td>D 4</td>
<td>D 4</td>
<td>D 4</td>
</tr>
<tr>
<td>IV03</td>
<td>End-user Perspective</td>
<td>E 7</td>
<td>E 7</td>
<td>E 7</td>
</tr>
<tr>
<td>IV04</td>
<td>Long-Term Profit Focus</td>
<td>D 3</td>
<td>D 3</td>
<td>D 3</td>
</tr>
<tr>
<td>IV05</td>
<td>Respected by Industry Network</td>
<td>E 7</td>
<td>E 7</td>
<td>E 7</td>
</tr>
<tr>
<td>IV06</td>
<td>Aware of Industry Developments</td>
<td>E 6</td>
<td>E 6</td>
<td>E 6</td>
</tr>
<tr>
<td>IV07</td>
<td>Corporate Social Responsibility</td>
<td>E 7</td>
<td>E 7</td>
<td>E 7</td>
</tr>
<tr>
<td>IV08</td>
<td>Governance &amp; Ethics</td>
<td>E 7</td>
<td>E 7</td>
<td>E 7</td>
</tr>
</tbody>
</table>
CPV is dependent on role

Whilst not impacting directly on customer perceived value change, the respondent points out that in a large organisation, his customers and suppliers - the value interfaces - are more likely to be internal i.e. not everyone is externally-focused with direct relationships, even if they have a customer or supplier related role. Because of this, it is sometimes less easy to recognise or experience value exchanges and rate value because only a limited part of the whole value process is seen. In summary, there may be both a time delay in value exchanges and an
invisibility of value exchanges to many people in an organisation which make it hard to assess:

“We don’t hear bad news...you don’t hear good news, so we interact when there’s been a failure”. (T1a)

CPV and supplier relationships

Raising a theme that also appeared in RR003’s case, RR005 recognises that if a supplier fails, i.e. value is not received, it may be because expectations were misattributed or unfairly high, or ambiguous. In other words, customer perceived value expectations should be appropriate and well communicated. This does not of course mean that they have to be lowered:

“If [the supplier] didn’t understand what you asked them to do, you’ve given them a job that they’re not skilled to do, so it can actually mean that I’m at fault, not the individual, so that’s why I wouldn’t have untrustiness (sic)...It just might mean that I’ve given them something that...I wasn’t correct in giving it to them or they needed some support or guidance”. (T1b)

In conceptualising customer perceived value, RR005 is interested in considering where the drive for value emanates - with the customer or supplier - and how that
value need is communicated. In other words, to what extent is customer perceived value stimulated and influenced by a supplier:

"I think [the demand for innovation] is more around as a need for it, or a perceived need. So does it have to be purely, 'the customer has asked me to do this'? It can be, I think. I know what the customer would like and I can then offer it. So I think it's mutually inclusive in the sense that there has to be a need for it. Now the supplier could identify the need or the opportunity, or likewise the customer could define the need." (T2b)

Respondent RRO05 goes on to say that longer term relationship development manifests itself in issues of trust, commitment, loyalty and openness - willingness to share information etc and this view is reflected across the research period as they underpin strong relationships that enable value to be more readily and easily received. And if they exist, most things (quality, delivery) will naturally follow.

### 5.6.2 Customer Perceived Value - Change in Value Attributes

Respondent RRO05 has just one change across the research period (T2, November 2009). He takes a view that, if nothing has changed then his values and value hierarchy has not significantly changed either (there is some minor amendment to his repertory grid but this does not impact core constructs). He is confident in his previous assessments, is not speculative or self-questioning about his own rationale.
RR005 changed his positioning of ‘product innovation’ as a customer perceived value attribute by raising its importance in the value hierarchy between the T1 and T2 research phases, partly because his reflection on the breadth of innovation changed over the course of the interviews, i.e. it’s not just a product-related issue.

Table 26: RR005 Value Attribute Changes

<table>
<thead>
<tr>
<th>Value Attribute Changes</th>
<th>Respondent: RR005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code</td>
<td>Description</td>
</tr>
<tr>
<td>0 = No Value, D = Desired Value (1 - 4), E = Expected Value (5 - 7)</td>
<td></td>
</tr>
<tr>
<td>No Value &lt; Expected</td>
<td>No Value &gt; Expected</td>
</tr>
<tr>
<td>No Value &lt; Desired</td>
<td>No Value &gt; Desired</td>
</tr>
<tr>
<td>Desired &lt; Desired</td>
<td>Desired &gt; Desired</td>
</tr>
<tr>
<td>PV06</td>
<td>Product innovation</td>
</tr>
<tr>
<td>Desired &lt; Expected</td>
<td>Desired &gt; Expected</td>
</tr>
<tr>
<td>Expected &lt; Expected</td>
<td>Expected &gt; Expected</td>
</tr>
</tbody>
</table>

5.6.3 Influences on Customer Perceived Value

CPV knowledge and learning

In terms of definition of customer value (those provided from academia and industry), respondent RR005 changed his selection of preferred definition at the second phase of the study, retaining that for the third phase. This definition was added in by the author at the second phase. They are:
"Customer perceived value is the difference between the benefits and the sacrifices (e.g. the total costs, both monetary and non-monetary) perceived by customers in terms of their expectations, i.e. needs and wants"

Changing to:

"Value, from the perspective of customers and marketers, is a multi-dimensional concept representing a net score that includes measurement of total benefits perceived or realised and total cost of acquiring, using and disposing of a product or service."

There was no strong, conclusive preference, but RR005 feels the second definition was comprehensive in terms of describing acquisition, use and disposal, which he can relate to.

He also dismisses other definitions for being too complex to be widely understood and disseminated.

"So if I'm honest, the wording wouldn't be me. It's putting complexity into what should be a relatively straightforward statement. I think there's complexity in that statement whereas these ones are quite succinct in terms of you can read them and identify with them quicker. I mean look my test is if my grandmother... if I could explain to my
grandmother then it's a good statement for me. Whereas this one I think, what are you talking about?” (T2a)

There is no apparent link between the knowledge provided by the definitions and the respondent's customer perceived value concept, the definitions helped to open up discussion and baseline a shared information position for all respondents. The researcher has no doubt that offering up the definitions for discussion provided more informed insight, enabling respondents to articulate what they concurred with and what they considered not to be relevant.

In this case, RR005 considers the description of benefits and sacrifices to be closest to his idea of customer value, but also states that he would use the term 'mutual benefit' rather than 'benefits and sacrifices':

"The difference between the benefits and sacrifices perceived by customers in terms of their expectations, needs and wants: so I think it's trade between what you have to put in to deliver the product at the end of the day, but then what does the person perceive you've put into that product; do they think it's of that value?" (T1a)

RR005 believes that there will be an impact on customer perceived value across different industries and value exchanges, from the transactional to the more complex, although not everyone in an organisation will recognise the benefit in developing a supplier relationship that enables value creation. He relates change in
customer perceived value as varying according to the nature of the supplier relationship, rather than changing with minor events:

“When you go shopping, you buy a product off the shelf, you don’t expect to then have to start working on a relationship with the person that supplied it, you’ve just come to expect I can go to the shelf and I can take it. And I think we’ve got the same ... some people have got that same mentality, whereas actually, when you increase the complexity, you actually have to work hard for that, it means you need to invest more in that side of [supplier relationships].” (T3a)

In terms of impact of role on customer perceived value, respondent RR005 is involved in improving more poorly performing suppliers, so interestingly is often engaged with ‘change’ and with those who have already failed to deliver value, or where there is a strong disconnect between value expectations:

“I think, because I’m Supplier Development the better engagements are the ones where we have a better relationship. So, my job is very much around change management, so hence I then have to focus far heavier on the people aspect. You’d step through building the relationship with them by getting to know them and asking them to do things, and they don’t want to do them...and they’re very obstructive so therefore you go and do some quick wins with them to try and just warm them up and generate some headroom for them”. (T2a)
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

Service-Dominant Logic

Whilst not labelling it co-creation of value, respondent RR005 is convinced of the need for mutually beneficial relationships:

"Doesn’t matter how good you are it’s how good you are together...
Companies are starting to realise... their supply chain is of equal importance as what I do myself, and how I manage that...the customer won’t see it but if that fails the customer will see it straight away". (T1a)

This theme is picked up again later in the study, and the respondent has a mature conception of shared value creation:

"I suppose it’s for the combined value because someone may have to sacrifice something for the other one to take advantage but when you put the two together the value is greater. So, I think it is ... when you said about sacrifices, I think it’s understanding what they are and what’s good for one might not be good for the other, but when you put the two together, it’s actually of benefit to both, the combined value." (T3a)

RR005 actually also sees his role as providing a service and value to his suppliers (supplier development), which makes for an interesting dynamic, certainly from a co-creation of value perspective. There is a belief that he can provide the right
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

environment (honesty, strong relationships) which will act as an enabler for the requirement to be delivered:

“As far as we’re concerned, the supplier in a way you could say is a customer of mine, because I’m providing them a service to improve their business... But we’re trying to do it from the point of, we started with you and when we left you... have you changed your opinion now of us as a result? Because, to be honest, when we first go in it’s normally on the back of some friction... For me, personally, the value is the satisfaction of seeing the company getting better or stronger as a result of whatever it is we’ve done together". (T2a)

This discussion with RR005 evolves into an interesting point relating to co-creation of value - sometimes when he in a coaching role with suppliers (i.e. acting as a ‘supplier’ to them) they want RR005 to do the work for them, to write the answers. He is, however, insistent that they have to contribute themselves to learn and own the improvements and he is, therefore, pushing his ‘customer’ (the supplier) into co-creation mode for them to ultimately get most value:

“I’ll walk you [the supplier] through everything but you need to write it down and put it into the language you understand and that will sit with your company, but just me giving it to you is just a waste of time because either you’ll just put it on the shelf or you’ll think you can just cut and paste and that doesn’t work.” (T2a)
Terminal and instrumental values

As with the other embedded cases, in assessing potential reasons for customer perceived value change, RR005’s terminal and instrumental value positions are considered, both at an individual, personal level and an organisational level, based on RR005’s interpretation of the organisation’s terminal values. Impact of these values are assessed both in terms of thematic links and whether changes in values impacts or is impacted by changes in customer perceived value.

Value constructs were elicited using the repertory grid technique. Table 27, Table 28 and Table 29, following, show RR005’s terminal values, and organisational and personal instrumental values with their dictionary meaning for clarification.

Table 27: RR005 Individual Terminal Values

<table>
<thead>
<tr>
<th>Terminal Values - Individual Personal Values</th>
<th>Respondent: RR005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal interaction</td>
<td>Being able to connect and communicate with others in having an effect and influence on each other</td>
</tr>
<tr>
<td>Respect</td>
<td>Good opinion and feeling of admiration for somebody or something because of their or its good characteristics or achievements</td>
</tr>
<tr>
<td>Professionalism</td>
<td>A high standard expected from a person who is skilled and well-trained with a high level of education in a particular job</td>
</tr>
<tr>
<td>Reliability</td>
<td>Likely to be correct or true, trusted, dependable</td>
</tr>
<tr>
<td>Trust</td>
<td>Belief that somebody or something is good, honest, sincere and reliable</td>
</tr>
<tr>
<td>Individual Value Construct Valence</td>
<td>Positive</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td><strong>Phrase</strong></td>
<td><strong>Meaning</strong></td>
</tr>
<tr>
<td>Deliver, listening</td>
<td>To take notice of or follow advice and directions</td>
</tr>
<tr>
<td>Empathy</td>
<td>Ability to understand others feelings and experience</td>
</tr>
<tr>
<td>Recognized</td>
<td>Admittance of existence and truth of something, thought of as very good or important by others</td>
</tr>
<tr>
<td>Icon, shining light</td>
<td>Famous person or thing that people admire or see as a symbol of a particular idea or way of life</td>
</tr>
<tr>
<td>Understanding</td>
<td>Knowledge of something or somebody, informal agreement, willingness to forgive somebody</td>
</tr>
<tr>
<td>Open relationship</td>
<td>Honest and not hiding information and feelings, able to listen to others alternative points of view without conflict</td>
</tr>
<tr>
<td>Honesty</td>
<td>Always being truthful about something, without cheating, hurting or stealing from others</td>
</tr>
<tr>
<td>Quality</td>
<td>Very high standard compared to other things</td>
</tr>
<tr>
<td>Leader</td>
<td>Head of organisation, best or first place</td>
</tr>
<tr>
<td>Friendliness</td>
<td>Behave in kind and pleasant way because you want help, not treating as an enemy</td>
</tr>
<tr>
<td>Organisational Value Construct Valence</td>
<td>Respondent: RR005</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td><strong>Positive</strong></td>
<td><strong>Negative</strong></td>
</tr>
<tr>
<td>Phrase</td>
<td>Meaning</td>
</tr>
<tr>
<td>Dependable</td>
<td>Be relied upon and trusted to provide what is wanted or needed or behave in a certain way</td>
</tr>
<tr>
<td>Doing anything in the correct manner</td>
<td>Provision of accurate, true processes and outputs by following rules and standards</td>
</tr>
<tr>
<td>Best ability</td>
<td>High level of skill and intelligence in performing a task/job</td>
</tr>
<tr>
<td>Capability</td>
<td>Harnessing a set of competencies in order to do something</td>
</tr>
<tr>
<td>Perfection</td>
<td>State of being complete without fault or weakness</td>
</tr>
<tr>
<td>Honesty</td>
<td>Always being truthful about something, without cheating, hurting or stealing from others</td>
</tr>
<tr>
<td>Professionalism</td>
<td>High standard of skills and abilities expected from someone well-trained in a specific job</td>
</tr>
<tr>
<td>Solid</td>
<td>Strong, well-made and reliable</td>
</tr>
<tr>
<td>Robust</td>
<td>Strong, durable, able to survive, determined</td>
</tr>
<tr>
<td>Doing what you say you will do</td>
<td>Keeping promises always, commitment</td>
</tr>
</tbody>
</table>

There are a couple of interesting positive and negative construct pairings which help better to define RR005’s value system. In terms of organisational values, for example, he selects ‘dependable’ as a value but opposes this with ‘mis-understanding’. Having talked this through during a first phase interview he explained that often if people were not dependable he felt it was not because they couldn’t be trusted but that they may have misunderstood what was required of
them, or were unskilled to do it. This seems particularly pertinent to his role in supplier development.

Overall his value system reflects much of the discussion during the interviews around the importance of relationships, mutual respect, and the need for clear, two-way communication.

All of these value constructs and their relative hierarchies can be seen on mind maps representing RR005’s value system at the first and third phases in Appendix 7. The shading on the mind maps indicates where the level at which the construct first appears.

In assessing impact or links between changes at value system, congruence between organisational and individual terminal and instrumental value constructs in terms of theme (indicated by blue shading), and changes in hierarchy across the research phases are shown in Tables 30 and 31.

In terms of terminal values, there is congruence across ‘reliability’ and ‘trust’ although they are subject to different hierarchies, changing at the individual, personal level.

With instrumental values there is organisational and individual congruence with ‘honesty’. As with other respondents, more change is visible in ratings for
organisational value constructs than personal constructs, but these are minor hierarchy changes.

### Table 30: RR005 Organisational and Personal Terminal Values

<table>
<thead>
<tr>
<th>Level</th>
<th>RR Organisational Values</th>
<th>Individual Personal Values</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mar 2009</td>
<td>Sept 2010</td>
</tr>
<tr>
<td><strong>Core</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trust</td>
<td>Trust</td>
</tr>
<tr>
<td></td>
<td>Integrity</td>
<td>Integrity</td>
</tr>
<tr>
<td></td>
<td>Innovation</td>
<td>Innovation</td>
</tr>
<tr>
<td></td>
<td>Reliability</td>
<td>Reliability</td>
</tr>
<tr>
<td><strong>1st level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Professionalism</td>
<td>Professionalism</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2nd level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reliability</td>
<td>Reliability</td>
</tr>
<tr>
<td><strong>3rd level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Excellence</td>
<td>Excellence</td>
</tr>
<tr>
<td><strong>4th level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>5th level</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 31: RR005 Organisational and Personal Instrumental Values

**Status, Hierarchy and Congruence**

Grid indicates at what level each 'value' first appears in the value system and if there are changes in status or hierarchy across research timeframe. Blue shading indicates congruence between organisational and personal values.

<table>
<thead>
<tr>
<th>Level</th>
<th>Individual 'Organisational' Value</th>
<th>Individual 'Personal' Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mar 2009</td>
<td>Mar 2009</td>
</tr>
<tr>
<td></td>
<td>September 2010</td>
<td>September 2010</td>
</tr>
<tr>
<td>Core</td>
<td>Dependable</td>
<td>Dependable</td>
</tr>
<tr>
<td></td>
<td>Perfection ↑</td>
<td>Deliver, listening</td>
</tr>
<tr>
<td></td>
<td>Do anything correctly</td>
<td>Empathy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Recognised</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mar 2009</td>
<td>Mar 2009</td>
</tr>
<tr>
<td></td>
<td>September 2010</td>
<td>September 2010</td>
</tr>
<tr>
<td></td>
<td>Core</td>
<td>Core</td>
</tr>
<tr>
<td></td>
<td>Dependable</td>
<td>Dependable</td>
</tr>
<tr>
<td></td>
<td>Perfection ↑</td>
<td>Deliver, listening</td>
</tr>
<tr>
<td></td>
<td>Do anything correctly</td>
<td>Empathy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Recognised</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1st level</td>
<td>1st level</td>
</tr>
<tr>
<td></td>
<td>Best ability</td>
<td>Best ability</td>
</tr>
<tr>
<td></td>
<td>Capability</td>
<td>Dependable</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Open relationship</td>
</tr>
<tr>
<td></td>
<td>Perfection</td>
<td>Solid ↑</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Honesty</td>
</tr>
<tr>
<td></td>
<td>Doing anything correctly</td>
<td>Leader ↑</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2nd level</td>
<td>2nd level</td>
</tr>
<tr>
<td></td>
<td>Honesty</td>
<td>Robust ↑</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Quality</td>
</tr>
<tr>
<td></td>
<td>Professionalism</td>
<td>Friendliness</td>
</tr>
<tr>
<td></td>
<td>Solid</td>
<td>Leader</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3rd level</td>
<td>3rd level</td>
</tr>
<tr>
<td></td>
<td>Robust</td>
<td>Honesty ↓</td>
</tr>
<tr>
<td></td>
<td>Doing what you say</td>
<td>Doing what you say</td>
</tr>
<tr>
<td></td>
<td>Professionalism ↓</td>
<td></td>
</tr>
</tbody>
</table>

Putting together only the value constructs and customer perceived value variables whose ratings changed over the course of the study into one chart (Figure 20) clarifies whether there is an apparent link with change in one area (values) impacting another (customer perceived value). However, in the case of RR005, it has already been established that there was only one change to customer perceived value variables (increase in ‘product innovation’) and there is no
apparent link. The chart does once again highlight that most changes were in organisational instrumental values, particularly around competence-based values. In his interviews he does not provide any clear rationale behind the hierarchy shifts in the repertory grids, except that there was a degree of correction when he reviews outputs from earlier research phases where he doesn’t feel the hierarchy reflects what he thought.

<table>
<thead>
<tr>
<th>Changed Org. Terminal Values</th>
<th>Changed Org. Instrumental Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competence</td>
<td>Competence</td>
</tr>
<tr>
<td>Behaviour</td>
<td>Behaviour</td>
</tr>
<tr>
<td>Personal</td>
<td>Personal</td>
</tr>
<tr>
<td>Social</td>
<td>Social</td>
</tr>
<tr>
<td>Reliability</td>
<td>Capability</td>
</tr>
<tr>
<td>Excellence</td>
<td>Solid</td>
</tr>
<tr>
<td></td>
<td>Dependable</td>
</tr>
<tr>
<td></td>
<td>Doing anything correctly</td>
</tr>
<tr>
<td></td>
<td>Professionalism</td>
</tr>
<tr>
<td></td>
<td>Perfection</td>
</tr>
<tr>
<td></td>
<td>Robust</td>
</tr>
<tr>
<td></td>
<td>Honesty</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Changed Personal Terminal Values</th>
<th>Changed Pers. Instrumental Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competence</td>
<td>Competence</td>
</tr>
<tr>
<td>Behaviour</td>
<td>Behaviour</td>
</tr>
<tr>
<td>Personal</td>
<td>Personal</td>
</tr>
<tr>
<td>Social</td>
<td>Social</td>
</tr>
<tr>
<td>Reliability</td>
<td>Leader</td>
</tr>
</tbody>
</table>

**Figure 20: RR005 Impact of value system changes on CPV**

**Critical incident changes and environmental factors**

When reflecting on change, RR005 returns to a common theme across his case study, that if he has strength in his internal and external relationships then that is
solid enough bedrock for change events not to have an impact. So things may happen, but not to the extent that he changes his opinion:

"I mean, there are lots of [incidents] that happen but, to be honest... and this isn't just because we're doing this ... the thing I value the most is my people, so what my people think of me is the most important thing for me..." (T3a)

When exploring a potential critical incident - the retirement of the long-standing, high profile chief executive, the respondent reiterates that these are peripheral to the steady state of him doing his job:

"I know the position I play and I'll concentrate on playing that position and... as long as I'm performing that position and I'm trusted, whether it's for Sir [X] or Sir [Y], that doesn't personally affect me."

During a discussion on the provided definitions of customer perceived value, RR005 suggests that in reality a definition of value cannot be as pure as just considering the exchanges between one customer and one supplier. There are moreover a range of circumstances and factors that impact customer perceived value over time. We must note there are two concepts here – both impact of situational changes and temporal changes:
"The only thing [the definition] probably doesn't take into account there is with regard to the environment or the position that you’re in, so what you perceive value at this point in time might change in a month’s time”.

In terms of critical incident, economic downturn is not seen in this context but it is nonetheless acknowledged by RR005 that it may have an impact, not just on the organisation, but also its relative position in the market with competitors. So rather than an event being significant enough to shift fundamental value systems or dramatically change customer perceived value, he alludes to events having the potential for customer perceived value recalibration – even though his customer perceived value saw virtually no change.

“It depends on the situation to be honest, and what’s going on in and around you at the time... This year is different from last year’s trading conditions. But also what other offerings there are as well...so if there’s multiple suppliers, what are they offering in competition to yourself?"

5.6.4 Summary

Respondent RR005, who recorded the least number of value changes across the three interventions, has a relatively clear and unchanging perception of what comprises customer value for him. He believes that customer perceived value is highly dependent on both the nature and success of long-term supplier relationships. His role in supplier development may indeed reflect that he sees suppliers as important in defining customer perceived value, and he believes that
understanding of customer perceived value may vary depending on a role's functional distance from customers or suppliers in the organisation. This is a key point, particularly within a large organisation where customer and supplier knowledge may be vital in defining customer perceived value, but where those without that knowledge may still be required to be making decisions that impact customer perceived value.

He also believes that if there have not been critical incidents or events, his customer perceived value is unlikely to change, and this was reflected in his ratings of variables.

Respondent RR005 reflects that the less tangible elements of customer perceived value can be hard to evaluate or measure and there may actually be a delay between a supplier delivering value to the customer and seeing value in return, i.e. a sort of value investment. This is an interesting point, when we consider the 'give-get' of value, particular in terms of co-creation, because it's possible each actor may not be aligned when they create and receive value. It also emphasises the importance of long-term relationships to fully realise value, especially in the context of a long-cycle industry:

*I'd always look back what's the payback [on a project] but then that's on the hard tangible...but on the soft intangible things like relationship in it, you can't measure those, so measuring the relationship change as a result of...of making this offering...it might be worth me putting more in*
and I might not actually get anything out of hard tangible, but what I have got is a better relationship...I’ll get the win in six months’ time. So rather than it always being short term thinking I’ll benefit from it in the long term”. (T1a)

He continues about the concept of investment of resource in order to receive long-term value:

“We do a lot of work with suppliers to improve their output performance to us, so we’re affecting their input to us, but we’ll do that in kind. You don’t charge them for that service or look to get that back from them in the short term, for what we expect is that we’ll improve the relationships, such that when we know the medium to long term relationship improves we start to do things for mutual benefit.” (T1a)

Another aspect we should consider in both change and differences in customer perceived value is the impact a respondent’s job function has on their perception of value, both at an organisational and individual level (RR005 changed role part way through this study).

Taking this down a level, we might even suppose that certain types of people may be drawn to particular job functions, but trying to assess the nature versus nurture or personality versus job function impact on values and value constructs is outside of the scope of this study.
Respondent’s Reflections on the Research Process

Reflecting on the process of assessing organisational values through the repertory grid process, RR005 finds it difficult to separate his own values and perceptions from those of the company, but recognises they may be different.

This is a key point, since employees are effectively given the delegated responsibility and authority to manage relationships and create and secure value on behalf of a corpus. So to what extent must an organisation accept that its values are upheld, contaminated by or in conflict with individual values? And similarly should a supplier focus on satisfying individual or organisational value needs to be successful?

“I found [the repertory grid] very difficult because I think my own feelings are coming in. These things here are my feelings. But trying to overlay them where I think the company’s at is quite difficult”. (T1b)

RR005 recognises the potential impact of job function on CPV; indeed he changed role part way through this study. He considers that job impacts who they interact with, and how, and how often, and for what reason. He recognises that perceptions of value may change (vary) according to each respondent:

“I think it will be interesting when you’ve put it all together what the actual output is...Because I don’t know how many of these you’re doing
but mine is obviously centring around people ... For me, I’ve never done
grid work before... this kind of reflection, it’s telling me what in my heart
I thought I was...And on a personal note, it would be interesting to see
what other - not naming the individuals but just as a generic landscape
...’I looked at 12, 15 people and a couple or three were ‘people’, a couple
or three were ‘product,’ you know?” (T2a)

RR005 believes that it is difficult to measure customer perceived value attributes
(both rate importance and evaluate whether they are received), especially the
intangibles:

“[Responsiveness] gets talked a lot, but truly I haven’t read anything
about ‘R’ and how do you measure it and what do you measure it
against? Is it lead time or is it when things go wrong? Time to correct
it? In engineering, is it design changes – how quickly we can
implement?...How do you measure honesty?” (T2a)

5.7 Summary

The observations and arguments presented in this chapter are based on the
researcher’s interpretations and knowledge to provide answers to the study’s three
research questions. The questions focus on how to conceptualise the phenomenon
of business-to-business customer perceived value, and provide insight to the
dynamics of how and why the phenomenon may or may not change.
Value is idiosyncratically determined

The findings appear to confirm foundational premise 10 of SD Logic, in that an individual's conceptualisation of value-in-use is idiosyncratically and phenomenologically determined by that person as a beneficiary. Furthermore it highlights how changes in value are also determined idiosyncratically and phenomenologically, most notably at the attribute level of service provision.

Value conceptualisation is dependent on role and knowledge

Value change appeared to be more associated with changes in each of two individuals' relative positions and roles within the organisation where there were a large number of increases or decreases in value. Whereas minimal or no change in value for one individual came from the need in his role to provide stability for supplier development.

CPV change is linked by respondents to micro- and individual factors

Whilst value constructs informed by an individual's sets of organisational values and individual values did not change per se, there were individual changes in terms of value reconfiguration within each respondent's value system hierarchy. Each respondent noted that different macro-environmental factors continuously influenced the organisational climate but did not directly impact as critical incidents on their sets of organisational values and individual values when deciding to change what they perceive to be of value.
Moreover, it may be that the closer the event or exchange is to the individual (micro and individual factors rather than macro- and meso-environmental factors), the easier it is for the individual to see a direct influencing link to customer perceived value conceptualisation and change because it feels more personal and relevant.

**CPV conceptualisation rationale is difficult to recall**

Whilst for two of the three cases there was moderate or significant change in customer perceived value, across the three research phases the reasons for change or the rationale of the former assessment were difficult to recall and sometimes speculative.
6 Discussion

6.1 Introduction

Members of organisations need to be clear about their collective, dynamic perception of value in a continually changing, networked ecosystem of resource integration and mutual service provision, in order to make valid value propositions to their customers and other stakeholders (Malhotra, 2012). It is also important for an organisation to have a better understanding of what it considers its customer perceived value to be so that the organisation is able to communicate it as comprehensively as possible to its suppliers in order to receive valid value propositions for the co-creation of value (Frow & Payne, 2011).

To the researcher's knowledge this is the first 'real time', exploratory, longitudinal study of business-to-business customer perceived value change from the perspective of individuals in the role they play in their organisation related to its position as a customer to its supply base. A panel of fifteen key, influential respondents were tracked over an eighteen month period with the focal point of the research being conducting on three embedded exemplar cases within a UK manufacturing case study setting. The findings show that each of the individual respondents have their unique perspectives of customer perceived value. The results also show how and why the respondents have or have not made unique changes in their assessments of the phenomenon. Differing accounts of customer perceived value change are made, even though the respondents are from the same
functional operating area of the same organisation and may be exposed to the same macro-, meso- and micro-environmental initiators of change.

Changes in customer perceptions of contextualised value, however, do not exist in a vacuum so this study has also built on overlapping areas of adjacent research into the theories of service-dominant logic of marketing, the servitisation business model and organisational development in terms of change and behaviour. These areas of research are consequently given consideration to a lesser extent when it comes to claiming contributions to knowledge about customer perceived value change. The researcher acknowledges the usefulness of theory and the repertory grid technique, employed from the subject area of cognitive psychology for this study, but is also acutely aware that any claims about in-depth knowledge contributions to that particular subject area are outside its realms and purpose.

Later in the chapter consideration is given to the contributions of the research in terms of theoretical and methodological implications for the academic community, plus managerial implications regarding the application of theory in terms of practical outcomes. Throughout the chapter the research results are interpreted with reference to the extant literature on business-to-business customer value change. A summary concludes how the findings support and/or challenge what other researchers and authors have reported in the literature.
6.2 Theoretical Implications

6.2.1 Difficulties in Perceiving Customer Value

Perceived value is phenomenologically processed by customers through a combination of imagining what value looks like and experience of what it is in mental representations. These representations are socially constructed, context laden and accessed in ex-ante preconceptions and ex-post evaluations by individuals at different structural levels within organisations and service ecosystems (Edvardsson et al., 2012; Ng & Smith, 2012). Imagination and experience are mental representations that come in many forms, e.g. externally sensed, inwardly sensed, cognitive, affective, aesthetic, etc, and are inherently opaque, vague and subjective perceptions as they are always owned by individuals (Sokolowski, 2008; Rescher, 2005).

Nevertheless, an individual's view of the world is not a mirror image of reality; rather it is that perception is both a proactive and reactive intelligent construct used in facilitating the best chances of survival in a complex and complicated environment. It is highly important, therefore, that individuals' value systems assist them in their ascribing of meaning in order to try and make on-going sense of their perceived worlds. In this regard an individual's resultant behaviours and expectation levels can also influence perception in certain ways, and are related to the notion that suggestion can influence judgements. Whilst processes of perceiving, evaluating and assessing take place as and when required, they draw on memory concerning value determination from the individual's previous social and
cognitive processing of the vast amounts of different and information and changing schema.

This is an interesting point when considering changes in customer perceived value, particularly if an individual is unable to draw on memory or make a connection in recognising the relevance between influencing events and any proactive or reactive change in value. Furthermore, differences in time between value proposition assessment and value in-use assessment may be lengthy or subject to reflection at a later date. Therefore memory may not always fully take into account the possibility of other reasons for the impact of changes on customers' perceptions of value. It is also possible, in collective terms for an organisation, that there is the difficulty of no shared memory on which to draw. For example, the individuals making conscious, access-value assessment of expected phenomenological value prior to and during the co-creation of value propositions, may not necessarily be the same individuals trying to assess the conscious, access-value evaluations of experienced value-in-use.

In this research study, all three respondents' conceptualisations of customer perceived value appeared rather unstructured and informal, reflecting a weak, conscious understanding of customer perceived value from their own perspective and in a collective organisational stance. Whilst the organisation's brand promise, strategy and values were well communicated, respondents did not have access to a formal, organisational system for valuing customer perceived value, and recognised they could only make a partial assessment of value in terms of benefit trade-off,
benefits versus sacrifices, consequences and end states. This may be those respondents did not have a value orientation towards those value components, principally because of their role and nature of their job function within the organisation. Even so, respondents recognised that others in the organisation may recognise and be able to assess the elements of customer perceived value that they do not take into account.

The three respondents were able to determine value subconsciously when accessing the process of valuing. They appeared to take their output on conceptualising for granted, because their value systems were seemingly successful at building what they believed to be an accurate representation of the real world through their perception of it. Even so, in two instances when respondents were reflecting on the research process, they claimed to be unaware, or said they did not fully realise, what a difficult task the brain had to perform in providing their personal interpretation of the environment. However, perception is not always perfect, and as value appears to be inherently ambiguous, then making sense of the meaning of value remained difficult for individuals in both their conceptualisation of customer perceived value and any changes in the phenomenon.

As the respondents' results reveal, sometimes an individual's perceptions are re-evaluated or adjusted, for example where there can be a notable difference between conception and perception. That is, an individual sees something is wrong in terms of misperception but knows it is wrong through correct conception. This was demonstrated in the instance of one respondent downgrading the highest
possible score for an attribute in terms of perceived importance, realising on reflection and with the benefit of more information, that the original score was an ideal perception that any supplier would not be able to meet. Consequently an individual's value system will flip-flop backwards and forwards in tension between two or more interpretations (Flint & Woodruff, 2001). It appears, therefore, that tension is driven by the expediency of being pragmatic yet plausible whilst striving for accuracy or searching for the ideal. There also appear to be individual differences in whether tension is more outwardly-directed, e.g. concerns of stability versus change for suppliers, or more inwardly-directed, e.g. concerns of change versus stability in new roles within the organisation.

Aligned with such tension is the issue of moods and feelings, also identified by the respondents. Although moods and feelings have been conceptually proposed as other aspects of tension-based influences on customer desired value change, along with emotion, stress, and attitudes, none of these factors has seen empirical investigation yet (Flint & Blocker, 2004).

6.2.2 Issues in Conceptualising Customer Perceived Value

In conceptualising business-to-business customer perceived value the three respondents' show that the phenomenon is determined by the elements of service attributes necessary for resource integration and the sought consequences. In addition, customer perceived value is also determined through the impact and degree of congruence between organisational values and the values of the individual. The paradox of value conceptualisation, though, is that whilst value
attributes seem to grow exponentially from different variable combinations of service offerings, specifications and portfolios, actual conceptualisation appears to be constrained at the consequence and end-states levels. Individuals’ frameworks of instrumental values comprise few competencies and behaviours at the consequence levels. There are fewer still in the terminal values set.

Nevertheless, there appears to be little or no agreement amongst individuals on a distinct delineation of value attributes, consequences or values. One individual’s attribute can be another individual’s consequence which can be another individual’s values. Nor do respondents have similar priority of where they each place what it is that they value in their value hierarchy. This appears to build on Flint et al’s (2001) suggestion that change at one level of the hierarchical levels of value is not always associated with change at another level.

The research results also revealed that individuals’ values, and what it is that they value, do not have equivalence of meaning in how they construe value. Constructs expressed through words and phrases have different meanings to different individuals because of the idiosyncratic interpretations shaped by the individual’s experiences and knowledge. For example, the pairing of ‘dependable’ with ‘unpredictable’ as the opposing construct for one respondent and the pairing of ‘dependable’ with ‘misunderstanding’ for another individual.

This area seems to be a fruitful area for further research as the emphasis in individual differences is not so much on what is valued in terms of positive
consequences, i.e. benefits, but rather is not valued in terms of being disadvantaged or risk, i.e. sacrifices. In other words, respondents know what they want, but also what they do not want or what inhibits value from being delivered. This appears to be in line with prospect theory’s premise that individuals are more risk-averse than they are gain-seeking, where they see a negative end of a value construct as a cost or uncompensated loss (Kahneman & Tversky, 1979).

All three exemplar respondents considered a number of the key factors that comprise relationship marketing (Morgan & Hunt, 1994) and reputation management (Fombrun, 1996), e.g. credibility, reliability, trust, commitment, and responsibility, as sought-after benefits at the consequence hierarchy level of value. However, it was interesting to note each respondent’s individual differences in emphasis about those key factors - RR001’s main emphasis was on credibility, R003’s main emphasis was on trust and RR005’s main emphasis was on reliability. The inference from this could be that emphasis is related to the three respondents’ current respective roles of risk and revenue sharing partnerships with suppliers, business improvement across the gas turbine supply chain unit, and supplier development.

The respondents’ responses indicate support for foundational premise 10 in the theory of service dominant logic of marketing (Vargo & Lusch, 2008) in that customer value is uniquely perceived and phenomenologically determined by the beneficiary. Nevertheless, the individual differences illustrate that the pursuit of a single, unified, all-encompassing evaluative theory and model of customer
perceived value, composed of 'silver metrics' (Ambler & Roberts, 2005) does not do justice to the phenomenon's complexity. It also appears virtually impossible for there to be a unified, organisational view of customer perceived value, let alone just one model of it in a universal sense. Such a lack of agreement amongst customers, therefore, does not assist suppliers in easily determining customer perceived value when developing credible and acceptable value propositions to customers.

Defining what a customer perceives value-in-use to be appears so multi-dimensionally complex, and so personal and variable, that it seems that the answer can only be determined by the customer himself or herself. So, at best, management from supplying companies can only guess at what value means to their customer organisation or rely on a narrow and unrepresentative view. If that premise holds true then individuals in business-to-business organisations need to be able to conceptualise and perceive what they consider to be contextual value in-use as a prerequisite to achieving the co-creation of value with other stakeholders in a service ecosystem. The first step to accomplish this would be for organisations to apply the maxim, 'seek first to understand yourself in terms of what it is that you perceive value to be, and then for that perception to be successfully communicated to and understood by others'. Moreover any changes in customer perceived value also need to be taken into account.
6.2.3 Uncertainty of Causal Links in Customer Perceived Value Changes

A similar question about the likely conceptualisation of customer perceived value in a single model can be asked about customer perceived value change: how likely is it that there is one predictive model, or indeed any model at all for changes in customers’ perceptions of value? More worryingly is that any changes in the different ways individuals perceive customer value may lead to erroneous interpretations or assumptions of it by suppliers. Changes may also go unnoticed or may be given the wrong emphasis, or be subject to the counteracting force of stability, as experiences of both are pursued by different sets of individuals in organisational life (Leana & Barry, 2000). For a supplier this could mean the distorting of a customer’s assessment of the supplier’s value proposition and the actual fulfilment of service provision for both parties.

Without an understanding of how and why changes in customer perceived value over time have occurred, individuals in organisations are more liable to make limited value-in-use assessments from their own organisational perspective of being a customer. In turn, the potential for organisations to maximise the co-creation of value through effective and efficient resource integration with other stakeholders is likely to be rather weakened. Stakeholders from supplying organisations in particular are affected by these limitations. This is because it is imperative for marketers in supplier organisations to know what value means for their customers, so that value propositions made to customers by those suppliers can be crafted more accurately and competitively, rather than being second-
guessed. If suppliers can successfully keep to the promises they made in their value propositions, so that value fulfilment is realised for and recognised by the beneficiary, then retention as a supplier is potentially deemed to be more achievable.

Whilst empirical studies show that customer perceptions of value are reasonably well researched and documented, the same cannot be said when it comes to knowledge about changes in customer perceived value. What little value change literature exists is centred on customers' desired value change, i.e. a wish list of what value is required in the future which is more akin to the ‘desirable’ i.e. what they think ought to be desired. There is a tendency therefore for researchers in this area towards speculation in trying to create a predictive model with direct links between the multi-dimensional triggers of change from the macro, meso- and micro-environments and conceptualisation of the new state of customer desired value (Flint et al, 1997; Flint & Woodruff, 2001; Lapierre et al, 2008). However desired value is only one aspect of the perception of value. Consequently the decision to research this phenomenon was venturing on to new ground through the introduction of concepts at variance or not fully taken into consideration with most of the beliefs on value change that had been largely established.

However, whilst these studies have contributed to some knowledge about what the antecedents of customer value change are, they have failed to make a direct link to change outcomes and have only been able to infer them. This appears to be because the actual process of valuing, i.e. using the moderating impact of individual
values and organisational values in order to determine what value is and has become, appears to be a largely neglected area in need of research. This study, an exploratory, idiographic research design using an interactive approach of interpretive qualitative elements mixed with descriptive quantitative elements, is the first known initial step in addressing that need.

The respondents’ research findings show that individuals’ assessments of customer perceived value are ‘of the moment’, i.e. the split second that a decision is made to change a state of customer perceived value, be that attributes, consequences or end-states; what results is the current state of customer perceived value. Consequently, combining the above argument along with the service-dominant logic of marketing’s premise that value can only be realised in use, the claim that ‘customer desired value change’ exists appears to be redundant and seriously weakens any previous research into that aspect of value change phenomena. Indeed, how well can anyone really predict what they will feel, value, sense, want in the future?

The research has highlighted that for the three respondents there was no evident direct link of triggers or initiators of change causing changes in customer perceptions of value through critical incidents. What appeared to cause two respondents to change their perceptions of customer value at the value attribute level was more of a recalibration of their individual and organisational value hierarchy systems, invoked through reflection and rationalisation of their value frameworks and assessment rationale. This occurred after experiencing
unexpected challenges in organisational climate aspects, e.g. review meetings with suppliers and the tension caused through entering new roles within the organisation.

The other respondent only made a very minor change in customer perceived value at the attribute level, albeit having also invoked a similar number of changes as other respondents in priorities within his individual and organisational value hierarchy systems. Once again, the issue of the respondent's role seems to have a key influence in that, as an agent of change in terms of supplier development, the objective is to create stability for the organisation. This aspect is missing from an empirical assessment of a theoretical model of the antecedents of customer desired value change (Lapierre et al, 2008).

It can be observed that any explanations about cause and effect of change are difficult to make because one exploratory, qualitative approach could not be used solely to develop models of them (Flint et al, 2002). An alternative, quantitative approach was flawed in asking respondents at a single point in time about the antecedents and links to customer desired value change three years prior to that date, and to have foresight three years into the future about the same parameters (Lapierre et al, 2008). In this real time study respondents did not appear able to be sufficiently definitive about cause and effect variables, or able to make connections between them.
6.2.4 Revised Conceptual Framework

Reflecting on the conceptual framework of the customer perceived value change initially introduced in Figure 5 in Chapter 2, refinements are proposed to reflect the findings in Figure 21. Principally, the framework now recognises that the effect of an individual's personal characteristics, in terms of impact on the customer perceived value, is more one of environmental influence than being integral to and indistinguishable from that person's individual values. This conclusion was in part drawn from the respondents' views that it was more likely to be changes in personal circumstances or tensions of new roles than a macro-, meso- or micro-environmental level adjustment that caused them to adjust their perception of value. It, therefore, reflects the idiosyncratic and varied nature of individuals as initiators of change, distinct from the corpus or organisational initiators of change. The framework now also reflects that individual values themselves are impacted by macro- and meso-environmental initiators.

The researcher complements the new conceptual framework with a proposed definition of customer perceived value change:

"Customer perceived value change is any contextual alteration of importance in value status or hierarchy of sought-after attributes, consequences and values in a customer's conception and assessment of value, be it with or without experience".
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

6.3 Managerial Implications

The findings and analysis of the research study highlight three key implications for strategic marketing management from a knowledge based theory of the firm perspective, where organisational knowledge of customer perceived value change capability depends on the knowledge generated, captured and distributed by individuals in their relational contacts within and outside of the organisation and the prevailing organisational climate (Sveiby, 2001; Goll et al, 2007). The value of such an approach is measured as positive when the cost of rediscovering and re-
using knowledge of the implications and impact of customer perceived value change is less than the cost of rediscovering that knowledge when the organisation needs to re-use it (Kelleher & Kannenkeril, 2011).

First, there is a need for the surfacing of individuals’ own tacit, experiential knowledge of customer perceived value change through knowledge tracking and management. The second need is the establishment of a common language for effective communication of explicit knowledge of customer perceived value conceptualisation and change to internal and external audiences. The third need is for a renewed emphasis on the market orientation concept and the essential aspect for individuals within an organisation in keeping close relationships with other relevant individuals from other key functions within the organisation, considering that different functions may interpret value concepts differently.

Aligned with this is the keeping of close relationships with individuals from external marketplace customers, industry supply-side organisations and other important stakeholders who are able to exert influence and control over the organisation’s perception of value in its role as a customer. Similarly, supporting a fundamental concept of relationship marketing, even if there is an established and communicated conceptualisation of value at a customer organisational level, suppliers need to develop effective relationships with the people in those customer organisations to understand individual’s value needs.
6.3.1 Customer Value Knowledge Management

With regard to the first need it became apparent from the research interviews that, outside of relying on their memories, respondents did not refer to any individual knowledge tracking process or have the capacity to know the aspects of what constituted or indeed constrained an organisation’s perspective of customer perceived value. Consequently a formalised knowledge tracking and knowledge management system to identify, unify, assess and record what individuals perceive value to be, and any changes in how or why customer perceptions of value altered, did not exist in the organisation. However, there was some evidence of partial functional metrics – such as the ‘match fit’ programme and other key performance indicators and processes within the company’s management system.

It was notable too that respondents had incomplete perspectives of customer perceived value, even allowing for the seniority of respective roles, and were only able to identify with some but not all of the various states of customer perceived value, i.e. benefit trade-off, benefits versus sacrifices, means-ends consequences, desirable end states, all encompassed and nested within in-use contextual experience. It appears, therefore, that individuals in organisations continue to be hampered in optimally understanding and measuring their own perceptions of what value means to their organisation in its role as a customer. These two observations reflect and give support to the lament that “remarkably few firms have the knowledge and capability to actually assess value in practice” (Anderson & Narus, 2004, p.3).
Organisations probably need to work harder and faster, therefore, in ensuring an accessible organisational memory is available that is suitable for tracking customer perceived value and logging how and why changes in it have taken place (Kaur & Gupta, 2010). This would necessitate building, operating and, more importantly, maintaining a consistent and coherent knowledge management system. The dissemination of this information within and outside the organisation to appropriate decision-makers is vital in order to improve their competences, and its success hinges on whether individuals are willing to share what they know (Sveiby, 2001). Perhaps the relatively new British Standard BS11000 on Collaborative Business Relationships, whose output is a mutually agreed stakeholder relationship management plan for value, would be a starting point (BSI, 2011).

Such a system would facilitate the codification and personalisation of implicit and explicit knowledge about customer perceived value change through an integrative framework, enabling analysis to assist the transition from individuals’ perspectives to an organisational collective state, but recognising that not all tacit knowledge can be made explicit (Baumard, 1996; Hansen, 1999). Codification is where codified data is stored on computer from measurement instruments used to capture an individual’s history of customer perceived value change so it could be used reliably, quickly and collectively by others. Personalisation is where individual experience and expertise is harnessed by individuals in using their computers to communicate their knowledge of customer perceived value change to others. Nevertheless, a gap may still remain in understanding how individuals’ involvement with knowledge
management may influence organisational current assumptions, practices, learning and innovation in the pursuit of the co-creation of value (Peters, 2012).

6.3.2 Using Effective Communication

The second need is for effective communication, and this is partly related to the first need in that communication is a core process in creating and managing knowledge. However, effective communication is also a fundamental prerequisite in realising its social transmission objectives, i.e. shared interpretation and meaning. This is formalised through establishing a common language to be used with both internal and external audiences. Internally a common language is essential so that the organisation is able to enhance its capabilities as a learning and intelligent organisation. The common language gives its individuals a common platform between provider and customer and different parts of the organisation to facilitate strategic alignment and manage change better through the leveraging of innovation, informed by value experience (Martinez et al, 2010). Regarding other external audiences, a common language is essential also for the successful application of explicit knowledge in enabling the co-creation of value with other stakeholders.

Similarly, in terms of communication and understanding, there is a potential danger to the practical relevance and application of theory if some academic researchers distance themselves by standing in rooms full of mirrors which they clean and polish to give what they believe are increasingly accurate, detailed reflections of reality. Under such scenarios reality will continue to elude those researchers.
because they can only ever get ever better approximations of the truth if they remain indoors or only very occasionally visit the outdoors. In using their own language to express meaning to what it is they think they can see, new meanings are given to ordinary and familiar terminology as academia latches on to them to label or to describe their new discoveries of theories, concepts, domains, processes and procedures. Sometimes these new meanings, or even the creation of altogether new words, appear, however, to be either far-fetched or even a rewriting of the past's actions where concepts and terminology were not available at the time the actions took place (Haddock, 2002). The new meanings are therefore simply unrecognisable in relation to the ones currently in use by practitioners in their worlds, as mentioned by one of the respondents, who claimed the organisation spoke the language of 'lean thinking'\(^2\) (Womack et al, 1990).

The emerging service-dominant logic of marketing mind set provides several good examples of the attempts to rewrite marketing discourse (Ellis et al, 2011). For instance, the re-naming of manufacturing as 'goods-dominant logic', even though not all manufacturing companies apply a goods-dominant logic. New terms like 'service infusion' and 'servitisation' express the trend amongst manufacturing companies to generate a higher proportion of value through service provision, rather than just delivery of a product to a customer (Vargo & Lusch, 2004; Gustafsson et al, 2012). However, in service-dominant logic, value cannot be 'delivered' but only proposed by the supplier to its customer, and can only occur

\(^2\) Lean thinking is a philosophy and production practice that considers the expenditure of resources for any goal other than the creation of value for the end customer to be wasteful, and thus a target for elimination (Bhasin & Burcher, 2006)
when the service offering is used (Vargo & Lusch, 2004; 2012). The confusion means also having to propose the retention of the term 'customer' rather than using 'actor-to-actor', including the current reclassification of the terms 'business-to-consumer' and 'business-to-business', because of an academic argument about the conceptualisation of the stratified individual (Peters, 2012).

In practice engineers' perspectives generally take a broad, positive view of marketing and marketers, even though there are inter-professional rivalries between both professions because marketing has some difficulties in locating itself and speaking the right language within manufacturing organisations (Eriksson, 1999; Shaw & Shaw 2003). Consequently, changing the language of marketing could have not only had a considerable impact on the importance of the relationships between the marketers and engineers across a range of functions in an organisation but also between the organisation and its external audiences who have to work together in order to co-create propositions and the fulfilment of customer perceived value (O'Malley & Tynan, 1999).

It must be remembered that new knowledge is not just the domain of academics pursuing Mode 1 i.e. pure theoretical research but is produced also by trans-disciplinary practitioners in Mode 2 i.e. applied research, or perhaps even better is co-created through both parties working together (Gibbons et al, 1994; Transfield & Starkey, 1998; Baron et al, 2011). This cooperation should therefore extend to the co-creation of emerging meaningful language for both parties rather than having one party's language asserted over the other. Just as there is co-creation of value
between an organisation and its external stakeholders an organisation’s internal perception of value and any changes in its role as a customer is also a matter of communication amongst the individuals in the organisation. Any degree of shared understanding and meaning within the organisation could be compromised, however, by the issue of the different languages used by individuals from the various disciplines, e.g. strategy, marketing, finance, that comprise the organisation.

In order to transcend this complexity and any barriers to a unified understanding of the organisation’s current and future state of customer perceived value, organisations need to facilitate and lead internal marketing dialogue. Such dialogue should inform employees on how organisational values and individuals’ values, as well as the impact of triggers of change, can lead to the new collaborative conceptions and evaluations of what is of value for the organisation. One avenue towards this could be by testing and adopting Gustafsson et al’s (2012) framework of frequency, direction, modality and contextual content of communications.

6.3.3 Revisiting and Implementing Market Orientation

It can be seen from the preceding discussion of knowledge management and effective communication that there is a suggestion for a shift in emphasis on ensuring everyone in the organisation understands the marketing concept and for them to share all the external information gleaned in practice, or from research-generated outcomes, about customer perceived value change. This is not unlike Kohli & Jaworski’s (1990, p.6) definition of market orientation:
"Market orientation is the organisation-wide generation of market intelligence pertaining to current and future customer needs, dissemination of the intelligence across departments, and organisation-wide responsiveness to it".

However, in this instance, the requirement for co-ordinating and encouraging inter-departmental and organisation-wide activities to focus upon responding to the current and anticipated needs of the customers is not externally based. Instead it is getting the individuals within an organisation to have a more comprehensive understanding of what the organisation actually perceives value to be for itself in its role as a customer. The researcher posits that knowledge of changes in customer perceived value need to be conceptualised, operationalised and evaluated at four levels in an organisation.

Three of these levels, i.e. normative, strategic, and operative, are based on Schwaninger's (2001) framework of management levels which define the level, its logical need in terms of legitimacy, effectiveness and efficiency, and the details of the knowledge control variables and parameters. The researcher has adapted the framework by adding a fourth management level - financial - which takes into account the issue of economy. Another column has been added that places the different sources of value of customer perceived value – values, consequences, appropriation and attribute benefits - at each level onto the framework. Table 32 shows the adapted framework the four levels, along with each level’s focal point of
interest, organisational value knowledge parameters, plus control criteria and sources of customer perceived value.

Table 32: Levels of conceptualising and operationalising value within organisations

<table>
<thead>
<tr>
<th>Management Level</th>
<th>Focal Point of Interest</th>
<th>Organisational Value Knowledge Parameters and Control Criteria</th>
<th>Sources of Customer Perceived Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normative</td>
<td>Legitimacy</td>
<td>System: ethos; identity; purpose; vision; mission; structure; culture</td>
<td>Values (valuing process and congruence)</td>
</tr>
<tr>
<td>Strategic</td>
<td>Effectiveness</td>
<td>Service: customer solution provision; core competencies; resource integration capability; application of critical success factors; sustainable competitive advantage; collaborative position; goals &amp; objectives achievement</td>
<td>Consequences (means - end)</td>
</tr>
<tr>
<td>Financial</td>
<td>Economy</td>
<td>Monetary: price; costs - capital and ownership; profit; cash flow; return on investment; net worth; opportunity cost; shareholder value; risk reduction; liquidated damages</td>
<td>Appropriation (exchange)</td>
</tr>
<tr>
<td>Operative</td>
<td>Efficiency</td>
<td>Attributes: functional - products; services; monetary; time; effort Attributes: emotional - relationship; image; social; epistemic; hedonistic</td>
<td>Benefits (trade-off)</td>
</tr>
</tbody>
</table>

Source: Adapted by P.B. Connor based on Schwaninger (2001)
6.4 Methodological Implications

Quite often some researchers and managers from particular perspectives and backgrounds find or assume that their paradigm or chosen methodology is so obviously the correct one that they may not always be properly bothered to defend their choice of methods, if at all. In this regard some of the most significant and far-reaching controversies in the customer perceived value research area have arisen - but not because there is disagreement about the actual data. Rather the disagreements are about their perspective being the only focus, the choice of methods being used to acquire and analyse the data, and making claims about knowledge and the subsequent relevance of the results. It is important, therefore, that different paradigms, methodologies and methods are employed and can be improved in order to advance knowledge of the phenomenon under study.

Whilst researchers may not always agree on the most useful approach to research, this study into customer perceived value change lends support to claims that there is no one best way of framing, producing, using and disseminating knowledge (Pettigrew et al, 2001). Specifically, this study's measurement of value and value change at the attribute level had the advantage of being relatively easy for respondents to participate in, using an itemised rating scale in determining what value comprises, assessing value in terms of desired or expected levels of importance. This approach of a split scale was found to be most useful because it helped individuals to be more critical in the process of assessing value and recording of their changes in it through reducing the likelihood of paradoxical
results based on a mixture of what value ought to be, in an universal sense, and what value actually is for themselves in application i.e. desired and expected (Hofstede, 1984).

However, value attribute level measurement has the disadvantage of not being able to capture the complex thought structures employed by of individuals. This is pertinent, particularly in individuals determining their values and evaluating the consequences of those values not being realised. It also applies to measuring change of values per se, and in the hierarchical positioning of values within an individual’s value system and for comparing perceptions of value (as sought benefits received compared with sacrifices made in realising the benefits).

The use of repertory grid technique in this research has illustrated that these aspects of capturing a respondent’s complex thought structures can be achieved both for each individual value and the changing thematic grouping of clusters of values in a hierarchy. The technique, therefore, lends support to the rationale for taking a more qualitative approach so that any tacit and hidden knowledge of a phenomenon is revealed by the individuals that do the construing and making of decisions. If not there may be reliance, or over-reliance, on positivistic, law-like generalisations from the resultant traditional quantitative output normally associated with repertory grid technique (Hair et al, 2009, Ellis et al, 2011). In this research study the focus was about revealing how and if individuals derived their perception of actual value from their espoused individual values and the espoused
values of their organisation. The technique was deemed to be successful in this regard.

Repertory grid technique appears to offer another benefit, in that its application automatically generates a series of descriptive, bipolar, semantic, differential scales as a self-report instrument that quantitatively measures an individual's meaning of language on a stimulus concept. Using repertory grid to generate semantic differential scales from a number of individuals would help to meet one of the key requirements associated with structural equation modelling - that of having at least four or more indicators per construct in order to get a well-fitting model. This would offset a lament that the current trend to overuse statistics in academic marketing research, e.g. applying structural equation modelling without really acknowledging its limitations, "is getting in the way of marketing as an academic discipline" (Baron, 2010, p.236).

However, the successful application of this suggestion may not be able to be realised immediately, partly because of the embryonic state of customer perceived value change, and partly that structural equation modelling is a theory-driven, confirmatory technique. This second aspect of searching for the correct model requires structural equation modelling to have well specified measurement and conceptual models. It is therefore best applied to areas of mature research with developed theories and much prior empirical work, usually based on large sample sizes of greater than 150.
7 Conclusion

7.1 Introduction

An evaluative and summative claim about the answers to the research questions and how they relate and contribute to the literature is made in this chapter. Self-critical reflexivity on the extent to which substantive, theoretical and methodological aims have been achieved and on what the researcher has learned in relation to improving the research design and conducting research is posited. The limitations of the research are identified and made transparent to other researchers and practitioners before a consideration of what subsequent research into customer perceived value change might usefully focus on in the future.

7.2 Answering the Research Questions

The researcher's interpretative knowledge position informed this research's exploratory case study design in order to answer why and how changes are made by customers in their perceptions of value. Woodruff & Gardial's (1996) means-end approach of a hierarchical view of value at three levels i.e. attributes, consequences and values as desired end-states was employed to surface and provide a better understanding of the phenomenon. Fifteen individuals, who were considered to be key informants with the responsibility for determining value from their supply base, were selected from a purposive sample of employees of a United Kingdom based
global aerospace organisation. Data collection occurred at three points in time over an eighteen month period using a mix of appropriate research methods. Three exemplar embedded cases were then selected to specifically explore and understand individual differences in the most amount positive and negative changes and the least amount of customer perceived value change.

Three questions guided and framed the empirical investigation. The first question was how does an individual conceptualise customer perceived value, be it personally or in an organisational environment? The second question is why does an individual change their conceptualisation of customer perceived value because of any external or internal macro, meso or micro environmental initiators of change? The third question is how does an individual change their conceptualisation of customer perceived value through proactively anticipating, by reacting immediately or after a period of reflection to the impact of changes?

**How can customer perceived value be conceptualised?**

- The research results show customers identification with the 55 variables contained in the value attributes questionnaire sourced from the extant academic literature and/or industry standards on business-to-business customer value and supply chain selection criteria. The results also show the presented attribute variables were not exhaustive as demonstrated by one individual's inclusion of 'meets whole business case' and 'risk flow-down' in order to conceptualise customer perceived value in a role where business case risk assessments are intrinsic. Aligned with this the results
show that customers perception of value was more critically determined in the process of assessing value by using a split rating scale of importance to acknowledge that not all value attributes are equal thus reflecting expected value attributes are 'must have' variables that seriously detract from value-in-use if they are not met, whereas desired value attributes contribute overtly to value-in-use if achieved.

- This study reinforces the importance of recognising that value is a multidimensional concept. The research results also revealed that an individual's values, and what is of value to that person, do not have equivalence of meaning in how customers construe value. Constructs expressed through words and phrases have different meanings to different individuals because of the idiosyncratic interpretations shaped by that individual's experiences and knowledge. For example, the pairing of 'dependable' with 'unpredictable' as a value construct for one respondent and the pairing of 'dependable' with 'misunderstanding' for another individual's value construct.

- This study has highlighted the importance of recognising that a means-end approach to value provides a broader perspective of conceptualising customer perceived value than just the traditional tendency to focus on the value inherent in an object or an outcome at the attribute level. By also taking the levels of consequences and values i.e. as desired end-states into consideration, this study has shown a second source of value emerges, that
of behaviour. This was deemed an important aspect when customers evaluate and place value on the worth or importance of human interaction in the integration of resources in the successful provision of service. In this regard all three exemplar respondents reported value constructs that comprise elements of relationship marketing and reputation management as sought-after benefits at the consequence hierarchy level of value e.g. credibility, reliability, trust, commitment, and responsibility. However individual differences in emphasis were also noted - RR001's was on credibility, RR003's was on trust and RR005's was on reliability. The result infers customer perceived value is related to the respondents' current respective roles of risk and revenue sharing partnerships with suppliers, business improvement across functional boundaries, and supplier development.

- The research study demonstrates support for foundational premise 10 in the theory of service-dominant logic of marketing in that customer value is uniquely perceived and phenomenologically determined by the beneficiary. In addition evidence from this study shows there to be little or no agreement amongst individuals on a distinct delineation of value attributes, consequences or values. One individual's attribute can be another individual's consequence which can be another individual's values. Nor do respondents have similar priority of where they each place what it is that they value in their value hierarchy. These results reinforce a personal
constructivist view of knowledge and experience for individual differences in customer perceived value.

- The research study results show that the combined use of critical incident technique and repertory grid technique to elicit 'real-time' value constructs from elements comprising individual personal values and organisational values provided a deeper understanding of customer perceived value at the consequences level of the means-end value hierarchy. In particular the study found individual differences in customer perceived value are not explained so much by what is valued in terms of positive consequences, i.e. benefits, but rather what is not valued in terms of being disadvantaged or put at risk in not realising desired end-states where the negative end of a value construct is perceived as a cost, sacrifice or uncompensated loss. In other words, customers know what they value, but also what they do not value and put more emphasis on the latter aspect because they are more risk-averse than they are benefit-seeking.

Why do customers change their conceptualisation of customer perceived value?

- Results from this study show that individuals have a general awareness of the myriad of possible different reasons why changes in value inevitably occur. Each customer noted that different macro- and meso-environmental factors created continuous influences on the day-to-day organisational climate. The study thus revealed a positive link between making minor recalibrations in customer perceived value as alterations or adjustments at
the value attribute level as customers sought to adapt their perception of value to a dynamic environment and context. However, whilst for two of the three respondents there was moderate or significant change in customer perceived value at the attribute level across the three research phases, the reasons for change when rationalising them against the former assessment were sometimes difficult to recall and on occasions speculative. The results also showed that customers were unable to attribute criticality to unprompted and prompted identified incidents as having a direct impact in changing their perception of value.

- The study revealed that changes in customer perceived value were more likely to be reported as occurring because of influences originating at the micro level and level of the individual, rather than surfacing in the macro- and meso-environmental factors. Customers stated it was easier for the individual to see a direct influencing link to customer perceived value conceptualisation and change because it felt closer, more personal and relevant. In this regard the study shows that value change was more associated with changes in each of two individuals’ relative positions and roles within the organisation where there were a large number of increases or decreases in customer perceived value at the attribute level. Whereas one minimal change in value for one customer came from the need in his role to provide stability for supplier development.
• The research study shows that both individual values and organisational values have an influence on customer perceived value within and outside of the organisation of which the individual is a member in how customers used them to determine value constructs at the consequences level of the value hierarchy. It was noticeable that the organisation did not change its values - even though organisations do not really possess values apart from the values of its members - and neither did customers in terms of their individual terminal values. Surfaced value constructs at the consequences level i.e. instrumental values therefore did not show any changes in status or congruency either thus demonstrating the relative stability of customer perceived value over the research period.

**How do customers change their conceptualisation of customer perceived value?**

• The study shows that whilst value constructs at the consequence level informed by a customer’s sets of organisational values and individual values did not change per se, there were individual differences in changes of value reconfiguration within the customer’s value system hierarchy. A re-scaling of value hierarchies therefore took place where the ranking of relative importance of a value construct over others was seen to vary across time.

• Results from the study highlight how changes in customer perceptions of value are also determined idiosyncratically and phenomenologically, most notably at the attribute level of service provision. The study also revealed
individual differences in how some, but not all, of the changes at the attribute level were linked to hierarchical changes in customers terminal and instrumental values.

7.3 Trustworthiness of the Research

There are established and recognised criteria for establishing trustworthiness, and it is a vital process if we are to seek to contribute to a wider pool of knowledge and learning, and be able to depend on the contributions of others. The researcher has focused on both general research criteria and criteria meaningful for the interpretative, phenomenological analysis undertaken, for example considering Yardley’s (2000) four principles for assessing the quality of qualitative research, and seeking to apply them from the outset of establishing research methods and methodology design.

Whilst customer perceived value in a qualitative environment is highly subjective, and the focus of the research is conceptual, consideration of trustworthiness criteria is still highly relevant and arguably more important in supporting the execution of the research and interpretation of the findings. Table 33 sums up the criteria, and the demonstration of them in this research.
Table 33: Trustworthiness of the study and findings: interpretative criteria

<table>
<thead>
<tr>
<th>Trustworthiness criteria</th>
<th>Method of addressing in this study</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Credibility</strong></td>
<td></td>
</tr>
<tr>
<td>Extent to which the results appear to be acceptable representations of the data</td>
<td>18 months’ conducting interviews</td>
</tr>
<tr>
<td></td>
<td>15 respondents gave input during data collection and interpretation</td>
</tr>
<tr>
<td></td>
<td><strong>Result:</strong> participants understood process and reassessed their CPV at each data collection phase</td>
</tr>
<tr>
<td><strong>Transferability</strong></td>
<td></td>
</tr>
<tr>
<td>Extent to which findings from one study in one context will apply to other contexts</td>
<td>Theoretical purposive sampling</td>
</tr>
<tr>
<td></td>
<td><strong>Result:</strong> Theoretical concepts were represented by data from all participants</td>
</tr>
<tr>
<td><strong>Dependability</strong></td>
<td></td>
</tr>
<tr>
<td>Extent to which the findings are unique to time and place; the stability or consistency of explanations</td>
<td>Participants reflected on many incidents and day-to-day occurrences covering events, both recent and past.</td>
</tr>
<tr>
<td></td>
<td><strong>Result:</strong> Found perceptions and experiences unique to respondents</td>
</tr>
<tr>
<td><strong>Confirmability</strong></td>
<td></td>
</tr>
<tr>
<td>Extent to which interpretations are the result of the participants and the phenomenon as opposed to researcher bias</td>
<td>Meaning and intent re-confirmed at each collection phase with respondents</td>
</tr>
<tr>
<td></td>
<td>Preliminary findings to supervisors</td>
</tr>
<tr>
<td></td>
<td><strong>Result:</strong> Interpretations were expanded and refined</td>
</tr>
<tr>
<td><strong>Sensitivity to context</strong></td>
<td></td>
</tr>
<tr>
<td>Extent to which findings recognise the specific research context, material and other inputs through collection and analysis</td>
<td>Approach contained in one specific industry context</td>
</tr>
<tr>
<td></td>
<td>Repertory grid and interview research methods focused on both organisational and personal values</td>
</tr>
<tr>
<td></td>
<td>Transcript extracts included in analysis and findings</td>
</tr>
<tr>
<td></td>
<td><strong>Result:</strong> Interpretations recognised idiosyncratic nature of context and individual respondents’ CPV</td>
</tr>
<tr>
<td><strong>Commitment and rigour</strong></td>
<td></td>
</tr>
<tr>
<td>Extent to which attentiveness is given to the participant in data collection and dedication applied to analysis in a thorough manner</td>
<td>Researcher time dedicated to longitudinal study</td>
</tr>
<tr>
<td></td>
<td>c120 hours’ interviews carried out, transcribed and interpreted</td>
</tr>
<tr>
<td></td>
<td>Researcher’s and respondents’ reflections on research process</td>
</tr>
<tr>
<td></td>
<td><strong>Result:</strong> Findings are not purely descriptive but interpret and illustrate individual cases</td>
</tr>
<tr>
<td><strong>Transparency and coherence</strong></td>
<td></td>
</tr>
<tr>
<td>Extent to which research process is clear and there is a logical presentation of arguments</td>
<td>Pre-research methodology</td>
</tr>
<tr>
<td></td>
<td>Post-research confirmation of process</td>
</tr>
<tr>
<td></td>
<td>Reflections linked to theoretical assumptions</td>
</tr>
<tr>
<td></td>
<td>Researcher’s own paradigm acknowledged</td>
</tr>
</tbody>
</table>
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

<table>
<thead>
<tr>
<th>Impact and Importance</th>
<th>Result: Reader has visibility of process and understands objectives and outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extent to which the research is interesting and useful</td>
<td>In-depth insight to personal interpretation and conceptualisation. Specific industry context</td>
</tr>
<tr>
<td></td>
<td>Result: Research reveals idiosyncratic nature of CPV and provides recommendations for academic and management contexts.</td>
</tr>
</tbody>
</table>

### 7.4 Researcher’s Reflexivity

There is a tendency for researchers to consider that their findings, analysis and interpretations of what constitutes knowledge have emerged naturally from the methods deployed during the data collection period, rather than reflecting on their choices when designing and in conducting the research (Johnson & Duberley, 2003). A PhD researcher, although being one of the co-creators of interpretation through interaction in the interview process, is most likely to be the sole interpreter and writer of the text report containing knowledge contribution within a discipline-specific theory and social setting (Woolgar, 1988; Alvesson & Skoldberg, 2000; Hardy et al, 2001). Given the above and that descriptions of the phenomenon are only ever partially constituted, it is essential, therefore, that researchers seek reflexivity by engaging in critical appraisal of their own research practice and process in shaping the research outcomes (Hasselgreen & Beach, 1999). This is achievable through introspection or driven in conversation with others Hibbert et al, 2010).

Reflexivity is generally lauded, despite drawing criticisms: of being self-indulgent psychoanalysis to claim authority, exposing difficulties in being able to reveal
subconscious influences encountered in the process of reflection, causing paralysis and sterility of thought through excessive searching for respect as a researcher, and profoundly disrupting the subject-object and observer-object distinctions in interviews (Seale, 1999; Weick, 1999; Bryman & Cassell, 2006). A more severe criticism is that reflexivity is principally conducted by academics claiming ‘rigour’ in order to get the reward of being published in academic journals, rather than taking real action to make their work more relevant with a direct impact on and for practitioners (Gummesson, 2001; Thorpe et al, 2011).

Various frameworks and techniques for considering reflexivity are available to researchers in order to make the research process transparent and accountable to others, but more importantly for themselves (Finlay, 2002). Despite some differences in approach there is a common premise in all of the frameworks in that researchers should be reflexive about the domains of epistemology, method and discipline. The reason for this is so that the researcher is not being led astray in the role taken in producing knowledge – the ‘how’ and ‘why’ aspects of the researcher reaching the conclusions about knowledge and how that resultant knowledge potentially shapes the world (Gummesson, 2001). In this research study the researcher made constant re-iterations between personal experience of the research, potentially relevant theory, underlying assumptions, data collection methods and being open to alternative findings from the data and participants feedback.
From the outset of PhD study the researcher has attended a number of postgraduate research degree modules, seminars, workshops and conferences on and off university campus right through to writing up the thesis. Throughout the nine years of study the researcher has ensured the benefit of having access to a select number of independent third parties in order continually to discuss and challenge the philosophical paradigm, chosen methodology, methods, processes and procedures in designing and conducting the research. These independent third parties comprised fellow students, academic colleagues from other universities, members of learned institutes and professional trade bodies, and trusted business colleagues involved in the aerospace industry from both inside and outside the case study setting organisation.

In addition, the researcher participated in a 30-strong, peer-based, first period-end review of collective work to date, an independently refereed MPhil to PhD transfer panel at the end of the second period, and a number of meetings with two supervisors, albeit not as regularly as desired because of personal issues. All of the above interventions contributed to critical discussion and questioning of the chosen approach compared with alternative perspectives on the meanings of data and the relevance of findings emerging from the research.

In terms of introspection, the researcher documented any additional thoughts on the research methodology, methods and observations about the respondents, be they reflective-in-action or reflective-for-action post interview, through memos which were then attached to the case study file. Several times this resulted in the
exploring customer perceived value change in an uk aerospace manufacturing company: a longitudinal case study

researcher seeking out the most current academic papers centred on methodologies and methods to understand if doubts or insights experienced during the data collection had been identified in the latest literature since the original research design had been generated. the purpose of this was to assess any need to modify the approach taken in order to limit the potential of researcher bias, inappropriate method application, or to achieve greater reflection on interpretation of conclusions and knowledge production. fortunately there was minimal modification after the first phase of the research in that the researcher ensured that there was not sole reliance on just one source of identification and interpretation of critical incidents by expanding the number of reports of them to include several sources with competing accounts.

the interactive, multi-method design used in the research incorporated repertory grid technique, critical incident technique and interpretive phenomenological analysis, and appeared to work considerably well in yielding rich data. nevertheless, applying reflexivity during conducting the research process, in intermittent periods of self-doubt about actual contribution, raised the question about whether any alternative methods could have been adopted or incorporated. the researcher, when originally considering the research design, almost immediately rejected the inclusion of undertaking diary, narrative and netnography study methods. this was purely because of the prospect of considerable additional activity on what was already set to be a labour-intensive workload comprising transcription, analysis, coding and interpretation of three one-hour sets of 15 interviews from three different points in time.
Throughout the research process the notion of using diary study surfaced again, partly because of the time intervals between data collection and partly because it permits the examination of reported events and experiences in their natural, spontaneous context and can assist with triangulation (Reis, 1994). However, it was soon discarded as it became obvious participants would not be able to give the level of participant commitment and dedication required. In addition, it was felt that the burden of repeated queries and responses would place a high demand on their already much limited time availability. It was believed this would be the case, even if the diary instruments would have been shortened for expediency and measured against the resultant potential of less in-depth reporting, with the likelihood of responses being omitted even at relevant times, leading to a weakening of knowledge contribution (Bolger et al., 2003).

7.5 Limitations of the Research

Knowledge contributions have been made at theoretical, methodological and managerial levels, but even so this study has shortcomings, just as has all research, and is therefore open to limitations. There are four identified major limitations of this research study which should be noted and taken into account when establishing priorities for future research.

The first of these limitations is that this study’s exploratory and interactive approach to building theory and testing theory can be considered to be only
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

partially successful in contributing to knowledge of customer perceived value change. This is because of the embryonic state of research into the phenomenon, evidenced by the researcher not being able to find any prior instance of value change focusing on customer perceived value, having been the subject of empirical enquiry. In addition there is a paucity of empirical results to be found in other aspects of customer value change, i.e. desired value, because the phenomenon is deemed to be in its infancy. This has made it difficult to compare and contrast the results from this study with what is known in the literature. Consequently the contribution from the study has been limited to mainly clarifying concepts and the identification of a number of ‘general picture’ themes and premises, rather than building more developed propositions or hypotheses normally associated with substantive theory production.

Second, the collection of data relied heavily on researcher-participant interviews and the reading of case study setting organisational documents available in the public domain, be they paper-based or in web-based internet format. With regard to data collection, especially through repertory grid technique, there is generally a heavy reliance on the language used by respondents to describe elicited elements and constructs and this can pose difficulties for a researcher in claiming to have been able to fully understand the respondent’s world if there are any subtle nuances of meaning, e.g. jargon, which may not have been recognised by the researcher. Observation, i.e. of individuals in meetings where value was discussed in-house or with external parties, played a much more minor role than case study methodology recommends, as did access to the studying of some specific
documents relating to value because of commercial sensitivities, legal restrictions and ethical considerations.

The third limitation is centred on issues of time and timing. The research design had to be longitudinal in order to observe and measure any changes in customer perceived value. The restricted availability of time allowed for conducting the interviews and feeding back of their output to respondents, i.e. three hours per data collection period, and the timing of the three periods in just over 18 months, has meant the research was actually more of a quasi-longitudinal study than a true longitudinal study which may span many waves, years or even decades. Given that the industry has long product/service cycles with a tendency to experience more small incremental changes in a relatively stable environment rather than large scale ‘critical incident’ change associated with more turbulent environments, it is possible some errors or omissions may have occurred. For example, during that period some observations of change, measurement of it and reasons for it may have been unobservable, impossible to identify or remember, made-up by respondents through interests, moods or panel conditioning effects or just so happened to be outside of the actual timeframe of this research period. It can be noted though, even longitudinal research, conducted over considerably longer time spans, may still be subject to these risks.

The final limitation is that this case study research was conducted in one UK organisation within the global aerospace industry and may be limited to both the tier at which the organisation is positioned and the industry in which it is
contextually situated. Related to this limitation is that although the selection of 15 key informant respondents for the longitudinal panel from the organisation’s supply chain unit function was based on purposive sampling, the panel’s composition was predominantly filtered through top management’s understanding of the researcher’s objectives and their own interests.

Furthermore, the maintainability of the panel was compromised through respondent attrition with the number of respondents being reduced to 10 by the end of the data collection period because of earlier than planned retirements, respondents having promotions to other functional areas of the organisation, or leaving to pursue careers elsewhere. In addition, the analysis has been contained to exploring the phenomenon in three embedded cases from an idiographic perspective: these being exemplar cases with the most amount of change in terms of increases in customer perceived value ratings, most amount of change in decreases in ratings, and the least amount of change in customer perceived value over the research period. All of these aspects have therefore limited the ability to generalise findings to the whole of the case study organisation as well as right through to the wider business-to-business population.

7.6 Future Research Directions

Despite the four limitations identified in section 7.5, the findings from this research study have provided a first time contribution towards a more comprehensive understanding of customer perceived value, its measurement and insight into how
and why it changes for both academic researchers and practising managers. However, as the nature of the research was exploratory and does not offer a complete picture of customer perceived value change, then both the limitations and findings of this research provide suggestions for potential further research which deserve to be mentioned. A continuing programme of research in this area is considered to be important because both theory building and testing will be essential in advancing the conceptualisation and practice of the co-creation of value with other stakeholders, i.e. seek to understand yourself first then to be understood by others.

Naturally, further studies using the idiographic research design from this study, in another single organisation or in a variety of different organisations' supply chains from the aerospace industry and/or other industries, would determine if the knowledge contribution from this study were valid in other contexts, leading to a potential ability to generalise customer perceived value change theory. Research outcomes in terms of knowledge contribution may prove to be more fruitful if future studies were to encompass different paradigms and qualitative methodologies, e.g. grounded theory, ethnography, etc, to facilitate other potential insights into the dynamic changes of customers' perceptions of value. This would be especially interesting in building on the results of this research study and existing research in areas related to customer perceived value change at the values level of the hierarchy level of value.
• The first area is investigating the inter-relationships between organisational culture, organisational climate and the congruence of organisational values and individual values, and their influences on the phenomenon of customer perceived value change (Wallace et al., 1999).

• The second area is investigating the appropriateness of alternative instruments for assessing hierarchical re-scaling and alterations in value status of an individual's values (Watson et al., 2004).

• The third area is looking at changes in values as influences of judgement and behaviours and vice versa (Torelli & Kaikati, 2009).

• The fourth area is investigating relationships between personality and individual values, and how these may impact on customer perceived value change (Higgs & Lichtenstein, 2010).

• The fifth area is investigating relationships between values and the customers determination of value at the consequences level of their value hierarchy in terms of what they do not value i.e. being influenced more by what they construe as negative outcomes i.e. disadvantages or sacrifices rather than the positive gains or benefits they seek (Gudergan & Ellis, 2007).

Another consideration would be to adopt a nomothetic research approach at the organisation system level, because of the question whether business-to-business
customer perceived value and changes in it are the sum of the knowledge and experience held by the individuals within it, or are conceivably something more with additional dimensions. In practice, every organisation’s overarching experience of value and valuing in its role as a customer is determined by consensus of perceptions amongst individuals. The consensus perspective of perceived value is made from different management levels and functions in an organisation, even though value is idiosyncratically and phenomenologically determined by its individuals.

Longitudinal qualitative research should be undertaken by a multi-disciplinary team of researchers, therefore, with those individuals who have the responsibility for the organisation’s customer order and supplier purchase order management cycles across a range of functions. By adopting a ‘staple yourself to an order’ wider approach (Shapiro et al, 1992) there would be a better understanding of ‘organisational customer perceived value change’ from key informant individuals who are the principal architects of the integration and aggregation of what is value for their organisation.

7.7 Final Thoughts

Marketing is pervasive and perpetually altering in ways to access value appropriation for organisations and provide perceived value with their customers, yet seems to be dislocated from them. The service dominant logic of marketing, an enhanced view of marketing pulls together disparate streams of marketing thought
with a central theme of customer value. However it is not marketing's new bag of tricks, and questions about the limitations of the old disparate streams still appear to remain unanswered. Consequently much current research in marketing and in particular service-dominant logic appears to run in all directions rather than focus on a few key areas.

One key area is the organisational need for a clearer understanding about dynamic perception of value in a continually changing, networked ecosystem of resource integration and mutual service provision to make valid value propositions for the co-creation of value with customers and other stakeholders. This study's contribution to customer perceived value change shows the topic remains a complex and multifaceted phenomenon, paradoxical in both being explicit and vague at present, whilst yielding the promise that more knowledge about it is waiting or wanted to be discovered in the future. Nietzsche's (1887) statement about the complexity of value appears to still have much relevance today:

"All sciences are now under the obligation to prepare the ground for the future task of the philosopher which is to solve the problem of value, to determine the true hierarchy of values".
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

References


Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study


Brodie, R. J., Glynn, M.S., Little, V. (2006) ‘The service brand and the service-dominant logic: missing fundamental premise or the need for stronger theory?’ Marketing Theory Vol. 6 No. 3 pp 363 – 379

Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study


Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study


334


Cronbach, L.J., Furby, L. (1970) 'How should we measure change: or should we' Psychological Bulletin Vol.74 pp 68-80

Crosier, K. (1975) 'What exactly is marketing' Quarterly Review of Marketing Winter


335


Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

Dewey, J. (1922) Human Nature and Conduct


Dooley, L.M. (2002) 'Case Study Research and Theory Building' Advances in Developing Human Resources Vol. 4 No. 3 pp 335 - 354


DTI (2003) An independent Report on the Future of the UK Aerospace Industry: Executive Summary Aerospace Innovation and Growth Team, DTI/Pub 6710/1k/06/03/NP


Economist (2010) 'Airbus v Boeing: Plane Poker', The Economist, 02 October, p75


Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study


Embanker, J., Buttle, F. (1989) 'A repertory grid analysis of Austria's image as a summer vacation destination' Journal of Travel Research, Vol. 27, No. 3 pp 3-7


Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study


Ford, H., Crowther, S. (1924) My Life and Work


Gibbert, M., Leibold, M. Probst, G. (2002)'Five Styles of Customer Knowledge Management, and how Smart Companies use them to create Value' European Management Journal Vol. 20, 5, pp 459-469


341
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study


Haddock, A. (2002) 'rewriting the past: Retrospective Description and its Consequences' Philosophy of the Social Sciences Vol.32, 2, pp 3-24


Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study


Harmar-Brown, F. (1968) 'Construing Kelly - The Lure of Classification' Advertising Quarterly, No 13 Winter pp 18-19


Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study


Hoya, C (2010) 'The lion of Rolls-Royce leaves the building', Financial Times, 30 September 2010


Hultman, K., Gellerman, B (2002). Balancing Individual and Organisational Values, Jossey Bass/Pfeiffer, San Francisco


344
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study


345
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study


346
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study


Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study


Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study


349
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study


Ng, I.C.L., Nudurupati, S.S. (2010) 'Outcome-based service contracts in the defence industry - mitigating the challenges' Journal of Service Management Vol. 21 No 5, pp 656-674

Ng, I.C.L., Nudurupati, S., Tasker, P. (2010) 'Value Co-creation in Outcome-based Contracts for Equipment-based Service' AIM working paper series, WP No 77


Nietzsche, F. (1887) On the Genealogy of Morals


Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study


Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study


Smith, A. (1776) *The Wealth of Nations* USA: Britannica


Spengler, P.M., Strohmer, D.C. (1994) 'Clinical Judgement Biases' *Journal of Counselling Psychology* pp 410-411


Tzokas, N. (2005) 'Research Directions' Panel Presentation 4th ESRC Seminar on Relationship Marketing: IMP Research Centre, University of Bath, Bailbrook House 18/02/05


Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study


Watson, T.J. (1994) 'Managing, Crafting and Researching: words, skill and imagination in shaping management research' British Journal of Management Vol. 5 Special Issue S77 – S87


Wilkie, W L., Moore, E.S. (2003) Scholarly research in marketing: Exploring the “4 eras” of thought development' Journal of Public Policy and Marketing 22 (Fall) pp 116-46


362
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study


Appendices
1. Competence and Behavioural Instrumental Values

<table>
<thead>
<tr>
<th></th>
<th>Personal</th>
<th>Social</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Defensive</strong></td>
<td>Caution</td>
<td>Material possessions</td>
</tr>
<tr>
<td></td>
<td>Clean</td>
<td>Security</td>
</tr>
<tr>
<td></td>
<td>Independence</td>
<td>Speed</td>
</tr>
<tr>
<td></td>
<td>Logical</td>
<td>Winning</td>
</tr>
<tr>
<td><strong>Stabilising</strong></td>
<td>Comfort</td>
<td>Professionalism</td>
</tr>
<tr>
<td></td>
<td>Credentials</td>
<td>Reliability</td>
</tr>
<tr>
<td></td>
<td>Dependability</td>
<td>Routine</td>
</tr>
<tr>
<td></td>
<td>Efficiency</td>
<td>Self-discipline</td>
</tr>
<tr>
<td></td>
<td>Health</td>
<td>Stability</td>
</tr>
<tr>
<td><strong>Competences</strong></td>
<td>Adaptablestivity</td>
<td>Knowledge</td>
</tr>
<tr>
<td></td>
<td>Adventurous</td>
<td>Learning</td>
</tr>
<tr>
<td></td>
<td>Competence</td>
<td>Mastery</td>
</tr>
<tr>
<td></td>
<td>Creativity</td>
<td>Merit</td>
</tr>
<tr>
<td></td>
<td>Curiosity</td>
<td>Opportunity</td>
</tr>
<tr>
<td></td>
<td>Delight</td>
<td>Optimism</td>
</tr>
<tr>
<td></td>
<td>Effectiveness</td>
<td>Originality</td>
</tr>
<tr>
<td></td>
<td>Enthusiasm</td>
<td>Perseverance</td>
</tr>
<tr>
<td></td>
<td>Excellence</td>
<td>Quality</td>
</tr>
<tr>
<td></td>
<td>Flexibility</td>
<td>Responsibility</td>
</tr>
<tr>
<td></td>
<td>Freedom</td>
<td>Responsiveness</td>
</tr>
<tr>
<td></td>
<td>Growth</td>
<td>Results</td>
</tr>
<tr>
<td></td>
<td>Humour/fun</td>
<td>Risk taking</td>
</tr>
<tr>
<td></td>
<td>Imagination</td>
<td>Self-starter</td>
</tr>
<tr>
<td></td>
<td>Improvement</td>
<td>Spontaneity</td>
</tr>
<tr>
<td><strong>Growth</strong></td>
<td>Adaptability</td>
<td>Knowledge</td>
</tr>
<tr>
<td></td>
<td>Creativity</td>
<td>Mastery</td>
</tr>
<tr>
<td></td>
<td>Effectiveness</td>
<td>Originality</td>
</tr>
<tr>
<td></td>
<td>Enthusiasm</td>
<td>Perseverance</td>
</tr>
<tr>
<td></td>
<td>Excellence</td>
<td>Quality</td>
</tr>
<tr>
<td></td>
<td>Flexibility</td>
<td>Responsibility</td>
</tr>
<tr>
<td></td>
<td>Freedom</td>
<td>Responsiveness</td>
</tr>
<tr>
<td></td>
<td>Growth</td>
<td>Results</td>
</tr>
<tr>
<td></td>
<td>Humour/fun</td>
<td>Risk taking</td>
</tr>
<tr>
<td></td>
<td>Imagination</td>
<td>Self-starter</td>
</tr>
<tr>
<td></td>
<td>Initiative</td>
<td>Strategic focus</td>
</tr>
<tr>
<td></td>
<td>Innovation</td>
<td>Timeliness</td>
</tr>
<tr>
<td></td>
<td>Intelligence</td>
<td>Variety</td>
</tr>
<tr>
<td><strong>Defensive</strong></td>
<td>Deference</td>
<td>Obedience</td>
</tr>
<tr>
<td></td>
<td>Expediency</td>
<td>Self-control</td>
</tr>
<tr>
<td></td>
<td>Manipulation</td>
<td>Situational ethics</td>
</tr>
<tr>
<td><strong>Stabilising</strong></td>
<td>Consistency</td>
<td>Humility</td>
</tr>
<tr>
<td></td>
<td>Dedication</td>
<td>Integrity</td>
</tr>
<tr>
<td></td>
<td>Dignity</td>
<td>Law-abiding</td>
</tr>
<tr>
<td></td>
<td>Diligence</td>
<td>Morality</td>
</tr>
<tr>
<td></td>
<td>Discretion</td>
<td>Self-respect</td>
</tr>
<tr>
<td></td>
<td>Ethics</td>
<td>Sincerity</td>
</tr>
<tr>
<td></td>
<td>Honesty</td>
<td></td>
</tr>
<tr>
<td><strong>Behaviours</strong></td>
<td>Authenticity</td>
<td>Faith</td>
</tr>
<tr>
<td></td>
<td>Commitment</td>
<td>Genuineness</td>
</tr>
<tr>
<td></td>
<td>Congruence</td>
<td>Spirituality</td>
</tr>
<tr>
<td></td>
<td>Courage</td>
<td>Truth</td>
</tr>
<tr>
<td></td>
<td>Credibility</td>
<td></td>
</tr>
<tr>
<td><strong>Growth</strong></td>
<td>Authenticity</td>
<td>Faith</td>
</tr>
<tr>
<td></td>
<td>Commitment</td>
<td>Genuineness</td>
</tr>
<tr>
<td></td>
<td>Congruence</td>
<td>Spirituality</td>
</tr>
<tr>
<td></td>
<td>Courage</td>
<td>Truth</td>
</tr>
<tr>
<td></td>
<td>Credibility</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

365
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

Source: Hultman & Gellerman, 2002, pp54-59
2. Case Study Protocol

Customer Perceived Value Change

Exploring Customer Perceived Value Change in UK Aerospace Manufacturing Companies: A Case Study Analysis

Paul Connor MSc
4019020

The University of Nottingham

30 Church Way
Wybunbury
Cheshire
CW5 7SA

Phone: +44(0)1270 842207
Mobile: +44(0)798 574321
E-mail: pconnor@myun.co.uk
Please consider the following various definitions of Customer Perceived Value and indicate the one you feel you can most closely identify with by placing a ✓ in the relevant box.

If none of these definitions is appropriate for you write down what you consider Customer Perceived Value to be.

Value in business markets is the perceived worth in monetary units of the set of economic, technical, service and social benefits received by a customer firm in exchange for the price paid for a product, taking into consideration the available suppliers' offerings and prices.

Customer Value is a customer's perceived preference for and evaluation of those product attributes, attribute performances, and consequences arising from use that facilitate (or block) achieving the customer's goals and purposes in use situations.

Value, from the perspectives of customers and marketers, is a multi-dimensional concept representing a net score that includes measurement of total benefits perceived or realised and total cost of acquiring, using and disposing of a product or service.

Customer Perceived Value is the difference between the benefits and the sacrifices (e.g. the total costs, both monetary and non-monetary) perceived by customers in terms of their expectations i.e. needs and wants.

Customer Perceived Value in industrial markets is the trade-off between the multiple benefits and sacrifices of a supplier's offering, as perceived by key decision-makers in the customer's organisation, and taking into consideration the available alternative suppliers' offerings in a specific use situation.

Customer Perceived Value in a business-to-business context is the customer's perception of the net-worth of benefits and sacrifices derived from a relationship with the service provider.

Value for the customer is any demand-side, personal perception of advantage arising out of a customer's association with an organisation's offering, and can occur as reduction in sacrifice, presence of benefit (perceived as either attributes or outcomes); the resultant of any weighted combination of sacrifice and benefit (determined and expressed either rationally or intuitively); or an aggregation, over time, of any or all of these.

Value for the customer is a synthetic cognitive construct originating from the ratio between the functional and symbolic benefits that the product offers in given usage situations, and the various costs (e.g. purchasing, information, finding, learning, maintenance, obsolescence and conversion costs) that the customer bears to obtain these benefits.

I consider Customer Perceived Value to be:
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

Case Study Respondent File

Respondent Identifier:  
Location:  
Date:

Customer Perceived Value Questionnaire
Construing and Determining Value

<table>
<thead>
<tr>
<th>Case Study Respondent File</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Respondent Identifier:</strong></td>
</tr>
<tr>
<td><strong>Location:</strong></td>
</tr>
<tr>
<td><strong>Date:</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interview Tape/File Number:</th>
<th></th>
</tr>
</thead>
</table>
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

Critical incident interview protocol

[Content of the critical incident interview protocol]

371
Please provide a description of either a positive or negative event, incident, issue or situation that has occurred in the past financial year for Rolls-Royce plc, which has led you to pro-actively or re-actively reconsidering your perception of Value.

What external and/or internal factors can you attribute to the incident?
Why did these external and/or internal factors lead to a change in what RR values?
In what ways has RR changed what it values following the impact of initiators of change?
How were you involved?
What specific contribution/interventions did you make?
What were your feelings at the time?
What were you trying to achieve?
Why did you intervene as you did?
How could you have dealt with the incident differently?
What choices did you have to do things differently?
What tension in terms of competing values, if any, did you experience?
What has happened since the incident?
How do you feel now about this experience?
What have you learned about yourself and how you deal with similar situations?
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

### Case Study Respondent File

**Respondent Identifier:**

**Location:**

**Date:**

### Documents Record

[Blank space for documents]

---

**Document 1:**

[Blank space for documents]

**Document 2:**

[Blank space for documents]
3. Customer Perceived Value Questionnaire

Extract from Case Study Protocol

Customer Perceived Value Questionnaire

Thank you for agreeing to participate in this project. You are assured this information remains confidential and no other Rolls-Royce plc employee will see your individual response. Please give your honest opinion on the items listed on the following sheets.

First indicate in the Value Status column whether you recognise that particular item as:

0 = Not being a value
E = A value that you consider to be expected i.e. no matter what
D = A value that you consider to be desirable i.e. given the opportunity

Second indicate in the Degree of Importance column how important each item is to you i.e. the extent to which that item matters to you in determining Value, by marking each item using a scale where:

1, 2, 3, 4 = of low importance for values that you have marked D
5, 6, 7 = of high importance for items that you have marked E

Please add any value that you believe should be included, and also add any comments to help clarify your response.

Respondent Identifier:

Location:

Date:

© P B Connor 2009 4019620
# Customer Perceived Value Questionnaire

<table>
<thead>
<tr>
<th>Code</th>
<th>Factor</th>
<th>Value Status</th>
<th>Degree of Importance</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>PRODUCT</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Conformity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reliability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Durability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Performance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quality</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Availability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Innovation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>SERVICE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Process Systems Alignment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Meeting Delivery Requirements</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pre &amp; After Sales Technical Support</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contract Management &amp; Control</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pre &amp; After Sales Commercial Support</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Key Account Management Process</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Service Failure Recovery Plan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Innovation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>RELATIONSHIP</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mutuality of Goals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trust</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Commitment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Joint Problem Solving</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Risk Minimisation &amp; Sharing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Knowledge Transfer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Loyalty</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exclusivity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>IMAGE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Leading Organisation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Global Capability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>End-user Perspective</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Long-Term Profit Focus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Respected by Industry Network</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aware of Industry Developments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Corporate Social Responsibility</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Governance &amp; Ethics</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

© P B Connor 2009
### Customer Perceived Value Questionnaire

<table>
<thead>
<tr>
<th>Code</th>
<th>Factor</th>
<th>Value Status</th>
<th>Degree of Importance</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>PRODUCT</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Conformity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reliability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Durability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Performance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quality</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Availability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Innovation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>SERVICE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Process Systems Alignment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Meeting Delivery Requirements</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pre &amp; After Sales Technical Support</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contract Management &amp; Control</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pre &amp; After Sales Commercial Support</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Key Account Management Process</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Service Failure Recovery Plan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Innovation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>RELATIONSHIP</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mutuality of Goals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trust</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Commitment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Joint Problem Solving</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Risk Minimisation &amp; Sharing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Knowledge Transfer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Loyalty</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exclusivity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>IMAGE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Leading Organisation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Global Capability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>End-user Perspective</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Long-Term Profit Focus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Respected by Industry Network</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aware of Industry Developments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Corporate Social Responsibility</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Governance &amp; Ethics</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

© P B Connor 2009  4019620
### 4. Interview Schedule Request Form

**MEETING AVAILABILITY FOR PAUL CONNOR PhD CASE STUDY**

<table>
<thead>
<tr>
<th>Subject: Customer Perceived Value Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>9:00</td>
</tr>
<tr>
<td>10:00</td>
</tr>
<tr>
<td>10:15</td>
</tr>
<tr>
<td>11:15</td>
</tr>
<tr>
<td>11:30</td>
</tr>
<tr>
<td>12:30</td>
</tr>
<tr>
<td>Lunch</td>
</tr>
<tr>
<td>13:30</td>
</tr>
<tr>
<td>14:30</td>
</tr>
<tr>
<td>14:45</td>
</tr>
<tr>
<td>15:45</td>
</tr>
<tr>
<td>16:00</td>
</tr>
<tr>
<td>17:00</td>
</tr>
</tbody>
</table>
5. Respondents’ Briefing Document

Exploring Initiators of Change and Customer Perceived Value in an UK Aerospace Manufacturing Organisation: A Case Study Analysis

Paul Connor M.Sc

PhD Research

Research Context & Focus

Rolls-Royce plc is shifting from ‘selling gas turbines’, i.e. predominantly products with some services to selling Power by the Hour to ‘Total Care’ i.e. co-created solution provision packages.

Concurrently, academic research is focusing on the transition to a Service-Dominant logic of Marketing based on Customer Value. How does RR plc conceptualise and determine its own Customer Perceived Value within these themes competing and changing frames of reference in the context of engines for large civil aircraft?
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

Research Framework & Questions

- How can customer perceived value be conceptualised from a customer's perspective within a B2B context?
- Why do customers change what they value following the impact of initiators of change?
- How do customers change what they value following the impact of initiators of change?

Research Methodology

- Longitudinal 'embedded' case study
  - 3 datum points over 18 months
- 10 - 15 panel members representing a range of functions
- Critical Incident Technique:
  - In-depth Interviews, Repertory Grid Technique, Laddering, Documents

Paul Conn, a Chartered Marketer, is MD of Mycon Marketing a provider of strategic marketing to worldwide clients comprising SMEs, plc and governments.
He is also a visiting lecturer in Strategic Marketing on four UK University Business Schools MBA/MAcc programmes and the Chartered Institute of Marketings Professional Postgraduate Diploma at two UK Colleges.
His research specialises are Customer Value Change, Marketing Effectiveness and Customer Satisfaction.
Research Contribution

Likely Limitations:
- These associated with Case Study:
  - boundaries
  - history
  - interaction
  - replication
  - generalisability

Academic & Theoretical:
- A better definition of the B2B CV construct through theory building and the development of scales for empirical testing of its operationalisation

Management Context:
- A model that facilitates a better understanding of how an organisation's perception of value (as a customer) helps to determine the nature of its business models, competitive strategy and its external and internal relationship marketing activities
- and also facilitates the envisaging of the timing and likelihood of change thus helping organisations to better manage the co-creation of value with their customers, suppliers and staff

Methodology:
- Development of the emerging interpretative paradigm in B2B research through application of so far unused combined cognitive psychology-based qualitative methods e.g. Repertory Grid Technique (Kelly, 1955) and Critical Incident Technique (Flanagan, 1954) and Interpretative Phenomenological Analysis (Smith, 2002)

What’s in it for Rolls-Royce?

Superior supply chain management can facilitate corporate strategy and lead to the creation of superior customer value, satisfaction and loyalty which in turn will lead to improved product and service margins, overall organisation profitability and growth

The challenge is in first recognising supply chain partners must understand what each company in the supply chain perceives as value

The first step is understanding your own perception of value, then you will be better able to be understood

An independently researched integration of multiple individual perceptions that provides a clearer vision of what Rolls-Royce plc perceives as value for the:

- harnessing of the co-creation and co-production of value to drive acceptable levels of supply chain performance with global suppliers rather than over reliance on the pursuit of, albeit necessary, cost-reduction programmes

- motivation and empowering of internal stakeholders through customer value learning and creation processes to understand and maximise their part in supply chain effectiveness and efficiency

A fuller and deeper understanding of Customer Value Change in global supply chains to facilitate strategic planning, innovation and business development
6. Sample Repertory Grid (RR001)
Using Rolls-Royce plc's values as desirable end-states, what do you perceive Value to be?

<table>
<thead>
<tr>
<th>Triad Pair</th>
<th>Similar Constructs</th>
<th>Reliability</th>
<th>Integrity</th>
<th>Innovation</th>
<th>Trust</th>
<th>Excellence</th>
</tr>
</thead>
<tbody>
<tr>
<td>123</td>
<td>Doing what you say consistently</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>124</td>
<td>Honesty and Capability</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>125</td>
<td>Best in class product that always works</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>134</td>
<td>You can depend on consistency</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>135</td>
<td>The worst disaster happened yet the best work</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>234</td>
<td>Advancements are only truly successful if they work</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>235</td>
<td>The best teams some people and not the best</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>345</td>
<td>Cannot complete our major project (pay for it) yet best</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>451</td>
<td>If it works every time you can depend on it</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>452</td>
<td>Don't state you can't do it, prove you can't</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
7. Case Respondents' Values Mindmaps

RR001 organisational value constructs – March 2009
RR001 organisational value constructs – September 2010
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

RR Pic's Values

1st Level
- Reliability
- Integrity
- Trust:
  - Reliability
  - Integrity

2nd Level
- Excellence
  - Reliability
  - Integrity
- Innovation
  - Excellence

Value - Core Constructs

1st Level
- Keeping promises always - Inconsistent excuses
- Best in class product quality - Unreliable performance
- Dependability - Inconsistency
- Successful advances - New product failure
- Proven validity
- Sounds good only

2nd Level
- Keeping promises always
- Leading supplier - Always doubling 2nd best
- Continuous Innovation - Not the best company
- Joint problem-solving - Getting Stuck
- Product Durability - Faulty (real or perceived)
- Dependability
- Proven validity

3rd Level
- Keeping promises always
- Product Durability
- Best in class product quality
- Dependability
- Successful advances
- Proven validity

Leading supplier
- Keeping promises always
- Joint problem - solving

Honest & Credible - Unethical
- Keeping promises
- Leading provider
- Product durability
- Best in class product quality
- Joint problem solving
- Product durability
- Successful advances - New product failure
- Joint problem solving
- Product durability

Leading supplier
- Dependability
- Continuous innovation
- Successful advances
- Proven validity

RR001A
Using RR Pic's Values As Desirable End-states What Do You Perceive Value To Be?
RR001 personal value constructs – March 2009
RR001 personal value constructs – September 2010
RR003 organisational value constructs – March 2009

RR003
Using RR Pic's Values As Desirable End-states What Do You Perceive Value To Be?

Core Constructs

RR pic's Values

1st Level
- Integrity
- Trust
- Excellence

2nd Level
- Reliability
- Trust
- Excellence
- Innovation

3rd Level

Core

Principled to pursue the best that you can, trusted to do so - Half-hearted don't really care

Striving for the best gives rise to innovation - Making do, putting up with second best
True to ourselves and principled to do the best that we can - Half-hearted/make do and not true to ourselves

Consistent in approach and results - Unreliable

Exciting - Boring
Using the means of striving for the best possible - Making do with the current standard, conservative
Pursuit of excellence will imply that I am trusted - Doing the minimum or less
Striving for the best gives rise to innovation
True to ourselves and principled to do the best we can

Consistent in approach and results
Doing a solid job well - sporadic done task/jobs
Consistent in approach and results
Exciting

Open & honest, nothing hidden, fair consistent
Devious, alternative agenda, use any means to get a result
Transparency - Opaque, closed, not sharing

Open & honest, nothing hidden, fair consistent
True to oneself and principled to do the best one can
Principled to pursue the best and trusted to do so
Transparency

Striving to be the best through innovation
Using the means of striving for the best possible
Pursuit of excellence will imply that I am trusted
RR003 organisational value constructs – September 2009

RR003A
Using RR Pic's Values As Desirable End-states What Do You Perceive Value To Be?
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

RR003 personal value constructs – March 2009

RR003P
Using Your Values As Desirable End-states What Do You Perceive Value To Be?
RR003 personal value constructs – September 2010

Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study
RR005 organisational value constructs – March 2009

RR005
Using RR Plc's Values As Desirable End-states: What Do You Perceive Value To Be?

Core Constructs

RR plc's Values

Trust
Integrity
Innovation

1st Level
Integrity
Innovation

2nd Level
Reliability
Integrity

3rd Level
Reliability
Trust

4th Level
Reliability
Innovation

5th Level
Reliability
Excellence

Dependable - Misunderstanding
Doing anything in the correct manner - Selfish

Best ability - Easy option
Capability - Unpredictable

Perfection - Waste
- Dependable
- Capability
- Doing anything in the correct manner

Honesty - Hidden agenda with negative impact
Professionalism - Lazy, complacent
Best Ability
Perfection

Solid - Loose
- Dependable
- Capability
- Doing anything in the correct manner

Capability
- Dependable
- Doing anything in the correct manner

Best Ability
Honesty
- Professionalism
- Dependable
- Solid
- Doing anything in the correct manner

Robust - Unflexible
Doing what you say you will do - Dishonesty
Honesty
- Professionalism
- Dependable
- Robust
- Capability
- Doing anything in the correct manner

392
RR005 organisational value constructs – September 2010

RR005A
Using RR Plc’s Values As Desirable End-states What Do You Perceive Value To Be?
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

RR005 personal value constructs – March 2009

RR005's Values

Core Constructs

Core
- Personal Interaction
- Respect

1st Level
- Professionalism
- Respect

2nd Level
- Reliability
- Trust

Professionalism
- Personal Interaction
- Trust

Reliability
- Trust

Professionalism

1st Level
- Deliver, listening - unconfirming
- Empathy - Selfish
- Recognised - Undefined
- Icon, Shining light - Crowd

2nd Level
- Understanding - Assuming
- Open relationship - Hidden agenda
- Honesty - Undependable

1st Level
- Deliver, listening
- Open relationship
- Quality - Normal

2nd Level
- Recognised
- Leader - Follower
- Quality
- Friendliness - Adversarial
- Understanding
- Icon, shining light
- Leader
RR005 personal value constructs – September 2010

RR005's Values

1st Level

Core

Personal Interaction

Respect

Professionalism

Respect

Trust

Reliability

Personal Interaction

Core Constructs

1st Level

Understanding - Assumming

Open relationship - Hidden Agenda

Honesty - Undependable

Deliver, listening

Leader - Follower

2nd Level

Deliver, listening

Open relationship

Quality - Normal

Friendliness - Adversarial

Understanding

Icon, shining light

Leader

Empathy

Open relationship

Understanding

Honesty

Quality

Recognised

Leader
**8. Sample Transcription**

Interviewer: Paul Brereton Connor (PBC)  
PhD Student – 4019620  
The University of Nottingham  
Tape Reference: DS400108

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Dialogue</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBC</td>
<td>Morning, [RR001].</td>
</tr>
<tr>
<td>RR001</td>
<td>Hi, Paul. Good to see you again.</td>
</tr>
<tr>
<td>PBC</td>
<td>Good to see you too. We’re just going to go through the two records that you collated at the beginning of the process, [RR001]. I’ve outlined the procedure for doing that. It’s just deciding to take the values and see what ten constructs you come up with based on looking at triads of those, and then taking two out of the three [0:00:27.4], creating an anchor point, and then looking at an alternative anchor point after that. So, I think you’re just going to review what you put last time.</td>
</tr>
<tr>
<td>RR001</td>
<td>Okay. So, do you want me to look at the contrast as well, Paul?</td>
</tr>
<tr>
<td>PBC</td>
<td>Yes, look at both, please. You can either do it all down the similar ones and then all down the contrast or do it across, it’s up to you.</td>
</tr>
<tr>
<td>RR001</td>
<td>It’s probably easier doing it across. Okay. I managed to have two, rather than just one. That’s rather magical. I managed to embarrass myself at one of those [0:01:24.4] Global Leadership meetings ‘cause they asked everybody to write one thing on a piece of paper and I managed to say something like, “I disagree for the following reasons – 1, 2, 3.” “Okay. Who did this? Thanks, [RR001], but one is like one and this is like three.” Do you want me to comment if I think something looks a little bit odd.</td>
</tr>
<tr>
<td>PBC</td>
<td>Yeah, if you want to. Some reflection would be good.</td>
</tr>
</tbody>
</table>
| RR001 | I’ll come back to it anyway. I’ve probably destroyed your piece of paper. Right. I think on reflection – and it’s always the danger here – on reflection I look at what I’ve done. What I’ve done is I’ve created the similar constructs and then when it comes to contrast, all I’ve done is produced the negative, which is okay, I think that’s probably what you wanted. So, it’s a little bit simplistic but that’s okay because we only have a limited time to do it. But the problem with one of my main concepts, as I go down this, what I’ve started to do is to have a theme and the theme has been product. And I think it’s because it’s a concept that’s come into my mind and made it easier to answer some of the questions because you’re thinking about things and events. So, as I look at it I can probably think of ... I’m okay with what I’ve done, it seems logical and sensible but, for example, when you look at three and four, which is Innovation and Trust, I’ve talked about things. So,
I've said here, "Advances are only successful if they work, are only truly successful if they work," that's what I've written there, and of course the negative being product, that doesn't work, it's a failure. But actually we were talking just before you put the tape on, Paul, just how the weather is and things and you could apply that to commercial situations too where you're trying to solve a commercial problem and you need to be innovative to solve it but it will only work if we trust one another. So, you tell me your problem, I need to trust that that really is a problem. So, if you tell me that, in order to buy this product externally, it really does cost you £100, if I don't believe that I'm not prepared to innovate a solution because I don't believe because you've just given me horse shit, you're adding something on or whatever it is, because I believe you can buy it for £50. So, I think you can apply the same thing to other problems than just product. But it doesn't matter, what I've said is true.

That also then goes across into behaviours as well.

Yes. It's easier to answer some of the questions by thinking about things because we're probably thinking about an analogy, if you buy a car or something like that, can you depend on it or whatever? And it's also true of Rolls-Royce's product but I think it's true of our people and behaviours too, and sometimes they're more complex. Because the debate of whether or not the spring, the door of your car doesn't work, it's not actually a debate. When you go to the garage and show them that when you shut the door it just bounces back again all the time, they're not going to argue with it. Okay, it is a new car, you paid a certain amount of money, here's the receipt, the car door doesn't work. Okay, I'll fix it. But other things are more difficult. That was one comment. I think I had a comment on this one – one and four. I can't remember what was bothering me about that one.

What did you say?

One was this is reliability and trust and you can depend on consistency. It's probably a hard question but I'm not sure what I was going on about there.

And what did you have as the negative...

I think it was probably just that... you've written in the margin there 'dependable', I think that was probably what it was about, rather than the fact it's a big consistency, I think you're right, for me reliability and trust is about being dependable. Yeah, that would have been what I was thinking.

So, you're happy with your construct and...?

Yeah.

At this stage, then, if you would like to just revisit the rating and say for each of those five elements, where would you put them on the continuum? If they're more this side, on a similar construct, reliability fits with that, it's a one or a two, if it's a four or a five it's over this side, and it's a three if it sits in the middle.

Okay. What do you want me to do? Do you want me to mark it off if I think it's different?

If it's different, yes, please alter it, yeah.

Just underneath it?

Yes, just cross it out in the box and then...

And remind me of this... it's just a rank, Paul?
### Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

<table>
<thead>
<tr>
<th>PBC</th>
<th>Yes, it is. It's one or two over here, if you agree that that value sits more to this end of your construct continuum.</th>
</tr>
</thead>
<tbody>
<tr>
<td>RR001</td>
<td>Why would it ever not be? How could it ever be a five if it...? Is that part of the trick question?</td>
</tr>
<tr>
<td>PBC</td>
<td>People know in broad views of continuums so... And also sometimes people reverse the continuum, so some people have a negative here and have a positive over here.</td>
</tr>
<tr>
<td>RR001</td>
<td>Okay. I just saw a ... the trouble with these words is we ... I'm rapidly learning that we use words all over the place and you can interpret any blooming meaning you like on words. So, trust, you could argue is a sub-set of all things or all of these could be a sub-set of trust, because if you're going to treat ... especially I've started talked about product, 'cause I've said best in class always works, so if you take ...that means you could trust the product and it's very high, but if you take trust in it's social meaning — do I trust you or not? — I can still trust you but you might have given me a product that doesn't work but if you're going to do something about it, it's okay. And integrity's the same, 'cause we in Rolls-Royce talk about product integrity, but integrity also has a trust moral social connotation.</td>
</tr>
<tr>
<td>PBC</td>
<td>That honesty?</td>
</tr>
<tr>
<td>RR001</td>
<td>Yeah.</td>
</tr>
<tr>
<td>PBC</td>
<td>And what's happened as people have gone through the grids, [RR001], is sometimes people have come up with the word 'transparency' on this side and I've got people that haven't got the same construct in opposite. So, when you're saying to somebody ... if somebody was to produce a questionnaire and sat down with you to say, &quot;Please rate this,&quot; what perspective are you looking at?</td>
</tr>
<tr>
<td>RR001</td>
<td>That's right. It depends ... and I guess what I ... I said it a few minutes ago ... once I get a concept in my mind as I'm filling this in about ... so, I get an analogy in my head, it's about a car and is the car reliable or not? Therefore, do I trust that deal? Has the guy got integrity? What did he tell me when I bought the car? But then against that concept I'll go round and tick this chart. But then if I had a different analogy in my mind, that might be a conversation about a commercial issue, then I'll say, okay, against that problem, how do I rate this? Or I might just say, &quot;I'll think about my dog. So, do I trust my dog? I can depend on consistency, let's think about my dog and think about you can depend on consistency. Can I depend on consistency with my dog? Hmm, yes, sort of, he's always there at dinner-time and if you rattle it's bowl, God is it there. Right, so we can rely on that, hmm, yeah. Has the dog got integrity? Hell, no, it's just a stomach on legs, that's a five, but actually I've rated it as a one here. Is there any innovation whatsoever? Well, it managed to eat two chocolates last night going in my wife's homework bag because she was pinning them on marking sheets, and ate the wrapper and all, so, yeah, it's pretty innovative. So, against different analogies you can come up with different answers.</td>
</tr>
<tr>
<td>PBC</td>
<td>Yeah, and that's ... of course, you're trying to do it against these sets of organisational values, but I understand what you're saying. You fix a reference point, which is why I've put that down there. In a minute I'll talk a bit more about that because I don't want to influence what you're doing at the moment.</td>
</tr>
<tr>
<td>RR001</td>
<td>Yeah, and the other thing that happens is that, when you do this at first you focus</td>
</tr>
</tbody>
</table>

---

398
on ... so, for example, if I look at this one here – 135 – I decided that I had a phrase that matched three and five and my phrase was 'the best of companies stay at the forefront of technology'. So, lo and behold, when it comes to scoring it, I've put a one in the boxes of three and five, because if I hadn't done that I would have been pretty stupid to have that phrase, so there is a tendency to think, oh well, I knew what I was doing.

PBC
So, there's just some marginal alterations to those.

RR001
It's hard.

PBC
When we looked at it last time the underlying pattern in the grid was that, of your ten constructs, immediately you think of nine of them when you analyse it and then this one came at a later stage. I can tell you now, without going through this ... I will go through it again and send you an update and ask for your opinion ... I'm guessing one or two of those might now go into there.

RR001
Okay.

PBC
That's just there to show you there's a difference in your value hierarchy. There's a varied change in what you value, its constructs, but what you would be altering is the hierarchies, how you think about them. Now, is there anything in your...

RR001
Is that good, Paul?

PBC
Oh, yeah, it shows we're normal but...

RR001
Thank you, Paul. You realise this afternoon I'm going to tell me all [0:17:48.3], 'my Therapist says I'm normal. I've spent two hours with my Therapist this morning and he says I'm normal, so I'm not having any s**t!'.

PBC
If we contrast that with your personal individual values, you can see they are more spread out, so maybe there might even be congruence between these values but how you assess value is different on a personal basis to maybe the...

How do you know that? Did we do a different form?

PBC
We did a different form, yeah. And what happened ... just looking at the spread of the pattern, regardless of what it says, it shows that you take a different view to ... you've got different levels ... you think about that first, then you move to that, then that, then that. You have the most holistic view of value of the 15 people that I've done this exercise with.

RR001
Holistic view? What does that mean?

PBC
Well, you take everything into consideration immediately, virtually everything into consideration immediately, whereas other people ... and that's a very good ... to me, that's quite a good helicopter view. You know they talk about getting up in a helicopter and looking down on things, you do that immediately.

RR001
That's why I get criticised for not being decisive.

PBC
Do you get criticised for that?

RR001
Yes. I have to be more decisive.

PBC
Has that come out of your peer reviews? Is that...

RR001
It came out of a [0:19:23.4], yeah. I didn't agree with it actually.

PBC
I mean, a fabulous strength as well, that you need somebody to be straight up there and have a look down on everything.

RR001
Yeah, but all strengths come with a weakness and it's probably true actually, when you think about it, because what you just said says that must be a weakness. I
remember a conversation that said that everyone’s weakness is their strength, and everybody’s strength is their weakness. So, if you’re very strong at some ... so, if you say that one of my strengths, if we can call it that ... it’s just a thing thought, isn’t it, it’s whatever it is. If you say one of my strengths is I like to analyse things and look at it from a holistic viewpoint, that’s good but what it means is, while I’m doing all that, someone else has probably decided what the answer is. The bad news is they’re probably wrong.

PBC

Or I just captured a bit of it and I’ve missed the other bits.

RR001

Yeah, it’s like the answer is we’re going for 10% there, so you can bugger off, Paul, because you’ve not matched that target. What I’ve not done is understand the impact of that. The impact of that is probably that we’ll never do business again and never deliver any parts and I’m now stuffed.

PBC

The fact you’ve altered some of these, has there been any critical incident that made you think about reflecting on...?

RR001

No, it wasn’t that. It was simply ... it was probably our conversation ... as I glanced at this, as I kind of stood back and glanced at it, it’s all ones and twos, and I was kind of looking at it from a viewpoint of is that ... I was probably being a bit more practical – is that really, really, really true? I don’t know if I can pick and example but here on this one here – 124 – I said that the construct was honest and credible, but when I looked at that, innovation doesn’t really come into it at all, I couldn’t see where innovation came, so I decided to give it a three.

PBC

And when we went back and looked at the product attributes that you marked, you marked innovation lower than some of the other attributes. So, maybe that’s fitting in with how you see it. I think you marked product innovation as something that’s expected and process innovation as something that’s desired. And I think that reflects ... maybe when you look at it on that continuum, you sort of looked at it on that basis perhaps.

RR001

Maybe.

PBC

The thing that I was going to say about the reference point that you made – I think about my dog or the car – are you aware of the prospect theory?

RR001

No.

PBC

Alright. The prospect theory is a theory of risk. And it says that value ... this losses here and these are gains on this side ... is that values are always to a reference point and what people ... they will spend more time avoiding losses than seeking to get the extra gains in benefit, the extra gains here in benefits.

RR001

That’s interesting, yeah.

PBC

I’ve got a very good paper on that, I’ll send it to you.

RR001

That’s actually relevant to my job. Can I have a look at it?

PBC

Sure.

RR001

That draft that you draw in the finance world, which is what risk and revenue showing is all about, is revenue, which is like value in a financial world, is proportionate to risk. So, if you put your money in the bank – let’s call that zero risk or all the banks will go bust – you get half a percent. If you were to enter a very risky GV, you might expect a return of ... we’ll make a number of 20% and it’s not a straight line but we tend to think of it a being a straight line. And we say,
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

okay, if you were a supplier you might expect a return that was down here but if you’re a risk and revenue sharing partner taking full risk in the full programme, the same as Rolls-Royce do, you might expect a higher return. And we try to value this, depending on the risks that people are prepared to take. So, if you carve out risks, if you say, okay, I will be a risk and revenue sharing partner in the programme but I’m not going to accept the risk on your after market price, we’ll say, okay, well that means you have to move down this curve a little bit. So, it’s similar. We think of it as being linear but your point is it’s not linear, people actually balance it towards protection of what they have.

PBC A reference point or whatever. And the secret is then...

RR001 That makes sense, doesn’t it? That makes perfect sense. And it’s kind of like the adage that says don’t gamble what you can’t afford to lose, that’s all that is, isn’t it?

PBC The gradient on this side of the curve is steeper than the gradient on that side.

RR001 Yeah, but it’s going to be, isn’t it?

PBC Yeah.

RR001 ‘Cause if I said to you, right, Paul, I’ve got something here that’s a pretty risky bet but if we win we’re going to do well, it’s called The Lottery. So, give me £20, you’ve got a reasonable chance of winning, you’d probably give me £20 because we know one another and I could convince you it was reasonable. But if I said mortgage your house on it, you’d say hell, no, because that would damage your lifestyle. That’s what prospect theory is.

PBC Prospect theory, yeah. I’ve got some really good stuff on it, I’ll send it to you. Right, okay, we get the chance to do the therapy on you at this stage. So, the same process exactly on this, to first and foremost check whether those ... what you said were the end stakes that you find desirable. Are they still your desirable end stakes?

RR001 Is that reasonable?

PBC Sorry?

RR001 Are they always reasonable?

PBC Yeah.

RR001 Ah, because we had children debates, didn’t we? I recall this now.

PBC Make sense of that.

RR001 I tell you, Paul, you see my next negotiation, I’m going to bring you along just to keep the records, keep all these bits of paper, tape everything anyone says. If you could find a way to index that and cross-reference it would be fantastic.

PBC You can. It’s a bit of software that does exactly that.

RR001 It would be God damn scary though, wouldn’t it? I mean can you imagine that when I go back to the Japanese and say you did say this and they go no, we never, and we [0:26:37.2]. I don’t think they’d speak to me ever again, would they?

PBC So, I think that was your thought processes as you tried to finalise the five.

RR001 Yeah. The second one’s belting, isn’t it? All I [0:27:04.4] likes dogs, that stupid thing ... I think you must have done something to me, you didn’t put something in my coffee by any chance?

PBC It makes me want to spend more time at home.
<table>
<thead>
<tr>
<th>RR001</th>
<th>It doesn’t say that anywhere, does it? Work-life balance – I should have thought of that one. Play more golf.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBC</td>
<td>If you’re happy with those, then...</td>
</tr>
<tr>
<td>RR001</td>
<td>It doesn’t say have fun anywhere, does it?</td>
</tr>
<tr>
<td>PBC</td>
<td>Maybe fun is on the journey to those things.</td>
</tr>
<tr>
<td>RR001</td>
<td>Ah, it’s because it’s all about values, isn’t it? Having fun wouldn’t really be a value for me.</td>
</tr>
<tr>
<td>PBC</td>
<td>But there are some people ... when I’ve done this before ... yeah, but virtually we all come down to one of three types – we’re pragmatists, we’re moralists or we’re hedonistic – and I’ve done this exercise with people that are purely hedonistic and it’s about the party. One guy I did this with and, as we went through the grid and did more and more things, he said that he guided his work life by having a balance of women and men in the office, because women were more fun. And he didn’t mean that in a bad way. What he meant was it gives a different perspective and they have a bit of a laugh and a joke and that sort of stuff. So, some people are like that and that can be there ... sadly, some people, it’s their only focus of course.</td>
</tr>
<tr>
<td>RR001</td>
<td>You said that. I want [0:28:58.2] Paul said that. A sexist remark.</td>
</tr>
<tr>
<td>PBC</td>
<td>Nobody in the room.</td>
</tr>
<tr>
<td>RR001</td>
<td>Okay. I won’t fall in the trap.</td>
</tr>
<tr>
<td>PBC</td>
<td>Can you imagine when this comes out in the PH team, there’s little quotes from the [RR001] and Paul episodes?</td>
</tr>
<tr>
<td>RR001</td>
<td>I don’t want to know. You told me it was a secret. Okay, I’m fine, that makes sense.</td>
</tr>
<tr>
<td>PBC</td>
<td>So, now, just the same exercise about taking those combinations – are you happy with how you determined value?</td>
</tr>
<tr>
<td>RR001</td>
<td>Ah, you must have helped me with that one – mercurial – that’s a good one.</td>
</tr>
<tr>
<td>PBC</td>
<td>No, I think that was all your own...</td>
</tr>
<tr>
<td>RR001</td>
<td>Yeah? Fantastic. It must have been a good day. I hadn’t seen some of my partners the day before then. I’ll tell you another part of the story when the tape goes off. This is another yesterday event. It wasn’t a good day yesterday. No, I was definitely on a good day when I wrote this. Okay.</td>
</tr>
<tr>
<td>PBC</td>
<td>Okay. You’ve just got a one pointer there, so...</td>
</tr>
<tr>
<td>RR001</td>
<td>Yeah, I was trying to ... maybe to articulate how I got to that point, because I can’t quite remember now. So, this was 345 and I had decided that three and four went together and I’d written here ‘gains credit’ so I was okay that three and four went together, it was this phrase ‘similar’, how this became the similar construct, so I’ve got consistency and meeting promises. I think I probably came to the conclusion that it was an outcome of those two. So, it has a link but it’s not actually a very similar phrase.</td>
</tr>
<tr>
<td>PBC</td>
<td>Gaining credit? Is that the gaining credit one?</td>
</tr>
<tr>
<td>RR001</td>
<td>Yeah.</td>
</tr>
<tr>
<td>PBC</td>
<td>When we go back over this, you’d put that together with this as well, so you have to ... these values are not a standard value, this [0:33:11.9] would not stand along, you’ve put them together in a [0:33:15.5]. So, this one, you’ve put it’s about being</td>
</tr>
</tbody>
</table>
exploring customer perceived value change in an UK aerospace manufacturing company: A longitudinal case study

dependent and meeting commitments, but it's also about delivery reputation is not a one-off. So, it's not one-off that you would then put ... if it happened once you’d say, look, you’ll not be unnoticed about this, mate. So, what you’re doing is ... it's like sort of like deposits in an emotional bank account. Every time you do what you say you’re going to do, tick, thank you very much.

RR001 Yeah, that’s probably what it was about. Yeah, thank you, Paul. That’s exactly what it was about. Okay.

PBC I’m going to score it now. You’ve gone for threes on this on I notice, a bit more.

RR001 Oh, yeah, gosh. I actually have decided the number one and two can be exceeded.

PBC Once again, can you count off any...

RR001 Well, the first one, I don’t know if I was just coming in and starting off, but it was the one I changed most, I guess, because this was 123 and I had four ones, it just didn’t feel right. So, this was reliability. So, something can be reliable but I couldn’t really see why I’d done fairness here. Again, perhaps it’s the context that you think of but ... especially if you think of things. Things can be reliable but it’s got nothing to do with whether it’s fair or not. It can be completely unfair but it’s reliable. So, I could be reliably horrible, that’s not fairness, similarly loyalty. Again, it’s a context issue, because I’m reliably ... if you can rely on me to be with Rolls-Royce forever, I guess that’s loyalty, but it’s...

PBC Yeah. I think perhaps [0:38:37.8] that as well.

RR001 It’s closer to consistency and meeting promises, which is why I left it as a one.

PBC You see, loyalty could also ... it could be a ... you can be loyal because it’s a sense of duty, if you see what I mean, and therefore reliable, but it’s not actually what you would really choose to do, it’s just that it’s your duty to do it.

RR001 Yeah, I was probably thinking of these more on a personal context, because I think this was more what this was about, wasn’t it?

PBC Yeah.

RR001 So, on a personal context, if I believed you to be reliable, Paul, it doesn’t necessarily mean you’re loyal. I’m sure you are but...

PBC So, once again, no particular issue or incident or event that you can think of that’s made you change the score, it’s just a refining of what you...

RR001 Yeah.

PBC I think the crucial thing is that you’ve kept the value constructs the same and it’s just the fine-tuning or playing up or playing down on things that’s...

RR001 No, I’m fine with the construct. And this was probably the most severe one. As you come down here I’ve made a few minor changes but yeah.

PBC But interesting...

RR001 I’ve probably changed this one here a reasonable bit as well – trust – because it is similar because it depends what trust means.

PBC Once again, I’ll play it out and see what happens but what was interesting on ... you know we talked about the word ‘dependable’ on your work grid, organisational value was one of your first ... it’s a value for you in your personal thing as well, so it’s very much ... there’s this congruence between how you apply organisational values against your own [0:40:33.9] and just see if there’s any tension between the two sets and ...'I’m not too sure there is too much tension
<table>
<thead>
<tr>
<th>RR001</th>
<th>I don’t think so.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBC</td>
<td>No.</td>
</tr>
<tr>
<td>RR001</td>
<td>I don’t think so, no, because it goes back to my thing, I’m very ... it’s here too. I’ve noticed I’ve reflected it here, it must be an on-going theme over the time that we’ve done this, ‘cause this thing here, I’ve put ‘reasonable objectives’. That’s back to the dependable thing, because if your objectives are reasonable then you can be dependable because you can achieve the objectives. Now, in your social life it’s really stupid things like if you and I say we’re going to meet at some point in time, we’ll meet at The Derby Ram at seven o’clock on Friday, I will hold that as important and I’m at The Derby Ram at seven o’clock, not at ten past, I’ll be there at seven o’clock because that’s what I told you I would do. And if at five to seven we’re sitting here, I would like to think I’m not going to agree to meet you at seven o’clock because that’s not a reasonable objective for me to get from here to there in five minutes.</td>
</tr>
<tr>
<td>PBC</td>
<td>Sure. So, if ... okay, that’s quite good. I guess I’ll play out the changes and see what the changes are in your value hierarchy. We did speak a little bit about critical incidents when we met earlier in the week, from talking to other people as well I’m starting to see that there’s incidents and in fact there’s no incidents, there’s barely incidents, incidents, significant incidents or critical incidents.</td>
</tr>
<tr>
<td>RR001</td>
<td>You’re talking about influence?</td>
</tr>
<tr>
<td>PBC</td>
<td>Yeah.</td>
</tr>
<tr>
<td>RR001</td>
<td>We were talking about organisation changes in Rolls-Royce, [XXXX] coming in, for example, that could be an influence on his organisation.</td>
</tr>
<tr>
<td>PBC</td>
<td>Yeah, and of course since we last met, Sir John announced his decision to retire and what’s been interesting ... talking to some people recently ... that some people have seen that as a critical incident and other people have said no, the critical incident is the guy coming in. You get these different perspectives, so I think it’s [0:43:00.8] goes back to this issue of perhaps where the stone drops into the water...</td>
</tr>
<tr>
<td>RR001</td>
<td>Yeah, ‘cause there can be ripples.</td>
</tr>
<tr>
<td>PBC</td>
<td>...and it depends on whether the weather ... was it a still pond that day or whether it was raining and the wind was blowing and are you on a boat or are you standing on the shore or...</td>
</tr>
<tr>
<td>RR001</td>
<td>Yeah, that’s true, it depends where you are. That’s a good analogy because Sir John’s replacement is unlikely to have a significant impact on certainly my day-to-day working life because I’ve met John a dozen times, he would have no need to look at ... he’s made remarks good and bad but I wouldn’t have said he has a major impact so I wouldn’t have viewed his retirement as a critical incident.</td>
</tr>
<tr>
<td>PBC</td>
<td>So, on reflection over the 18 months that we’ve been doing this, have there been any critical incidents for you at work?</td>
</tr>
<tr>
<td>RR001</td>
<td>We talked last time about ... it depends what critical incident ... we’ve talked about ... let’s talk about major incidents and maybe it will help you decide if they’re critical or not. So, things that might have influenced me over that period? So, I mentioned to you last time that I’m getting to the point now where the organisation is thinking about what I do next, so that has a little bit of influence on</td>
</tr>
</tbody>
</table>
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

PBC: how I think, 'cause you look at things from slightly different views, both what you're doing now and the things you're doing, so that makes you think.

RR001: It's a little bit of both because, you know, we have a standard appraisal system every year and the standard thing in an appraisal is 'are you happy in your current role, is it time for a move?' So, I've been over four years now in this job and it's seen as a big development move, my job, so it will come from both directions. So, firstly, I guess I have a view that you should only stay so long and as a balance, then... and actually, four, five years, it's time I moved, personally because I'll start to repeat the things I've done before and there's certain things now that happen that, when I first came into the job, I would have frowned upon and I would have been going bananas but some of the things now I just put up with, because you've done what you can do and it's time to seek other things. So, I've got a couple of really major things I'm personally going to bring home this year or shortly afterwards and, when I've done those, I'll be searching for what I should do next. Where someone coming in new will see what I've done and hopefully that'll be okay but they'll automatically leap to those things that they want to do next. So, sometimes it's time for a change. So, personally it's time for a change but the organisation's come to the conclusion as well. And they sound you out quietly and I think if I had said hell, no, I think I really want to do this and I'm doing that and I really want to stay here, they would have left me for another year or so, but it's only a matter of time because the organisation looks at... the organisation... and they look at my role and think, oh, right, it will be nice to move Fred from there and get Fred into RR001's job because he can grow and expand and it's time he had a look at some supply chain issues because he's been too long in engineering or customer business or whatever they do, so it's both.

PBC: It's both, yeah. So, there's not really any major things?

RR001: Well, that's one. I think I mentioned my wife broke her arm?

PBC: You did, yes.

RR001: That's more a kind of social thing, so that's something. I guess several... it was a leadership programme that has caused us all to think. I think that's the problem... I wouldn't have said that was a critical issue for me but it's made me think, in the same way as your interviews make you think. Part of that leadership programme was a coaching course, we had a two day... it was on a two day coaching course with four or five in my peer group, which is the 'go mad' thing, you know the stuff. It's very good and again it makes you think. It's a practical tool that's not very practical, to be frank, but it makes you think.

PBC: I think we call it innovation and creativity in change, that's the module, they just throw nuts things at you, like you say, out of the box stuff.

RR001: Yeah, you know the 'go mad' framework, like you say, out of these boxes and you're to try in an interview to touch on the boxes consciously with open questions, leading questions, whatever they call them, open or leading questions.

PBC: They become leading after a while because you're not getting...

RR001: Ah, but you're not supposed to do that.
<table>
<thead>
<tr>
<th>PBC</th>
<th>No, I know.</th>
</tr>
</thead>
<tbody>
<tr>
<td>RR001</td>
<td>That's why I'm ... I tried the formal process two or three sessions and it was okay actually, but the trouble is the people that you're doing it know you well and they know that you know what the answer is and so when you've asked them the same question ten times — why don't you do it a different way? Where might you seek help? — they're kind of, so who is you think should need help? Have you tried looking at page four of your contract? But I wouldn't have said there was a critical incident. I guess [XXXX] ... you haven't met [XXXX] ... but he's unfortunately leaving Civil Aerospace. [XXXX] is an American, he's a kind of unique guy, even being an American, he's very challenging, he asks you searching questions. Again, not a critical incident but I still recall one particular incident which challenges the Rolls-Royce behaviours. So, we have a meeting with [XXXX], all the people you [0:49:10.4], all the great and the good, and there was a little bit of ... sort of the RSP Group doesn't know what it's doing about cost and various other things so I had to prepare the presentation to address questions that were arising and I'd got it down to quite a succinct few view foils, like four or five view foils. It was just a round-the-table debate but some of it was quite major changes to what we do. So, I went to see [XXXX] to square Civil's story for this meeting. So, I went in to see [XXXX], I said [XXXX], &quot;I just want to take you through this presentation,&quot; and he said, &quot;Ah, right, that's interesting, [RR001], I don't think I want to do that.&quot; I said, &quot;Why not?&quot; He said, &quot;Well, what's the purpose of doing that?&quot; I said, &quot;Because I'd like to show you what I want to present.&quot; And he said, &quot;But I trust you, I don't want to see what you want to present, we have a meeting which is a whole hour in my diary, I don't need to see it in advance, I can think on my feet or I wouldn't have the job and I trust you. So, what's the real purpose of this meeting?&quot; I said, &quot;Well, I'm going to say some really...&quot; &quot;cause now of course I'm wound up ... I said, &quot;'Cause I'm going to say some really controversial things and if you and I are going to disagree I want to have that disagreement now, not in front of [XXXX].&quot; &quot;Okay, well that's a good meeting, [RR001], so what are the controversial things?&quot; That was actually quite intuitive, but again not a critical incident, but it says something about our behaviours. Because the standard Rolls-Royce view of that would be, &quot;Yes, no problem, let's go through it,&quot; and when I show you the first view file, Paul, I'm fully expecting you to put a semi colon in somewhere or tell me that I shouldn't use that word or, &quot;I think you mean 'dependable' there, [RR001], not 'trust', so we'll change that word,&quot; and before where we are the half hour is up and at least I've told you what I'm going to say and I can tell you that I told you before we get there so you'd better not contradict me. So, it makes you think about what are we actually trying to do?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PBC</th>
<th>I suppose one of the things I've seen from doing this exercise is that critical incidents seem to be ... if value is determined by each recipient, then the criticality of an incident is determined by the recipient of the effect of it, at the end of the day. There's...</th>
</tr>
</thead>
<tbody>
<tr>
<td>RR001</td>
<td>Yeah, the only one that should give me more confidence, and sometimes you wonder if it does, is when you're right. So, there's been a couple of things that have happened now, and this is proprietary, where I've been right and I've been slapped down. And you begin to question actually other people. One of them was</td>
</tr>
</tbody>
</table>
... I guess I shouldn't name on tape all of these things ... but there's been two particular incidents in the last two or three years where I've said things and stuck my head above the parapet and been told to get back in my box and about a year later, after everyone's forgotten that you've been slapped down and put back in your box of course, the organisation has moved to where you told them to move and you think...

PBC I had a personal experience of that when I worked for the company.

RR001 And what happens is it's actually very akin to some of the things you're talking about here because it's about goals and objectives and in a sense it's about your value proposition. And it's all about stress calls, it always comes down for me to this issue of stress calls. When everyone is saying, "This is the right thing to do, we can do this or we're all going to be going home and we're going to go down," and you stick your head up and say, "Guys, we're going to fail, it's just not possible," though that's not being a team player.

PBC It's the punch in the air gives it away though, doesn't it?

RR001 I try not to gloat too much, because that's definitely not team behaviour, we all understand that bit, but it is hard to [0:53:24.0] back and do an 'I told you so' somewhere along the line.

PBC Okay, that's interesting. Did we speak the other day about value in use, value in exchange, experience of engagement?

RR001 You need to remind me, Paul.

PBC Right. There's a view that value is started off really value in exchange. So, I've got this pen, I've made it...

RR001 You did mention it to me, yeah. Like barter?

PBC Yeah. Then it's more about, well, actually, I get value in use from using the pen and then it became about experience because the circumstances in which I might need ... and then it became about engagement. And I asked you about a customer engagement and experience in that and is it a term that's used inside the company?

RR001 What term?

PBC Customer engagement.

RR001 Yes. I don't know ... we certainly have voice of the customer, which is a lean manufacturing phrase, because we're not a lean company, we just pretend. So, we steal words like 'Kaiser' and don't tell ourselves we're lean.

PBC Yeah.

RR001 You're not going to quote that back to [0:54:34.9], are you?

PBC No, no, no. But I work for a company which, at one stage, was a supplier to you guys and they brought in Kaiser and they had a competition inside the company to try and get other people to buy into the concept and said that we're going to give it its own name. Guess what they came up with? Kaiser.

RR001 That [0:54:59.7].

PBC And that's...

RR001 That's like when ... do you remember ... what were Goodrich called before they were Goodrich?

PBC Oh, yeah, [0:55:10.6].
# Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study

| RR001 | No, that’s part of the TA. They were called ... was it ... they were called Goodrich something else and they had this big thing and they ended up calling themselves Goodrich. Okay, that’s makes sense. Somebody probably made a lot of money out of it. |
| PBC | Yeah. I think we’re about there, [RR001]. I’ve got a few things... |
| RR001 | Do you want me to punch the air and say, “Yippee”? |
| PBC | No [0:55:45.0]. Like I said, what I’ll do is I’ll just [0:55:52.7] those two charts, send them to you, along with that... |
| RR001 | [0:56:16.6] chart for Civil Aerospace and a little bit about... |
| PBC | [0:56:01.6] strategy. I’ll just stop the tape and just say ... before I do that ... thank you very much ... oh, one more thing, sorry, would you give me a comment about the process that we’ve been though? Have you struggled with it? Have you warmed to it? |
| RR001 | Okay, so shooting from the hip, I’ve actually enjoyed it. I’ve enjoyed our talk, Paul. I think I’ve said it a couple of times on here, you made me think about things in different ways, probably standing back a little bit, you’ve linked some things up. I’ve enjoyed it, it’s been almost a free consultation in some ways and a little bit of a coaching session probably with [0:56:42.8] and stuff. You’ve introduced some concepts that I’ve not thought about. I think you have a good process. It’s a bit of a drain on time but it’s not that bad. And the fact that you’ve done it over a long period has helped with that. There were a couple of times when we were filling the forms in when I was kind of running out of ideas, especially when you have ... some of the things we looked at today with the constructs, because a lot of the wording is very similar and sometimes it is hard to sort of think ... it’s the bit where you have to think in your own words something that isn’t just those words and the negative isn’t just to say the word ‘not’ in the front, or ‘no’. I struggled a little bit with some of that. But, no, I’ve enjoyed it. |
| PBC | I don’t think you’re alone on that. I think everybody does. When I’ve done the grids, I’ve been filling them in, somebody’s been doing it to me, it’s exactly the same and there’s a wonderful bit of software actually called Visual Thesaurus. It’s £40. I only saw it the other day, one of the Professors was using it, and it was ... what happens is you put your word in and it gives you all these different sort of noun, adjective, what have you, round it. And then when you ... there’s like nodes and when you press on the next one it expands up again. It’s absolutely phenomenal. For me, worth buying, but I think everybody should have a look. The only thing is ... this is not too much of a criticism, I hope ... it was written in America so some of the meanings and aspirations may be a bit different, but... |
| RR001 | I find in the commercial world more and more and more the meaning of words is so difficult. I was telling some of the team today, and we were talking about a commercial issue, and one of the guys said, “No, this other guy was there when this was agreed.” Okay, sounds convincing. “And what did he say?” What he said was, “I don’t agree with this.” Okay. It’s the way you tell it, Paul, absolutely the way you tell it. |
| PBC | Alright, I’ll stop the tape there, [RR001]. |
| RR001 | Thanks, Paul. |
| PBC | Thank you. |
Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study
9. Communicating customer partnerships

Rolls-Royce 'voice of the customer' site poster

Voice of the Customer
Developing understanding ... Building trust

"I believe we are more than a customer, we are a strategic partner to Rolls-Royce"

Robert Nyenhuis
- Vice President Aircraft Engineering, Lufthansa Technik

Resolve Customer Issues - Meeting commitments to our customers

Exploring Customer Perceived Value Change in an UK Aerospace Manufacturing Company: A Longitudinal Case Study