

University of Warwick institutional repository: http://go.warwick.ac.uk/wrap

A Thesis Submitted for the Degree of PhD at the University of Warwick

http://go.warwick.ac.uk/wrap/3514

This thesis is made available online and is protected by original copyright.

Please scroll down to view the document itself.

Please refer to the repository record for this item for information to help you to cite it. Our policy information is available from the repository home page.

AN EXAMINATION OF THE LOGIC APPLIED TO COMMODITY BUSINESS PROCESSES ADOPTION: A CASE STUDY APPROACH.

BRADLEY POULSON. FMS, MSc.

Submitted in fulfilment of the requirements for the degree of Doctor of Philosophy at Warwick Business School, University of Warwick.



WARWICK BUSINESS SCHOOL

June 2002

TABLE OF CONTENTS

Table of contents List of Figures List of tables	I VIII X
Acknowledgments Declaration Abstract	XI XII XIII
CHAPTER ONE: INTRODUCTION	1
1.1 Introduction to research subject	1
1.1.1 An introduction to what is being investigated.1.1.2 Overview of the individual chapters.	1 1
1.1.2 Overview of the individual chapters. 1.2 Introduction to the research context	2
1.2.1 A brief history of the Boots Company PLC	$\frac{2}{2}$
1.2.2 Boots The Chemists	5
1.2.3 How the Boots business changed during the period of the study	3
1997-2002	5
1.3 Introduction to the research project	6
1.3.1 The approach	7
1.3.2 The case studies	7
1.3.3 Main conclusions	7
1.4 Summary	8
CHARTED TWO. I ITED ATTIDE DEVIEW, DISTRICT DOCESSES	
CHAPTER TWO: LITERATURE REVIEW: BUSINESS PROCESSES - CURRENT PERSPECTIVES AND DEBATE	9
2.1 Introduction	9
2.2 The organisation of work	9
2.2.1 A historical context	9
2.2.1 A historical context 2.2.2 Post-industrial age	9 11
2.3 The structure of the literature of business processes	14
2.3.1 Introduction	14
2.3.2 What is a business process?	14
2.3.3 Why business processes are an important unit of analysis	17
2.3.4 Process types	17
2.4 Key process movements and debates	18
2.4.1 Management of ongoing processes	18
2.4.2 Improvement of business processes	20
2.4.3 Reengineering of business processes	21
2.4.4 The closely coupled relationship between BPR and Information	
Technology	25
2.5 Knowledge, the new factor of production	27
2.6 Current trends in management practices that influence business processes	29
2.6.1 IT Outsourcing	30
2.6.2 Package software increase in use within businesses	30
2.6.3 Application Service Providers	32
2.6.4 Core competencies	33
2.6.5 New theorist economics view on software dominance	33
2.6.6 Organisational economics	34
2.7 An introduction to call centres	36
2.7.1 Market size, factors, and UK economy	36
2.7.2 From help desks to call centres	37
2.7.3 Employment issues	38
2.7.4 The growth of outsourced call centres	39
2.7.5 An introduction to call centres at Boots The Chemists	39

2.7.6 An overview of the call centre process	40
2.8 The commodity adoption paradox	42
2.8.1 An introduction to the commodity adoption paradox	42
2.8.2 Business processes as a unit of commodity	44
2.8.3 Emerging properties	45
2.9 Summary	46
CHAPTER THREE: RESEARCH METHODOLOGY	47
3.1 Introduction	47
3.2 Getting started	47
3.2.1 The purpose of the research design	47
3.2.2 The research question and objectives	48
3.3.3 Philosophical stance	48
3.3.4 Exploratory, testing-out, and problem solving research	50
3.3.5 Constructs, propositions, and hypotheses	51
3.3 Selecting cases	51
3.3.1 Sampling and replication considerations	51
3.3.2 Single or multiple case studies designs	52
3.3.3 The use of longitudinal case studies	53
3.3.4 Advantages and disadvantages of using case studies	54
3.3.5 Why these particular cases?	55
3.4 Crafting instruments and protocols	56
3.4.1 Quantitative versus qualitative data	56
3.4.2 Unit of analysis	57
3.4.3 Data collection methods	57
3.4.4 Difficulty of the single observer	57
3.4.5 Gaining access to research companies	57
3.5 Entering the field	58
3.5.1 Overlapping data analysis	58
3.5.2 Adjustments during the data collection process	59
3.6 Analysing data	60
3.6.1 Introduction	60
3.6.2 Activity Record	60
3.6.3 Strategic Choice Analysis	61
3.6.3.1 Practical implications of using SCA as a research	
instrument	64
3.6.4 Inscription/Specialisation	66
3.6.4.1 Introduction	66
3.6.4.2 Inscription	67
3.6.4.3 Translation	68
3.6.4.4 Irreversibility	68
3.6.4.5 Inscription/Specialisation analysis framework	69
3.6.4.5.1 Degree of specialisation	69
3.6.4.5.2 Degree of Inscription	70
3.6.4.5.3 Patterns of activity	70
3.6.5 The logic linking the data to the propositions	72
3.6.5.1 Within-case analysis	72
3.6.5.2 Cross-case analysis	74
3.7 Shaping hypotheses	74
3.7.1 Introduction	74
3.7.2 Construct validity	74
3.7.3 Internal validity	75
3.7.4 External validity (Generalisability)	76
3.7.5 Reliability	76
3.8 Enfolding literature	77

3.9 Reaching closure 3.10 Summary	77 77
CHAPTER FOUR: CASE STUDY ONE – CUSTOMER SERVICE	79
4.1 Introduction	79
4.1.1 The structure of the case studies	81
4.2 The customer service process in focus (Process logic)	82
4.2.1 Introduction	82
4.2.2 Activity one: Receive inbound calls	83
4.2.3 Activity two: Identify customer and information	85
4.2.4 Activity three: Handle the complaint or enquiry	86
4.2.5 Activity four: Initiate other processes	86
4.2.6 Activity five: Close the call	87
4.3 The approach taken to the business problem (Decision logic)	87
4.3.1 Introduction	87 88
4.3.2 Step one: Shaping of problems 4.3.2.1 Determine an approach?	89
4.3.2.1 Determine an approach? 4.3.2.2 How best to provide the IT?	89 89
4.3.2.3 Obtain or acquire call centre capability?	89
4.3.2.4 Boots staff handle the calls?	90
4.3.2.5 Effective complaint handling?	91
4.3.2.6 Match the in-store experience?	91
4.3.2.7 Maximise customer relationships?	91
4.3.2.8 Separation of written and oral work?	92
4.3.2.9 Provision of the telephony?	92
4.3.3 Step two: Designing the possible courses of action	92
4.3.4 Step three: Comparing the possible courses of action	96
4.3.4.1 Comparisons under uncertainty	100
4.3.5 Step four: Choosing commitments for action through time	101
4.3.5.1 Commitment package	103
4.4 The alignment of the Actors in the Network (Alignment logic)	105
4.4.1 Introduction	105
4.4.2 People – Customer Service Advisors	106
4.4.3 Customer 'Q' – Customer contact software	107
4.4.4 Telephony	107
4.4.5 Accommodation	107
4.5 Summary	108
CHAPTER FIVE: CASE STUDY TWO – BOOTS ADVANTAGE	
LOYALTY CARD	109
5.1 Introduction	109
5.1.1 The approach taken to this case study	110
5.2 The loyalty card process in focus (Process logic)	111
5.2.1 Introduction	111
5.2.2 Activity one: Receive inbound calls	112
5.2.3 Activity two: Identify customer and information	113
5.2.4 Activity three: Service the account	113
5.2.5 Activity four: Initiate other processes	113
5.2.6 Activity five: Close the call 5.3 The approach taken to the hydrogen problem (Decision logic)	114
5.3 The approach taken to the business problem (Decision logic) 5.3.1 Introduction	114 114
5.3.2 Step one: Shaping of problems	114
5.3.2.1 Determine an approach?	114
5.3.2.1 Determine an approach? 5.3.2.2 Whether to utilise smart-card technology?	115
5.3.2.3 How best to provide the IT?	116
	0

5.3.2.4 Obtain or acquire call centre capability?	117
5.3.2.5 Extended schemes to other Boots companies?	118
5.3.2.6 Obtain or acquire call centre telephony?	118
5.3.2.7 Whether to move call centres in-house?	119
5.3.2.8 Use Boots staff to handle calls?	119
5.3.3 Step two: Designing the possible courses of action	120
5.3.4 Step three: Comparing the possible courses of action	123
5.3.4.1 Comparisons under uncertainty	127
5.3.5 Step four: Choosing commitments for action through time	127
5.3.5.1 Commitment package	129
5.4 The alignment of the actors in the network (Alignment logic)	131
5.4.1 Introduction	131
5.4.2 Telephony and accommodation	132
5.4.3 People	132
5.4.4 CDAS/LSOS Technology	133
5.5 Summary	133
	100
CHAPTER SIX: CASE STUDY THREE - MOTHER & BABY DIRECT	135
(MAIL ORDER)	
6.1 Introduction	135
6.1.1 The approach taken to this case study	136
6.2 The mail order process in focus (Process logic)	136
6.2.1 Introduction	136
6.2.2 Activity one: Receive 'inbound' calls	137
6.2.3 Activity two: Identify customer and information	138
6.2.4 Activity three: Take order	140
6.2.5 Activity four: Initiate other processes	142
6.2.6 Activity five: Close the call	142
6.3 The approach taken to the business problem (Decision logic)	143
6.3.1 Introduction	143
6.3.2 Step one: Shaping of problems	143
6.3.2.1 Determine an approach?	144
6.3.2.2 Whether to utilise in-house logistics?	145
6.3.2.3 Is the existing call centre capability appropriate?	145
6.3.2.4 How best to provide the Information Technology?	146
6.3.2.5 Offer Advantage Card points?	147
6.3.2.6 Match store deals and offers?	147
6.3.3 Step two: Designing the possible courses of action	148
6.3.4 Step three: Comparing the possible courses of action	151
6.3.4.1 Comparisons under uncertainty	158
6.3.5 Step four: Choosing commitments for action through time	159
6.3.5.1 Commitment package	161
6.4 The alignment of the actors in the network (Alignment logic)	163
6.4.1 Introduction	163
6.4.2 People – call centre agents	164
6.4.3 Business Express	164
6.4.4 Telephony and accommodation	164
6.4.5 Mailbrain, Logica, and EPSOM - Information Technology	164
6.5 Summary	165
CHAPTER SEVEN: CASE STUDY FOUR – HEALTH & TRAVEL	
INSURANCE SERVICES	167
7.1 Introduction	167
7.1.1 The approach taken to this case study	168
7.2 The insurance service process in focus (Process logic)	169

7.2.1 Introduction	169
7.2.2 Activity one: Receive inbound calls	170
7.2.3 Activity two: Identify customer and information	170
7.2.4 Activity three: Take order	171
7.2.5 Activity four: Initiate other processes	171
7.2.6 Activity five: Close the call	171
7.3 The approach taken to the business problem (Decision logic)	171
7.3.1 Introduction	171
7.3.2 Step one: Shaping of problems	172
7.3.2.1 Determine an approach?	173
7.3.2.2 How best to provide the IT?	175
7.3.2.3 Is existing call centre capability appropriate?	175
7.3.2.4 Boots staff represents the brand?	176
7.3.3 Step two: Designing the possible courses of action	176
7.3.4 Step three: Comparing the possible courses of action	179
7.3.4.1 Comparisons under uncertainty	183
7.3.5 Step four: Choosing commitments for action through time	184
7.3.5.1 Commitment package	186
7.4 The alignment of the Actors in the Network (Alignment logic)	188
7.4.1 Introduction	188
7.4.2 People – call centre agents	189
7.4.3 ISAAC – Information Technology	190
7.4.4 Telephony and accommodation	190
7.5 Summary	191
·	
CHAPTER EIGHT: A LONGITUDINAL VIEW – THE NEXT FIVE YEARS	192
8.1 Introduction	192
8.2 Customer Service	193
8.2.1 Introduction	193
8.2.2 Development of the call centre process (TEAMS) (PACKAGE) (IN	193
HOUSE) (YES)	
8.2.3 Support for new products and services	195
8.2.4 Customer Relationship Management (CRM) trial	195
8.3 Loyalty Card – Boots Advantage Card	196
8.3.1 Introduction	196
8.3.2 Developing the call centre process (OUTSOURCE) (YES)	1,0
(OUTSOURCE) (BESPOKE)	197
8.3.3 The amalgamation of Customer Service and Loyalty Card call	200
centres	
8.4 Mother & Baby Direct – Mail Order	202
8.4.1 Introduction	202
8.4.2 Developing the call centre process (MODULAR) (BESPOKE) (NO)	
(YES)	202
8.4.3 The emergence of new e-commerce channels	205
8.5 Insurance – Health & Travel Insurance	207
8.5.1 Introduction	207
8.5.2 Developing the call centre process (PARTNER) (PARTNER)	
(BEPOKE)	207
8.5.3 Analysis of the costs	209
8.6 Summary	211
·	
CHAPTER NINE: CASE STUDY ANALYSIS	212
9.1 Introduction	212
9.2 Process Logic	212

9.2.1 Introduction	212
9.2.2 The language used to describe business processes	213
9.2.3 The similarity of the processes under review	214
9.2.3.1 Information and knowledge	216
9.2.3.1.1 How closely coupled is the process with the	
other processes?	216
9.2.3.1.2 Attainment of the call centre capability	217
9.2.3.1.3 Know-how	218
9.2.3.2 Cultural difference between 'retail' and 'Financial	
Services'	220
9.2.3.3 Administrative inheritance (where we are now)	220
9.2.3.4 Assets, governance, and commoditisation	221
9.2.3.4.1 Asset specific investments	221
9.2.3.4.2 Telephony is a commodity	222
9.2.3.4.3 Location and accommodation	223
9.2.3.4.4 Governance	223
9.2.3.4.5 The automatic association between commodities	223
and outsourcing	224
9.2.4 Process logic summary	225
9.3 Decision Logic	226
9.3.1 Introduction	226
	227
9.3.2 Approach - structured versus anarchic decision making 9.3.3 Decision areas	228
	220
9.3.3.1 Process specific decisions within the boundary of the	230
problem focus 0.3.3.2 Customer Service - Obtain or acquire call centre	230
9.3.3.2 Customer Service – Obtain or acquire call centre	230
capability?	230
9.3.3.3 Customer Service – Boots own staff to handle enquiries or	221
complaints?	231
9.3.3.4 Loyalty Card – Obtain or acquire the call center capability?	232
9.3.3.5 Mail Order/Insurance – Is existing call center capability	000
appropriate?	233
9.3.3.6 Related decisions within the boundary of the problem	222
focus	233
9.3.3.7 Determine an approach?	233
9.3.3.8 How best to provide the IT?	234
9.3.3.9 Whether to utilise smart-card technology?	235
9.3.3.10 Whether to utilise in-house logistics?	236
9.3.4 Process specific and related decisions outside the boundary of the	
problem focus	236
9.3.5 Decision options and decision schemes	237
9.3.6 Comparison areas of decision schemes	239
9.3.7 Managing uncertainty	239
9.3.8 Bounded rationality and Satisficing	243
9.3.9 Slow and strategic versus fast and technical	243
9.3.10 Decision logic summary	244
9.4 Alignment logic	245
9.4.1 Introduction	245
9.4.2 Alignment of the actors in the network	246
9.4.2.1 Telephony and accommodation	247
9.4.2.2 People engaged in the call center process	248
9.4.2.3 Software used in the call center process	250
9.4.2.4 Externalities and overflowing	252
9.4.3 Methods of inscription observed during the cases	252
9.4.3.1 Trials, pilots, and speed of implementation	252

9.4.3.2 Hierarchical, intermediate, and market governance	253
9.4.3.3 The influence of key actors in the network	253
9.4.3.4 Evidence of translation and inscription activity taking	
place in the non-aligned space	254
9.4.4 Movement around the inscription/specialisation framework	256
9.4.5 Alignment logic summary	258
9.5 Integration of the three logics of commoditisation	259
9.5.1 Introduction	259
9.5.2 The construction of the model	259
9.5.2.1 The process logic	261
9.5.2.2 The decision logic	262
9.5.2.3 The alignment logic	264
9.5.3 Movement over time	265
9.5.4 Commodity adoption at different levels of the firm	266
9.5.5 Summary	266
CHAPTER TEN: CONCLUSIONS AND CONTRIBUTIONS	269
10.1 Introduction	269
10.2 The relational	269
10.3 The analytical	271
10.3.1 Processes are similar in the core but have a surround that is specific	271
10.3.2 The characteristics of a process differentiate it from any other	
processes	272
10.3.3 The significant difference in the alignment of actors in a network	272
10.3.4 A commodity process has to be seen to be a commodity by the	
actors in the network	273
10.4 The empirical	273
10.4.1 The mix and variety of the decisions taken compounds the	
differences between processes	274
10.4.2 Decisions regarding processes take place at multiple levels within a	
business	274
10.4.3 The closely coupled nature of 'related' decisions and the influence	
on the final outcome	275
10.5 The practical	275
10.6 The methodological	276
10.7 Future research, development and applications	277
10.8 Conclusions	278
10.9 Summary of contributions	279
APPENDICES	
Appendix One: Interview guide	281
Appendix one. Interview guide	201
REFERENCES/BIBLIOGRAPHY	284
ALL LILL VENIUULIVUMI III	∠ ∪-т

LIST OF FIGURES

- 2.1 A Classification of the major process types (Based on Garvin 1998)
- 2.2 The recursive relationship between IT and BPR
- 2.3 Leavitt's Diamond
- 3.1 Single and multiple case study designs
- 3.2 Overlapping data collection and analysis
- 3.3 Activity Record example
- 3.4 Inscription/Specialisation analysis framework
- 3.5 High-level overview of the research data collected
- 4.1 An activity record of the Customer Service process
- 4.2 A decision graph of the key case decisions
- 4.3 Analysis of interconnected decision areas (AIDA)
- 4.4 Option Graph Customer Service
- 4.5 Feasible decision schemes for the Customer Service case
- 4.6 Forming a working shortlist Customer Service
- 4.7 Uncertainty graph salience of uncertainty to this comparison
- 4.8 A comparison of the feasible action schemes
- 4.9 Customer Service process inscription/specialisation framework
- 5.1 An activity record of the Loyalty Card process
- 5.2 A decision graph of the key case decisions
- 5.3 Analysis of interconnected decision areas (AIDA)
- 5.4 Option Graph Loyalty Card
- 5.5 Feasible decision schemes for the Loyalty Card case
- 5.6 Forming a working shortlist Loyalty Card
- 5.7 Uncertainty graph salience of uncertainty to this comparison
- 5.8 A comparison of the feasible action schemes
- 5.9 Loyalty Card process inscription/specialisation framework
- 6.1 An activity record of the Mail Order process
- 6.2 A decision graph of the key case decisions
- 6.3 Analysis of interconnected decision areas (AIDA)
- 6.4 Option Graph Mail Order
- 6.5 Feasible decision schemes for the Mail Order case
- 6.6 Forming a working shortlist
- 6.7 Uncertainty graph salience of uncertainty to this comparison
- 6.8 A comparison of the feasible action schemes
- 6.9 Mail Order process inscription/specialisation framework
- 7.1 An activity record of the Insurance process
- 7.2 A decision graph of the key case decisions
- 7.3 Analysis of interconnected decision areas (AIDA)
- 7.4 Option Graph Insurance Services
- 7.5 Feasible decision schemes for the Insurance Services case
- 7.6 Forming a working shortlist
- 7.7 Uncertainty graph salience of uncertainty to this comparison
- 7.8 A comparison of the feasible action schemes
- 7.9 Insurance process inscription/specialisation framework
- 8.1 Case study key events and milestones (After Langley & Traux 1994).
- 9.1 Activity record composite

- 9.2 A composite of all four option graphs
- 9.3 Alternative implementation approaches
- 9.4 Case study process components grouped by type
- 9.5 Movement due to inscription/translation over time
- 9.6 Conceptual model of commodity business process adoption: the three central factors
- 9.7 Conceptual model Process logic characteristics
- 9.8 Conceptual model Decision logic characteristics
- 9.9 Conceptual model Alignment logic characteristics
- 9.10 Plot of the conceptual model of commodity business process adoption
- 10.1 Commodity business process adoption triangle

LIST OF TABLES

- 1.1 Summary financial data 1997 2001
- 2.1 Business process definition analysis
- 2.2 Business Process Reengineering definition analysis
- 2.3 Summary of the three principal business process movements
- 2.4 Comparisons between call centres and help desks
- 3.1 Main ideas of the philosophical approaches of social sciences
- 3.2 Examples of case study types
- 3.3 Six sources of data collection evidence
- 4.1 Options within the boundary of the decision area
- 4.2 List of comparison areas
- 4.3 Comparison under uncertainty
- 4.4 Comparing uncertainty areas
- 4.5 Commitment package framework Customer Service
- 5.1 Options within the boundary of the decision area
- 5.2 List of comparison areas
- 5.3 Comparison under uncertainty
- 5.4 Comparing uncertainty areas
- 5.5 Commitment package framework Loyalty Card
- 6.1 A process impact matrix of the mail order call centre.
- 6.2 Options within the boundary of the decision area
- 6.3 List of comparison areas
- 6.4 Comparison under uncertainty
- 6.5 Comparing uncertainty areas
- 6.6 Commitment package framework Mail Order
- 7.1 A comparison of new products and services introduced by well-known UK high-street retailers over the preceding five years.
- 7.2 Options within the boundary of the decision area
- 7.3 List of comparison areas
- 7.4 Comparison under uncertainty
- 7.5 Comparing uncertainty areas
- 7.6 Commitment package framework Insurance Services
- 9.1 Summary results of the decision logic analysis techniques
- 9.2 Summary of the decision areas inside and outside the boundary of the problem focus, split by process specific and related problems
- 9.3 Summary of the process specific decisions
- 9.4 Summary of the related decisions inside the problem focus boundary
- 9.5 Summary of the compatibility matrix results
- 9.6 Comparison areas of decision schemes
- 9.7 Uncertainty areas (UE)
- 9.8 Uncertainty areas (UR)
- 9.9 Uncertainty areas (UV)
- 9.10 Current translation activity in the four case studies

ACKNOWLEDGEMENTS

Undertaking a PhD by part-time study while holding a senior post within a blue-chip company relies on the cooperation and understanding of many people, notably family and friends, and the sacrifices they made during holidays, weekends and evenings. I am indebted for their understanding, support and forbearance. I also wish to thank my supervisor Professor Richard Ormerod, who made this often difficult and frustrating undertaking a valuable learning experience. Despite the many personal pressures Richard encountered during this extended period, he afforded me the time, support and guidance I needed, and is truly a great mentor and friend. I remember thinking how lucky I was to be allocated Richard as my supervisor, and looking back that was certainly the case. Dr. Jimmy (Chung-Ming) Huang of Nottingham Business School, a fellow PhD student at Warwick (Full-time), for sharing his experiences, the highs and lows, anxieties, frustration, and finally joy at his graduation. I feel I have a life long friend in Jimmy. Dr David Arnott my MSc. Thesis Supervisor at Warwick Business School who's encouragement and enthusiasm gave me the confidence to study for a PhD during my earlier academic pursuits. Lesley Inness PhD Secretary for being a constant and reliable source of help and information and one of my few regular contacts at Warwick. A special thank-you to Graham Hardy, Customer Service Manager at Boots The Chemists for his patience and help during the development of the cases, and everyone else who took part in interviews, discussions, and workshops. Finally, Andreas Kyrlacou and the staff at the King Jason Hotel Apartments in Paphos, Cyprus, for their understanding and consideration of this eccentric Englishman who regularly appeared on holiday complete with laptop computer, text books and paper, and who under suitable shade spent many hours reading, writing or typing.

DECLARATION

This thesis is presented in accordance with the regulations for the degree of doctor of philosophy (Ph.D.). The work described is entirely original and my own, unless otherwise indicated. None of the material contained hereafter has been submitted for a degree at any other university. The interpretations in this thesis are the sole responsibility of the author, and do not in any way represent the views of the case companies or Warwick Business School.

ABSTRACT

This research examines in detail the ability (logic) of organisations to adopt commodity work business processes. Four case studies taken from within one major UK retailer, Boots The Chemists, examines how a single work business process, that of call centres, has been developed in each of four different internal business ventures by studying the process, decision, and alignment logic applied in each case. The research approach adopts qualitative and interpretative analysis that includes longitudinal case studies. This multiple case study approach has an embedded design incorporating the components of work business processes as subunits to enhance insight. Data was collected predominantly from interviews supported by archive material, documents, and direct observation. Overlapping cross case, and within case analysis was undertaken, using Activity Records, Strategic Choice Analysis, and concepts supported by Actor Network Theory. While it might be expected that broadly similar processes located in the same overall business context would adopt similar solutions in terms of commoditisation, governance, and resourcing (architecture), the research found that in the four cases four quite different approaches were taken. It is concluded that while the core processes were the same across the cases, (i) the detail of the process, (ii) the variation in the contexts, (iii) the logic of the decision process as they evolved, and (iv) the view of the actors involved (as to whether each element could be treated as a commodity) combined together to lead to quite different approaches in each case. Moreover as time progressed and experience was gained and the situation evolved, actors changed their views (alignment) resulting in changes to the business process. There appeared to be little transfer of knowledge across different parts of the organisation.

CHAPTER ONE:

INTRODUCTION

1.1 Introduction to research subject

1.1.1 An introduction to what is being investigated

This research examines in detail the ability (logic) of organisations to adopt commodity work business processes. Four case studies taken from within one major UK retailer, Boots The Chemists, examine how a single work business process, that of call centres, has been developed in each of four different internal business ventures by studying the process, decision, and alignment logic applied in each case. In this age of standardisation, commodification, simplification, and rationalisation, it is interesting to understand why four business ventures within one organisation would implement such diverse solutions for what would appear on the surface to be an identical business process, one that has for a long time been considered in some way a commodity (i.e. a process that is not specific to any particular business, is readily obtained, and is more or less equally valuable to any number of businesses). The capability of organisations to assess, recognise and then adopt commodity business processes is more often assumed than scrutinised, and there appears to be a paradox surrounding commodity process adoption whereby if a business process 'is' truly a commodity then why don't organisations just adopt it? The research on which this thesis is based takes as its focus the logic employed by organisations and the context in which it is applied.

1.1.2 Overview of the individual chapters

This chapter, chapter one, gives a brief history of Boots to provide context, sets out the research questions, and introduces the cases and summarises the main conclusions that are reached. Chapter two endeavours to set out the topology of the business process literature, highlighting the current perspectives and debates, and includes a general overview of call

centres and the industry in which they operate. Chapter three describes the methods chosen for this research and provides justification for their appropriateness. In addition, it demonstrates the reliability of the data sources and case studies used, and include discussion of the academic literature of the chosen techniques and methods utilised. It also provides an account of the approach taken in this study. Chapters four, five, six, and seven each contain one of the four case studies examined in this research. Each case is structured in an identical way and opens with an introduction to the case under investigation, followed by details of the process in focus (process logic), then the approach taken to the business problem (decision logic), and thirdly the alignment of the actors in the network (alignment logic). Each case is concluded with a summary. Chapter eight takes a within-case and longitudinal view of the four cases using evidence of what actually happened, and reviews the development of each case over the five-year period from 1997 - 2002. Chapter nine examines in detail the findings from each of the four cases both individually and collectively using cross-case analysis. It is in this chapter that the conceptual model of commodity business process adoption is introduced. Finally, chapter ten draws the themes together and presents the conclusions from the research along with details of the contribution the research makes to the body of knowledge.

1.2 Introduction to the research context

In order to put this research into context, a brief history of The Boots Company, its current operation, and the changes during the study follows.

1.2.1 A brief history of the Boots Company PLC

Boots is one of the best known and trusted retail brands in the UK comprising businesses operating principally in retailing, the manufacture and marketing of health and personal care products throughout the world. It also develops and manages retail property. Headquartered on a 300-acre site at Beeston, Nottingham, England, it employs approximately eighty thousand staff in an international operation. It has recently

introduced health and beauty format stores in Taiwan, which supplement its growing presence in Thailand, and initiated collaborative ventures in Japan and Holland, in addition to its traditional UK based business.

In 1877 Jesse Boot took over the family business, a small herbalists shop in Goose Gate, Nottingham. Under the slogan of 'Boots Cash Chemists', herbal preparations, basic remedies and household products were advertised at reduced prices. The business extended into Lincoln and Sheffield, and soon had ten branches in the Midlands. By 1883 the formation of the 'Boots Pure Drug Company Limited' was completed and accompanied the purchase of production facilities in Nottingham to manufacture simple pharmaceuticals. In 1886 Jesse married Florence Rowe, daughter of a bookshop owner in St. Hellier, Channel Isles. Florence was particularly active in the welfare of the employees, especially young females working in the manufacturing works. Although thought of as a quintessential English company, it did have a period of American ownership when in 1920 the controlling interest in the company was sold to the American retail chemist, United Drug Company. It was during the thirteen-year period of American ownership that, at the age of 81, Jesse Boot died. His son John, who in 1933 returned the company to its UK ownership, a feat of which his father would no doubt have been proud, succeeded him. This same year also saw the opening of the 1000th Boots store in Galashields, Scotland. Florence founded the 'Boots book lovers library', which by its peak in the mid 1930's had over half a million subscribers at its 450 branches that operated the scheme.

The next fifty years, which included a significant contribution to the war effort producing vital chemicals and pharmaceutical products, saw a period of massive expansion and considerable activity in acquisitions and product launches. The Nairobi factory opening in Kenya (1942) was the start of a major expansion across continents, along with the acquisition of the Timothy Whites and Taylors chemist chains (1968), launch of

Ibuprofen (Brufen) in the UK (1969), purchase of Crooks Laboratories Limited (1971), Rucker Pharmacal, Shreveport USA (1977) (later re-named Boots Pharmaceuticals Inc.), while being awarded the Queens Award for Exports in 1974, and Queens Award for Technology (Research Department) in 1985. A name change followed in 1971 to 'The Boots Company Limited', later becoming 'The Boots Company PLC' in 1982. Building on the first Optical Services Department in Boots stores in 1983, the late 80's saw the takeover of Clement Clarke Opticians, the first Children's World store opened in Dudley, West Midlands, the acquisition of Underwoods Chemists, the formation of a new property division, and the acquisition of Ward White companies which at the time comprised Halfords, AG Stanley and Payless. The 90's saw the merger of Payless and W H Smith's 'Do-It-All' (1991) to form a joint company, and in the same year the formation of Boots Healthcare International (BHI) and Boots Contract Manufacturing (BCM). Boots Healthcare International sold Boots Pharmaceutical to BASF in 1995. In 1996 Children's World was sold to Storehouse PLC and Laboratoires Lutsia was acquired. In 1997 Boots Healthcare International acquired Hermal Kurt Herrman oHG. 1998 saw the sale of Do-It-All to the Focus Retail Group Limited.

The Boots Group today comprises Boots The Chemists (BTC), Boots Retail International (BRI), Boots Opticians (BOL), Halfords, Boots Properties, Boots Healthcare International (BHI), Boots Contract Manufacturing (BCM), and Handbag.com. Boots see the environment and local community as core business issues. It has made significant progress in improving its energy efficiency while making significant reductions in carbon dioxide emissions, effluent discharge, packaging and waste.

1.2.2 Boots The Chemists

12.5 million people visit the 1400¹ Boots The Chemists stores throughout the United Kingdom every week making it one of the most accessible brands with a presence in virtually every town, shopping centre and major transport interchange. In 1998, through the acquisition of Hayes, Conyngham & Robinson, and Connors, Boots The Chemists became the largest retail pharmacy chain in Ireland. Ranked as the most trusted brand for being 'honest and fair', it employs over 4000 Pharmacists. Its growth continues with the development of dentistry services now employing over 180 dentists and 91 hygienists, and developments with chiropody services, NHS walk-in clinics and beauty treatments continues a pace. The Advantage Card continues to be Europe's largest smart card loyalty scheme with 14 million card holders (10 million active card users), and its 'own label' cosmetics No.7, 17, Natural Collection and Botanics are market leaders. Despite continued pressure from the supermarkets it provides an unparalleled range of over 25,000 health and beauty products with only a 16% sales overlap with the major supermarkets.

1.2.3 How the Boots business changed during the period of the study 1997 - 2002

This period was an interesting time in Boots' history as it moves from its retail orientation as the 'chemists to the nation', to a 'wellbeing' organisation focussing on products and services that make their customers 'look good and feel good'. For the year ending 31st March 2002, turnover had increased by 2% to £5,332m, and group profit by 9.9% to £595.8m after exceptionals. Table 1.1 is a summary of the financial results for the previous five years. Despite a steady year on year growth and entry into new markets, Boots The Chemists remains unfashionable in the city, described as "dull and boring" by

¹ A range of store numbers is quoted throughout this thesis depending on the particular point in time to which it refers. Boots had just fewer than 1300 stores in 1997, and has almost 1450 in 2002 (excluding BOL, Wellbeing and Dentistry).

city analysts which reflected in the fact that its all time high share price in excess of £10 in 1998, plummeting to £4.52 in the second half of 1999.

	1997	1998	1999	2000	2001
Turnover £m	4,578	5,022	5,045	5,189	5,226
Operating Profit £m	492	538	562	565	580
Free cash flow £m	147	203	95	376	60
Payment to shareholders £m	470	563	207	312	224
Dividend per share p	20.5	22.3	23.8	25.2	26.3

Table 1.1: Summary financial data 1997 – 2001

During this period the abolition of retail price maintenance (RPM) on over the counter medicines was introduced along with much speculation that this would damage Boots traditional core business, but as yet it appears to have had no discernable impact.

1.3 Introduction to the research project

1.3.1 The approach

This thesis reports on the outcomes of a research project that started in 1996 and finished in 2002. The intention was to examine in detail the ability of organisations to adopt commodity work business processes. The study investigated the process logic, decision logic, and alignment logic in four internal corporate initiatives within one major UK retailer (Boots) where each initiative required a call centre at the heart of its operation. The goal was to develop insights into the development of new business processes and thereby understand what approach would be required in order to adopt commodity work business processes. The key questions were to discover:

- □ How key architecture decisions are taken?
- □ What are the conditions under which commodity adoption takes place?
- What is the influence of commodity work business processes in that decision-making?

The term 'architecture' is used in this thesis to mean the way organisations choose to design their processes and procedures, and not the internal organisation of computers components, or that of a systems network.

1.3.2 The case studies

The developments examined are referred to as the Customer Service case (CS), Loyalty Card case (LC), Mail Order case (MO), and the Insurance case (INS). Despite the similarity of all cases requiring call centre capability at the heart of the operation, the contexts and situations differ considerably, and were chosen for their contrasting approaches to the business problem. The first of these, Customer Service, is a redesigned internal venture that developed and implemented a new in-house call centre capability. The second case, Loyalty Card, was a completely new venture that started with an outsourced call centre, which was later brought in-house. The third case, Mail Order, was another new venture but with a completely outsourced call centre. Finally, the Insurance case is a new joint venture with the call centre operated by the partner organisation. In each venture the call centre represented a significant and fundamental part of the business operation. The research follows each of the initiatives in turn paying particular attention to the call centre process in use. It charts the development over a five-year period from the implementation of the first call centre (1997), through to the present day (2002). While the initiatives were initially completely unrelated to each other and each had a large amount of autonomy, the research does attempt to highlight any impact that they might have had on each other, particularly as all four were introduced within a thirteen month period and evolved over a relatively short yet similar time period.

1.3.3 Main conclusions

While it might be expected that broadly similar processes located in the same overall business context would adopt similar solutions in terms of commoditisation, governance, and resourcing (architecture), the research found that in the four cases four quite different

approaches were taken. It is concluded that while the core processes were the same across the cases, (i) the detail of the process, (ii) the variation in the contexts, (iii) the logic of the decision process as they evolved and (iv) the view of the actors involved (as to whether each element could be treated as a commodity) combined together to lead to quite different approaches in each case. Moreover as time progressed and experience was gained and the situation evolved, actors changed their views (alignment) resulting in changes to the business process. There appeared to be little transfer of knowledge across different parts of the organisation.

1.4 Summary

This chapter gives a brief history of Boots business, its history, and how the business has changed during the period of this study in order to provide context. It sets out the research questions, introduces the cases and summarises the main conclusions that are reached.

CHAPTER TWO:

LITERATURE REVIEW: BUSINESS PROCESSES - CURRENT

PERSPECTIVES AND DEBATES

2.1 Introduction

The purpose of a literature review is to set a context and framework for the research, and to develop sharper research questions (Yin 1994). Stevens et al (1993) list the four main

functions as:

□ To give reasons why the topic is of sufficient importance for it to be researched,

□ To provide the reader with a brief up-to-date account and discussion of literature on

the issues relevant to the topic,

To provide a conceptual and theoretical context in which the topic for research can be

situated, and

□ To discuss relevant research carried out on the same topic or similar topics.

This chapter starts by setting a context of the organisation of work, before exploring the

literature of business processes by responding to the question, what is a business process?

An explanation as to why business processes are important and the different process types

that exist follow this. It then goes on to explore the three key business process movements

(TQM, the learning organisation, and BPR). The next section explores the composition of

business processes before exploring the current trends in management practice that

influence business processes. An introduction to call centres follows to provide context

along with the positioning of the paradox of commodity process adoption. The chapter

concludes with a summary that includes the research propositions.

2.2 The organisation of work

2,2,1 A historical context

"Paradise regained in Turner's rural idyll". This headline from an article in 'The Times'

from August 1998 describes how the Derwent Valley at Swalwell near Gateshead,

England, has been restored to its former beauty, as once painted by Turner, after it had been laid to waste by generations of industrial pollution. The article goes on to describe how Iron had been worked nearby since 1690, when Sir Ambrose Crowley set up his Winlaton Ironworks, Europe's first integrated manufacturing plant, pioneering the idea of putting raw materials in one end and taking finished goods from the other, an operation that had been in existence for 150 years. In fact, this degree of vertical integration was described as 'remarkable' (Flinn 1957), especially as a lack of integration was characteristic of the eighteenth century iron industry. The business embraced a wide range of processes and services, and included in their employee lists are references to clerks, coopers, carters, wallers, farmers, seamen, warehousemen and Thames waterman in addition to the usual iron workers. Crowley developed what was described as an 'administrative framework' that enabled this integrated ironworks to be operated simply and efficiently by post from his London home. This framework existed in the form of a Law Book, which provided a codification of the rules and regulations and acted as a precise guide for employee behaviour.

Since the days of Ambrose Crowley there have been many significant developments. It was Adam Smith during the eighteenth century who championed the 'factory system' making work more efficient by specialisation and the division of labour comprising: development of skills, saving of time, and the use of specialised tools. Following the War of Independence, Eli Whitley capitalised on the shortage of muskets and subsequently pioneered the concept of designing and using interchangeable parts for production. This led to concepts of *tooling-up*, *quality control*, *production standards*, *work-study* and *incentives*.

F.W. Taylor built on much of the work that had gone before and formalised it into the 'Principles of Scientific Management' (1929) This introduced work design, work-measurement and production control. He specialised in 'fitting the task to the worker', and

his research on the use of appropriate tools for the job and rates of work led to concepts such as *method study* and *piece rate systems on the shop floor*. From this time there were rapid developments in machinery. Towards the end of the nineteenth century the internal combustion engine was invented, leading to the development of the motorcar. Henry Ford embraced the modern assembly-line techniques reducing the time it took to assemble a car from twelve and a half hours for one man, to ninety-three minutes. Two world wars played a large part in speeding-up the rate of output. Forecasting became a problem and this led to the introduction of techniques such as *statistical quality control* and *work sampling*, and *operational research* was established within the armed forces. As organisations grew, improvements came from management and clerical work as much as from direct work. This led to the establishment of the *Organisation & Methods* (O&M) discipline.

2.2.2 Post-Industrial Age

Building on the work of Adam Smith (pin factory) through to Frederick Taylor's (Bethlehem Steel Works), the underlying assumption is that industrial work benefits from being broken down into the smallest and most basic tasks. This relies on hierarchical, command and control structures. Functionally based structures became the norm, with all the associated problems of repeated and manual processing of information. Today enterprises are moving to a new organisational model, from a focus on 'functions', to one focused on 'business processes'. Technology Foresight (1995), asserts that "firms must learn that changes which optimise processes rather than functions can take them to world class performance". In many industries it is becoming more important to develop new products effectively than to produce old products efficiently (Macintosh and Francis 1997), however organisations hang on to their existing architecture long after it has ceased to be the best on offer to perform the particular tasks required of it (Francis and Southern 1995). Now organizations are moving into a new 'post-industrial' age, powered by information technology, and as a result many firms are moving toward a 'combination'

not 'division' of labour. New entrants pose a threat to existing organisations by 'adopting radically different modes of operation'. As Drucker (1993) points out: "In 1880, about 9 out of 10 workers made things; today that is down to one out of five. The other 4 out of 5 are 'knowledge people' or service workers'."

Population ecology perspective argues that change comes about because the existing mode of operation loses its legitimacy, rather than the cost and benefit argument (Hannan and Freeman 1989). For example, the traditional way of operating loses its legitimacy when respected competitors adopt new organisational practices. More recently Information Technology (IT) has been revolutionary in the way it has co-ordinated and controlled production processes, the way it has enabled unprecedented cost reductions, and the way it distances workers (both blue and white collar) from the elements of labour. IT has been a vehicle for change in firms, especially when coupled with other technologies. It has made the co-ordination of the enterprise easier in three ways: the ability to collapse time and distance, the ability to substitute generalised for highly specific tasks and processes, and the ability to capture and use organisational memory.

Business Process Reengineering (BPR) brought together three critical components: the ability of technology to change the way work was done in addition to improving effectiveness; the concept of observing activity across functional boundaries (a concept borrowed from the quality movement); and applying this to a clean-sheet-of-paper and not being constrained by the legacy of the past. The appearance of articles such as 'Reengineering work: Don't automate, obliterate' (Hammer 1990), and 'The new Industrial Engineering: Information Technology and Business Process Redesign (Davenport & Short 1990) brought these concepts of reengineering business processes to a wide audience. But as Davenport (1996) subsequently concluded "the most profound lesson of business process reengineering was never reengineering, but business processes. Processes are how we work. Any company that ignores its business processes or fails to

improve them risks its future". The three most influential process movements TQM, Learning Organisation, and BPR share a cross-functional orientation, TQM favours incremental change by continuous improvement based on existing processes, while BPR encourages radical change, reengineering everything from a 'clean slate'.

Miles and Snow (1978) describe how efficient organisations constantly modify their structure, roles, relationships and management processes employed to run their businesses. This is a complex task requiring many inter-related decisions and they have developed a framework, the 'Adaptive cycle', which describes three key problems senior management must solve. These are the entrepreneurial problem, engineering problem and the administrative problem. The entrepreneurial problem addresses the products, services and target markets. The engineering problem is concerned with the 'operations management' aspects such as, appropriate production and distribution technology for its chosen products and services. The administrative problem (structure and processes) is the one this research will focus on. It is a process of rationalisation, "stabilising those activities which successfully solved problems faced by the organisation during the entrepreneurial and engineering phases". This does however include a delicate balancing act between, what is described as, lagging and leading variables in the process, which will enable the organisation to continue to evolve. However, it is possible for the administrative problem to be resolved so 'tightly' that whilst it adequately manages it's current activities, it would jeopardise any future innovations.

Today, some three hundred years after Ambrose Crowley, "popular English has become coated with a managerial varnish" according to Pettigrew & Whipp (1991), the emphasis being on 'tiered supply networks', outsourcing and assembly rather than manufacturing; working 'with' suppliers rather than vertically integrating the company (a comparison between Rover Car Company and Toyota); and on business processes, "a set of logically related tasks performed to achieve a defined business outcome", as defined by Davenport

& Short (1990). New age management prophets such as Handy (1989) promote 'upside down thinking', by describing the concept of the appropriately named 'shamrock organisation' (the organisation structure it depicts resembles a three leaved shamrock connected only at the centre). The leaves represent the professional hub but with outsourced and partner associations to undertake the work

2.3 The structure of the literature of business processes

2.3.1 Introduction

This section introduces the literature on business processes, along with some key definitions of the techniques and principles under investigation. Using Scarborough's (1995) analogy, there is an "academic division of labour" on this subject as each major process oriented movement has its own literature. Examination of the relevant business process literature (Keen and Knapp 1996) has not revealed any established body of expertise or common language about business processes as a whole.

2.3.2 What is a business process?

There is no shortage of popular definitions for business processes as can be seen from the selection that follows:

A process is "a structured, measured set of activities designed to produce a specified output for a particular customer or market. It implies a strong emphasis on how work is done within an organisation" (Davenport 1993).

"A series of logically related activities that combine to accomplish specific aims by transforming given inputs to desired outputs" (Patching 1995).

Core Business Process: "A series of logically related activities that combine to produce the primary output(s) from a business organisation" (Patching 1995).

Business processes: "a set of logically related tasks performed to achieve a defined business outcome". (Davenport & Short 1990).

Processes: Collections of tasks and activities that together, and only together, transform inputs into outputs (Garvin 1998).

"A process is thus a specific ordering of work activities across time and place, with a beginning, an end, and clearly defined inputs and outputs: a structure for action". (Davenport 1993).

"Process: Any activity or group of activities that takes input, adds value to it, and provides output, to an internal or external customer". (Harrington 1991).

"The direction and frequency of work and information flows linking differentiated roles within and between departments of complex organisation". (Galbraith and Kazanjian 1986).

"A collection of activities that takes one or more kind of inputs and creates an output that is of value to the customer". (Hammer and Champy 1993).

"A process is a set of linked activities that take an input and transform it to an output" (Johanson et al 1993).

"A business process is most broadly defined as an activity that carries out a series of steps, which produces a specific result or a related series of results" (Morris and Brandon 1993).

Despite the variety of definitions of 'processes' in common use, when compared (Table 2.1), there is a reasonable degree of consistency that generally includes a description of how they are made up from activities and tasks. Discussion about the connectedness of activities and tasks through being logically related, structured, and combined, also features prominently in the literature. Clearly defined inputs, outputs, start and end points are also common.

WHAT IT IS	WHAT IT DOES	HOW ACCOMPLISHED (APPROACH)	FOR WHOM	COMMENTS
a structured, measured set of activities	designed to produce a specified output		for a particular customer or market	It implies a strong emphasis on how work is done within an organisation
A series of logically related activities	by transforming given inputs to desired outputs	that combine to accomplish specific aims		
a set of logically related tasks	performed to achieve a defined business outcome			
Collections of tasks and activities	transform inputs into outputs	that together, and only together		
work activities across time and place	A beginning, and end, and closely defined inputs	a specific ordering of		
the direction and frequency of work and information flows	linking differentiated roles within and between departments of complex organisation			
a collection of activities	that takes one or more kind of inputs and creates an output		that is of value to the customer	
an activity	which produces a specific result or a related series of results	that carries out a series of steps		
Any activity or group of activities	Take input, add value to it, provide output		To an internal or external customer	
A set of linked activities	Take an input and transform it to an output			
An activity which carries out a number of steps	Specific result or series of results			

Table 2.1: Business process definition analysis

Their applicability to both internal and external customers, and as Davenport & Short (1990) identified they cross organisational boundaries, i.e., they occur across or between organisational sub-units, can take place between organisational entities, and can result in

the manipulation of objects, both physical and informational. Typical examples of business process definitions are: developing a new product; ordering goods from a supplier; creating a marketing plan; and, processing and paying an insurance claim.

2.3.3 Why business processes are an important unit of analysis

Processes are a sensible unit of analysis as they look across a number of areas. Garvin (1998) cites two very important reasons for using the 'process' as a "powerful lens for understanding organisations, and management". Firstly, using the metaphor of 'forests and trees' he describes how a process view ensures that both individual tasks or actions (the trees), and the organisation as a whole (the forest) are given the needed integration, ensuring that "the realities of work practice are linked explicitly to the firms overall functioning". Secondly, this approach emphasises the links among activities, as part of an 'unfolding sequence', rather than seemingly unrelated tasks.

2.3.4 Process types

Garvin (1998) has devised a framework for thinking about processes and has classified the major business process types into two categories, 'Managerial' and 'Organisational', or 'Managerial' and' Operational' (Davenport & Short 1990). Managerial processes focus on the individual managers and their relationships and comprise direction setting, negotiating & selling, and monitoring & control. Organisational processes are made up of three sub categories: work processes; behavioural processes; and change processes (Figure 2.1). The first of these, Work processes, are those that are more readily noticeable and focus on accomplishing tasks. Work processes can be sub divided into two further categories, 'operational' processes and 'administrative' processes. Operational processes create, produce and deliver products and services, for example, new product development, manufacturing, logistics and distribution. Administrative processes are necessary for running the business but are not normally visible to the customer' for example, strategic planning, budgeting and performance measurement. The second category, Behavioural

processes, concentrate on the organisational characteristics exhibited in decision making such as interacting and communicating. In contrast, the third category 'change' processes describe how individuals, groups and organisations adapt over time. Work business processes are the subject of this research.

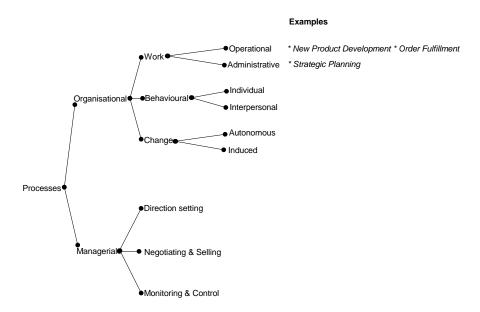


Figure 2.1: A Classification of the major process types (Based on Garvin 1998)

2.4 Key process movements and debates

Kutschker (1994) suggests that at least three kinds of business process management can be identified: (i) the management of ongoing business processes, (ii) the improvement of business processes, and (iii) the re-engineering of business processes. Embedded in these process management approaches are the three most influential business process movements of Total Quality Management (TQM), the Learning Organisation, and Business Process Reengineering (BPR). Using Kutschker's classification some of the key issues are now discussed.

2.4.1 Management of ongoing processes

Management of the ongoing business processes focuses on the tasks to be performed and the processes to be controlled. Davenport and Beers (1995) describe information about processes as "Process measures of processes", such as the time cost consumed by their

execution, how long it takes and how much it costs to fill a customer order. What this 'meta' date is not is a set of measures about the performance of products or services (which are the outputs of processes). From their research of twenty US companies, many of them Malcolm Baldrige quality award winners, they suggest that a "a key aspect of success in process improvement is effective management of information about process performance". In addition to financial measures, firms need to manage the efficiency and effectiveness of the day-to-day activities, yet little prescriptive literature exists to assist firms in managing information about business processes.

Process benchmarking is another method of establishing relative performance. Process benchmarking is: "A continuous activity which measures, compares and exchanges information about the processes operated within a business, with other departments, divisions and organisations, to improve performance" (Poulson and Arnott 1996). In their research of the leading UK retail financial services companies Poulson & Arnott revealed that although there is a great deal of interest, few companies are actually process benchmarking. Competitor benchmarking is well established but concentrates on the comparison of financial results. This reveals little about the content of the business. Benchmarking is being used as a tactical rather than strategic tool on an infrequent basis. There is however, little evidence of internal benchmarking. There are no common methods or data standards in place and most are using in-house approaches. Despite the popularity of BPR, few organisations are structured by process. There is recognition by many organisations, that their skills and awareness are below industry average and despite a willingness to participate, most do not have the ability to make the necessary changes (or to make the measurement required). Confidentiality is important but most are prepared to benchmark outside their own industry. Membership of benchmarking clubs and consortia is not unusual.

2.4.2 Improvement of business processes

The second approach deals with the incremental and continuous improvement of business processes that is most closely aligned with the Total Quality Management movement. The best established of the three movements discussed here, it features heavily the continuous improvement of processes with a focus on customers; setting of targets, standards, and the reduction of output variability; the reliance on statistical data; and the education of managers and staff in TQM principles. Pioneered by W. Edwards Demming and Joseph Juran the dual approach of culture and measurement was to become the cornerstone of TQM. Described as 'Demming's fourteen points' this list has become the underpinning philosophy of this movement although they are not meant to be tablets of stone. An example of such an approach would be an improvement through process standardization. Stanton (1999) describes how IBM responded to the globalisation of its large corporate customers by moving towards standardizing its worldwide operations to offer common processes such as order fulfilment and product development to its customers. He goes on to describe how companies who have adopted a 'process enterprise' mentality can benefit from:

- (i) Overhead costs being lowered, as it requires only one 'process owner', set of documentation, training material and information systems,
- (ii) Presents one face to its suppliers and customers, and
- (iii) Promotes flexibility in labour resourcing and responsiveness to peaks in demand.

In contrast 'process diversity' allows a company to serve different customers in different ways. The example of Texas Instruments is used to illustrate how a single order fulfilment process would not adequately satisfy the diversity of requirement between their industrial customers demanding rapid response to design changes to digital signal chips, and retailers who want fast replenishment of standard items. Subsequently they have encouraged business units to design and manage their own order fulfilment processes.

Popularised by Senge (1990), the learning organisation is the second of the three most influential business process movements examined here. In keeping with BPR it shares the belief that radical rethinking is needed to break away from existing assumptions. However the learning organisation majors on the people side of process innovation. "People in learning organisations see beyond simple cause-and-effect linear chains to interrelationships and dynamic complexity. Learning is a team skill that requires vision and experimentation" (Keen and Knapp 1996). According to Senge the learning organisation exhibits five component technologies: (i) Systems thinking, (ii) personal mastery, (iii) mental models, (iv) shared vision, and (v) team learning.

Caulkin (1997) describes how de-layering and downsizing more often resulted in "a forgetting rather than a learning organisation", as companies found that they had "outsourced the ability to make the wheel, let alone invent it". This 'corporate amnesia' that downsized and reengineered companies can experience as informal networks and memory systems are disrupted, contributed to their poor performance when compared with those companies that outperformed their industries while enjoying 'stable structures' (The Economist, April 1996).

2.4.3 Reengineering of business processes

The final approach is the third of the process movements, Business Processes Reengineering (BPR), the most influential (and controversial), which can be defined as:

"A conscious reshaping of an organisation behind a new corporate vision, the market place and the customer. BPR's ultimate objective is to yield sustainable improvements in profitability, productivity, service and quality, whilst maximising the potential of the individual and the team" (Pearson & Skinner 1993).

BPR, also known as business process redesign, process innovation, and core process redesign, has rapidly grown as an approach attracting much management interest over the

past few years, and can no longer be considered just a 'management fad'. However, with its roots in 'Taylorism' (Work Study, Organisation & Methods, and Industrial Engineering), BPR quickly became the mechanism for aggressive cost reduction programmes which led to massive layoffs. This prompted one of its creators (Davenport 1996) to comment, "Reengineering didn't start out as a code word for mindless bloodshed". Of course 'reengineering' implies that business processes were once engineered or designed, and changes to operating procedures and methods don't happen without intervention. Someone, or a group of people need to 'architect' these changes. They need to design, plan and organise the complex relationships between what people do, the tasks and activities that make up the processes, and how it affects the sales or service proposition. But are companies reengineering their processes in order to make them 'unique' to their business, or are they following a commodity approach as they adopt industry standards and best practice?

Hammer (1990) offers the following 'principles of reengineering':

- (a) Organise around outcomes, not tasks;
- (b) Have those who use the output of the process perform the process;
- (c) Subsume information processing work into the real work that produces the information:
- (d) Treat geographically dispersed resources as though they were centralised;
- (e) Link parallel activities instead of integrating their results;
- (f) Put the decision point where the work is performed, and build control into the process; and
- (g) Capture information once and at the source.

Once again the literature is not short of popular definitions of BPR, and describes reengineering in terms of being radical; a fundamental rethinking; transformation and conscious reshaping of business processes. In turn, these are expected to generate

quantum, dramatic and orders of magnitude improvements. Table 2.2 compares the main points of the definitions that follow.

"Radical redesign of business processes to achieve quantum improvements in business performance, as perceived by the customer and realised by the company" (Littlejohn 1996).

"The fundamental rethinking and redesign of business processes to achieve dramatic improvements in critical contemporary measures of performance such as cost, quality, service, speed". (Hammer and Champy 1993).

"Stepping back from a process in inquire as to its overall business objective, and then effecting creative and radical change to realise orders of magnitude improvements in the way that objective is accomplished". (Davenport 1993).

"A cross-functional initiative, focused on business processes, requiring simultaneous change to organisation design, culture, and information technology that enables radical performance improvements". (Stoddard et al. 1996)

"The holistic approach to transform core processes and hence to achieve radical improvements in business performance". (Institute of BPR).

Business Process Reengineering (BPR) can be defined as: "A conscious reshaping of an organisation behind a new corporate vision, the marketplace and the customer. BPR's ultimate objective is to yield sustainable improvements in productivity, service and quality, whilst maximising the potential of the individual and the team". (Pearson & Skinner 1993).

Business Process Redesign is "the analysis and design of workflows and processes within and between organisations" (Davenport & Short 1990).

"The critical analysis and radical redesign of existing business processes to achieve breakthrough improvements in performance measures." (Teng et al 1994).

	ACTION UNDERTAKEN	SUBJECT OF THE ACTION	THE OBJECTIVE	FOR WHO'S BENEFIT	HOW
1	Radical design	Business processes	Quantum improvements in business performance	Customer and company	
2	Fundamental rethinking and redesign	Business processes	Dramatic improvements in critical contemporary measures of performance (costs, quality, service, speed)		
3	Effective creative and radical change	Business processes	To realise orders of magnitude improvements		Stepping back from a process to inquire of its overall business objective
4	Simultaneous change to organisation design, culture and information technology	Business processes	Radical performance improvements		A cross functional initiative
5	Transform	Core processes	Radical improvements in business performance		Holistic approach
6	Conscious reshaping of an organisation		Yield sustainable improvements in profitability, productivity, service and quality	Corporate vision, market place and the customer	Whilst maximising the potential of thee individual and the team
7	Analysis and design	Workflows and processes within and between organisations			
8	Critical analysis and radical redesign	Existing business processes	To achieve breakthrough improvements in performance measures		

Table 2.2: Business Process Reengineering definition analysis

The philosophies and characteristics of the three principal and most influential process movements (TQM, The Learning Organisation, and BPR) are shown below, and can be differentiated primarily by (i) their approach to transformation as either continuous incremental, or immediate radical change, (ii) the primary focus and emphasis is either on the people aspects of the change or the workflow elements, and (iii) the breadth of any

action and the type of process that is targeted for action. Table 2.3 summarises the main business process movements along with their key characteristics.

	PRINCIPAL PROCESS MOVEMENTS			
	TQM	LEARNING ORGANISATION	BPR	
Approach to transformation	Continuous Incremental improvement of processes with a commitment to customers.	The people side of process transformation that embraces radical rethinking to break away from existing assumptions and beliefs.	Immediate radical change in business processes targeting dysfunctional processes.	
Primary focus	People as primary focus with a reduction in output variability.	People as primary focus. The creation of knowledge is the foundation of organisational capabilities.	Cross-functional streamlining of work activities. Workflow as a primary focus.	
Breadth of recommendations	Disciplined backed by rigorous education of workers, supervisors and managers.	Organisational capability	Fundamental destruction and rebuilding of processes.	

Table 2.3: Summary of the three principal business process movements

2.4.4 The closely coupled relationship between BPR & Information Technology

The traditional 'functional' application of technology, by automating existing 'manual' tasks and activities, 'paving the cow paths' as Hammer (1990) described it is no longer acceptable. Information Technology is a fundamental component of any modern business today, whether its use is as a result of a planned and managed introduction, or alternatively a tactical initiative to keep in step with its competitors. Davenport and Short (1990) describe the relationship between BPR and IT as a 'recursive one' (Figure 2.2). This recursive relationship would suggest that it is a self-sustained process, which unprompted, could start from nothing and grow exponentially. It does however require intervention from senior management, employees and technology specialists. Of course, a positive loop can also reverse itself and then generate exponential decay. The successful utilisation of technology and the application of BPR rely on the organisation identifying and restructuring its activities around business processes.

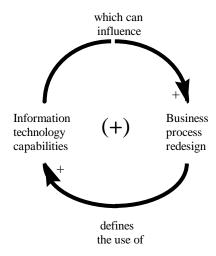


Figure 2.2: The recursive relationship between IT and BPR

"The real benefits from IT accrue only with fundamental transformation of business strategy choices, internal processes (organisation structure and processes), the IT platform, and the IS architecture's" (Venkatraman 1991). It disregards conventional 'functional' structuring within organisations, and requires cross-functional co-operation and skills in business analysis, systems development, project management and organisational change. Davenport & Short (1990) refer to this broadened, recursive view of IT and BPR as the 'new industrial engineering'.

Hammer (1990) considers IT as the key enabler of BPR, which he considers as "radical change." He prescribes the use of IT to challenge the assumptions inherent in the work processes that have existed since long before the advent of modern computer and communications technology. He argues that at the heart of reengineering is the notion of "discontinuous thinking or recognising and breaking away from the outdated rules and fundamental assumptions underlying operations..." These rules of work design are based on assumptions about technology, people, and organisational goals that no longer hold. Davenport & Short (1990) argue that BPR requires taking a broader view of both IT and business activity, and of the relationships between them. IT should be viewed as more

than an automating or mechanising force: it allows an organisation to fundamentally reshape the way business is done. Business processes represent a new approach to coordination across the firm. Its promise and its ultimate impact is to be the most powerful tool for reducing the costs of co-ordination. Davenport and Short outline the following capabilities that reflect the roles that IT can play in BPR: transactional, geographical, automatical, analytical, informational, sequential, knowledge management, tracking, and disintermediation.

An alternative approach is espoused by Smith (1999). He suggests a concurrent engineering approach that involves the simultaneous reengineering of business processes alongside the selection of an ERP. He argues that to leverage the best practices from the software an organisation needs to implement as close to a "plain vanilla implementation" as is possible, while recognising the embedded practices within the ERP. It is important that both software and processes are considered equally, and that after the exhaustive evaluation process of the software which is typical of most companies, then it is sensible to get the value from the product in the way that it was designed.

2.5 Knowledge, the new factor of production

We saw earlier in this chapter how business processes, more specifically work processes, focus on accomplishing tasks by creating, producing and delivering products and services, yet the literature contains little about the make-up of a process. Leavitt (1965) describes a view of organisations as "complex systems in which at least four integrating variables loom especially large". These are: task; structural; technological; and human variables. He goes on to describe the interdependent nature of these variables as characterised in Figure 2.3, and describes, at great length, how a change in a variable, say a structure change due to centralisation, would impact (and change) the performance of a task (or even remove the need for it).

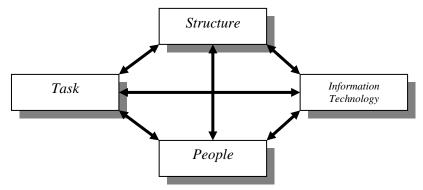


Figure 2.3: Leavitt's Diamond

Leavitt's diamond can equally be used to describe a view of work business processes, which comprise people, information technology (including plant and machinery), a structure in which it operates, and the task. However, numerous observations have been made about how knowledge and intellectual capital, essentially intangible assets not appearing on the balance sheet, need to displace the pre-eminence of traditional factors of production (land, labour and capital) if companies are going to be successful in the 'information age' (Bradley 1997). Caulkin (1997) describes how Skandia, the Swedish insurance company, and Canadian Imperial Bank of Commerce (CIBC), have developed a three part model for considering how best to manage that which cannot be owned, 'Intellectual Capital'. This comprises: (i) Human Capital, the knowledge and talents that reside only in the human brain - the stuff that goes down in the lift each evening. This knowledge is rented, not owned and must be managed accordingly; (ii) Customer Capital, the value of a firms relationship with its customers, and (iii) more importantly for this research Structural Capital, the know-how contained in the company's distinctive processes and competencies e.g. Marks & Spencer's collection of supply-chain routines. In an article entitled 'Deal gives IBM access to Dell's build-to-order process' (Knowles 1999), Peter Scacco, a spokesman for Dell said "We have intellectual property around our build-to-order process". Dell's build-to-order process has been the envy of the industry, and other PC OEMs, including IBM, have been unable to emulate it despite their

best efforts. Under the terms of the deal, the two companies will work to develop customised products for Dell.

Firm specific knowledge is generated from 'doing' things and there is a need to retain the 'tacit knowledge' or 'intellectual property' within the business. However, companies are in danger of this knowledge being eroded with wholesale shifts towards packaged software and outsourcing. For example, automotive seat design technology nowadays resides within the car seat manufacturer or supplier, and not with the car production company who are now merely assemblers.

Kransdorff (1998) commented that, because of the flexible labour market, companies forfeit their individual know-how faster than their ability to retain it. Tacit knowledge is the 'how' of 'know-how', and a key component of organisational memory. Business processes invariably involve 'people' as components. "Processes don't do work, people do" (Brown & Grey 1995), refers to the impromptu, informal and inspired ways that real people solve real problems in ways that formal processes can't. Increasingly, customers play a role in providing the delivery of the good or service. Handy (1989) describes the growing trend of a new form of sub-contracting, getting the customer to do the work. He demonstrates how self-service and 'self-delivery' i.e. using your own cars to make a delivery, pour our own petrol, withdraw our own money from cash machines and even clear up our own mess in fast food restaurants. Ritzer (1996) describes this form of involvement as the 'McDonaldization of Society' after the fast food giant.

2.6 Current trends in management practices that influence business processes

This section explores the current management practices that can influence, and have an impact on, business processes. Although not a complete list, they cover some of the more recent and influential approaches in use today.

2.6.1 IT Outsourcing

Despite the 'closely-coupled' nature of computer software and business applications described earlier, boardrooms are showing a move away from in-house development to the use of outsourcing. Outsourcing is "the commissioning of third-party management of IT assets, people and/or activities to required result" (Willcocks and Fitzgerald 1993). In a survey conducted by the London School of Economics, in conjunction with Compass (1996), IT Directors of some of the worlds top 3,000 companies were indicating trends away from in-house development, and an increase in the outsourcing of IT capability. The survey shows an increase in the use of packaged software in preference to the in-house development, from around 25 per cent in 1993, to over 45 per cent by 1996, and a quarter of IT in the UK is contracted out, from less than 15 per cent in 1993. As long ago as the 1930's Coase explained why we had large bounded companies "the costs of co-ordinating and supplying outsourced products were higher than if they were produced in-house; this increased the size of companies and gave meaning to a company boundary". However, this is now changing as company boundaries become less defined. Transaction and coordinating costs have plummeted, electronic commerce is quick and relatively inexpensive, and intellectual capital is moving out of town to operate on 'at-will' contracts.

2.6.2 Package software increase in use within businesses

Enterprise systems, also referred to as Enterprise Resource and Planning systems (ERP), are commercial software packages that purport to provide seamless integration of all the core information that a company requires: supply chain, financial and accounting, human resources and customer information. SAP is the market leader in Enterprise Application software systems made by a rapidly growing software company of the same name, based in Walldorf, Germany. Its revenues climbed from \$532 (€516) million in 1992 to an estimated €7.3 billion in 2001. SAP is the fourth largest independent software retailer in the world with 36% market share, and 17,000 customers in 120 countries. (SAP AG Jan.

2002). SAP shares the market with its main competitors Baan², Oracle³ and PeopleSoft⁴. Marcus Harwood, World-wide Director of Ernst & Young LLP's SAP implementation services in Atlanta, described SAP as "the closest thing to a de facto standard since the glory days of Big Blue [IBM]" (Baatz 1996). However, firms are reporting an unexpected benefit from the rigid implementation that SAP imposes.

"Firms adopting the popular SAP software package report that it is inflexible in how it handles many basic business functions. Typically, this forces them to change their business practices to conform to the software's requirements. Some customers view this as a feature, not a bug, because it compels recalcitrant managers to discard their old practices". (Brynjolfsson et al 1997)

Computing problems associated with the turn of the century and the need to comply with forthcoming EMU regulations is giving 'legitimacy' to technology expenditure proposals, where authorisation for capital expenditure would have been much harder to secure, if at all, without this as a contributory factor. This may have been a turning point as many companies are running to 'quick solutions' from software vendors. The Millennium drove the market faster than normal to a move to packages and outsourcing, subsequently having an effect on processes and people. Did this problem 'shift' the focus from 'process

_

² Baan was founded in The Netherlands in 1978 and has dual headquarters in Barneveld, The Netherlands and Herndon, Virginia, USA. The company is a provider of enterprise business management software that reduces complexity, improves processes, enables adaptation and optimises management.

³ Oracle Corporation is the worlds second largest independent software company. Founded in 1977, and headquartered in California, USA, it has grown to annual revenues of over \$9.6 billion, with 43,000 employees worldwide (21,000 US), and offers its databases, tools and application products, along with related consulting, education, and support services, in more than 145 countries around the world.

⁴Peoplesoft, the California based company, provides eBusiness and analytical applications for human resource management, financials, distribution, manufacturing, and supply chain. It employs over 6,000 people and has revenues in excess of \$1.3 billion (1998), and over 3000 customers worldwide.

redesign' to 'process preservation' (or restoration)? Keeping the business going became more important than changing the way it operates.

Typically, technological flexibility was seen as a requirement that is considered at odds with the purchase of standard packages. However, Robertson and Powell (1997) argue that whilst in-house development gives you 'one-off' flexibility in specification of requirements, tools and a choice of platform, "outsourcing development via packages leverages much greater resources from the supplier". The flexibility manifests itself as 'customisation' - (to your own specification), tailoring user exits and parameterisation. However, they conclude that a package choice gives 'tactical robustness not strategic', and it could be argued that this choice actively avoided 'negative flexibility' but did not gain any 'positive flexibility'.

2.6.3 Application Service Providers

Application Service Providers (ASP's) are a new and growing phenomenon, where typically software is rented to businesses over the Internet. For example, Cable & Wireless announced a collaborative venture with Microsoft where they intend to provide applications ranging from e-mail to payroll programmes to small businesses (The Economist 2000). Described as "the third wave of outsourcing which is industry-centric" (Currie and Seltsikas 2001), as opposed to the first and second waves (technology-centric traditional outsourcing, and business-centric enterprise outsourcing) respectively, this application outsourcing will enable a utility model to operate where companies pay-asthey-go enjoying "applications and services on tap". However, the unwieldy legacy system or those bespoke applications are unlikely to be the number one priority for ASP's to take on. Ironically, in order to get the very benefits that the ASP's promised of easier control and deployment of systems, a new breed of service provider, Management Service Providers (MSP's) is emerging. As the number of ASP's grows, and the complexity of managing multiple ASP's increases as they offer only limited, specialist or niche services,

an organisation might find itself requiring these services to ensure it gets the benefits it originally wanted from ASP's.

2.6.4 Core competencies

Companies are retreating into core competencies and are abandoning the opportunity to develop their business processes more widely, on the premise that others will always do a better job outside their own core competency. Taken to its logical conclusion, companies following this strategy will have little that is unique (or differentiating), and much will be similar if not identical, to its competitors. Prahalad and Hamel (1990) suggest that at least 'three tests' can be applied to establish a 'core competence', they are:

- □ "First, a core competence provides potential access to a wide variety of markets".

 For example, competence in display systems enables entry into TV's, monitors, calculators etc..
- □ "Second, a core competence should make a significant contribution to the perceived customer benefits of the end product". For example, Honda's engine expertise.
- □ "Finally, a core competence should be difficult for competitors to imitate".

 Especially difficult if it is the 'harmonisation' of a number of skills.

2.6.5 New theorist economics view on software dominance

'New theorist' economists are claiming that, in a world where unit costs fall without limit as output rises, monopoly thrives. Software is cited as a prime example of this phenomenon where costs are generally up front and largely fixed, production costs are relatively small compared with the rate that production can be expanded. They also argue that their value to any user increases in proportion to the number of users. The fear is that monopolies could embark on a 'limit pricing' strategy, by either charging less than

textbook profit-maximising price so as to extend prices later, or to deter new entrants in return for monopoly rents later.

Product lock-in is a particular problem with new technologies. As a product achieves market dominance demand for similar products will decrease, thus increasing the dependency (and value) on that product (The Economist 1999). For example, Microsoft's 'Office' suite of products have become the de facto industry standard for the interchange of files between businesses. Such is Microsoft's grip on the PC software market that Judge Thomas Penfield Jackson recently ruled that Microsoft has used its monopolistic position to gain unfair advantage over its rivals and the introduction of their innovations, to the detriment of consumers. Bill Gates the founder and President of Microsoft is reported as saying:

"He will accept no terms that challenge his right to bundle new features into his operating system and to dictate how computer makers present such features on their screens". (The Sunday Times 1999)

2.6.6 Organisational economics

Organisational economics seeks to represent firms as organisations rather than the neoclassical 'theory of the firm' as a black box operated so as to meet the relevant marginal conditions with respect to inputs and outputs, thereby maximising profits (Jensen & Meckling 1986). Four key issues are considered within organisational economics: transaction costs; agency; property rights, and evolution.

Transaction costs have been defined as "a unit of transfer of legal control" (Commons 1961); "a transaction cost is any activity that is engaged in to satisfy each party to an exchange that the value given and received is in accord with his or her expectations" (Ouchi 1980). Transaction costs embrace concepts such as asset specificity, which occurs when an investment is made for a specific rather than a general purpose, that is, in relation

to a particular transaction, and then the asset cannot easily be used for another purpose, that is, for another transaction.

The fundamental approach of agency is that an 'agent' is unlikely to carry out any activity on behalf of the 'principle' in exactly the same way the principle would have carried out the activity for him or herself. This is because the interests of the principle and agents (e.g. employer – employee, franchisor – franchisee) are rarely identical. Agency has been characterised by the saying "If you want a job done properly, then do it yourself" (Sappington 1991). Rowlinson (1997) summarised agency by describing it as "Principals have the problem of articulating their interests and constructing the agency structure so as to take account of the different types of agent. Agents have the problem of identifying their principals and reconciling the often contradictory interests of multiple principals".

Put simply, property rights are "the rights of individuals to use resources" (Eggertsson 1990). Coase (1990) uses an example of a noisy office worker who is disruptive to a neighbouring office worker. He explains how both office workers could apply market transactions in order to settle the dispute (i.e. perhaps by erecting a partition wall with the associated costs shared up to the amount where the office workers feel it is of value to them). However, he points out that should one of the office workers enjoy the initial assignment of rights, (i.e. who the office belongs to) then this has a fundamental bearing on any outcome and cannot be ignored.

Evolution, as the term implies, uses metaphors from biology to explain the changes that orthodox economics fails to recognise. Economics in general treats the sources of change as exogenous. Boulding (1981) believes that change is constant, and that all processes of production (biological, economic, or social) originate in some kind of information structure, as genetic information in the egg or cell, or knowledge and know-how in the heads of people, libraries, computers in social systems.

Barney (1999) argues that while transaction cost economics helps firms make boundary decisions i.e. whether to bring activities 'within' the boundary of the firm, or not, especially when the characteristics of 'transaction specific investment' is applied to a decision, it should also consider the role of the capabilities of its potential partners. He goes on to describe how different forms of governance (market, intermediate and hierarchical) can mitigate opportunism (when unfair advantage is taken by another party), particularly when large transaction specific investments are involved. He concludes that it must be costly for firms to either create the capabilities itself, or to acquire them through the acquisition of another firm that already possesses them, for capabilities to play an important role in determining a firm's boundary. Because of this, firms prefer to 'outsource' (i.e. use 'market' or 'intermediate' forms of governance) in preference to purchasing or developing the capability, despite the threat of opportunism.

2.7 An introduction to Call Centres

2.7.1 Market size, factors, and UK economy

Dubbed by the media as the 'dark satanic mills of the 21st century', with descriptions such as "sweat shop" and "slave labour" being attributed to them, it is difficult to understand why call centres are one of Britain's fastest growing industries and often hailed as the saviour of British jobs. It is anticipated that by 2002 in excess of 500,000 people will be employed in over 1000 centres (Helpdesk Management Website). Business conducted over the telephone is widely accepted with 84% of the UK population using the telephone to buy goods, get information and access services from businesses (The Henley Centre report 'Teleculture 2000'). The combination of information technology and telecommunications networks has enabled the telephone to be a cost effective method to contact a massive number of customers but at the same time maintain a 'personal' service. While at one time only available to the largest of organisations (typically banks and

insurance companies), the latest and relatively low cost equipment makes entry into this channel-to-market more cost effective, with the growth being predicted in smaller companies. According to Mintel (2000), 700 million calls are estimated to have been made during 2000 to financial call centres; mobile phone lines have grown by 100% since 1997; around 45% of motor insurance policies will be sold direct, and one fifth of consumers use the telephone to manage finances. The liberalisation of the UK telecommunications market, which has increased competition, will mean that UK prices will continue to fall. The UK is the most developed market for telebusiness in Europe.

2.7.2 From help desks to call centres

Although it could be dismissed as semantics, the description 'help desk' has passed into the language to describe anything from a kiosk on Victoria Station, which is really an 'information centre', to a five-hundred seat telesales call centre. Typically the call centre will not deal with people face-to face, and the helpdesk will do more than just rely on a standard script. Help desks were fuelled by the growth in desktop computing, inexperienced users and unstable software that increased the demand for assistance. Many organisations will be familiar with the concept of 'help desks', typically taking that form in the mid-1980's. However a decade on, the call centre has taken over from help desks and become the growing trend, and as the market matured along with it's components such as 'out-of-the-box technology', despite coming first, the help desks are being subsumed into call centres. "In essence, the final triumph will be the conversion of what began as a cheap delivery channel, repositioning away from a 'back-office' function to a high value resource". (Mintel 2000). Despite the components being similar between help desks and call centres (i.e. the people, technology, and telephony). Table 2.4 lists some interesting contrasts.

	CALL CENTRE	HELP DESK	
Financial justification	Associated with 'Sales' and therefore a profit centre	Generally perceived as a cost	
Knowledge Management	Usually extracted from a finite, know pool of knowledge (a catalogue of products and services on offer, their features, pricing and availability). Call can be answered from a pre-defined script. Calls requiring diagnosis outside the script are passed to a second-line resolver.	Calls require diagnosis outside a pre-defined script.	
Skills & qualifications	Use of a knowledge base or recitation of a set of pre-scripted questions is a competence that can be gained relatively quickly.	Manufacturers certificates and technical know-how is usually a pre-requisite.	
Pay and conditions	Negative pressure on salaries and conditions.	Upward pressure on salaries and conditions.	

Table 2.4: Comparisons between call centres and help desks (Based on Helpdesk Management Centre).

2.7.3 Employment issues

Typically call centres are concentrated within geographical areas. Major UK cities such as Cardiff, Bristol and Edinburgh have done much to attract big businesses to take up the call centre facilities within their location as a means to provide additional employment. Birmingham boasts that it has attracted many blue chip companies to its region such as Vodaphone who employ 700 staff in its 68,000 square foot call centre operation, and HFC Bank who have created hundreds of jobs in Birmingham with its Goldfish card. Birmingham also promotes its diverse multicultural community as an excellent source of bi-lingual employees. Typically the workforce is young and relatively mobile so movement around a number of call centres within one city is not uncommon.

Higher than average turnover (50% is common) characterises the call centre industry, with low rates of pay and poor working conditions the norm. Work related upper limb disorders (RSI), voice loss, stress, and a feeling of being cooped up like battery hens are

typical symptoms. Excessive monitoring by supervisors, having to put your hand up to go to the toilet, long shifts without adequate breaks, and excessive surveillance have led to an increase in bullying claims within the workplace.

2.7.4 The growth of outsourced call centres

Driven predominantly by cost and volume, the outsourced call centre can appear an attractive business proposition, as it is able to defray the fixed costs of people, workstations and the telephony by operating in a multi-client model. These economies of scale are encouraged with contracts being based on a volume or per-day rate. Companies such as the Capita Group Plc⁵ have developed a £1 billion pound business in providing professional support services. Capita aims to be a 'natural partner' for business who wishes to transform their business through partnership, seeking support in non-core areas of their business. Capita boasts that it handles more than 6 million calls a year in its call centres, recruits for more than 3,000 clients vacancies a year and administers payroll and pensions for more than 2.8 million people a year. Ventura, a member of the Next Group of companies, run a large-scale client-dedicated customer contact centre. They have over 4000 staff in four UK locations, handling over fifty million minutes of inbound telephone calls and despatching sixty million bills and letters annually.

2.7.5 An introduction to call centres at Boots The Chemists

BTC has the need to make and receive telephone calls with its customers, suppliers, and staff. In the normal course of events this is an everyday office or administrative task, but in specific areas, principally those where the telephone is the prime route to market for a

_

⁵ The Capita Group Plc is one of the largest, and fastest growing, professional support services organisations in the UK., providing an integrated range of white collar, professional support services on long-term contracts across Central and Local Government, Education and the Private Sector in the UK. Their aim is to improve service quality on behalf of clients and to reduce their costs of delivery. The services they provide are essential to the smooth running and success of clients' operations. With over 12,500 people working across a network of over 140 sites, generating a turnover in excess of £450 million, Capita's achievements promoted the Group to the FTSE 100 in 2000.

good or service, then the concentration of calls received warrants the dedicated resource that a call centre can provide. Traditionally a call centre is a designated facility, equipped with telephony and supporting Information Technology, and trained personnel with the know-how and skills to handle the calls. Invariably, call centres operate extended hours, many of them 24 hours a day, 365 days per year depending on the nature of the operation.

BTC is a diverse and complex business, which utilises a range of call centres as part of its operation. These call centres comprise a mix of internal operations, partnerships, and outsourced services. For example, the technical helpdesk for its feminine interest website 'handbag.com' is a wholly outsourced operation. In contrast a medical advice line, and a catalogue shopping service are provided through partnerships with manufacturers or outsourced to mail order specialists. An article by Collins-White (IT Week 2000 cited Mintel 2000) that market research has once again confirmed that "call centres are becoming ever more important in company strategies for dealing with customers".

2.7.6 An overview of the call centre process

Typically the process begins when a call is either received by, or made from, a call centre, however in all the cases that follow 'inbound' calls are the most common. Callers can either be internal customers i.e. other members of staff, or external customers i.e. those who already have a relationship with Boots, or are about to enter into a relationship should they purchase a product or service. Information flows are typically two-way, but the specific nature of the task being undertaken by the call centre will influence this. An 'information line' will respond to callers asking for specific information potentially on a wide range of topics, answering questions on how a loyalty scheme works, or store opening hours, or a health and beauty products advice line. Alternatively, where customers are purchasing products or services, typically the information flows will be from the customer to the call centre in response to a request for information such as personal details, medical history, bank or payment details.

Although calls can be handled by IVR (Interactive Voice Recognition)⁶, even if only initially, the call is generally dealt with in person, possibly by someone with specialist skills such as a foreign language if international calls are received, or medical training (nurse, doctor or pharmacist) if a health enquiry and a diagnosis is required. Callers can be routed to nominated operatives (Agents, Assistants, Advisors, Associates or Operators as different industries adopt different naming conventions), by advertising specific telephone numbers for specific activities. For example, the telephone number advertised and appearing on literature for purchasing insurance will typically be different to the number used for a claims procedure, thus allowing the call to be routed to a suitably skilled or qualified person. Calls can be free, local or national rate, or premium rated depending on the nature of the product or service, and increasingly they operate extended hours such as 8 AM to 8 PM or even around the clock, especially if calls are taken from around the world in different time zones. Information is captured 'on-line' directly to a screen based system, the operator normally following a script or guide to ensure that the appropriate information is gathered. Typically, systems have real time links to Post Office Address directories, bank and payment systems and warehouse systems to check availability and likely delivery dates of merchandise. Additionally, account or customer details are also available so that an instant profile of the customer is available to the operator.

Invariably the process will generate documentation such as policy documents and schedules, or even just a letter to confirm a sale/purchase. Depending on the level of sophistication of the systems it is possible that these can be generated automatically and posted from a remote location without further intervention from the operator. However, it is also possible that the sale or enquiry cannot be 'closed' successfully on a single call and

⁶ IVR - Interactive Voice Recognition incorporates automated voice responses and touch-tone prompting route calls and 'switch-on' particular computer applications and scripts.

there is a need to have further dialogue with the caller, or a request for additional information, or documents, or proof that the details being supplied are correct. However, generally the process concludes with the end of the call.

The call centre process will typically cross-organisational boundaries having links to Sales, Marketing, Accounts, Customer Services, Distribution, and Finance departments, not forgetting the originator of the call which is usually the customer. In general the calls follow a logical sequence, say from receiving an order, taking payment, arranging delivery and being a point of contact for after sales services.

It is now possible with current technology to operate 'virtual' call centres, where the operators are distributed, sometimes working from home, but where the technology can be provided remotely. As the call centre is not the unit of analysis but the processes surrounding the decision-making is, this research will consider the traditional approach only.

2.8 The commodity adoption paradox

2.8.1 An introduction to the commodity adoption paradox

Thinking back to Ambrose Crowley and the Winlaton Ironworks, everything was done within the business. Therefore by definition, every business process was almost certainly proprietary, i.e. it was designed to specifically meet the precise needs of that business and no other. The architects of the business processes were almost certainly employed within the business and how that business operated was entirely dependent on the capabilities within the organisation. I started by describing how business processes were specific to an organisation and could be considered proprietary. However, we have also seen a growth in the adoption of external services such as outsourcing, and the use of packaged software has increased the similarity of processes undertaken by companies. In fact in some cases there appears to be little to distinguish between the same processes operated by different

companies. Similarly, organisations have to structure their businesses in such a way to be able to take advantage of these products and services, as Clarke and Staunton (1987) observe, "all organisations have the daunting task of matching the specifics of their situation to the general features of externally supplied innovations". Vendors are keen to supply you with their 'vanilla' offering with customisation at a prohibitive additional cost and incentives to take the product as seen. These could be considered commodities, with organisations switching between products and services depending on price, quality and service. However, there appears to be a paradox surrounding commodity process adoption whereby, if a business process 'is' truly a commodity then why don't organisations just adopt it?

However, there are opponents to that view. Bettis et al (1992) concluded "Sourcing amounts to renting the skills and competencies of a potential competitor. Renting may appear cheap relative to ownership (and a large mortgage), but the lease may not be renewed or the rent may be dramatically increased. Furthermore, you are accumulating little if any technological knowledge (equity) and are unlikely to benefit if the skills and competence's appreciate in value due to future business opportunities that cannot be clearly foreseen". Davenport (1998) suggests "companies may lose some of their uniqueness, and their competitive advantage, through squeezing themselves into the SAP mould. He says that managers should ask whether the system's technical demands coincide or conflict with their companies business goals". Davenport goes on to ask the question, "Such convergence around a single software package should raise a sobering question in the minds of chief executives: How similar can our information flows and our processes be to those of our competitors before we begin to undermine our own sources of differentiation in the market?". Is differentiation really in the 'processes' or something else, for example product, service or costs?

Prahalad and Hamel (1990) assert "companies that judge competitiveness, their own and their competitors, primarily in terms of the price/performance of end products are courting the erosion of core competencies - or making too little effort to enhance them. The embedded skills that give rise to the next generation of competitive products cannot be 'rented in' by outsourcing and OEM (Original Equipment Manufacturers) supply relationships. Too many companies have unwittingly surrendered core competencies when they cut internal investment in what they mistakenly thought were just 'cost centres' in favour of outside suppliers". Although a short cut to a more competitive product, people embodied skills are not developed. Jonas (1986) describes the emergence of 'Hollow Corporations', a new kind of company that does little or no manufacturing. He asserts that this traditional industrial sector that had been the wellspring of innovation, are now likely only to produce the packaging and the label. He cites Thurow who asks how engineers and scientists can keep coming up with new products without the production base, "when advances in technology are generated along the learning curve of an ongoing production process?" 'Hollow Corporations' require a different management approach (Pastin 1988), which recognises the importance of three ethical 'traits' necessary to manage these 'network' corporations successfully. These are (i) toughminded fairness, (ii) personal responsibility, and (iii) common purpose.

2.8.2 Business processes as a unit of commodity

A commodity can be defined as: (i) Something useful or valuable, (ii) a product possessing utility; something that can be bought or sold, (iii) an article of trade or commerce, especially, when delivered for shipment, (iv) something bought or capable of being bought (Longman 1984). Or, (v) An article of commerce, (vi) Something of use, advantage, or profit, (vii) An exchangeable unit of economic wealth, especially a primary product or raw material (Collins 1991). Thomas' (1991) definition of 'commodity'.

"Commodities are here understood as objects, persons, or elements of persons which are placed in a context in which they have exchange value and can be alienated. The alienation of a thing is its dissociation from producers, former users, or prior context".

Stewart (1997) describes three skill types exhibited within organisations labelled commodity, leveraged, and proprietary. His description of 'commodity' skills, which with adaptation lends itself ideally to processes thus: "Processes that are not specific to any particular business, are readily obtained, and are more or less equally valuable to any number of businesses". This distinction will be used throughout the forthcoming chapters to define commodity business processes.

2.8.3 Emerging propositions

Two propositions have emerged during this review and will be taken forward into the research methodology.

Proposition one:

In the wake of pervasive trends such as outsourcing, implementation of standard application software packages, and a focus on core competencies, organisations are increasingly viewing work processes as 'commodity' work processes (i.e. work processes that are not specific to any particular business, are readily obtained, and are more or less equally valuable to any number of businesses).

Proposition two:

The adoption of commodity work processes can be 'planned' as the result of a conscious decision, for example to outsource, or 'unplanned', by unknowingly adopting them as a consequence of some related decision or action such as the selection of a computer software packaged application.

2.9 Summary

The chapter starts by setting the historical context of the organisation of work, and the change in emphasis in recent years from 'do it all', to 'do parts of it', largely attributed to technological advances and the ability to 'outsource' tasks, activities, and more recently business processes to third party organisations. The literature of business processes is examined and establishes the common attributes of business processes as being a closelycoupled set of cross functional activities and tasks, having defined inputs and outputs, with recognisable starts and ends. It then establishes the two main categories of processes as 'managerial' and 'operational', and for the purpose of this research focuses on 'work' processes, a subset of the operational category. Using Kutschker's classification of 'managing processes', 'improving processes', and finally 'reengineering processes', the three most influential business process movements namely Total Quality Management (TQM), the Learning Organisation, and the recent phenomenon of Business Process Reengineering (BPR), are discussed and compared. The closely coupled relationship between reengineering activity and information technology is also incorporated. The relationship of know-how and processes is explored as are the current trends in management practice that impact on processes, such as outsourcing, the increase in the use of packaged software such as ERP and MRP's, Application Service Providers (ASP's), core competencies, and new theorist and organisational economics. An introduction to call centres (including those at Boots) is included to inform the context. The chapter concludes by introducing the concept of the commodity adoption paradox, i.e. the dilemma an organisation faces when adopting a process it considers is a commodity. If a business process is truly a commodity then why don't organisations just adopt it? Finally the two emerging propositions are documented.

CHAPTER THREE:

RESEARCH METHODOLOGY

3.1 Introduction

The purpose of this chapter is to describe the methods chosen for this research and to provide justification for their appropriateness for this particular situation. In addition, it will demonstrate the reliability of the data sources used, and include details of the criteria for the cases selected. It will also, as suggested by Delamont et al (1997), include some discussion of the academic literature of the methods used, along with references to similar studies using the same method. A complete account of how the chosen method worked is included, and a copy of the interview guide is provided in appendix one.

The basic construction of the research design, and this chapter, follows the eight steps for building theory from case study research as proposed by Eisenhardt (1989), juxtaposed with the extant literature. The eight steps comprise: (i) *Getting started*: definitions of the research question; (ii) *Selecting cases*: specifying the population; (iii) *Crafting instruments and protocols*: multiple data methods, qualitative and quantitative data, multiple investigators; (iv) *Entering the field*: Data collection methods, overlapping data collection and analysis; (v) *Analysing data*: within-case and cross-case pattern matching; (vi) *Shaping hypotheses*: replication and not sampling logic, iterative approach; (vii) *Enfolding literature*: comparisons with the literature; and finally (viii) *Reaching closure*: theoretical saturation. Each of the eight steps are discussed below:

3.2 Getting started

3.2.1 The purpose of the research design

The research design is the *action plan* or *blueprint* primarily concerned with making sure that the evidence collected addresses the questions asked. It does this by ensuring the

researcher has a clear understanding of the following: (i) what questions to study, (ii) what data are relevant, (iii) what data to collect, and (iv) how to analyse the results. In doing so it must also addresses four principal issues of quality design, namely construct validity, internal validity, external validity, and reliability.

3.2.2 The research question and objectives

The objective of the research is to understand the logic that surrounds the decision-making activity of commodity business process adoption. In particular, to understand:

- □ How key architecture decisions are taken?
- □ What are the conditions under which commodity adoption takes place?
- □ What is the influence of commodity work business processes in that decision-making?

The output will be a conceptual model of commodity business process adoption. The research adopts a longitudinal case study approach for each of four internal corporate ventures in one major UK retailer. Each case focuses on the same work business process (call centres), which is a key business process within each of the four ventures.

3.2.3 Philosophical stance

In much the same way that a historian has to verify the authenticity of archives and documents, and a scientist ensure that the calibration of his instruments are accurate and appropriate, a social sciences approach has to satisfy the questions asked of it as to what kind of science it is, and can the methods of the natural sciences be used in the social sciences? Blaikie (1993) discusses seven distinctive approaches to social enquiry (positivism, critical rationalism, interpretivism, critical theory, realism, structuration theory, and feminism). It is not the intention of this thesis to explore each approach in

detail, but the ontology, epistemology and main ideas of these philosophical approaches are contained in table 3.1.

	ONTOLOGY	EPISTEMOLOGY	MAIN FEATURES
Positivism	A complex of causal relations between events, as an emerging patchwork of relations between variables	Drives from sensory experience by means of experimental or comparative analysis; concepts and generalisations are summaries of particular observations.	Sensorial experience Passive observations Empirical regularities Theory (= reality) testing Prediction>explanation
Critical Rationalism	A complex of causal relations between events, as an emerging patchwork of relations between variables	A tentative and error continuous critical evaluation (discovering knowledge), in order to reject the false theories, where observations are theory dependent in a horizon of expectations.	Trial and error observations Imposed regularities Non-proved deductive theory
Interpretivism	Product of processes by which social actors together negotiate the meanings for actions and situations.	Derives from everyday reality (concepts and meanings), where social researchers reconstruct the meaning of theories.	Interpretation of experience Understanding Historical description
Critical theory	Natural and social realities are seen to be socially constructed, being fundamentally different.	Three kinds of knowledge: Empirical- analytical: Science of technical interest of prediction and control: Historical-Hermeneutic: understanding of everyday discourse: and Critical: human beings emancipatory interests.	No objective observations Consensus truth Cognitive interests
Realism	A socially constructed world which social episodes are the products of cognitive resource social actors bring to them, or social arrangements are the products of material but unobservable structures of relations.	Build models of mechanisms that if they are to exist and act in the postulated way, they would account for the phenomena being examined.	Observed/Non-observed Underlying mechanisms Ideal (not real)truth Cognitive interests Explanation>Prediction
Structuration Theory	Produced and reproduced by the skills activities of social actors but not necessarily under the conditions of their own choosing.	No epistemology.	Ordering institutions along time Regulations in social practices Historical variations Intrusions of knowledge in social reproduction Social critique Qualitative/quantitative Context-time dependency Anthropological view Policy making role
Feminism	Natural and social realities are seen to be socially constructed, being fundamentally different, due to different experiences (man and woman).	Integrate thoughts and feelings, logical capabilities and intuition, rational and emotional, through shared visions.	Feelings/experiences in a political context Natural setting Qualitative Story

Table 3.1: Main ideas of the philosophical approaches of social sciences

Eisenhardt (1989) describes her theory building from case study approach as *positivist*, that is, concerned with the development of testable hypotheses and theory that is generalisable across settings. This in contrast to Strauss (1987), and Van Maanen (1988) who are more concerned that a "rich, complex description of the specific cases under study evolve", and appear less concerned with development of generalisable theory. This

study, although following the approach as described by Eisenhardt, is approached from an *interpretivism* perspective typically by deriving expert accounts of social life from the actors involved.

3.2.4 Exploratory, testing-out, and problem solving research

Phillips and Pugh (1994) use a threefold classification of research type namely, exploratory, testing-out, and problem solving, which is preferred to the more traditional distinction of 'pure' and 'applied' research which tends to infer that pure research develops the theories and that applied research uses them and tests them out in the real world. Exploratory research typically involves tackling a new problem, issue or topic where little is known about the subject area, and will need to include an examination of what theories and concepts are applicable. It requires that the existing boundaries of knowledge are pushed forward and that new discoveries are made. Testing-out research examines the limits of previously proposed generalisations. Working with existing and established research material this type of research will test-out theories under different conditions (extremes), in different circumstances, and using different methodologies, approaches or a combination of them in order to refine and perfect understanding. Problem solving research attempts to tackle a real-world problem by bringing together the available knowledge and intellectual capital around a particular problem or subject area. Clarity surrounding the problem is key as a cross-discipline approach is often required.

Despite Phillips and Pugh's advice to research students that testing-out research is by far the most suitable for the novice researcher when pursuing a PhD, this research will be of the 'exploratory' type, as it is examining a relatively new phenomenon about which little has been written or previously researched. They also recommend that you aim for 'symmetry of potential outcomes'. This ensures that the thesis will not stand or fall by a particular result, but will make a contribution whatever the outcome. This is not always achievable but clearly a worthwhile objective.

3.2.5 Constructs, propositions, and hypotheses

As the focus of this research is 'theory building', then the ideal starting position is that there is no theory or hypothesis in place (Eisenhardt 1989). However, two important propositions have emerged from the literature that can be measured throughout the research and will provide a triangulated measure on which to base the emerging theory. There is also recognition of the need to adopt a structured approach that will not prejudice the outcome, and propositions help in directing attention to something that should be examined within the scope of the research (Yin 1994). The emerging propositions are as follows:

Proposition one

In the wake of pervasive trends such as outsourcing, implementation of standard application software packages, and a focus on core competencies, organisations are increasingly viewing work processes as 'commodity' work processes (i.e. work processes that are not specific to any particular business, are readily obtained, and are more or less equally valuable to any number of businesses).

Proposition two

The adoption of commodity work processes can be 'planned' as the result of a conscious decision, for example to outsource, or 'unplanned', by unknowingly adopting them as a consequence of some related decision or action such as the selection of a computer software packaged application.

3.3 Selecting cases

3.3.1 Sampling and replication considerations

Theory building from case studies relies on theoretical sampling, i.e. that cases are chosen for theoretical and not statistical reasons (Glaser and Strauss 1967). However, as with

hypotheses testing research it is necessary to limit the 'population' of cases as it helps to control extraneous variation and defines limits of generalisation of the findings. Yin (1994) distinguishes between *literal replication* and *theoretical replication*, and argues that, under different circumstances, it is acceptable to use a single case study that is analogous to a single experiment, particularly useful when the item under investigation is extreme, unique, critical, revelatory or so infrequent that it would be silly not to capture it. In contrast, while repeating more studies of the same type will add external validity via literal replication, multiple case studies will not necessarily develop the theory much further. Contrasting studies that demonstrate the opposite to be true will be much better suited to developing the theory. Pettigrew (1990) encourages the use of cases where 'polar types' or extremes are observable especially as there is usually a limit to the number of cases it is feasible to observe, and suggests that you chose cases where the process you wish to observe is 'transparently observable'.

3.3.2 Single or multiple case studies designs

In this research the use of a multiple case study approach enables the emerging results to be verified against a variety of circumstances, thus improving the opportunities for generalising beyond the immediate case studies. Figure 3.1 shows the model developed by Yin (1994) overlaid with options under consideration for this research.

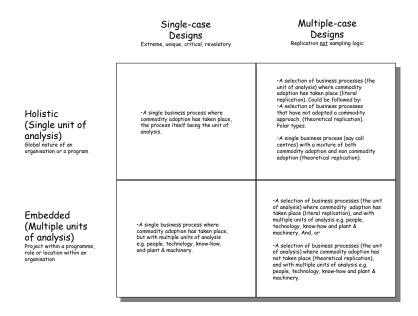


Figure 3.1: Single and multiple case study designs (Based on Yin 1994)

This research has adopted an embedded design that incorporates the components of a work business process as subunits to enhance the insights into the cases. Care must be taken to ensure that the focus of the study doesn't shift away from the prime unit of analysis (which is the design and decision making activity of internal corporate ventures which have 'call centres' as a key business process within that venture), becoming a study of the components that make up business processes instead.

3.3.3 The use of longitudinal case studies

Case studies exhibit great versatility in their applications from providing description, to testing or generating theory. Table 3.2 shows three examples of the use of case studies for quite different study types.

STUDY	DESCRIPTION OF CASE	RESEARCH PROBLEM	DATA SOURCES	INVESTIGATORS	OUTPUT
Kidder 1982	(Provide description) Data General	Describing the intense effort behind the design of a computer at Data General.	Direct observation of engineers of Data General design and build a new 32-bit minicomputer in just one year.	Single investigator.	Insight into the world of corporate, high- technology America
Pinfield 1986	(Theory testing) Canadian government bureaucracy	An opportunity to evaluate the two perspectives (Structured and Anarchic) and to develop a more general theory of organisational decision making	Direct observation Interviews (during the processes) Interviews (After closure of the process)	Single investigator as participant and observer	A synthesis of two decision process models (Structured and Anarchic)
Harris & Sutton 1986	(Generate theory) 8 Diverse organisations	Parting ceremonies during organisational death	Interviews Archives	Research team	Conceptual framework about the functions of parting ceremonies for displaced members.

Table 3.2 Examples of Case Study types (Based on Eisenhardt 1989)

3.3.4 Advantages and disadvantages of using case studies

Typically, case studies are well suited to situations where the contextual conditions of a situation are considered important. For example processes, "a sequence of individual and collective events, actions, and activities unfolding over time in context" as defined by Pettigrew (1997), are embedded within context, and therefore require to be studied in that way. Pettigrew goes on to describe this processual analysis as to "Catch reality in flight". Yin (1994) asserts that case studies are:

"Best suited to research where 'how' and 'why' questions are being asked about a contemporary set of events, over which the investigator has little or no influence" Metaphors such as "Drowning in data" (Anderson et al 1995), or 'data asphyxiation' (Pettigrew 1990) are commonly used to describe the problems faced by a researcher with this approach. Pettigrew goes on to caution against the inevitable consequences and considers that "cycles of induction and deduction", or "going native" (Dyer and Wilkins 1991) is a more realistic approach to take. Similarly, this retrospective analysis relies heavily on people's memory, and participants frequently move on to new positions within the organisation.

3.3.5 Why these particular cases?

All four case studies were chosen from the same organisation and contain the call centres business process as the focus of the research. They were chosen for their contrasting approaches to the business problem and diversity of the final outcomes thus encouraging theoretical replication. The ventures were approached as independent activities and were launched during a thirteen-month period between March 1997 and April 1998. The four cases are:

- □ Customer Service a redesigned venture which developed and implemented an in-house call centre capability,
- □ Loyalty card a new venture with an outsourced call centre which was later brought in-house,
- □ Mail order another new venture with a completely outsourced call centre, and
- \Box Insurance a new joint venture with the call centre operated by the partner.

Limiting the investigation to a single business process (call centres) eliminates many of the extraneous variables that might otherwise be present if looking across a number of disparate business processes, and restricting the case studies to one organisation limits the organisational variables. This approach was quite deliberate to enable the researcher to concentrate on the 'decision-making' characteristics rather than the organisational or business process ones.

Eisenhardt (1989) describes how it is acceptable to add cases later on in the research process as appropriate, and cites the study of strategic decision-making (Eisenhardt and Bourgeois 1988). This approach extended the study and allowed for the inclusion of additional data from two extra cases where the composition of the teams under investigation had changed. This additional data could then be dynamically compared with the results from those teams where the team composition had not changed.

3.4 Crafting instruments and protocols

3.4.1 Quantitative versus qualitative data

Often referred to as 'hard' data, quantitative research is typically concerned with data in numeric form. It is generally more suited to large-scale studies where there is lots of data as it allows it to be more easily analysed. This leads to it being considered more 'scientific' or 'objective'. In contrast, the 'soft' or qualitative research is "primarily concerned with collecting and analysing information in as many forms, chiefly non-numeric as possible" (Blaxter et al 1996). This will usually involve a smaller sample but covered in much more detail, concentrating on 'depth' and not 'breadth'.

Researchers who choose one approach or the other are particularly partisan in their views and insist on separation between the two approaches. However, the combination of both quantitative and qualitative data is synergistic (Eisenhardt 1989). Mintzberg (1979) advocated the inclusion of both types, as the hard data creates a foundation that uncovers relationships, and the soft (or anecdotal) data, provides the richness from which explanation is possible.

3.4.2 Unit of analysis

The unit of analysis for this study is the design and decision making activity of internal corporate ventures which have 'call centres' as a key business process within the venture. With this type of unit of analysis care must be taken to clearly define the unit as it is difficult to identify the start and end points of the case, and depending on the weltanschauung – worldview (Checkland & Scholes 1990) can change its perspective considerably. The unit starts where the decision to enter the new internal venture has already been taken, and ends once the processes are considered 'business as usual'.

3.4.3 Data collection methods

Table 3.3 overleaf is based on the six sources of evidence as described by Yin (1994) and shows how four of those sources (documentation, archival records, interviews, and direct observation) were utilised in this research.

3.4.4 Difficulty of the single observer

The limitations of PhD research determines that interviews will be undertaken using a single investigator, which unfortunately does not give the researcher the opportunity to pick up all the nuances, body language and other non-verbal signals during an interview, where a second interviewer might well do. While not ideal this cannot be avoided. However, interviews were recorded on tape, which removes the need to take detailed notes during the interview.

3.4.5 Gaining access to research companies

Pettigrew (1990) argues that gaining access to research companies is best characterised as 'planned opportunism', so the opportunity afforded to access research sites as a full-time employee of The Boots Company plc, a FTSE 100 blue-chip organisation, is an ideal circumstance. Care has been taken to ensure that as an employee I recognise that I am

'involved in the culture' of the organisation, but at no time have I been directly or indirectly involved with any of the cases described in this research.

SOURCE OF EVIDENCE	REASON FOR INCLUSION	EXAMPLES FROM THIS RESEARCH	
Documentation: Letters, memoranda, agendas, announcements, minutes of meetings, written reports, newspaper clippings and articles from mass media.	To corroborate and augment evidence from other sources.	The Boots company plc Report & Accounts, The Customer Service complaint handling review (Interim Report) – August 1996, Investment Decision meeting minutes (Ref. No.B197) – July 1997, Partnership statement of principles – November 1997. Access to internal project and operational documentation, corporate communications and presentations.	
Archival records: Service records, organisational records, maps and charts, lists of names, survey data such as census records or previously collected data, personal records such as diaries.	Can become so important that they become the object of extensive retrieval and analysis.	Call logging statistics, service level records, BIS/RSA Service Level Agreement. In-house magazine (Blueprint), Promotional and POS (Point of sale) material, training material.	
Interviews: Key respondents are asked for facts of a matter as well as the respondent's opinions about events. Can be open-ended, focused, and/or surveys	Essential sources of evidence as most case studies are about 'human affairs'.	Semi-structured interviews were recorded on cassette tape, with the exception of the initial 'exploratory discussions' with lead representatives from each case study, at which copious notes were taken. Transcripts were made for each of the initial interviews from every case. As interviews were repeated, abbreviated notes were transcribed of the interviews and only 'new' information taken in full. However, in all interviews quotes were transcribed verbatim. Based on the principles of a structured interview methodology (Kerlinger 1986).	
Direct observations: Making a visit to the case study 'site'.	Some relevant behaviours or environmental conditions will be available for observation, might include photographic evidence.	Visits to the call centres, 'listening-in' to 'live' customer calls, observing the developments of the process, witness customer reaction to processes and protocols. Access to the corporate intranet site.	
Participant observations: Taking a part in a functional role, department etc	Insight into personal behaviour and motives.	Not applicable in this research.	
Physical artifacts: Physical or cultural artifact, technological device, tool or instrument.	Insight into personal behaviour and motives.	Not applicable in this research.	

Table 3.3: Six sources of data collection evidence (Based on Yin 1994)

3.5 Entering the field

3.5.1 Overlapping data analysis

The initial point of data collection was through semi-structured interviews (following some pilot interviews) with participants and informants from all four cases, the timing of

which was principally determined by their availability. This meant that the interview sequence did not follow the chronology of the cases at that time, further recognising that they were unconnected and completely stand-alone. One case (Mail Order), which chronologically was the third in the sequence, emerged initially as being 'richer' in available data and became by default the benchmark against which the other cases were measured and set the agenda for the subsequent data collection schedule. The Mail Order case was the first to be written-up and several styles were developed before choosing the final approach. Information from the initial interviews provided data to populate the Activity Record, Strategic Choice Analysis, and the Inscription/Specialisation analysis. However, where information was missing or had not surfaced during the interview further meetings, telephone conversations and emails were often sufficient to collect the data. Figure 3.2 is a schematic of the overlapping data collection and analysis phases.

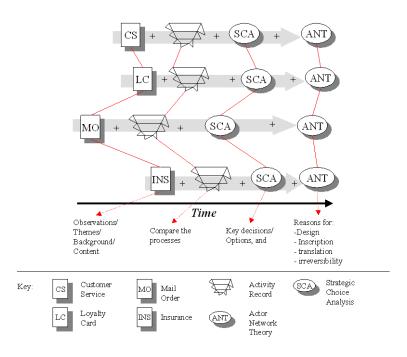


Figure 3.2: Overlapping data collection and analysis

3.5.2 Adjustments during the data collection process

The overlapping of data collection and analysis allowed for adjustments to the data collection process to be made throughout the study. For example, the inclusion of new questions as they emerged in later cases was made much easier by being 'on-site' and

having direct access to most of the participants, which made it possible to ask supplementary questions of them and add them to the case. Similarly, the use of SCA raised a number of questions that were not anticipated during the interviews but these could be supplemented by access to additional material, documents or archives. As visits to the call centres were made this raised new issues that were incorporated. Eisenhardt (1989) defends vigorously the legitimacy of adding to the data collection methods when building theory from case studies and distinguishes between the goals of producing 'summary statistics' versus attempting to understand each case individually in as much depth as is feasible. However, caution is advised that this flexibility is more akin to "controlled opportunism" than "a licence to be unsystematic". New data collection opportunities should be used to better ground the theory and provide theoretical insight.

3.6 Analysing data

3.6.1 Introduction

Analysing data is described by Eisenhardt (1989) as being the most difficult and least codified part of all the research process. The initial approach is to gain an understanding of each case individually before attempting any cross case comparisons. In addition to the rich textual case description three techniques have been used as frameworks, thereby improving validity, to structure the data and then used as a lens through which to understand the data. The three techniques are (i) Activity Records, (ii) Strategic Choice Analysis, and (iii) an Inscription/Specialisation framework. The three techniques are described as follows:

3.6.2 Activity Record

The Activity Record technique as devised by Werner and Schoepfle (1987), is used in this research to compare the work content of the business processes under review in the four case studies. An advantage of using this technique is that all parts of the process are described with clear beginnings and endings, and the hierarchical nature makes each

activity within the process visible. In addition it highlights processual context, and defines activities and their sub-activities. Figure 3.3 gives an example of an Activity Record.

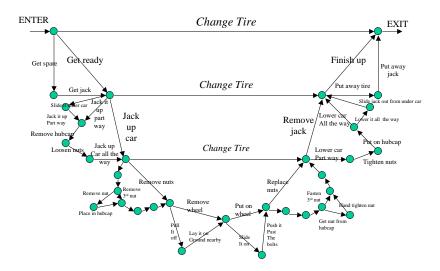


Figure 3.3: Activity Record example (Werner and Schoepfle 1987)

The arrow represents an activity that is named, with the node representing the relation "and then...". Thus in the accompanying example you "get spare" and then "get jack", and then "jack it up part way", the hierarchy being clearly demonstrated that you need to "jack up the car" before you can "change the tyre". This makes this technique very explicit showing the time boundaries and sequential/hierarchical structure of the process.

3.6.3 Strategic Choice Analysis

The second technique, Strategic Choice Analysis (SCA), is an approach to decision making developed from research conducted at the Tavistock Institute and based on the findings from two seminal projects, one in the construction industry (Crichton 1966), and the other in city government (Friend and Jessop 1977). The approach deals primarily with the interconnectedness of decision-making by building incremental progress towards a

final decision by examining alternative ways of managing uncertainty. It is important to emphasise that the term 'Strategic Choice' is not a reflection that the problem in focus has to be a high level strategic one, but that the decision is approached in a 'strategic way'.

Described by Friend and Hickling (1987) as 'Planning under Pressure', SCA is used when people are faced with a number of complex decisions and dilemmas and need to decide between factors like current commitment versus future flexibility, or who should be involved, all overlaid with real-time pressures. Although both of the seminal projects typically have widely diffused powers of decision making, the approach can, and does, transfer into other organisational settings, whatever the management and planning context. SCA was not used in any of the cases under investigation, but is used in this research to 'articulate', in a more explicit way, the decision-making processes taking place. This approach recognises three types of uncertainty each requiring a different approach. These are:

- (i) Where the consequences of moving forward are difficult to predict and not enough is known about the circumstances i.e. the working environment surrounding the decision. Undertaking surveys, investigation costing and data gathering can generally resolve them. These are uncertainties about the working environment, labelled **UE**.
- (ii) The second uncertainty arises where there is a lack of clarity regarding priorities, interests or objectives, and additional information is required regarding the guiding values. They can be resolved by consulting those affected, relevant interest groups, or evaluation of alternative proposals.

 These are uncertainties about the guiding values, labelled UV.

(iii) The final uncertainty relates to problems of restricted scope, where it might be unreasonable to take decisions without reference to other related decisions. These can be resolved by collaboration with other decision makers, by taking a broader planning approach, or to consider more linked decisions. These are uncertainties about related decision fields, labelled **UR**.

This approach recognises the real and practical choices decision makers face when confronting uncertainty and assumes not only scarce resources (the timely availability of money and people), but also the demands of time pressures and any delays. Frameworks of structured techniques are offered for use when working in any one of the four proposed modes for decision-making, these modes are: shaping, designing, comparing, and choosing. To take each one in order:

- □ *Shaping:* addresses the structure of the decision problem to understand if it should be linked to any other decisions. The decision graph technique of mapping related (and unrelated) decision areas is proposed.
- Designing: addresses the concerns about the possible courses of action, their implications and possible constraints and policy issues. Here AIDA Analysis of interconnected Decision Areas (Luckman 1967) is the predominant approach.
- Comparing: addresses the range of approaches available from detailed analysis through to a simple evaluation of 'pros' and 'cons'. Using such concepts as comparison area, relative assessment, advantage comparison, and working shortlists, and finally
- Choosing: addresses the management of uncertainty and the development through time.

3.6.3.1 Practical implications of using SCA as a research instrument

Strategic Choice Analysis was used to record the decision-making processes applied when faced with the problem of providing call centre capability for an internal business venture. Retrospectively applying SCA as a research instrument some years after the event, rather than using it as part of the decision making process at the time the decisions were being made, highlighted a number of issues as follows:

- □ SCA provides a systematic approach to decision making, so when using SCA to simulate the events, decisions, uncertainties and possible outcomes of a previous decision making occasion it is likely to identify new schemes or options that were not identified at that time. Care must be taken to ensure that the options being developed are those that could have been suggested at the time of the original analysis and decision-making and aren't as a result of new information or the benefit of hindsight.
- □ The actual feasible option schemes chosen within the case studies would not necessarily be the scheme of choice when using the output from SCA today. It can appear that the scheme chosen at that time was inappropriate when compared with its alternatives. However, the techniques in use at that time might mean that the alternatives would not have been identified or viewed positively at that time.
- In some of the cases the decision scheme that best fit the criteria and appeared most suited to the situation was not that chosen in the case study. Where this occurred SCA highlighted the variance between the 'ideal' outcomes and that of the outcome chosen at that time. This is particularly relevant to the Mail Order case where the 'real-life' choice would not have been progressed through to analysis. Whenever this situation occurred the SCA choice was used as a comparison with the actual choice.

- SCA works best in a workshop environment so the opportunity to recreate the original decision making activity comprising the key participants and decision makers in the cases to simulate the decision-making processes would have been preferable. However, many of the original participants had moved to new positions within the organisation, and some to new organizations therefore the requirement to get enough of the right people to make it a worthwhile exercise was not practical.
- □ Doing the 'within-case' analysis on each case separately meant that some of the terms and abbreviated names were re-used in different cases. When it came to the cross-case analysis this repeating of abbreviated names was confusing, so some of the options and actions were renamed to avoid confusion.
- The iterative nature of SCA ensures that you capture as many issues, uncertainties and options as possible. However, its 'additive' nature means that should you uncover new evidence then it has to be re-worked into the analysis from the start, which subsequently means that all the analysis that follows has to be re worked. This can be quite a lengthy and time-consuming process.
- With some of the events happening up to five years prior to the research, the accuracy of what is recorded is always open to interpretation. With the benefit of hindsight participants might now have a view on the relative importance of issues and uncertainties that is different from that held at the actual time of decision-making. Clearly this is an issue arising from the adoption of longitudinal research that relies on participants and informants memories over an extended period of time, rather than an issue because SCA was chosen.
- □ The natural 'bracketing' of the SCA does not always fit the natural 'brackets' within the case studies. For example, the approach can be used to work through

the stages to reach a decision point having considered all of the evidence and analysis. In practice, decisions were being made at each leg of the decision making process rather than as a holistic decision at the end. SCA does accommodate such decision-making profiles but would, if being used as the decision tool rather than as a research instrument be reworked at each stage. This would be confusing to the reader if all the reworking was to be portrayed in this way.

- □ When formulating a working shortlist comparison measures were used that was indicative of those expressed by those interviewed and are intended to reflect the requirements as defined.
- ☐ The complete end-to-end nature of SCA addresses the 'chain of evidence' issue.

3.6.4 Inscription/Specialisation

3.6.4.1 Introduction

The third analytical framework borrows techniques and concepts from Actor Network Theory (ANT) in order to help in the detailed understanding of the relationships between the actors and the decisions surrounding commodity process adoption. ANT is most prominently associated with the French sociologists Bruno Latour and Michel Callon. The actor network is used to represent the influence of a wide range of surrounding factors when going about doing your business. An actor network, then, is "the act linked together with all of its influencing factors (which again are linked), producing a network" (Hanseth & Monteiro 1998). One way of putting this is that the actor network spells out the contents of the context or situatedness of an action (Suchman 1987). Actors are "entities that do things" (Latour 1992). Networks are a "group of unspecified relationships among entities of which the nature itself is undetermined" (Callon 1993).

Latour (1997) describes three common misunderstandings when working with actor networks as being:

- ☐ The misuse of the technical network metaphor to describe and understand actor-networks. He suggests that "an actor-network may lack all the characteristics of a technical network: it may be local, it may have no compulsory paths, no strategically positioned nodes".
- □ Unlike social networks, actor network theory does not limit itself to human individual actors but extend the word 'actor' (or actant) to non-human, non-individual entities.
- ☐ Finally, he describes how networks enable us to remove "the tyranny of distance", giving examples of how proximity doesn't ensure connectedness and that distance doesn't conversely mean disconnectedness.

Three concepts from ANT are of particular relevance for this research, they are (i) Inscription, (ii) Translation, and (iii) Irreversibility. Each concept is now taken in order.

3.6.4.2 Inscription

"The notion of inscription refers to the way technical artefacts embody patterns of use" (Hanseth & Monteiro 1998). "Technical objects thus simultaneously embody and measure a set of relations between heterogeneous elements" (Akrich 1992). Hanseth and Monteiro (1998) have identified four key aspects of inscription:

- ☐ The identification of explicit anticipations (or scenarios) of use held by the various actors during design (that is standardization),
- ☐ How these anticipations are translated and inscribed into the standards (that is, the materials of the inscriptions),
- □ Who inscribes them, and

☐ The strength of those inscriptions, that is, the effort it takes to oppose or work around them.

3.6.4.3 Translation

The concept of a translation is succinctly described by Somerville (1998):

"Translation rests on the idea that actors within a network will try to enrol (manipulate or force) the other actors into positions which suit their purposes. When an actor's strategy is successful and it has organised other actors for its own benefit it can be said to have translated them".

Translations are "embodied in texts, machines, bodily skills which become their support, their more or less faithful executive" (Callon 1991). Translate: "That is, re-interpret, represent or appropriate, others interests to one's own" (Hanseth and Monteiro 1998). Latour (1991) describes an interesting example of translation and inscription by a hotel wanting to encourage guests to leave their room key when departing the hotel. He describes a progression of inscriptions from signage behind the reception desk, security staff on the hotel exit (both unsuccessful), and finally through to a bulky key fob which had its weight increased to the point at which guests would prefer to leave the key rather than taking it with them. Thus the hotels interest were finally inscribed into a network strong enough to impose the desired behaviour on the hotels guests.

3.6.4.4 Irreversibility

Irreversibility represents the strength of inscriptions, whether they must be followed or avoided, and depends on the irreversibility of the actor-network they are inscribed into. For example the strength of an inscription, say a work routine, could be reinforced by training. If this was too weak then being embedded in textual description within a manual could reinforce the inscription. If this was still too weak then supporting them with

information systems could reinforce the routines. The cumulative effect of superimposing these inscriptions increases strength and promoted irreversibility.

3.6.4.5 Inscription/Specialisation analysis framework

In order to assist with the analysis the following conceptual framework was devised to analyse two critical dimensions that capture the characteristics of work business processes, and the components that make up those processes, these are: *the degree of specialisation, and the degree of inscription*. The two dimensions can be plotted on a graph as shown in Figure 3.4.

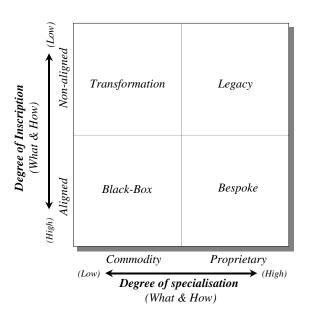


Figure 3.4: Inscription/specialisation analysis framework

3.6.4.5.1 Degree of Specialisation

The degree of specialisation (X axis) focuses principally on 'what' is done within a process, and to a lesser degree 'how' it is done. Work business processes with a low degree of specialisation will comprise standard tasks, activities and routines that are shared by many companies. They will not normally be the source of differentiation in

their own right, and provide no real competitive advantage from what is undertaken. Typically they will contain commodified components, be self contained and modular. In contrast, a process with a high degree of specialisation will be tailored to the specific and non-standard needs of a business, which contains tasks, activities and routines that are likely to be unique to that business. This specialism will almost certainly be a source of differentiation and is likely to generate significant competitive advantage. The components of the process will be integral to the offer, and they are likely to be proprietary.

3.6.4.5.2 Degree of inscription

The degree of inscription (Y axis) principally focuses on the alignment of the interests of actors in the network. A high degree of inscription would characterise a situation where the potentially diverse set of interests of actors in the network are highly aligned, i.e. consensus on how things are done would be evident, and there would be general agreement as to how to proceed. This alignment would be embodied in the computer systems, procedures adopted, the training provided, and in the tasks and activities that make up the process. Where the degree of inscription is low, then this would characterise a situation where the diverse interests of the actors in the network are not aligned, consensus would not be evident, and there would be attempts to 'translate' other actors to their inscribed view. There would be no agreement as to how to proceed and the systems, procedures and training would not be embodied with a common alignment. The strength of the inscription, that is whether it must be followed or can be avoided, would be determined by the 'irreversibility' of the actor-network they are inscribed to.

3.6.4.5.3 Patterns of activity

This gives rise to four patterns of activity:

(i) High-inscription/low-specialisation (Aligned-commodity) or 'Black-box'

The 'aligned-commodity' space represents those process components where 'what' is undertaken is highly routine, standard and non-specific to a particular business, and where both 'what' and 'how' it is undertaken is fully aligned with the interests of the actors involved. Their content, i.e. the way it works, is considered a black box, i.e. "It contains that which no longer needs to be considered, those things whose contents have become a matter of indifference". (Callon and Latour 1981). Callon (1999) observed that, "To construct a market transaction (that is to say to transform something into a commodity), it is necessary to cut the ties between this thing and other objects or human beings one by one. It must be decontextualised, dissociated, and detached".

(ii) Low-inscription/low-specialisation (Non aligned-commodity) or 'transformation'

The 'non aligned-commodity' space represents those process components where 'what' is undertaken, and or 'how' it is undertaken, is highly routine, standard and non-specific to a particular business, however this is not fully aligned with the interests of the actors involved. This non-alignment is likely to promote translation activity hence resulting in transformations taking place. The propensity for translation is further increased where, due to a market transaction (i.e. where a product or service has been purchased), the relationship with the supplier is maintained. This continued relationship allows the supplier to be part of the network and can therefore attempt to align the interests of its customers to their own interests. For example, the ongoing relationship with a telephony rental company allows that company to influence its customers through the products and services it offers, its pricing structure, its attitudes, culture and behaviour, its union agreements, and its general ethos.

(iii) High-inscription/high-specialisation (Aligned-proprietary) or 'bespoke'

The 'aligned-proprietary' space represents those process components where both 'what' is undertaken, and 'how' it is undertaken, is non-routine, non-standard and highly specific to a particular business, and is fully aligned with the interests of the actors involved. The business process is likely to be unique to this situation only, and be provided through components that are bespoke and non-standard.

(iv) Low-inscription/high-specialisation (Non aligned-proprietary) or 'Legacy'

The 'non aligned-proprietary' space represents those process components where 'what' is undertaken, and or 'how' it is undertaken, is non-routine, non-standard and highly specific to a particular business, and at the same time is not aligned with the interests of the actors involved. The absence of clear actor alignment encourages translation and a high degree of ambiguity, coupled with the highly customised and specialised tasks and activities of a unique process, makes the ensuing process instantaneously a legacy, i.e. in the form of an inheritance of future development and maintenance difficulties.

3.6.5 The logic linking the data to the propositions

3.6.5.1 Within-case analysis

For each of the cases a detailed and descriptive write-up of what had been observed was captured. These write-ups enabled the particulars which are distinctive to each case to be recorded in a systematic way, thereby allowing the emergent within-case patterns to be identified before any cross case analysis took place. Evidence was collated from interviews, internal documents, archival records, and direct observations.

In order to make sense of what had been collected a simple model was developed (Figure 3.5), which clearly shows the data falling into two key domains. The area to the left of the model (not shaded) identifies the key decision-making activity the actors went through in

order to determine how they should organise the work contained within the process. The shaded area to the right of the model illustrates the activities and tasks that go on within the call centre process. From this initial high-level analysis the two clear domains emerged, subsequently labelled *Process Logic* and *Decision Logic*, which were later to be complimented by the Inscription/Specialisation framework that addresses *the Alignment Logic*.

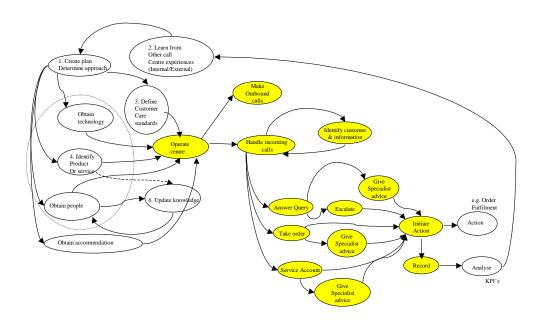


Figure 3.5: High-level overview of the research data collected

In order to understand what happened over time, longitudinal case study write-ups were produced for each case to put into context the long-term outcome, in some cases this being five years after the initial implementation.

3.6.5.2 Cross-case analysis

The approach to the cross case analysis has focussed principally on the following broad themes: (i) Pattern matching, such as within group similarities, (ii) 2 x 2 grids (Inscription/ Specialisation framework), and (iii) Visual mapping: Langley (1998), Langley and Truax (1994) and, Lyles and Reger (1993). Using pairs of cases (i.e. forced comparisons to generate new categories and concepts) were considered but on this occasion didn't really generate any unexpected categories or concepts. The pairs of cases considered for analysis were: (i) Sales versus service, (ii) New business venture versus established business venture, (iii) In-sourced call center versus outsourced call center, and (iv) Internal assistance versus external assistance. Data divided by data source: People, (i.e. patterns from one data source are corroborated by the evidence from another) Interview, archives, documents, direct observation.

3.7 Shaping hypotheses

3.7.1 Introduction

A key step in the research process is to test the appropriateness of the emergent findings in order to establish how well (or badly) it fits with the case data. Usually an iterative process it aims to sharpen constructs and definitions, while building internal validity. Four checks are discussed here: Construct validity, internal validity, external validity (generalisability), and reliability.

3.7.2 Construct validity

Construct validity is concerned with establishing the correct operational measures for the concepts being studied. For example, in this study the plan was to examine the logic (ability) of organisations to adopt commodity work business processes. To achieve construct validity in this case it must be possible to demonstrate that the selected measures actually *do* reflect any logic applied by organisations. Approaches to ensure that construct validity has been maintained include multiple sources of evidence

(triangulation), ensuring that a chain of evidence has been maintained, and to get key informants to review the case study material.

Converging lines of enquiry have been achieved by using multiple sources of evidence and multiple data sources (interviews, direct observations, archival records and documents), also by using a series of techniques such as SCA, Activity Records, and borrowing some concepts from Actor Network Theory to determine the degrees of specialisation and inscription that occurred during the decision making and beyond.

3.7.3 Internal validity

Particularly relevant to explanatory and causal case studies, internal validity is concerned with ensuring that a causal relationship has been established between two conditions and can clearly demonstrate that one condition has led to another. Approaches to ensure that internal validity has been maintained include: multiple sources of evidence (such as triangulation), pattern matching, and time series analysis. Triangulation is principally concerned with ensuring validity through the use of multiple sources of evidence. Patton (1987) describes four types of triangulation as: Data triangulation (of data sources); Investigator triangulation (among different evaluators), Theory triangulation (of perspectives on the same data set), and Methodological triangulation (of methods).

As an employee of BTC I enjoyed unrestricted access to all the relevant personnel who were engaged on the cases under investigation, and on the whole the interviewees were most helpful, accommodating and generous with their time. Similarly, I was able to have sight of documents and literature that would usually be confidential and have had restricted access. A longitudinal case design with three distinct data collection phases over a five-year period increases internal validity by ensuring that the events are correctly placed in sequence not only within case but also in relation to each of the other cases (Leonard-Barton 1990).

3.7.4 External validity (Generalisability)

External validity is concerned with the problem of knowing if a study's findings are generalisable beyond the immediate case study. Care must be taken to ensure that analytical generalisation is the objective, i.e. striving to generalise a particular set of results to a broader theory (Yin 1994), and not statistical generalisation which aims to select a sample that if representative correlates to a larger population. The use of multiple cases increases generalisability, providing reassurance that events and processes in one well-described setting are not wholly idiosyncratic, and that the findings make sense beyond a specific case (Miles and Huberman 1994).

The four cases used in this study while containing the same process within the unit of analysis does examine a range of quite different circumstances, and the generalisations applicable will cover broader theoretical issues such as the decision logic used, or the role of actors in the network, rather than specific issues about call centres.

3.7.5 Reliability

The goal is to minimise the errors and biases in a study. Using a criminology metaphor Yin (1994) describes the importance of being able to maintain a 'chain of evidence'. He emphasises the methodology of ensuring that all of the 'evidence' contained in the case study report is the same as that collected at the scene of the 'crime', and that all of the facts are presented. This should ensure that if the case needs to be re-examined then it could be recreated and followed exactly as described by the original investigator(s). Reliability is increased when the appropriate citations of texts, documents, interviews, and observations are included and can be traced.

The four cases were each subjected to exactly the same approach. Key actors in each case were interviewed and recorded on tape. The interview was subsequently transcribed and

extracts attributed to the relevant interviewee. The Strategic Choice Analysis used identical techniques for each case and the results are included within each case description. An annotated bibliography of additional sources of information is provided in addition to the complete bibliography of texts and references.

3.8 Enfolding literature

Comparing the findings of this research with that of the extant literature will enhance the validity of the study, particularly where the results or findings are conflicting as this forces a more creative and frame breaking approach. Confidence in the results can be enhanced if they stand up to the rigour of contradictory evidence, which will in turn enhance both generalisability and internal validity.

3.9 Reaching closure

Eisenhardt (1989) recommends a pragmatic approach to determining when research closure should take place, which is either recognition that incremental saturation has been reached i.e. when learning is at a minimal because the evidence has been seen before, or alternatively the improvement in quality is minimal. Case studies should number somewhere between four and ten, any fewer is hard to generate theory from, and more than ten increases significantly the complexity and volume of data.

3.10 Summary

This chapter introduces the eight steps for building theory from case study research (Eisenhardt 1989), and overlays each step with the approach taken in this study. The research adopts qualitative and interpretative analysis that includes longitudinal case studies of four internal business ventures within one major UK retailer. This multiple case study approach has an embedded design incorporating the components of work business processes as subunits to enhance the insight. Data was collected predominantly from interviews supported by archive material, documents, and direct observation. Overlapping

cross case, and within case analysis was undertaken, with Activity Records, Strategic Choice Analysis, and concepts supported by Actor Network Theory (Inscription/Specialisation framework) integral to the analysis.

CHAPTER FOUR:

CASE STUDY ONE - CUSTOMER SERVICE

4.1 Introduction

The Boots The Chemists (BTC) Customer Service function is a centralised facility which handles approximately one thousand telephone calls, and five hundred letters, faxes and emails daily from customers and stores about the products and services Boots provides. Based in the Corporate Head Office in Nottingham, advisors handle a wide range of enquiries and complaints ranging from the straightforward, such as store opening times, product availability queries, or product specific enquiries such as the use of hair colourants and skin preparations; through to complaints as diverse as the service quality received in any of the 1400 stores, nudity in television adverts, the grammar used in literature and promotional material, and product recalls. However this has not always been the case, and the 'Customer Service Complaint Handling Review' (Interim Report, August 1996), stated that the strategic intent for Customer Service is: 'to maximise customer relationship opportunities thereby driving customer loyalty and increasing sales and profit'. This to be achieved through two phases:

- 1. Effective management of customer complaint handling within BTC, and
- 2. The development and execution of a customer relationship strategy to include care lines, expert help lines and Advantage Card customer contact handling.

The effective management of complaint handling within BTC is intended to "act as a springboard" for the development and execution of a customer relationship strategy. The complaint handling objectives were described as:

- □ Prompt and effective resolution of complaints,
- □ Consistency of delivery in performance and communication,
- ☐ Information feedback contributing to increased sales and profit, and
- □ Protection and enhancement of BTC's reputation.

However, the Customer Service Manager described customer service above all as: "A necessity, you have to recognise that customers want to contact you"

At the time of the above review, the methods, processes and systems used to handle complaints did not support the strategic intent, and Boots' competitors had been investing heavily to improve the perception of their customer service. Providing the customer with positive personal service and good after sales service is perceived by Boots as being critical to differentiation. Comparisons with other retailers such as Marks & Spencer, Sainsbury and Safeway revealed that the productivity of handling written complaints was half that of the worst in the comparable group, and only 20% of the best. This did not reflect its mid-table ranking for investment in customer service. Complaints were running at approximately 65,000 per year, with the majority (86%) being merchandise related, while the remaining 14% comprised service, pricing value, professional services and miscellaneous categories. The ratio of complaints to enquiries was 1:1. Boots has a diverse inventory of about 55,000 lines (approximately 30% own brand), most of which are available through the stores channel (however not all lines are available at all stores).

The 'decentralised' Customer Service units at that time did little more than respond to paper generated complaints, which led to inconsistencies in quality and content of correspondence, a random mix of formal and informal tones, different service levels for turnaround of responses, and even differing remedies to problems. Staff, who were not necessarily selected for their customer service skills, operated the units, and their approach was characterised as "anything for a quiet life".

When customers contacted Boots by telephone this was via the head office switchboard, which often led to the caller being routed to an inappropriate department or person. For example, a Product Supply Manager would not be well equipped to handle a supply enquiry from a customer concerning the stock level of a specific hair shampoo, at a

specific store, at a specific time. In much the same way, a customer complaining about being trapped in an elevator in a store would thoughtlessly be put through to an engineer.

As a Group Telecommunications Client Manager explained:

"Customer Service was born out of a need to gather together in one place the complaints that were received via the switchboard, which was inconvenient for them and the caller. We also lost lots of information. Switchboards are about 'speed' and 'volume' and passing on the call as speedily as possible. It's not necessarily about chatting with the customer. The principle of taking a call live and dealing with it at the first attempt, then that's the most productive way of dealing with any complaint or problem".

The present day department was formed over five years ago (April 1997) from the disparate 'complaint handling' units which were located within the then separate Business Centre structure⁷. Customer Service is an amalgam of those original units, now located together in one location, ensuring that a consistent approach to handling customer enquiries and complaints is given, and that all calls are logged, and that the resolution of any problems is as professional as any customer of Boots The Chemists would expect, ensuring that: "It matches the experience you get in a Boots store".

4.1.1 The structure of the case studies

In this case, and the three cases that follow, three sections in turn examine: (i) the detail of the process under review, i.e. how the process was constructed at the time of its implementation, labelled 'process logic', and presents the activities and tasks that make up that process, (ii) the approach taken by the actors in the case to decision-making, labelled the 'decision logic', including a detailed account of the decision making process,

and (iii) using concepts from Actor Network Theory an understanding of the alignment of the actors in the network, labelled 'alignment logic'. Each of the four cases is presented in an identical style, although each was researched independently. The case studies conclude with a summary of the key themes. Recorded semi-structured interviews were conducted in this case with Graham Hardy - Customer Services Manager, and Tony Kemmer -Director of Corporate Development, as well as actors from the business units involved in each of the case studies, department representatives from internal functions such as Information Systems (IS) and Group Telecommunications (GT), suppliers representatives, telephony vendors, and members of the BTC Executive. Archive material such as call logging records and service level agreements were also use.

4.2 The customer service process in focus (*Process logic*)

4.2.1 Introduction

This first section examines the Customer Service work business process under review as it operates today and presents the five prime activities and tasks that make up that process, namely: (i) Receive the 'inbound' calls; (ii) Identify the customer & information; (iii) Handle the complaint or enquiry; (iv) Initiate other processes; and (v) Close the call. It is not the intention to include all the activities that go to make up the complete end-to-end Customer Service process, only those that relate to the call centre process. The process starts with an inbound call from a customer, and ends when the dialogue, and all the associated components of the interaction (letters of apology, credit notes etc.) are complete for despatch. Figure 4.1 below shows an Activity Record of the call centre process as utilised for Customer Service.

7

⁷ The Marketing function at that time comprised five Business Units, each dedicated to a specific product category range. For example: Health, Baby, Photographic, Leisure, and Beauty Personal Care.

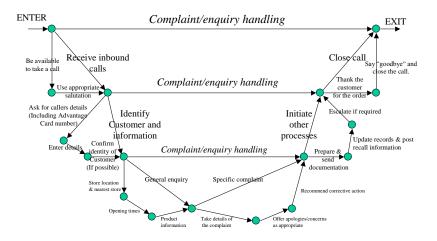


Figure 4.1: An Activity Record of the Customer Service process

Each of the activities is described in full as follows:

4.2.2 Activity One: Receive 'inbound' calls

The process starts with an 'inbound' call from a customer using the customer service contact number which is included on most product information and increasingly on packaging, literature, and in-store material. The call centre is manned six days a week from 0800 to 1800 Monday to Friday and 0800 to 1700 on Saturdays. At all other times key customer services staff are contactable by mobile phone in case of emergencies. Over forty advisors with specific knowledge of the products they had previously been associated with make up this new function. Similarly, a new management structure was established which reflected the desire to divide the department into small teams (maximum 8 people), in order to maintain a manageable and 'human' environment.

Office accommodation is 'open plan', a structure that suits the interchange of information between advisors and creates a mutually supportive environment. It can help to lessen the boredom when call rates and energy are low. Access to the building is round the clock, seven days per week, which also included 'out-of-hours facilities.

At that time Diamond Cable (a local cable television company now part of NTL) were using Automatic Call Distribution (ACD)⁸ telephony technology for their own purposes, and it was relatively easy for BTC to utilise some of their capacity, paid for on a 'per-user' basis. A low entry-level cost was achieved by limiting capital investment to the purchase of consumables such as operators' headsets, and to upgrade the line capacity between the Head Office building and that of Diamond Cable, where the telephony equipment was housed. Risk was limited through a one-year contract just in case the customer service concept didn't take off. Implementation of the managed service while not without technical problems was relatively easy and straightforward. Although the service was 'basic' it benefited from detailed call logging data, which had previously been unavailable. From this it was possible to gauge the daily call profile and subsequently from this the staffing levels and coverage required. The data on 'peaks' of activity and average call lengths, abandoned calls and out of hour's activity was invaluable, and has subsequently benefited others in their project work by being able to compare and challenge metrics and forecasts.

The reason for a call to Customer Service can be wide ranging, from a general enquiry as to the location and opening times of the nearest store, right through to a complaint about a product or service which could, ultimately, have caused death or serious injury. This requires that advisors are professional, patient, courteous and knowledgeable about the products and services Boots The Chemists provides.

⁸ ACD - Automatic Call Distribution system is an intelligent switchboard, or PABX. It monitors traffic, routes calls automatically and provides performance analysis. More advanced systems have links to voice or touch tone response systems, and ACD's can also be linked in a network.

4.2.3 Activity Two: Identify customer and information

The transaction with a customer might well require an exchange of personal and product information, which is captured as part of the enquiry/complaint process and retained for subsequent problem resolution, product design, and marketing initiatives. Customers are asked to identify themselves if an Advantage Card holder by quoting their membership number. Customer Service Advisors use a system called 'Customer Q'® which is designed for internal customer contact centres and help desks, and is produced and distributed by the Quintus Corporation⁹. It captures, stores and retrieves critical information instantly through an interface, and accesses information from multiple knowledge bases. When first launched 50% of the calls received were from stores, which highlighted two key issues: firstly that stores will take the easy option and call someone else for a resolution to a problem rather than solve it themselves, and secondly, that there was a need to satisfy those requests where help was genuinely needed. Today this has reduced to around 10% of calls, and these will normally involve the customer being present in store at the time the call is made.

Advisors have access to other BTC systems such as the 'Store Directory', which includes details of the opening hours of stores, their locations, the Loyalty Scheme Operating System (LSOS) to assist in the answer of Advantage Card queries, and Ami Pro (Office Automation software) for answering letters scanned into the system. Electronic Mail (e-mail) enables advisors to communicate with each other, within their teams, and with the rest of the organisation.

.

⁹ Quintus Corporation provides contact centre software that unites traditional call centre technology with Internet communication, allowing businesses to build customer relationships across a variety of media. The Quintus e-Contact suite of software includes computer telephony integration software and applications for customer relationship management, email response management, Web, and e-commerce integration

Product recall or product information can be posted onto an electronic notice board via the Lotus Notes database. An upgraded version of Customer 'Q' was later installed to rectify some of the initial problems associated with the earlier version. Correspondence is scanned into the system and read 'on-screen'. Standard letters are generated in a semi-automated way and will shortly be connected to Customer Q.

4.2.4 Activity Three: Handle the complaint or enquiry

At this stage the call will fall in to two broad categories: (i) a general enquiry, or (ii) a specific complaint. General enquiries will typically require the Customer Service Advisor to obtain information from a related system such as a Lotus Notes database or a store directory, and then relay this information to the customer. The most frequent questions relate to store opening times, the nearest store to a specific location, or whether a store stocks a particular product. Most enquiries of this nature are easily answered to the customer's satisfaction and no further action is required.

Alternatively, if the call relates to a complaint then the Advisor will obtain the customers details along with the nature of the complaint. Typically the customer wants to demonstrate their annoyance, anger and disappointment, while gaining some recognition and understanding of how this issue will be avoided in future. They will also expect, and will always be offered, an apology. Within pre-defined limits the advisors can (and do) suggest corrective action such as replacing faulty or defective goods, a full refund, credit notes, or Boots gift vouchers as a goodwill gesture. However, on occasions, either due to the severity or nature of the complaint, or at the customers' insistence, the call can be escalated to a more senior and experienced advisor.

4.2.5 Activity Four: Initiate other processes

If the complaint cannot be resolved to the customer's satisfaction, or the severity requires that a more experienced advisor be consulted, then the complaint will be escalated to a senior person. Typically this is done as part of the original call however it might be beneficial to return the customers call. The call details are documented, and pre-briefing the senior advisor prior to handing over the call usually is sufficient. For less serious cases advisors will produce any associated documentation such as letters of apology, gift vouchers, refunds, or make arrangements for product recalls.

4.2.6 Activity Five: Close the call

On conclusion of the telephone call the advisor will thank the customer for their enquiry/complaint and close the call. The associated documentation is produced automatically where applicable, any notes about that particular call are logged, and product information added to the appropriate database.

4.3 The approach taken to the business problem (*Decision logic*)

4.3.1 Introduction

This second section provides a detailed account of how the Customer Service call centre process was approached and managed, in particular what decisions were considered and the outcome of those decisions. The senior management team within the Customer Service function, i.e. the Director of Customer Service and other senior managers, assumed ownership for this business problem and for the most part managed the process. Interviews were conducted with members of the senior management team, plus representatives from Information Systems (IS), Group Telecommunications (GT), as well as having unrestricted access to internally published reports and data. The opportunity to listen-in on live calls from customers was also taken. Strategic Choice Analysis (SCA) was used as a research framework to reconstruct the decision logic used within this case with hindsight, as told to the author by those involved. This section has therefore been split into the four logical sections used by SCA and describes each of them in turn, namely: (i) 'Shaping' i.e. the judgements about possible connections between one field of choice and another, (ii) 'Designing' the possible courses of action, (iii) 'Comparing'

those possible courses in the light of what the consequences might be, and finally (iv) 'Choosing' mode, where commitments for action through time are formulated.

4.3.2 Step one: Shaping of problems

This first step examines the judgements about possible connections between one field of choice and another. The Decision Graph, as shown in Figure 4.2, depicts those decisions seen by the actors in this case to be key to the outcome of the project. Those decisions shown within the boundary of the problem focus were given prominence over those outside the boundary, however it is realised that all the decisions shown are closely related.

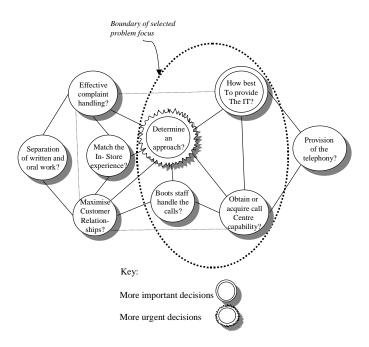


Figure 4.2: A Decision Graph of the key case decisions

The four key decisions within the boundary of the problem focus are (i) Determine an approach, (ii) How best to provide the IT, (iii) Obtain or acquire call centre capability, and (iv) Boots staff handle the calls. To take each decision in order:

4.3.2.1 Determine an approach?

The project team considered three possible options:

- Current structure and resource is retained within each Business Centre, i.e. do nothing,
- Current structure and resource is retained within each Business Centre but with central management of the teams, and
- □ Centralisation: All resource is brought together within a common management structure.

Some initial analysis comprised process flows, financial appraisal, risk analysis, internal opinion gathering, and external visits.

4.3.2.2 How best to provide the IT?

This was largely a choice between developing a bespoke application and utilising an existing packaged product. The principle requirement of the information technology is to capture the details of the complaint or query as it is received in real time and enter it directly into a customer service system. The Customer Service management team were already aware of a preferred product known as 'Customer Q'. The early versions of 'Customer Q' were neither intuitive nor interactive and were designed principally around taking information from correspondence, which didn't allow for the easy capture of information during telephone calls.

4.3.2.3 Obtain or acquire call centre capability?

At the time of setting up the centralised Customer Service function BTC had no inhouse call centre capability. However, as a Telecommunications Account Manager observed: "At that point there were no call centres in the company as such, although we did have a number of 'help-desks'. Why do we differentiate between a 'help-desk' and a call centre? I believe we have dozens of call centres going on here. If you define a call centre as a number of people within a close geographical proximity (although the technology means they don't even have to be seated together), taking and making telephone calls on a limited range of issues or questions, then we have dozens of them. Any one of a number of 'help-desks' is doing exactly that".

No facility currently exists within Customer Service to handle financial transactions via the telephone (i.e. to take payments for goods and services, refunds, or deposits), and there was a perception that this would be something that was difficult to achieve. The options considered to be available to the team at that time were (a) to develop an in-house call centre capability, or (b) outsource to a third party.

4.3.2.4 Boots staff handle the calls?

An important principle of any new approach was 'Making people feel valued', and the demanding environment of taking calls directly from irate customers has been key in ensuring that advisors are likely to be mature in years having developed 'life skills'. As the Customer Service Manager described it: "A unique aspect is the quality of our people. You see people smiling, you see people crying, as that goes with the territory"

The question was whether the call centre staff needed to be recruited from experienced Boots staff, who understand the products and service culture, or whether any suitably trained and motivated staff could perform the tasks in a way that was acceptable to Boots.

The key decisions considered to be outside the boundary of the problem focus were: (i) Effective complaint handling, (ii) Match the in-store experience, (iii) Maximise customer

relationships, (iv) Separation of written and oral work, and (v) Provision of the telephony.

To take each of those decisions in order:

4.3.2.5 Effective complaint handling?

It was a requirement of this project to improve the existing arrangements for complaint handling and by doing so it should also create opportunities to improve the customer contact experience so that it is at least as good as, but ideally superior to, its competitors. The decision is therefore whether to design a solution that maximises complaint handling, or to emphasise the related 'contact' issues.

4.3.2.6 Match the in-store experience?

Most Boots customers will have experienced the service a Boots store provides which has become a fundamental of the Boots brand. As far as is practicably possible the intention was to replicate the same level of service within the call centre. Therefore the decision options are (a) whether to establish service level agreements (SLA's) for call centre staff as in stores, and (b) whether to link the SLA's to the performance management scheme.

4.3.2.7 Maximise customer relationships?

The issue here was whether to simply deal with issues raised by the customer or whether to treat it as an opportunity to build the relationship with the customers. The majority of customer calls were initially treated as anonymous with the emphasis being placed on capturing the nature of the call, for example an enquiry about store opening times or the location of the nearest store to a specific location, rather than the personal details of the caller. However, this personal information is now considered useful in gauging effectiveness of advertising, understanding if special interest groups are adequately catered for, or even establishing if the customer already has a relationship with Boots. The customer details will now be captured on all occasions that contact is made with a customer.

4.3.2.8 Separation of written and oral work?

Traditionally the work had been split into two teams, those answering the calls and queries from customers using the telephone, and those responding to letters and emails. It was felt that this division of labour helped improve the productivity. Alternatively, keeping the two together would provide some variety for the teams, facilitate skills transfer, and create a more flexible workforce.

4.3.2.9 Provision of the telephony?

From a telephony perspective Customer Service was treated as a trial. The 'soft' nature of the benefits made them difficult to quantify, and there was a reluctance to invest in capital expenditure for something considered a trial. The number of operators envisaged at that time was roughly equivalent to the total number of staff engaged in the decentralised Customer Complaints units within the individual Business Units, at that time approximately 15-25 people. Therefore opportunities existed to take advantage of a 'managed service' from a local cable company (Diamond Cable), rental from existing mainstream telecommunications companies such as BT, or outright purchase of an inhouse system.

4.3.3 Step Two: Designing the possible courses of action

This second step focuses on designing possible courses of action, and Table 4.1 summarises the key decisions to be taken along with the possible options under consideration. The 'option label' is an abbreviation used to represent that option in future tables and models.

DECISION AREA	OPTIONS	OPTION LABEL
Determine an approach?	 Do nothing Centralisation of teams Centralisation management of teams 	 Nothing Centralise teams Centralise mgt.
Boots own staff to handle the enquiries or complaints?	- Yes - No	- Yes - No
How best to provide the information Technology?	 Predominantly Bespoke Predominantly Package 	- Besp - Pack
Obtain or acquire call centre capability?	Develop in-house Outsource to third party	- In-house - Outsource

Table 4.1: Options within the boundary of the decision area

A key feature of the decision making process is the interconnectedness of the decisions and the consequences of those decisions, and that the likely outcome will rely on a compromise between possible options. SCA utilises the Analysis of Interconnected Decision Areas approach (AIDA) to help in understanding the relatedness of these decisions and is useful here to understand how and what decisions have been made. Figure 4.3 shows the results from comparisons of options from each decision area, with the options from every other decision area. This pairing of options ensures that incompatible or doubtful combinations are highlighted and potentially excluded from future analysis.

	STAFF?		
ch?		Yes	No
Approach	Nothing	X	X
dd√	Centralise teams	•	X
~	Centralise mgt.	•	?

	IT?				
.ئ		Besp	Pack		
Staff?	Yes	•	•		
	No	•	•		

	CALL CENTRE?				
٠ .		In-house	Out- Source		
IT?	Besp	•	?		
	Pack	•	•		

	CALL CENTRE?			
		In-house	Out- Source	
ch?	Nothing	X	X	
Approach?	Centralise teams	•	X	
Ą	Centralise mgt.	•	X	

	IT?		
		Besp	Pack
.h?	Nothing	X	X
Approach?	Centralise	_	
	teams		
l A	Centralise		
	mgt.		

	CALL CENTRE?				
íf?		In- house	Out- Source		
Staff	Yes	•	?		
	No	Х	•		

Figure 4.3: Analysis of interconnected decision areas (AIDA)

The Option Graph in Figure 4.4 diagrammatically represents the outcome from AIDA. The convention used for Option Graphs is to show the decision areas as circles, the options as nodes within the circles, which are connected by solid lines where there is an incompatible option (option bar), or a broken line where a doubtful compatibility has been identified, i.e. requiring further analysis. For example, a solid bar joining for instance 'Package' and 'Nothing' indicates an incompatible combination. A dotted line, for instance, between 'Bespoke' and 'Outsource' indicates doubtful compatibility.

^{• =} Compatible combination

X = Incompatible combination

^{? =} Doubtful compatibility

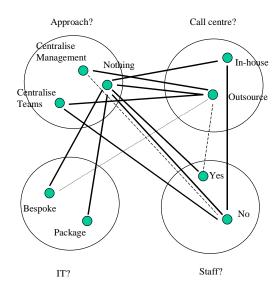


Figure 4.4: Option Graph – Customer Service

This is a key step that cuts down the potential decision schemes (a decision scheme represents a combination of options from each decision area) in this case from twenty-four to four. Two prominent options that create 'bars' are the do 'Nothing' and 'Outsource' options. Clearly the option to do 'nothing' if chosen would make any option it pairs with unacceptable, as do nothing while a valid option would not address the issues or meet the objectives. Any decision to 'outsource' the call centre was seen as incompatible with a structure of centralised teams or management thereof, so these pairings were excluded. Having determined which options are compatible it is then possible to establish which combination of those options can be realistically crafted into a feasible decision scheme. A feasible decision scheme is one where it doesn't violate any of the incompatibilities established during earlier analysis, but their inclusion in the final solution is still not automatic. Using a diagram similar to a decision tree it is possible to

map the possible decision schemes so that they can be logically assessed for future consideration.

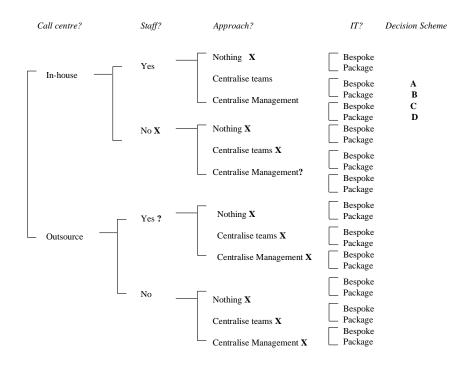


Figure 4.5: Feasible decision schemes for the Customer Service case

Figure 4.5 shows that when the compatible options are re-presented to determine what feasible decision schemes are possible only four decision schemes emerge from the analysis, however none of these have any doubtful compatibilities that would need to be resolved in order to establish if they are truly feasible.

4.3.4 Step three: Comparing the possible courses of action

Having determined a list of feasible decision schemes the next step is to compare each of the schemes in light of what their consequences might be. Table 4.2 lists those comparison areas that emerged to be of importance to the actors in this case, and a comparative measure has been assigned to each comparison type.

COMPARISON AREA:	COMPARATIVE MEASURE:
Prompt and effective resolution of complaints: The ability to deal with any complaint efficiently and effectively that has a positive impact on the Boots brand.	Greater than 90% ⇔ Less than 90%
Consistency of delivery in performance and communication: Coordinated approach across the disparate Business Centres.	High ⇔ Medium ⇔ Low
Opportunity for information feedback contributing to increased sales and profit: Good customer intelligence can greatly influence product development and customer service.	Yes ⇔ No
Protection and enhancement of BTC's reputation: With one of the most trusted brands on the high street Boots are extremely cautious about damaging the brand.	Good ⇔ Poor
Maximise customer relationship opportunities: Driving customer loyalty and increasing sales and profit.	High ⇔ Med ⇔ Low
Cost: Minimise expenditure.	High ⇔ Medium ⇔ Low

Table 4.2: List of comparison areas

A working shortlist can be developed from the feasible decision schemes identified earlier, by comparing each of them against what the project teams considered were the top three comparison areas in this case, namely: 'cost', 'maximise customer relationship opportunities', and 'consistency of delivery in performance and communications'. Figure 4.6 shows the working shortlist along with the assessment of how each comparison area compared with the desired minimum ratings of at least 'medium' for both 'customer relationships' and 'consistent delivery', and a 'low' for cost.

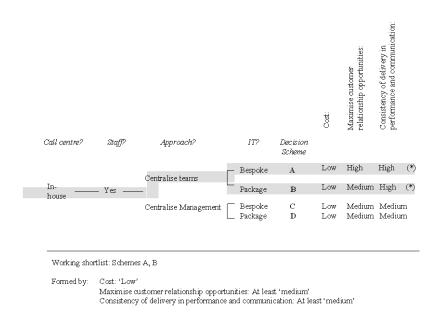


Figure 4.6: Forming a working shortlist – Customer Service

The outcome of the comparison ratings suggests that all four of the feasible decision schemes could form the working shortlist as they all met the minimum requirements for the comparison measure. However, according to the judgements included in Figure 4.6 decision scheme 'A' had marginally the most favourable comparison rating over decision scheme 'B'. The comparisons of each of the four key decision areas (Call centre, Staff, Approach, and IT) and the choices to be made are as follows:

Call centre (in-house versus outsource)

The perceived relative high cost of outsourcing and the increase in risk to the Boots brand were central to the concerns of the actors in this case, having no internal experience at operating a call centre or any guarantee that the level of customer service would be improved by having a call centre. Looking back at this decision, one participant described amalgamating these functions as being:

"Bags of ignorance. We assumed it would be better, which it clearly is, but there was lots of pain in between. This was new territory and no-one had been there before".

As the traditional approach had been a paper-based administrative function it was recognised that appropriate training and development was required for the staff, many of whom had never received Customer Services training or telephone skills training before. Similarly, appropriate systems training and support services and processes would need to be made available.

Staff (Boots staff to handle calls 'Yes' versus 'No')

The preference for an in-house approach was clear, and the following statement by the Customer Service Manager was typical of those interviewed:

"If we can't give you an answer we commit to come back to you with the answer. In contrast to outsourced call centres you are able to escalate the complaint, unlike call centres where you're not even talking to the people with whom you do the business. A third party hasn't got the incentive to do what we do"

Considerable emphasis was placed on the importance of the Boots brand, the affection with which customers view Boots, and it's standing as an established and cherished British retailer. The Customer Service Manager described this as follows:

"The advisors are the voice of Boots, and customers look upon us as custodians of the nation's morals. We need to ensure that the 'music on hold' is sensible; that we adopt a semi-formal style, that correspondence is free of grammatical errors, and that adverts are free of naked ladies".

The ready supply of experienced Boots Customer Service staff was also a contributory factor.

Approach (Centralise teams versus centralise management)

Consistency of delivery in performance and communication, and improved opportunity for information feedback contributing to increased sales and profit, were the two key reasons why the centralisation of teams was preferred to that of the centralisation of management. A centralised team makes rotation and management of staff easier and gives the advisors variety and wider experience, while being more effective in delivering consistency in performance and communication. The results overwhelmingly favoured the centralisation option, some of the key conclusions being the commonality of processes across the business units. The Business General Managers although divided in their opinion over the proposals universally supported the concept of 'care lines'.

IT (Bespoke versus package)

Faced with limited knowledge of actually operating a customer service call centre, and the desire to manage costs and complexity, the added complication of designing and developing a bespoke customer Service IT application, albeit more functionally rich and tailored to Boots specific requirements, in addition to all the other development activity needed to support this project was seen as prohibitive. There was clearly a desire to benefit from the development work that others had invested in software products for this application, and an understanding that functionality could be compromised in favour of speed, a known and fixed implementation timetable, and a tried and tested product.

4.3.4.1 Comparisons under uncertainty

In Table 4.3, two of the four short-listed decision schemes (labelled 'A' and 'B') are compared against each other in terms of all six comparison areas listed earlier.

A			В
In-house	Call c	entre? In-house	
Yes	Sta	ff?	Yes
Teams	Appro	oach?	Teams
Bespoke	ΙΊ	?	Package

Comparison Area:	l		Comparative comment:
Prompt and effective resolution of complaints: (Greater than 90% ⇔ Less than 90%)	High	High	Both likely to be similar.
Consistency of delivery in performance and communication: (High ⇔ Medium ⇔ Low)	High	High	Considered that centralisation would be more effective in delivering consistency in performance and communication.
Opportunity for information feedback contributing to increased sales and profit: (Yes ⇔ No)	Good	Good	A centralised team makes rotation and management of staff easier and gives the Advisors variety and wider experience.
Protection and enhancement of BTC's reputation: (Good ⇔ Poor)	Good	Good	Both likely to be similar.
Maximise customer relationship opportunities: (High ⇔ Med ⇔ Low)	High	Medium	Bespoke software is more likely to be able to integrate with existing in-house and legacy systems enabling a 'single view of customer' in a much better way. Packages while offering speedy functionality can be harder to integrate.
Cost: (High ⇔ Medium ⇔ Low)	Low	Low	In both schemes the relative costs are very similar and would not make a significant difference. However, it was assumed that in-house software development resource would be used if a bespoke development were undertaken.

Table 4.3: Comparison under uncertainty

This provides further opportunity to make additional forms of comparison to the crude assessments that were made in earlier short-listing. The 'textual' rather than 'numeric' descriptions convey uncertainty, which is explored in the following section.

4.3.5 Step four: Choosing commitments for action through time

The final step is the formation of proposed commitments to action through time. Table 4.4 is a cumulative list of uncertainty areas identified by the actors and captured during

the analysis, which have been categorised into one of the three uncertainty types, UE (uncertainties about the working environment), UV (uncertainties about the guiding values) or UR (uncertainties about related decision fields), along with an indicator to the salience of this uncertainty to the final decision. The two most salient uncertainties identified by the actors were the relative difficulty of integrating packaged software as opposed to bespoke software (?PACKINT), and the absence of customer service call centre experience (?EXPERT).

UNCERTAINTY AREA	LABEL:	TYPE:	SALIENCE:
From 'Managing customer relationships' comparison: ? That packaged software will be more difficult to integrate than bespoke software.	?PACKINT	UE	•••
From 'Cost' comparison: ? The assumption that in-house development resource will be available to bespoke an application.	?DEVSKILLS	UR	••
? The ability of an outsourced call centre to use 'company specific' bespoke software.	?BESPOUT	UE	•
? Availability of suitable office accommodation.	?ACCOM	UR	•
? No real 'Customer Service' call-centre experience.	?EXPERT	UE	•••
? Soft benefits are difficult to quantify.	?SOFTBEN	UV	••
? The uncertainty of the project being worth the investment in in-house telephony	?TELINVEST	UE	••
? Will a call centre improve customer service	?SERVPLUS	UE	••

Table 4.4: Comparing uncertainty areas

Figure 4.7 plots those uncertainties previously identified on an uncertainty graph for the Customer Service case, which clearly shows a concentration of uncertainties of the UE type. This diagram would help in determining which uncertainties will be most influential on the final outcome and which can be deferred for the moment. The two uncertainties that have been classified 'high' in salience (the absence of any call centre experience, and

the integration off packaged software to existing systems) are therefore likely to have a significant influence on the final outcome. Indications of the options likely to resolve those uncertainties are also indicated.

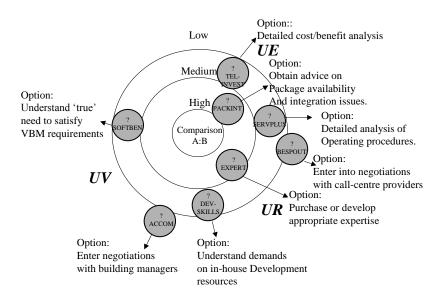


Figure 4.7: Uncertainty graph – Salience of uncertainty to this comparison

4.3.5.1 Commitment package

A judgment has to be made as to what decisions can be made now, how much exploration should take place in order to reduce uncertainty, and what arrangements can be made to defer decisions to a later date. SCA addresses this issue by rearranging the feasible action schemes so that the more 'urgent' decision areas can be brought forward to earlier branches of the decision tree and those that are less urgent can be deferred. An example of such a rearrangement for this case is shown in Figure 4.8. In practice when considering decision schemes 'A' or 'B', there was little choice in three of the four decision areas in this case, leaving outstanding the decision of how to provide the IT, which had no impact on the earlier decisions. Although the choice of approach had initially been seen as a

more 'urgent' decision, when the decision schemes were compared in the context of the likely outcomes the actors in this case were prepared for this decision to be deferred.

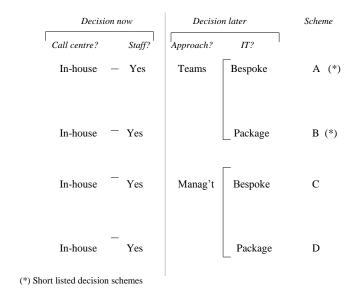


Figure 4.8: A comparison of the feasible action schemes

Strategic Choice Analysis uses the concept of the commitment package as the framework for determining those actions that have to be taken immediately, those actions that require further exploration to reduce the salience of areas of uncertainty, and finally the other arrangements that need to be made to enable actions to be deferred. Table 4.5 sets out the commitment package framework for this case and is a summary of the commitments and actual decisions taken in this case now, and those that were deferred to later.

	DECISIONS NOW			FUTURE DECISION SPACE		
	Actions	Explorations	•	Deferred Choices	Contingency Planning	
Call centre:	Operate an in-house call centre but rent the telephony from a local provider.			Consider the purchase of the appropriate telephony.	Limit rental contract to one year.	
Staff:	Boots own staff to operate the call centre.			•	Outsource to a third party.	
Approach:	Centralise the existing teams at Head Office.			Consider alternative location other than Head Office.		
IT:	Start by using a package application in order to gain experience and speed up implementation.		•	Consider alternative package and bespoke applications for future use.		

Table 4.5: Commitment package framework - Customer Service

The actual decision scheme chosen by BTC i.e. (an 'in-house' call centre, 'yes' to their own staff, a 'centralised teams' approach, and 'package' systems) was labelled as decision scheme 'B'.

4.4 The alignment of the Actors in the Network (Alignment logic)

4.4.1 Introduction

The third phase of the analysis uses concepts from Actor Network Theory to understand the alignment of the actors to the proposed approaches. If we plot the process components for the Customer Service case study on to a process inscription/specialisation framework, which represents the view as defined by the actors in the case study (Figure 4.9), the following can be observed.

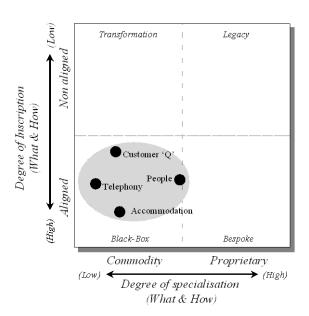


Figure 4.9: Customer Service process inscription/specialisation framework

In the Customer Service case the components of the process are concentrated in the 'aligned-commodity' space, which would suggest that not only are the components considered standard, routine and typical of those used by many companies i.e. low degree of specialisation, there is also broad alignment of the actors that they are of this type (in other words there is considerable agreement).

4.4.2 People – Customer Service advisors

The Customer Service advisors are considered by Boots to have Boots specific know-how hence the positioning of the 'people' component towards the proprietary sector however; their *tacit* knowledge could be made *explicit* by use of a knowledge base, software, or good documentation hence promoting movement back towards commodity. More importantly however when representing the company, especially when dealing with a complaint, it is considered very important by Boots that a customer should be able to talk with an employee of the company, rather than their agent, as they would be more likely to

be empathetic, have a sense of ownership and pride in the company, and therefore represent it more accurately and favourably. This view was the aligned view of the internal stakeholders in the network.

4.4.3 Customer 'Q' - Customer contact software

The use of Customer 'Q' software as the preferred choice reflected the views of the actors to limit complexity of the final solution, and to reduce cost by adopting industry standard protocols and approaches as inscribed within the software. This was a conscious and deliberate decision that acknowledges the likely limitations of integration with other inhouse software, and therefore the ability to undertake all the customer services identified. It does however reflect their lack of experience to be able to articulate clearly what functionality might not be provided within such a package.

4.4.4 Telephony

Without exception, the project team were happy to accept that the telephony components should be industry standard and that they would work within the parameters of what could be provided at a cost that was affordable. Long term commitments to telephony vendors or transaction specific investments were actively avoided and future options kept open.

4.4.5 Accommodation

Most call centres operate in office environments that are typical of any modern office accommodation, and have minimal 'special needs' over and above those normally provided. This was also true in this case and standard office accommodation was made available and utilised.

4.5 Summary

This case study describes the approach taken by Boots The Chemists to establish a customer service call centre, with the objectives of ensuring consistency in the provision of prompt and effective complaint resolution and information feedback, all of which protects and enhances the Boots brand. The existing functionally located customer service units (which are predominately correspondence based) were not providing the service required, and a call centre approach was the desired outcome although it was not know how that was to be achieved. The case study examined in turn the detail of the process under review (process logic); the approach adopted to decision making (decision logic); and using concepts from Actor Network Theory an understanding of the alignment of the actors in the network (alignment logic). Activity Records are used to examine each of the five prime call centre activities, while the decision making process was re-created by means of SCA. Using the inscription/specialisation framework developed for this research by the author, the alignment of the actors in the network is captured for each of the call centre process components. The actual choice adopted by BTC was decision scheme 'B' i.e. (TEAMS - PACKAGE - IN-HOUSE - YES), which was extremely close to the decision scheme labelled 'A' (TEAMS - BESPOKE - IN-HOUSE - YES), which emerged as the optimal choice from retrospectively applying SCA. The differences reflect a deliberate preference for packaged software chosen for reduced complexity, in preference to a bespoke solution and increased functionality. The process as determined in the Customer Service case comprises largely commodity components (telephony, software, and accommodation), and these are also seen to be commodities by the actors in the network. However, it was determined that the Customer Service Advisors despite having commodity skills must be Boots employees, a decision that was supported universally by the actors in the network. It later transpired that this was the only case where alignment supported a proprietary solution to manning call centres, and demonstrated the power and influence of an aligned view. The next chapter examines a call centre in a completely different business context.

CHAPTER FIVE:

CASE STUDY TWO - BOOTS ADVANTAGE LOYALTY CARD

5.1 Introduction

With over twelve million cardholders, and new applications running in excess of 40,000 per week, the Boots Advantage Card is Europe's largest retail 'smart card' loyalty scheme currently in operation. Targeted heavily towards women in the 20-40 years age range, shoppers receive four points for every £1 spent on all purchases in store (with the exception of medicines, gift tokens and stamps), with one point being worth 1p. When enough points have been earned these can be used by the customer to 'treat' themselves from a selection of pampering or beauty products, or health & beauty treatments at nearby venues. In contrast to the vast majority of loyalty schemes the emphasis is on 'female self indulgent rewards' for the cardholder, rather than a discount scheme on commodities, or a supplement for housekeeping. The vast majority of loyalty schemes are of the traditional credit card, airline, or petrol types, with a strong 'male' bias based on a proposition of rational discounted purchases. Some schemes offered by clothing and fashion retailers such as C&A and BHS do have more of a feminine bias but straddle the rational/discount and emotional/indulgent categories. However, the Boots Advantage Card has a massively feminine bias (93% of cardholders are women), and the rewards are clearly emotional/indulgent in nature, targeted specifically at that group.

In addition, the customer can be made aware of exclusive offers on products of interest, information and advice, and access to 'in-store' events. Rated by 85% of cardholders as being 'excellent/good', consumers consider it to be "more different, more generous and offering better rewards" than comparable cards.

Boots see the Advantage Card as having a role in it's evolution from being "Chemists to the nation" to "The place for products and services that help me look good and feel good". It will allow them to focus the customer offer and values according to the needs

and behaviours of individual cardholders, and to enable and enhance new initiatives such as product development; non traditional retail products and services; store efficiency initiatives, and new retail services.

However, twelve million cardholders, (85% of them regular users) generate significant levels of ongoing administration, which broadly fall into two discrete categories:

- □ Changes to personal details such as name, or change of address (typically women upon marriage); lost or stolen cards; progress chasing upon applying for a card; and
- General enquiries about the Advantage Card scheme (points balances, points earned) etc., including comments about how the scheme operates such as "they think its sexist".

Most of this administration is handled by the 'Advantage Card Call Centre', which at the time of the national launch (September 1997) was operated by AT&T on a wholly 'outsourced' basis. This call centre operated from 0800 - 1800 Mondays to Fridays, with IVR¹⁰ out of hours. Although the store should be the first point at which customers raise queries, many find it much more convenient to telephone a call centre at a local rate call charge and speak to an experienced agent about their query. In addition, the centre also operated a store help line for use by store staff that had queries.

5.1.1 The approach taken to this case study

The approach taken was the same as that described in the previous case (see 4.1.1). The case contains data from interviews conducted with Project Team members, Phil Douty the Advantage Card Programme Manager, Business unit representatives, and members of the Advantage Card Marketing team, Information Systems, Group Telecommunications, Implementation & Training Development, and Operations Improvement Department.

_

 $^{^{10}}$ IVR – Interactive Voice Recognition. Automated voice response and touch-tone prompting route calls and switch-on computer applications or scripts.

Access to archive material such as call statistics, and findings from the regional trials, were freely available.

5.2 The loyalty card process in focus (*Process logic*)

5.2.1 Introduction

Loyalty card

This first section examines the loyalty card work business process under review and presents the five prime activities and tasks that make up that process, namely: (i) Receive the 'inbound' calls; (ii) Identify the customer & information; (iii) Service the account; (iv) initiate other processes, and (v) Close the call. It is not the intention to discuss all the processes that go to make up the complete end-to-end loyalty card business however; card fulfilment, i.e. delivering the card to the cardholder, a process initiated from within this process, is discussed because of the closely coupled association with the process under investigation.

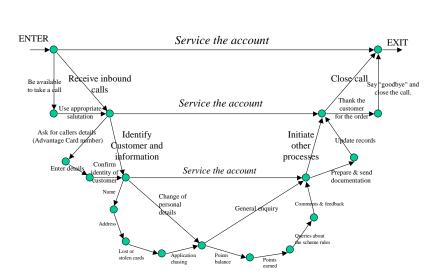


Figure: 5.1 An Activity Record of the loyalty card process.

The Process starts with an inbound call from a customer, and ends when the account details change or enquiry has been completed satisfactorily, and any correspondence sent

to the customer. Figure 5.1 shows an Activity Record of the call centre process as utilised for the Advantage Loyalty Card. Each of the activities is described in full as follows:

5.2.2 Activity One: Receive 'inbound' calls

The process starts with an 'inbound' call from a customer. Calls generally follow a pattern of activity with Monday being the busiest (following on from Saturdays trading), with Friday being the next busiest. Daily patterns follow a mid-morning and post 4.30 PM peak. Mid-week activity is typically quiet. Call volumes average at approximately 2,700 per day, rising to 4,000 at Christmas. Advisors are expected, somewhere during the conversation, to identify themselves, thank the customer for calling, and empathise and demonstrate active listening by confirming and acknowledging the facts. The Customer Service Manager commented:

"We do expect people to behave in a certain fashion during the call. We apply Boots rules, Boots empathy, and make the caller feel good about the transaction".

Average call duration is usually between 60 and 90 seconds and although the facilities are available, and there might be some opportunities to utilise them in future, CLI (Call Line Identification)¹¹ and CTI (Computer Telephone Integration)¹² are not currently used as the customers telephone number is not captured on the Advantage Card database, and customers tend to call from their workplace.

.

 $^{^{11}\,\}mathrm{CLI}$ - Call Line Identification detects and identifies the incoming telephone number.

¹² CTI - Computer Telephone Integration provides integrated functionality to telephone and information systems users. A telephone call may be influenced by information from a computer or a computer may be directed to perform functions based on a call. The computer can also monitor a call and record additional data, such as the total time from the beginning of the telephone ringing to the end of the conversation, with outcome and process.

5.2.3 Activity Two: Identify customer and information

Approximately 10% of calls are received from BTC stores, sometimes with the customer present. Stores use a national rate number, which allows the call centre to identify the call as coming from a store before it is answered. Customers use a local rate number (prefixed 0845), which appears on all of the literature but not on the Advantage Card itself. Automatic Call Presentation (ACP)¹³ has recently been introduced which 'forces' an available advisor to take an incoming call. Advisors have received this change positively as it makes the job easier, in addition they have also been given an extra paid break to recognise the increased call handling capability this technology has enabled, and the subsequent achievement of the published service levels.

5.2.4 Activity Three: Service the account

Servicing the loyalty card account normally comprises two main activities: (i) Changes to personal details such as name, address, or lost and stolen cards and sometimes progress chasing their card application; and (ii) General enquiries about the Advantage Card scheme, for example points balances, redemption enquiries, and general comments about how the scheme operates. Both enquiry types will require access to the Loyalty Scheme Operating System (LSOS) in order to record the new customer details.

5.2.5 Activity Four: Initiate other processes

Ancillary processes are largely confined to the preparation and sending of confirmatory documentation or chasing a card application that appears to have been 'lost' in the process. This might result in telephone calls being made to the card producer.

_

 $^{^{13}}$ ACP - Automatic Call Presentation routes calls 'live' to an operator without them having to respond to a ring-tone.

5.2.6 Activity Five: Close the call

On conclusion of the telephone call the operator will thank the customer for making contact and close the call. The associated documentation is produced and posted to the customer. The process ends.

5.3 The approach taken to the business problem (*Decision logic*)

5.3.1 Introduction

This second section provides a detailed account of how the Loyalty Card process was designed and managed, in particular what decisions were considered and the outcome of those decisions. Sponsored by the Director of Marketing, this high profile project was managed as a marketing initiative, and consequently the composition of the project team had a strong marketing bias. Unrestricted access to company confidential information was maintained throughout the research. This section documents the decision-making activity adopting the logical sequence of SCA (refer to chapter one for a description of the technique).

5.3.2 Step one: Shaping of problems

This first step examines the judgements about possible connections between one field of choice and another. The Decision Graph, as shown in Figure 5.2, depicts those decisions seen by the actors in this case to be key to the outcome of the project. The decision graph shows two problem focus boundaries, one labelled 'original', and the other 'new'. This study will focus on the events surrounding the original decision however; the subsequent decisions taken within the 'new' problem focus are material to this case and will be discussed later in Chapter Eight. Clearly, in this case the initial decision to determine the overall approach was urgently required, as it would influence many of the associated decisions.

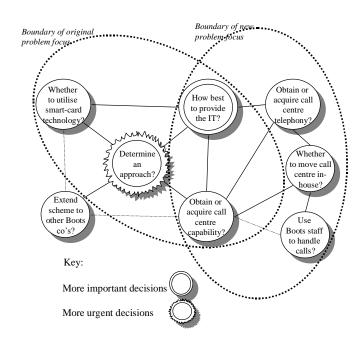


Figure.5.2: A decision graph of the key case decisions

The four key decisions within the boundary of the original problem focus are (i) Determine the approach, (ii) Whether to utilise smart-card technology, (iii) How best to provide the technology, and (iv) Obtain or acquire call centre capability. To take each decision in order:

5.3.2.1 Determine an approach?

Two controlled trial areas had previously been established in Norwich (November 1995) and South West (September 1996), which incorporated 14 and 29 participating BTC stores respectively. With a joint customer population in both areas totalling approximately 1.3 million, different reward levels were tested and valuable data on 'active' cardholders established. Early indications from the trials were that 35% of sales were linked to the

card, and incremental sales running at 3.5%, but despite this there was still some anxiety by those involved of the true benefits of the scheme. The team were faced with the decisions to continue with a controlled trial or pilot in much the same way as in Norwich and South East, get a third party to administer the scheme, or administer the scheme inhouse. Clearly this was the most urgent decision, as this one would influence many of the related decisions.

5.3.2.2 Whether to utilise smart-card technology?

The conventional approach to card based products was to hold information on the card using a magnetic stripe as most credit and bank cards did at that time. The magnetic stripe is capable of holding limited amounts of data that can be read and updated by machine. This technology although well established and widely accepted is quite old and has limited functionality. The development of memory and micro-processor chip cards was just emerging, and although the banks were actively supporting the benefits of cards that utilise chip rather than the magnetic stripe technology (due to improved options for security and fraud detection), loyalty schemes of the day were still using magnetic stripe, for example Sainsbury's 'Reward' card, and the Tesco 'Club card'. Boots envisaged the Advantage Card as being the 'key' to a number of product and service related offerings to its customers, possibly incorporating sensitive medical records and prescription data of the cardholder, applications that would be ideally suited to a memory or micro-processor chip card. The magnetic stripe card could utilise standard in-store technology as all stores already have magnetic card readers, however the use of a chip card would require investment in approximately 14,000 chip card reader/writer devices (one at every till position), and the development of the associated software interfaces.

5.3.2.3 How best to provide the IT?

The administration of a loyalty scheme requires a customer database that comprises the complete records for customers who have an Advantage Card. As with the customer

service case, this was largely a choice between purchasing an existing software application package (a number existed that were designed around conventional 'discount' loyalty card schemes using magnetic stripe technology), and developing a bespoke application that catered for the extensive vision Boots had for its Advantage Card. Enhancements would also be required to existing systems (tills, card reader interfaces, and nominal ledgers) to facilitate a seamless transaction at the point of sale or service. This decision is closely related to the decision to use a chip card or not.

5.3.2.4 Obtain or acquire call centre capability?

During the Norwich and South West trials AT&T provided call centre capability on a temporary basis. However, it was clear that a dedicated call centre would be needed to handle the volume of calls anticipated should the customer take-up of cards be in line with the predictions following the trials. The Customer Service call centre had been established a few months earlier and was therefore included in the possible options. The Customer Service Manager commented:

"At the time of the Advantage Card launch we had the telephony capability and know-how. The critical issues were the people, where do we put them, especially as headcount numbers were under pressure? The Head Office building was being refurbished and a new annex being constructed which was very disruptive".

Group Telecommunications supports and encourages the use of industry standard products and services and fosters relationships with the major telecommunications providers. The telephony industry is a standards-based one, a necessity to allow the connectivity of calls between systems around the world, and this has therefore helped in making the telephony components a commodity. At that time Nortel ACD Telephony was being rented from Diamond Cable, therefore the options considered to be available to the

team at that time were (a) utilise the existing internal Customer Service call centre, (b) outsource the call centre to a third party, or (c) set up a new internal call centre.

The four key decisions outside the boundary of the problem focus were: (i) Extend scheme to other Boots companies, (ii) obtain or acquire call centre capability, (iii) whether to move call centre in-house, and (iv) use Boots staff to handle calls. Decisions (ii), (iii), and (iv) were to take on a greater significance later on in the case. To take each of those decisions in order:

5.3.2.5 Extend scheme to other Boots companies?

Although restricted to use within BTC only at the time of its launch, it was likely that the Advantage Card could be extended to include the customers of other Boots Group companies for example Halfords, Boots Opticians, and the Do-It-All DIY stores. Although no immediate resolution to this question was required the general approach should consider the wider implications of extending the scheme to other customers, such as deployment at the point of sale or service, confidentiality of data, and data protection regulations.

5.3.2.6 Obtain or acquire call centre telephony?

Group Telecommunications constantly survey the market to understand what is available in order to influence the strategic direction of the company. A Telecommunications Project Manager commented on the growing trend to rent managed services from third parties:

"It became clear that the functionality of the managed service was limited, and the supplier wasn't growing the service at the rate our demand for functionality was growing. Other Business Units such as Boots Opticians, Boots Healthcare International and more recently helpdesks such as our own (Group Telecommunications) and Information Systems were taking up the service. There comes a point where you are paying 'n' times the rate the managed service are charging you, and you can do it for a similar price in-house".

This view placed the issues surrounding the use of third parties firmly on the corporate agenda, which meant that alternatives needed to be considered when considering telephony issues in future.

5.3.2.7 Whether to move call centre in-house?

The Advantage Card call centre was launched with the help of AT&T, the contract with AT&T being signed just as Sheila Patterson (Director of Customer Service) was going through the final stages of submitting a business case for the Customer Service call centre, but she wasn't quite at a point where she could say that they could support the Advantage Card initiative. The initial price per call basis for charging soon became prohibitive, with call rates rising sharply in line with the dramatic take up of Advantage Cards. Similarly, service issues were also surfacing as AT&T changed ownership, and along with it their philosophy and approach. Boots were described by AT&T as being "quite demanding and not an easy client". This pressure on cost and service was central to considering the decision to bring the Advantage Card call centre back in-house.

5.3.2.8 Use Boots staff to handle calls?

Boots is very protective of the brand and generally prefers to use its own staff to interact with its customers. However, it was recognised that there is a difference between call centres that specialise in order fulfilment, advice lines, or in this case simple enquiries and data changes, and was likened by one project team member to a 'Tango' soft drinks campaign that required customers to contact a call centre that captured their name and

address and in return sent them a 'money off' voucher. The decision therefore is whether Boots should use its own staff, or the staff of a third party.

5.3.3 Step two: Designing the possible courses of action

This second step focuses on designing possible courses of action, and Table 5.1 summarises the key decisions to be taken along with their possible outcomes under consideration.

DECISION AREA	OPTIONS	OPTION LABEL
Determine an approach?	 Controlled trial or pilot Get a third party to administer the scheme In-house administration 	PilotOutsourceIn-house
Whether to utilise smart-card technology?	- Yes - No	- Yes - No
How best to provide the Information Technology?	Predominantly BespokePredominantly Package	- Besp - Pack
Obtain or acquire call centre capability?	Utilise internal call centre Outsource Set-up new internal call centre	- Internal - Outsource - New

Table.5.1: Options within the boundary of the decision area

Figure 5.3 shows the results from comparisons of options in each decision area with every other option in each decision area (AIDA). This pairing ensures that incomparable or doubtful combinations are highlighted and potentially excluded from future analysis.

	SMART CARD?			
		Yes	No	
L1;	Besp	•	•	
	Pack	X	•	

		CALL CENTRE?				
l .			Internal	Outsource	New	
;	:h?					
	oac	Pilot	•	•	?	
	Approach?	In-house	•	?	?	
	A	Outsource	X	•	X	

	SMART CARD?				
ch?	Yes No				
Approach?	Pilot	•	•		
ddγ	In-house	•	•		
1	Outsource	•	•		

	IT?			
ch?		Besp	Pack	
roa	Pilot	?	•	
Approach?	In-house	•	•	
1	Outsource	•	•	

	IT			
centre?		Besp	Pack	
cen	Internal	•	•	
Call (Outsource	•	•	
	New	•	•	

	CALL CENTRE?				
t card?		Internal Outsource		New	
Smar	Yes	• •		•	
S_1	No	•		•	

- = Compatible combination
- X = Incompatible combination
- ? = Doubtful compatibility

Figure 5.3: Analysis of interconnected decision areas (AIDA)

The Option Graph in Figure 5.4 diagrammatically represents the outcome from AIDA. This step cuts down the possibility of up to thirty-six decision schemes to twenty-one decision schemes, however unlike the preceding case the number of option bars is greatly reduced, with only three incompatible combinations, and four doubtful ones (but some of these doubtful combinations might be reversed with further work or analysis). Figures 5.4 demonstrates how it would be incompatible to elect to deploy smart-card technology and expect to utilise a software package to support the loyalty scheme, as there was no software packages to support a smart-card loyalty scheme at that time. This reduced number of doubtful or incompatible combinations improves the choice of decision schemes going forward.

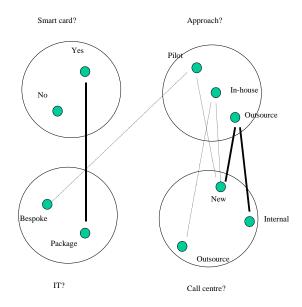


Figure 5.4: Option Graph - Loyalty Card

Having determined which options are compatible it is then possible to establish which combination of those options can be realistically crafted into a feasible decision scheme. A feasible decision scheme is one where it doesn't violate any of the incompatibilities established during earlier analysis, but their inclusion in the final solution is still not automatic. Figure 5.5 shows that when the compatible options are re-presented to determine what feasible decision schemes are possible twenty-one decision schemes emerge from the analysis, thirteen of those having doubtful compatibilities that would need to be resolved in order to establish if they are truly feasible.

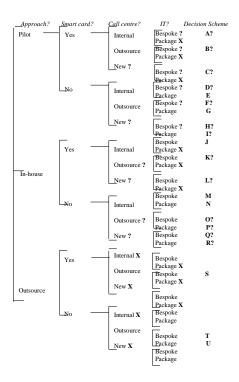


Fig.5.5: Feasible decision schemes for the Loyalty Card case

5.3.4 Step three: Comparing the possible courses of action

Having determined a list of feasible decision schemes the next step is to compare each of the schemes in light of what their consequences might be. Table 5.2 lists those comparison areas that emerged to be of importance to the actors in this case, and a comparative measure has been assigned to each comparison type. A working shortlist can be developed from the feasible decision schemes identified earlier, and compared against those considered by the project team to be the top three comparison areas in this case, namely: 'support for new products and services', 'cost effective administration', and 'flexibility to cope with high demand'. Figure 5.6 shows this working shortlist along with the assessment of how each comparison area compared with the desired minimum ratings of at least 'average' for the support of new products and services, for cost effective administration to at least 'break even', and demonstrate at least 'medium' flexibility to cope with high demand.

COMPARISON AREA:	COMPARATIVE MEASURE:
The ability to enhance new initiatives: A number of initiatives were being considered which utilised the Advantage Card and the associated processes.	Yes ⇔ No
Cost effective administration: The administration of the Advantage Card is seen as a 'necessary evil' and a direct cost, with little or no value adding capability.	Effective ⇔ Break even ⇔ Ineffective
Scalability to include other Boots Group companies: Although restricted to BTC at the time of its launch, it was expected that the Advantage Card would be extended to include other Boots Group companies (e.g. Halfords, Boots Opticians).	High ⇔ Medium ⇔ Low
The ability to support new retail products and services: The Advantage Card is seen as being central to a number of related activities	Good ⇔ Average ⇔ Poor
Flexibility to cope with high demand: All the marketing predictions showed the potential for a massive take-up of the Advantage card.	High ⇔ Medium ⇔ Low

Table.5.2: List of comparison areas

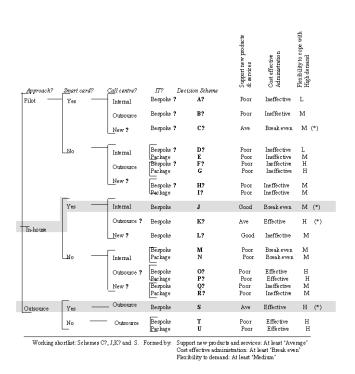


Figure 5.6: Forming a working shortlist – Loyalty Card

The outcome of the comparison ratings suggests that decision schemes 'C?', 'J', 'K?' and 'S' should form the working shortlist as all four options met at least the minimum requirements for the comparison measure. However, as schemes 'C?' and 'K?' had doubtful compatibility (signified by the question mark) they were removed from further analysis. The comparisons of each of the four key decision areas (Approach, Smart-card, Call Centre, and IT) and the choices to be made are as follows:

Approach (In-house versus Outsource versus Pilot)

The existence of two previous trials was enough to convince the project team that Boots customers would positively receive, and actively participate in, a loyalty card scheme. The administration of the scheme was considered a burden and therefore there was little appetite to actively take it on. The Customer Service call centre was in its infancy and not able at that time to accommodate the predicted levels of additional loyalty card work. Therefore the option to outsource to a third party, in this case AT&T was actively pursued.

Smart-card (Yes versus No)

Unique at the time of the launch was the decision that the card should contain a memory chip (often mistaken for a micro-processor chip), which unlike most other loyalty cards that used magnetic stripe technology did not rely on the concept of a 'home store'. This enabled customers to shop at the Boots stores of their choice, and points could be added or redeemed at any location as the crucial personal and point's details were held on the chip.

Call centre (Internal versus Outsource versus New)

Phil Douty the Loyalty Card Programme Manager said:

"The perception of the team is that the call centre was a cost with little or no value. Not that they dismissed its value, but more that it isn't value creating, unlike the investment in a database where you can see revenue streams or improvement in profit delivery arising from it. The Advantage Card scheme had to be value creating, therefore everything that created it was a positive cost, the two items that weren't were points redemption (which is just pay-back), and call centres which are a necessary evil. Rightly or wrongly when you have to find ways of saving money, this great 'lump' [call centre] that doesn't positively contribute anything, and if we can reduce that by reducing the number of calls if we operate better. It wasn't a penalty for operating badly; it was a necessary cost of doing the business, just like ground rents are a necessary evil in running a store. People recognised that it was critically important but begrudged spending the money on it because it didn't contribute to a revenue stream".

While in this frame of mind it would be difficult to support the provision of a new in - house call centre, or to burden the existing Customer Service call centre with the additional calls from the Advantage Card. In keeping with the outsourcing of the administration it also follows that the call centre should also be outsourced.

IT (Bespoke versus package)

The absence of packaged software being readily available to administer a chip card based loyalty scheme led to a bespoke software development being commissioned from Cap Gemini. The deliverables being a Loyalty Scheme Operating System (LSOS), which contains details of customers personal details, card details such as points balance, card numbers, customer number (which is transparent to the customer), and an account number. In addition to LSOS a Customer Database Analytical System (CDAS) was

implemented which has the ability to mine customer information to assess shopping habits. Item level transaction details are passed through CDAS to understand shopping habits. By virtue of size, LSOS has become the de facto Customer Database and is at the heart of any CRM activity. As the Programme manager explained:

"We considered the creation of an internal database but it wasn't followed through. The external option was preferred at the time as it was going to be tricky to tackle and would shy away from it ourselves, and we didn't have the resource for the call centre. We didn't have the will to impose a Boots solution. The quickest way to market is to have someone else drive it for you".

5.3.4.1 Comparisons under uncertainty

In Table 5.3, two of the four short listed decision schemes (labelled 'J' and 'S') are compared against each other in terms of all five of the comparison areas listed earlier. This additional form of comparison provides another opportunity to make an assessment using the full range of comparisons identified. The comparisons include a mix of 'numeric' and 'textual' comparisons.

5.3.5 Step four: Choosing commitments for action through time

The final step is the formation of proposed commitments to action through time. Table 5.4 is a cumulative list of uncertainty areas identified and captured during the analysis, which have been categorised into one of the UE, UV or UR uncertainty types, along with an indication of the salience of this uncertainty to the final decision. The most salient uncertainty considered by the actors involved in this case is the uncertainty surrounding the true cost of outsourcing.

—					.
	J			S	
	In house Yes Internal Bespoke			Outsource Yes Outsource Bespoke	
II Coi	nparison Area:			Comparative comm	ent:
The ability to enhance new initiatives: (Yes ⇔ No)		Yes	Yes	No advantage lies with either scheme, a both are likely to enhance new initiatives.	
Cost effective administration: (Effective ⇔ Break even ⇔ Ineffective)		Break even	Effective	An assumption has been made that an outsourced call centre will be more cost effective than the in-house alternative, thereby increasing the efficiency.	
Scalability to include other Boots Group companies: (High ⇔ Medium ⇔ Low)		Medium	Medium	loyalty card exist companies at prese	ent for the use of the s within other Group ent, but neither scheme e favourable than the
The ability to support new retail products and services: (Good ⇔ Average ⇔ Poor)		Good	Average	the company the	ly within the control of crefore increasing the t new products and
Flexibility to cope with hig (High ⇔ Medium ⇔		Medium	High	It is assumed that an outsourced call cent will be more flexible and able to cope will a rapid growth in demand.	

Table 5.3: Comparison under uncertainty

UNCERTAINTY AREA	LABEL:	TYPE:	SALIENCE:
? The ability to cope with the rapid take-up as indicated by the trials.	?TAKE-UP	UE	••
? The true cost of outsourcing.	?OUTCOST	UE	•••
? The likelihood of setting-up a new internal call centre when one already exists for another service.	?NEWCALL	UR	••
From 'Scalability to include other Boots Group companies' comparison: ? The real likelihood that other Group companies will require the loyalty card.	?GROUPCARD	UV	••
? The likelihood of outsourcing the call centre when an 'in-house' administration option has been chosen.	?IN-OUT	UR	••

Table 5.4: Comparing uncertainty areas

Figure 5.7 plots the uncertainties previously identified on an uncertainty graph for the Loyalty Card case. Clearly the uncertainty labelled '?OUTCOST' is likely to have a significant influence on the final outcome, and further explorations to reduce the uncertainty should be taken.

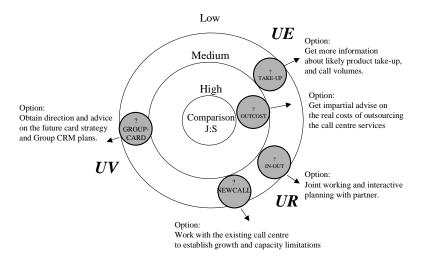
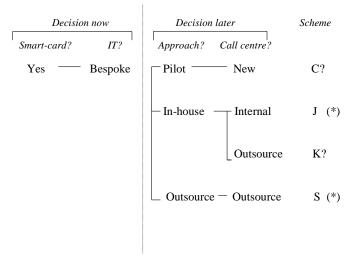


Figure 5.7: Uncertainty graph - salience of uncertainty to this comparison

5.3.5.1 Commitment package

In practice decisions can be made in sequence rather than at the same time, and deferring decisions can provide time to reduce uncertainty and bring forward any decisions than should be, or can be, made sooner. Figure 5.8 rearranges the feasible action schemes to reflect those decisions that can be taken sooner (i.e. there is little choice), but at the same time building flexibility by allowing those decisions where there is some choice to be taken later, perhaps when more information is known or uncertainty reduced. By adopting this strategy choice can be engineered when determining 'approach' and 'call centre' options.



(*) Short listed decision schemes

Figure 5.8: A comparison of the feasible action schemes

Figure 5.8 implies that the most urgent decision 'Approach' has, or could be, deferred. The reality is that 'Smart-card' and 'IT' have been moved forward, and as they feature in all four option schemes there is no reason to defer them, thus allowing time to investigate the other options in more detail.

The commitment package is the method Strategic Choice Analysis uses to set-out the framework of the decisions to be made, and distinguishes between those actions that have to be taken immediately, those actions that require further exploration to reduce the salience of areas of uncertainty, and finally the other arrangements that need to be made to enable actions to be deferred. The commitment package in Table 5.5 is a summary of the actual decisions taken in this case and distinguishes between those decisions taken initially and those that were deferred.

	DECISIONS NOW			FUTURE DE	CISION SPACE
	Actions	Explorations		Deferred Choices	Contingency Planning
Approach:	Outsource the administration of the scheme to a third-party.	Consider alternative administrative providers.			Limit contractual arrangements to increase flexibility.
Smart- card:	Invest in chip card technology to maximise future exploitation of the card and data.	Investigate alternative card smart-card suppliers.		Consider amalgamated Credit/smart- card readers	
Call centre:	Outsource the call centre activity to AT&T.		1	Consider alternative providers to AT&T.	Limit contractual arrangements to increase flexibility.
IT:	Commission the development of a Loyalty Scheme operating system.	Might be developed by the in-house IT department.			

Table 5.5: Commitment package framework – Loyalty Card

The actual decision scheme chosen by BTC i.e. (an 'outsource' approach, 'yes' to utilise a smart-card, to 'outsource' the call centre, and to 'bespoke' the IT) is represented by decision scheme 'S'.

5.4 The alignment of the actors in the network (Alignment logic)

5.4.1 Introduction

The third approach uses concepts from Actor Network Theory to understand the alignment of the actors to the proposed approaches. Plotting the process components on the inscription/specialisation framework the Loyalty card case has different characteristics to those seen in the Customer Service case. Figure 5.9 shows the relatively tight grouping of the 'people', 'accommodation' and 'telephony' components all in the 'aligned-commodity' space, while the two systems CDAS and LSOS are positioned, quite separately, in the non aligned-proprietary space. So why is this?

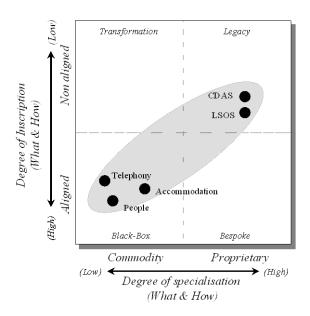


Figure 5.9: Loyalty Card process inscription/specialisation framework

5.4.2 Telephony and accommodation

Firstly, the positioning of 'telephony' and 'accommodation' components is consistent with the other cases and is considered 'black-box'. As with customer services, it was accepted that these components were standard, and that normal office accommodation and standard telephony features were perfectly acceptable in this case.

5.4.3 People

The role of the advisors in this case is far more routine, non-specialist and consistent with what is provided in multi-customer call centres. The nature of the enquiries received is routine, and responses are well scripted thus ensuring a consistent approach. The systems support is sufficient to allow a novice to easily answer queries or make changes to the standing data. No special skills are required, or Boots know-how to successfully handle the call. The high degree of inscription ensures that this remains the case with the actors being aligned to this view.

5.4.4 CDAS/LSOS Technology

There is evidence of 'overflowing' (Callon 1999) as far as the software products are concerned. 'Overflowing' refers to the impossibility of total framing, i.e. where framing is the ability to isolate or cut off a product, service, or actor from externalities. While rightly considered 'bespoke', the systems are operated and maintained by IBM and there is little alignment or agreement of the functionality required by these systems. For example, many consider that LSOS should be the engine for any CRM system, and others that as Boots has a well-established and mature in-house Information Systems capability, which is quite used to operating large mainframe-based applications that it should, and could, be operated in-house in a more cost effective way. At that time the immature market for smart-card loyalty scheme software inevitably resulted in a proprietary solution, while the reliance on a third party to operate the system added extra opportunity for translation activity.

5.5 Summary

This second case study describes the approach taken by the Advantage Card project team within Boots, to establish the Loyalty Card call centre in order to handle the ever-growing administration associated with the loyalty card scheme. Boots envisaged the Advantage Card as being the 'key' to a number of product and service related offerings to its customers, and fundamental in its evolution from 'chemists to the nation' to 'the place for products and services that help me look good and feel good'. As in the previous chapter the details of the process logic, decision logic, and alignment logic were examined using the tools and techniques as described in chapter three.

The actual choice adopted by the team was decision scheme 'S' i.e. (OUTSOURCE – YES – OUTSOURCE – BESPOKE). This choice was considered marginally better than its closest rival decision scheme 'J' (IN-HOUSE – YES – INTERNAL – BESPOKE), as at that time it was thought to have greater flexibility to respond to an as yet unknown

demand, and be more cost effective. As with the Customer Service case telephony and accommodation components are considered commodities, but in complete contrast to the Customer Service case so were the people. The aligned view of the actors was that the role of the advisors was routine, non-specialist, and consistent with what is provided by multi-customer call centres. The specialised nature of the software components forced a proprietary approach but that did introduce the possibility of 'overflowing' (i.e. the ability to isolate these systems from externalities). Fewer option bars existed in this case than in the Customer Service case, which subsequently generated more feasible action schemes and therefore choices in how to proceed.

The next chapter examines a call centre in a mail order environment.

CHAPTER SIX:

CASE STUDY THREE - MOTHER & BABY DIRECT (MAIL ORDER)

6.1 Introduction

Mother & Baby Direct (MABD) is a home shopping catalogue operated by Boots The Chemists, with a range that includes over 1500 products, including maternity wear, larger and 'one-off' items such as pushchairs and cots, and regular but bulky baby care essentials for 0-2's such as disposable nappies. Nearly half the range is available only from the MABD catalogue. Calling a local rate order line can place orders, or alternatively, by completing an order form contained within the catalogue that can be either posted or faxed. Delivery is guaranteed within five working days direct to the customer's door (invariably the home), which is free from delivery charge when the value of the order is over fifty pounds.

Mother & Baby Direct was seen as a first phase in BTC's plans to enter the national 'alternative shopping' arena, and an opportunity to gain understanding of the customer requirement and how alternative shopping can be leveraged. The 'pregnant women/new mother' consumer had been identified as a profitable one with whom BTC is advantaged, and the proposition of offering greater expertise and a wider range of products while providing ease in delivering bulky items to customer's homes was seen as an attractive proposition. In addition, it provided a suitable alternative to the convenience of 'superstore' shopping and would offer an early response to the competitive threat of Tesco Baby Direct. Tesco launched their 'Tesco Baby Direct' home shopping catalogue in January 1997, in the midst of similar activity from other retailers such as Mothercare and the Early Learning Centre.

6.1.1 The approach taken to this case study

The approach taken was the same as that described in the previous case (see 4.1.1). Data was collected from interviews conducted with members of the BTC baby category team and the MABD project team, Gail Laxton the MABD Product Manager, the internal specialist groups or teams associated with the project, such as Information Systems, Group Telecommunications, Finance, Personnel, and members of the Executive Managers whom have the ultimate decision making authority. Usually, although not exclusively, the business unit supplies the project manager or leader for whom the work is being conducted. This generally implies, although this is certainly not always the case, that the incumbents has the skills and capabilities to run such a project. Contract documentation, recruitment and training material, service level agreements and call handling statistics were all utilised.

6.2 The mail order process in focus (*Process logic*)

6.2.1 Introduction

This first section examines the work business process under review and, using the 'Activity Record' technique, presents the five prime activities and tasks that make up the process, namely: (i) Receive the 'inbound' calls; (ii) Identify the customer & information; (iii) Take the order; (iv) Initiate other processes, and (v) Close the call. It is not the intention to include all the processes that go to make up the complete end-to-end MABD business however, warehousing and despatch processes are discussed because of the closely coupled association with the process under investigation. The Process starts with an inbound call from a customer, and ends with a finished order and all the associated components (picking lists, despatch notes, invoices and merchandise) being complete for despatch. Figure 6.1 shows an Activity Record of the call centre process as utilised for mail orders.

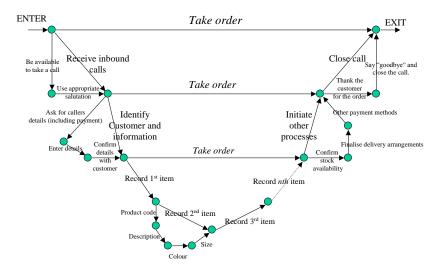


Figure 6.1: An Activity Record of the Mail Order process

Each of the activities is described in full as follows:

6.2.2 Activity One: Receive 'inbound' calls

The process starts with an 'inbound' call from customers who call a local rate telephone number which is available between the hours of 7 AM and 10 PM daily, and 8 AM to 8 PM at weekends. The MABD catalogue contains a description of the ordering process and advises that customer reference code, credit/debit card, Advantage Card and delivery address details are to hand. Although not mandatory, customers are advised to plan their call using the order form inside the back cover of the catalogue, which ensures that the correct product code, product description, colour, size and unit price, (where applicable) are readily available, thus reducing the call duration. Advantage Card loyalty points are available to those customers with a Boots Advantage Card, and simply quoting the card number will ensure that a loyalty scheme points voucher is included with the merchandise. Payment is made normally by credit/debit card quoting the relevant card details, although payment can also be made by cheque and gift voucher, but this would then involve a postal transaction. Since its launch in April 1998, daily volumes of orders

have been approximately 300 - 400, with a peak of in the region of 1000 per day around the Christmas period.

'Salestrac', an independent mail order company located in Portsmouth, were chosen to receive the calls and handle the customer orders placed by telephone for the Mother and Baby products. A key component of handling inbound calls is the ability to take the calls quickly and efficiently in an appropriate customer friendly way, but also ensuring that a sale is achieved. Boots is 'the' most trusted brand on the UK high streets, a position it defends vigorously especially when outsourcing any of its services. The Mother & Baby Direct Product Manager confirmed this by demanding: "Very high levels of service because that's what people expect from the Boots brand, consumers have an expectation of that".

A unique local rate telephone number was secured for MABD and made available to Salestrac, who at the time used an FDX ACD telephone system to handle and route calls to their operators. They subsequently changed to a Rockwell, and in keeping with many organisations have more recently migrated to a Lucent Technologies system.

A dedicated team were assigned to the MABD account and were given specific product knowledge training as well as an overview of the Boots trading philosophy and customer awareness guidance. Operators were required to work shifts to cover the extended trading hours offered by this mail order operation, and Boots engaged a full time employee to scrutinize Salestrac constantly, which included time to screen how they manage customers, listen in on calls, and generally make sure that the whole process operates efficiently.

6.2.3 Activity Two: Identify customer and information

The transaction with a customer requires an exchange of personal and product information, which is captured as part of the order fulfilment procedures and retained for

subsequent problem resolution and future orders. To do this Salestrac use a system called 'Mailbrain', which is a modular suite of software products that supports mailing house, fulfillment operations, and direct sales organisations. It is operated in over 150 companies, and a further 400 companies use its features and functions indirectly. It links directly to third party systems such as Post Office Address File, BACS¹⁵, Electronic Funds Transfer, and industry standard word processing, spreadsheet and EIS (Executive Information System) packages.

When placing an order customers are asked to quote the 'Customer Reference Number' printed on the catalogue, which uniquely identifies them and enables the Operator to quickly access their customer records. Screens tailored to the MABD requirements appear, and the operator can guide the customer through a series of logically related questions to establish their identity, and to check details such as billing and delivery addresses, methods of payment and Advantage Card details.

Although MABD is a comparatively routine mail order procedure Boots insisted on making a series of amendments to Mailbrain, with twenty-eight major system changes being identified, such as:

- ☐ The adoption of a seven-digit product code to match the BTC product code protocols,
- □ Routines to allocate Advantage Card loyalty scheme points; and more significantly,
- ☐ A major development to handle the sophisticated promotions that match the promotions running in BTC stores at any given time, despite advice from industry professionals that this wasn't necessary in a mail order business.

_

¹⁴ Mailbrain is a product of Sanderson CFL Limited, which is a member of Sanderson Group PLC.

¹⁵ BACS – Banks Automated Clearing Services

Although Salestrac have a license to make changes to the Mailbrain system (in addition to the normal parameter driven changes), such was the extent of the proposed changes that the software vendors (Sanderson's) were encouraged to get involved with some of the changes. As a consequence of this Salestrac now have to support a 'MABD specific' version of the Mailbrain system; resulting in, what should be low cost minor changes, being difficult and costly.

The Boots Advantage Card loyalty scheme has approximately 12 million members, which is a rich source of customer and buying behavioural data. The Loyalty Scheme Operating System (LSOS) holds details of the cardholder, while an allied system CDAS (Customer Data Analytical System) holds details of shopping habits and recent transaction history. The system is the closest application Boots has to a dedicated CRM (Customer Relationship Management) facility.

6.2.4 Activity Three: Take order

'∎').

Taking the order is at the heart of this process, and the operator will require additional information in order to fulfil the customers order. Having established the identity and bona fides of the caller, the customer will describe the items they want to purchase, and the system will prompt the operator to establish specific details such as colour, styles or size, depending on the nature of the products. Table 6.1 is a process impact matrix of the mail order call centre completed at the time which reveals just how closely coupled the call centre process is with the other information systems used during, and in support of, the process. Listed down the left hand side are the activities involved in the process, and along the top the departments. As can be seen, the call centre has a connection with nearly every activity in the total Mother & Baby Direct operation (as represented by the symbol

	CUSTOMER SERVICES	CALL CENTE	PRODUCT QUALITY DEVT.	WAREHOUSE	FINANCE	SUPPLY	ADVANTAGE CARD	BUSINESS UNITS	BUSINESS EXPRESS	STORE	MARKETING
Order Placement - Standing Order - Deferred Order - Baby List - Gift Vouchers		•		•	•	•	•				•
Customer Payment - Staff Discount - Gift Vouchers		-		•	-		-	•			•
Order Fulfilment		•									
Returns	•	•									
Repairs - Loan Items		•	•	•	•	•			•	•	
Customer Queries	•	•	•					•		-	
Inventory Maintenance		•		•		•		•		•	
Pricing		•			•			•		•	
Promotions/Deals		•		•	•		•	•		•	•
Supply to Warehouse - Direct Supply			-	•	•	•					
Warehouse Stock Management		•		•	•						
Stock Disposal				•	•	•		•			
Stock Recall	•	•									
Advantage Interface - Points allocation - Points collection - Data collection - Data analysis		•		•		•	:			•	
Customer Credit		-									
Stock Accounting		-		•	•						
Management Reporting	?	?	?	?	?	?	?	?	?	?	?

Key: ■ Has an impact on the call centre process. ? Not yet defined

Table 6.1: A Process Impact Matrix of the Mail Order Call Centre

Customers expect to be told estimated delivery dates, especially if the item is 'out of stock' at the time of placing the order, which will require on-line links to the warehouse

inventory systems to establish stock levels and forecast delivery dates. Once ordering is complete and payment details are taken, the system has to perform credit checks, produce pick-lists for the warehouse, calculate any loyalty bonuses, discounts, and in the case of a staff purchase any deductions.

6.2.5 Activity Four: Initiate other processes

The MABD warehouse is at Acton Road, Nottingham, therefore the orders; more specifically the pick-list and delivery details have to be passed from Salestrac in Portsmouth to the warehouse in Nottingham to put together the order. Details of the delivery status, any missing items or special instructions for the customer are added here and made available to the Mailbrain system in Portsmouth. An independent courier (Business Express), is advised of the delivery requirement along with a shipping order.

Deals and offers traditionally offered in Boots stores were also offered via the MABD catalogue, despite the complications this created such as the '3 for 2' deal on nappies where three items are despatched but costs and profits apportioned across two only. This also made the accounting for Advantage Card loyalty points difficult. A series of management information reports were generated to keep control of stock movements for later analysis. Once the order is complete and payment received then the transaction is completed.

6.2.6 Activity Five: Close the call

On conclusion of the telephone call the operator will thank the customer for the order and close the call. The associated documentation is produced automatically at the warehouse, the order is picked, packed and despatched via Business Express. The process ends.

6.3 The approach taken to the business problem (*Decision logic*)

6.3.1 Introduction

This second section provides a detailed account of how the Mail Order process was approached and managed from the original concept through to implementation and beyond. As the 'baby category' team was already in existence it formed the core of the project team going forward. Strategic Choice Analysis techniques (SCA) are used to understand the decision making approach used by the actors in this case.

6.3.2 Step one: Shaping of problems

This first step examines the judgements about possible connections between one field of choice and another. The Decision Graph, as shown in Figure 6.2, depicts those decisions seen by the actors in this case to be key to the outcome of the project.

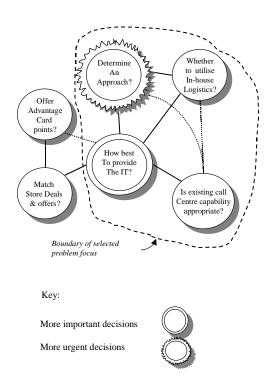


Figure 6.2: A decision graph of the key case decisions

Those decisions shown within the boundary of the problem focus are given prominence over those outside the boundary, however it is realised that all the decisions shown are closely related. Clearly, in this case the initial decision to determine the overall approach was urgently required, as it would influence many of the associated decisions. The four key decisions within the boundary of the problem focus are (i) Determine an approach, (ii) Whether to utilise in-house logistics, (iii) is the existing call centre capability appropriate, and (iv) how best to provide the information technology. To take each decision in order:

6.3.2.1 Determine an approach?

The project team initially considered two quite different approaches to the problem, these were:

- □ Acquire or work with a partner who could supply the end-to-end solution (call centre, warehouse and delivery), which was understood to be the preference of the BTC Executive at that time, or
- ☐ A piecemeal or modular approach looking at each component individually, with the emphasis on low cost, high speed to market, which at that time was considered a disposable and inherently lower risk approach.

In order to make speedy progress the project manager organised the project into three parallel streams of activity: Call centre, Logistics, and Information Systems, each having a lead person allocated to them, and each reporting into the overall project manager. The Project Manager assigned to 'Call Centres' had the benefit of previous involvement in the strategic positioning work for BTC 'direct' products, particularly issues relating to extended inventory of both Health & Travel services as well as Mother & Baby categories. She described the attitude of the participants in this project as:

"In many ways the project was approached with the mind-set of a trial despite the fact that some contracts demanded a minimum commitment of two years".

Traditionally Boots are not 'first movers', normally waiting to see what others are doing, but the Tesco initiative did help to focus attention on the launch, and a decision was taken by the Baby Business Category to try and launch in fourteen weeks (i.e. by September 1997).

6.3.2.2 Whether to utilise in-house logistics?

As a retailer Boots considered it already had 'warehousing' capability, and a preference was expressed early on in the project to provide the warehousing processes in-house, although there had been discussions with suppliers such as 'GUS' and 'Gratten' who could both supply an end-to-end capability. However this was going to be more expensive than the cost of the current in-house operation, which was attributed mainly to the insistence of Boots to conduct the operation 'their way', for example, to configure the information systems to accommodate and mirror every conceivable in-store promotion possible. Therefore the choices were a simple 'yes' or 'no'.

6.3.2.3 Is the existing call centre capability appropriate?

At that time AT&T were operating the Advantage Card call centre and there were growing concerns over the relationship and the potential for a clash of interests. An inhouse Customer Service call centre based in Head Office had just completed its first year of operation and was handling 1200 calls per day (average). However, the Call Centre selection Project Manager commented:

"We knew we didn't have the capability [for call centres] in-house, and it was a struggle to get the company to realise that we didn't have the capability in-house. Having a call centre is not the same as having a call centre that can take and process mail orders. A different set of criteria is

required. This is a very different business - the appropriate 'mindset' has to be in place".

The call centre would need to take payment by credit card, and although payment by card had been done for years in BTC stores, the current call centre did not have that capability, and this was made to appear as being a significant issue. This development work coincided with a restriction on any increase to headcount of those who operate the BTC Customer Service Call Centre. As one Project Manager commented:

"We have a tendency to invest outside the company, due to head-count capping, rather than grow internally, which is almost without considering the financial dynamics of the case"

The likely options are expressed in terms of: (i) 'yes' the internal call-centre is capable, (ii) 'no' it isn't, or (iii) it could be capable with development.

6.3.2.4 How best to provide the Information Technology?

The provision of timely and accurate information is essential to provide an effective and efficient mail order operation, and as described earlier, the call centre process is right at the heart of that operation. The call centre will be required to access customer, product, stock, Advantage Card, payment, and delivery information, much of it in 'real-time', in conjunction with the necessary telephony technology to make this appear 'seamless' to the customer. This is likely to be a combination of existing systems and new functionality not previously used. The choice of how the technology is provided is considered to be the most important, i.e. whether to utilise packaged software and therefore be 'constrained' by the methods of operation that the software supports, or alternatively, utilise existing processes and routines as a framework to develop complimentary bespoke software, to work in conjunction with software packages.

The two key decisions outside the boundary of the problem focus are:

6.3.2.5 Offer Advantage Card points?

It was reasonably clear from the beginning of the project that it would be preferable to award customers with Advantage Card points in much the same way as if shopping instore. However, as the loyalty card scheme had been designed around a face-to-face transaction with the customer, which relied on the customer tendering the card onto which points were physically credited, the provision of points in a non face-to-face transaction was more challenging. Although inelegant this could be easily resolved by providing the customer with a voucher with the appropriate number of points, which could be credited to their Advantage Card at the next face-to-face transaction in store. This apparent resolution, while not without some difficulty, appeared to be accepted as a pragmatic option thus removing it from the 'critical' decision status.

6.3.2.6 Match store deals and offers?

Despite engaging third-party organisations for amongst other things their know-how of the mail order processes, BTC Marketing insisted on ignoring their advice by including promotional 'deals' in the mail order offer that match those operated in BTC stores. This was a decision supported by the internal legal advisors at that time as they thought it a legal requirement to consistently offer products at the same price regardless of channel to market. Compared with Boots the preferred mail order partner (Salestrac) were an inconsequential company and Boots took their advice in moderation. Boots has a very 'arrogant' approach to these arrangements and has a strong culture of "we know best". As a Product Manager described:

"We chose third parties for their expertise, but didn't listen to them. We said we were open to suggestions, but weren't really, we were 'hamstrung' by the red tape, very little liberty to take decisions. The call centre people were telling us not to do deals. Mail order doesn't lend itself to deals. You are going to get yourselves into all kinds of problems.

The customers you get through mail order are not necessarily as price aware, but they are convenience shoppers. The price (say getting three goods for the price of two) is not always going to persuade them to buy from your catalogue".

6.3.3 Step two: Designing the possible courses of action

This second step focuses on designing possible courses of action, and Table 6.2 summarises the key decisions to be taken along with their possible outcomes under consideration.

DECISION AREA	OPTIONS	OPTION LABEL
Determine an approach?	ModularAcquisition (e.g. Littlewoods)	- Mod - Acq
Whether to utilise in-house logistics?	- Yes - No	- Yes - No
How best to provide the information Technology?	Predominantly BespokePredominantly Package	- Besp - Pack
Is the existing call centre capability appropriate?	YesWith developmentNo	YesDev'tNo

Table 6.2: Options within the boundary of the decision area

A key feature of the decision making process is the interconnectedness of the decisions and the subsequent consequences of those decisions, and that the likely outcome will rely on a compromise between possible options. SCA utilises the Analysis of Interconnected Decision Areas approach (AIDA) to help in understanding the relatedness of these decisions and is useful here to understand how and what decisions have been made. Figure 6.3 shows the results from comparisons of each option within a decision area with every other option within the decision area. This pairing ensures that incomparable or doubtful combinations are highlighted and potentially excluded from future analysis.

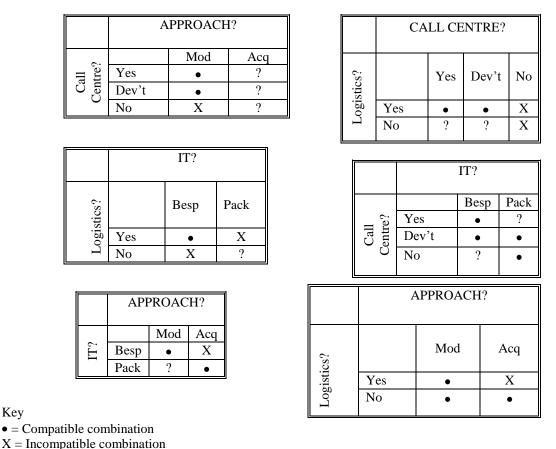


Figure 6.3: Analysis of interconnected decision areas (AIDA)

Key

? = Doubtful compatibility

The Option Graph in Figure 6.4 diagrammatically represents the outcome from AIDA and it can be seen that despite the possibility of up to twenty-four decision schemes, this is reduced to only six decision schemes, however the number of option bars has increased to seven, and there are nine doubtful combinations (but some of these could be reversed with further work or analysis). Figure 6.4 demonstrates that by choosing 'yes' to the option to utilise in-house logistics capability it immediately causes incompatibilities (option bars) with using packaged application software, as the current BTC logistic operation is largely bespoke. Similarly, the acquisition of a third-party organisation that also has logistics capability would be incompatible with wanting to utilise the in-house capability.

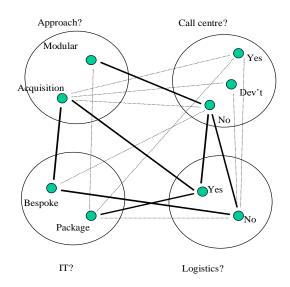


Figure 6.4: Option Graph – Mail Order

Having determined which options are compatible it is then possible to establish which combination of those options can be realistically crafted into feasible decision schemes. A feasible decision scheme is one where it doesn't violate any of the incompatibilities established during earlier analysis, but their inclusion in the final solution is still not automatic.

Figure 6.5 shows that when the compatible options are re-presented to determine what feasible decision schemes are possible only six feasible decision schemes emerge from the analysis, four of those having doubtful compatibilities that would need to be resolved in order to establish if they are truly feasible.

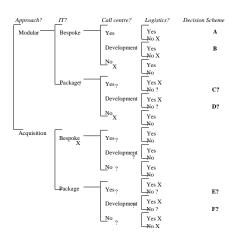


Figure 6.5: Feasible decision schemes for the Mail Order case

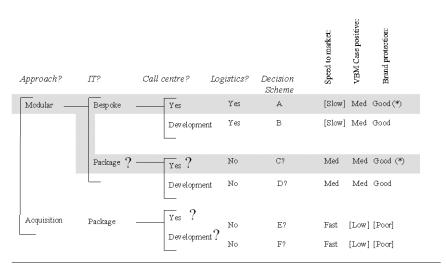
6.3.4 Step three: Comparing the possible courses of action

Having determined a list of feasible decision schemes the next step is to compare each of the schemes in light of what their consequences might be. Table 6.3 lists those comparison areas that emerged to be of importance to the actors in this case, and a comparative measure has been assigned to each comparison type. A working shortlist can be developed from the feasible decision schemes identified earlier, by comparing them against those comparison measures considered by the project team to be the top three comparison areas in this case, namely: 'speed to market', 'VBM case positive', and 'brand protection'.

Figure 6.6 shows the assessment of how each feasible decision scheme compared with the desired minimum ratings of at least 'medium' for both speed to market and VBM positive, and at least 'good' for brand protection.

COMPARISON AREA:	COMPARATIVE MEASURE:
Speed to market: Seen as an important response to competition, and a positive impact with City analysts.	Fast ⇔ Medium ⇔ Slow
Value Based Management (VBM) case positive: Investment decisions are based on 'managing for value' principles and therefore require a positive business case.	High ⇔ Medium ⇔ Low
Expansion potential: The ability to flex operations in line with demand.	Yes ⇔ No
Brand protection: With one of the most trusted brands on the high street Boots are extremely cautious about damaging the brand.	Good ⇔ Poor
Risk: Inherently a risk averse organisation.	High ⇔ Med ⇔ Low

Table 6.3: List of comparison areas



Working shortlist: Schemes C?, D? (Switch to A as an alternative to C?)

Formed by: Speed to market: At least medium VBM Positive: At least medium Brand Protection: At least good.

Figure 6.6: Forming a working shortlist

The outcome of the comparison ratings suggests that decision schemes 'C?' and 'D?' should form the working shortlist, as these were the only decision schemes that met the

minimum requirements for the comparison measure. However, both these schemes had doubtful compatibility (signified by the question mark), and were very similar in composition; therefore decision scheme 'A' was substituted for decision scheme D to provide a more realistic comparator and was a closer fit to the actual decision scheme chosen by BTC. The comparisons of each of the four key decision areas (Approach, IT, Call Centre, and Logistics) and the choices to be made are as follows:

Approach (Modular versus Acquisition)

Discussions took place early on with some of the big names in catalogue and home shopping business for example, Greater Universal Stores (GUS), Gratten, and Littlewoods. Boots desire to maintain control habitually precluded joining forces with such established players in other industries, despite the obvious brand leverage Boots enjoys.

IT (Bespoke versus package)

Even though at first considered quite separate, the three themes of call centre, warehousing and, IT are closely coupled, as it is the technology that binds them together. Although Salestrac was the preferred call centre partner it was felt that they didn't have the systems capability to make the changes required. Salestrac were asked if they would fund assistance from Sanderson (the vendor of the Mailbrain software) to assist with the changes, and they subsequently agreed. Therefore systems development changes to the Mailbrain software would be a tripartite arrangement. Firstly, as Salestrac have licensing rights to modify and tailor bespoke elements of the system; they could undertake 'bolt-on' elements with their small development team that was supplemented with two contractors. Sanderson, the vendors of Mailbrain can undertake the core systems changes, and BTC internal IS development staff undertake the in-house systems changes. At one point the changes to Mailbrain numbered 46, excluding deals and changes since. As one Business

Analyst commented at the time "It was psychologically more palatable to change the system rather than the people".

The option of operating the MABD warehouse by imitating the procedures of a BTC store, in order to utilise the stock functionality of the store Epos systems to quickly satisfy the requirements of a stock-file (held on the store controller), although initially considered to be convenient will in fact be problematic. For example, it will not be possible to disentangle the finance systems elements from the store stock replenishment software, it was also necessary to report stock levels accurately in order to establish accurate financial information. This was aggravated further by the use of seven digit item codes, which had to be translated into 5 digit codes and then back to seven. The Mailbrain system can also provide complete order processing and fulfilment functionality, however this has been 'truncated' to allow the Acton Road warehouse to be used. This then feeds into a proprietary system built by Logica, which in turn handles the shipping documentation for the carrier (Business Express). This approach has generated a considerable number of integration and file transfers between systems. A recent desire to switch to an alternative carrier has revealed the 'hard coded' nature of this system that now requires system changes to facilitate this. Stock-file accuracy for a mail order operation is critical, therefore in keeping with the store approach; stock items are scanned-in to stock at the warehouse. Sales are scanned-out thus ensuring accurate stock figures. This results in a large amount of double handling within the warehouse.

This was also a significant factor in the choice of call centre, as they had to be able to remotely print an order to the Acton Road warehouse. As an IT Business Analyst pointed out:

"This sounds very simple, but we later realised that we would be building our own warehouse system. It was a naive view that an order can be printed from the system, at the warehouse, which would allow the picking and packing of the ordered items".

It was taken as a 'given' that BTC had warehousing and logistics capability and the pressure to deliver a solution quickly made it easy to go along with that view. However, referring to the years of experience in Logistics, the Business Analyst went on to say:

"What we actually have is years of experience in is forty-four ton trunkers and moving pallets between one shed and another. We don't have experience in moving a single item to 'Mrs. Smith' in Acacia Avenue"

As one Analyst commented "All of the replenishment taken care of by treating it as a store". However, the Systems Development Project Manager observed that:

"Trying to make a mail order operation look in the accounts like a BTC store turned out to be not a very sensible thing to be doing, we had to go through all kinds of hoops and get extra software written and do things to all kinds of Finance systems".

It wasn't so much the decision to emulate the store processes that was the problem, but more the consequences of that decision. For example, activities such as bank reconciliation were unnecessarily complicated as the mail order business was logically (even if not physically) treated as a separate company. Ultimately the costs of the changes to Boots Finance systems alone were comparable to the total costs of all the other systems changes. A change to the Financial Accountant allocated to this project during its life was also disruptive, each one having a different view on the accounting treatments necessary for this venture.

Call centre ('Yes' in-house versus in-house with Development versus No to in-house)

Despite having an adequate in-house call centre in operation at that time, the decision to tender externally was taken. As the Call Centre Project Manager described it:

"To change things internally would have taken longer, so an option could have been to put a mail order processing system into the Customer Service call centre. We all felt that would take longer to do, and that it was easier to remove the politics and just go outside"

An invitation to tender (ITT) process to select the call centre vendors was used, "which was frankly hard work", and over complicated the process. It was based very much around the 'system' rather than the 'service'. Five companies were initially short listed and invited to tender. Four of those organisations took part in the initial selection process, the fifth declining to respond to the ITT due to a recent internal restructure. Of the four, Boots already had a relationship with two of them for call centre services (AT&T for Advantage Card, and Mailcom for 'Active & Independent')¹⁶. Two of the four were call centre specialists and the others IT companies. These companies were included at the request of BTC Information Systems department. Responses to the tender documentation were scored against pre-determined criteria and the respondents invited to make presentations to the project team. Visits to each of the respondent's premises, and demonstrations of systems and references from other clients were all sought. The tender process took an elapsed time of approximately six weeks, the final short list of two companies being made in May 1997. The capability, client base and systems capability of all the companies were quite diverse. Those rejected at the earlier stages demonstrated that they didn't understand 'mail order' processing, and they also fell down on customer service. In trying to leverage additional income from their call centre infrastructure at hugely inflated costs they confirmed their lack of understanding of price sensitivity in the mail order business. Lots of 'test scenarios' were undertaken, mainly due to the IS

influence, meant that testing was literally "treated as an exam", with us not telling partners what we expected to test, which didn't make for good partnership working. As one Business Analyst pointed out "We are a big company and can be extremely 'crushing' in terms of confidence etc". So much so that some refused to tender because of the amount of customisation work involved.

Salestrac were chosen because of their customer service credentials and active blue chip client base, coupled with an accommodating and 'chatty' customer friendly style. Maintaining high standards was central to the Boots philosophy and strategy, so much so that they insisted on having some involvement in the selection of staff, which has consequently led to unsuitable staff being removed from the MABD account. A key perceived reason for this call centre being 'outsourced' was the ability to handle a financial transaction during order taking, as they weren't being conducted in-house at that time.

Logistics ('Yes' in-house versus 'no' in house)

Despite Salestrac having additional floor space and therefore expansion capability a five-year lease was taken out on a new Boots warehouse at Acton Road in Nottingham. Two thousand lines, the majority from the main central warehouse (D82), and Nottingham Common Stock Room (CSR), would be stored at Acton Road to satisfy MABD. During this project a major Boots warehouses on its Nottingham site was badly damaged by fire, which diverted much needed warehousing systems expertise from the project, and temporarily commandeered the Acton Road warehouse as an emergency facility, which had been intended for use by Mother & Baby Direct.

1/

¹⁶ 'Active & Independent is a mail order based catalogue for the elderly or infirm who require specialised equipment such a walking frames, wheel chairs, and specially adapted household appliances.

BTC has a number of warehouses at its Head Office site in Nottingham, along with numerous locations around the city centre. Warehousing capability (operationally) was considered a core competence of a retailer, and Boots was no different in that respect, but the information systems were deemed not suitable. The corporate standard warehousing software package 'Dallas'¹⁷, which is heavily customised, was briefly considered but in reality would be a sledgehammer to crack a nut. A new system was required to support Acton Road. However, this perceived capability manifest itself in on over-engineered specification of requirements, which was profoundly influenced by how the existing warehouse processes operate. With 'perfection' the goal, throwing away what had been developed was a real risk.

6.3.4.1 Comparisons under uncertainty

In Table 6.4, the two short-listed decision schemes (labelled 'A' and 'C?') are compared against each other in terms of all five comparison areas listed earlier.

	A			C?	
	Modular	Appr	oach?	Modular	
	Bespoke	ľ	??	Package	
	Yes	Call c	entre?	Yes	
	Yes	Logis	stics?	No	
Comparison Area:				Comparative co	omment:
Speed to market (Fast-Medium-Slow)		Slow	Medium	Likely to be more difficulties in combining the components in 'C' th in 'A'. However, 'C' might be quick to market. High uncertainty.	
VBM Case positive (High-Low)		Medium	Medium	Both very similar, however both are high in uncertainty.	
Expansion potential (Yes-No)		Yes	Yes, Slightly Better	organisation capacity to	sess however, external is might have greater grow than internal unctions.
Brand protection (Good-Poor)		More Secure	Less Secure	Assumes better control if the major of components are kept within th company.	
Risk (High-Medium-Low)		High	High '+'	elements. On	nes have 'high' risk balance, more control scheme 'A'.

Table 6.4: Comparison under uncertainty

.

¹⁷ Dallas: Warehouse automation computer software.

This comparison table is a more complete comparison that takes into account all of the comparison measures (and not just a sub-set) which includes a more general mix of comparison types.

6.3.5 Step four: Choosing commitments for action through time

The final step in this process is the formation of proposed commitments to action through time. Table 6.5 is a cumulative list of uncertainty areas identified by the actors in this case and captured during the analysis, which have been categorised into one of the three UE, UV or UR uncertainty types, and an indicator to the salience of this uncertainty to the final decision. The most salient uncertainties identified by the actors were the ability to mix package and bespoke software (?PACKFIT), the time difference between deployment of those (i.e. bespoke and package) (?BESDEV), and the unknown levels of customer demand for the products via this channel to market (?SALESPROF).

UNCERTAINTY AREA	LABEL:	TYPE:	SALIENCE:
? The doubtful ability to support a mixed range of inhouse and/or external modules with packaged software.	?PACKFIT	UE	• •
From 'Speed to market' comparison: ?The ability to trade off quality in favour of speed.	?SPEEDQUAL	UV	•
From 'Expansion potential' comparison: 'Will expansion potential be truly favourable, and more practical with third parties.	?EXPANPOTL	UE	•
From 'Speed to market' comparison: 'The 'real' time differences between package adoption and bespoke development.	?BESDEV	UE	• •
? The likely levels of customer demand, average order size, and the impact of cannibalisation of sales.	?SALESPROF	UE	• •

Table 6.5: Comparing uncertainty areas

For example, at the point when the project team needed to request finances and secure Executive approval from the Investment Decision committee there remained some key financial uncertainties. This was recorded in the 'Investment Decision meeting documentation, Ref. NO.B197, 7th July 1997'.

7th July 1997

Financial Review

Key uncertainties in the areas of customer demand, average order size, and the impact of cannibalisation of sales preclude the accurate forecasting of value creation. On current estimates and a 10.5% cost of capital, the project generates a 10 year NPV of £16.0m, a discounted payback after just three years a yields a net annual cash flow benefit of c£5m from 00/01 onwards. Economic profit streams increase from £(1.4m) in 97/98 to +£3.7m in 00/01. Cannibalisation has been built up from Product Group level and averages 15%.

Source: 'Investment Decision meeting documentation, Ref. NO.B197

The use of an 'uncertainty graph' helps to put these uncertainties into perspective by grouping like types together and comparing their likely relevance to the final decision. Figure 6.7 shows the uncertainty graph for the Mail Order case and the concentration of uncertainties of the UE type. This diagram would help in determining which uncertainties will be most influential on the final outcome and which can be deferred for the moment. None of the uncertainties have been classified 'high' in salience, and are therefore unlikely to be too inhibiting.

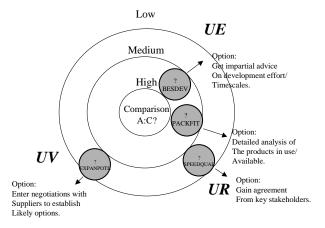


Figure 6.7: Uncertainty graph – Salience of uncertainty to this comparison

6.3.5.1 Commitment package

A decision has to be made as to how much exploration should take place and what decisions can be made immediately. By choosing a call centre partner in reality the choice of call centre software had also been made. Similarly, choosing to de-couple the fulfilment activities from the ordering activities by operating the warehousing in-house forced yet another technology choice. Therefore, the selection criteria for the systems to support the call centre become principally:

- (i) The ability to integrate with the warehouse system,
- (ii) The ability to calculate and print Advantage Card vouchers¹⁸, and
- (iii) Stock replenishment (Salestrac have a 'virtual' stock).

Figure 6.8 below relates the actions to the timing of the decisions in this case.

Deci	sion now	Decision later	Scheme
Call centre?	Approach?	Logistics? IT?	
Yes	Modular	Yes — Bes	A (*)
		No Pack	C?(*)
	Acquisition	No —— Pack	E?
Dev'T	Modular	Yes — Bes No — Pack	B D? F?
	Acquisition	No Pack	F?

(*) Short listed decision schemes

Figure 6.8: A comparison of the feasible action schemes

_

¹⁸ When it is not possible to add Advantage Card points to the customer's card directly, vouchers are sent to customers that can either be added to the card during a transaction in a store or redeemed against the next purchase.

Strategic Choice Analysis uses the concept of the 'commitment package' as the method for determining the choice between those actions that have to be taken immediately, those actions that require further exploration to reduce the salience of areas of uncertainty, and finally the other arrangements that need to be made to enable actions to be deferred. Table 6.6 sets out the commitment package framework for this case and is a summary of the commitments and actual decisions taken in this case now, and those that were deferred to later.

	DECISIONS NOW		FUTURE DE	CISION SPACE
	Actions	Explorations	Deferred Choices	Contingency Planning
Approach:	Withdraw from negotiations with possible acquisition companies.			
Call Centre:	Engage in a contract with Salestrac.	Prepare the internal call-centre for the increased capacity		Limit contractual arrangements to increase flexibility
Logistics:		Continue to evaluate the in-house offering versus third party suppliers		Use a third party to regulate the flow of usage as sales rise etc.
IT:	Investigate bespoke software development versus package software	Examine maintenance and systems changes as they attract a premium thus increasing the operations costs.	Choose between IT types	Choice of logistics might have IT implications. Consider them as early as possible

Table 6.6: Commitment package framework – Mail Order

Having taken into account the decisions, options, and incompatibilities that emerged in this case, the actual decision scheme chosen by BTC i.e. (a 'modular' approach, 'bespoke' systems, 'no' to utilising the existing in-house call centre, and a 'yes' to using in-house logistics) did not emerge as one of the feasible decision schemes.

6.4 The alignment of the actors in the network (Alignment logic)

6.4.1 Introduction

The third approach uses techniques from Actor Network Theory to understand the alignment of the actors to the proposed approaches. The 'process inscription/specialisation framework' is used to analyse two critical dimensions that capture the characteristics of work business processes, and the components that make up those processes, these are: *the degree of specialisation, and the degree of inscription*. The two dimensions can be plotted on a graph, and Figure 6.9 below shows the output for the Mail Order case.

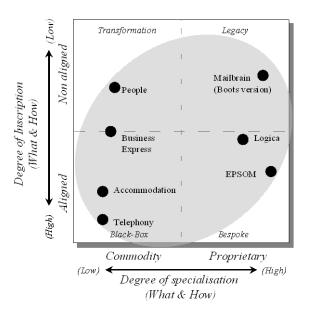


Figure 6.9: Mail Order process inscription/specialisation framework

The spread of results around the framework demonstrates that there is little consensus about the alignment of the interest of the actors in the network, or of the composition of the process components. The Mail Order case represents a dysfunctional process.

6.4.2 People – call centre agents

The non-alignment of 'people' reflects the broad spread of opinion and lack of agreement of the actors involved as to whether the skills required by the call centre agents are 'specialist' because of the nature of a sales environment, or that they are a 'commodity' and could easily be satisfied by appropriate training and development.

6.4.3 Business Express

The services of a courier 'Business Express' were used to fulfil the orders placed upon MABD. Although the courier business is relatively self contained and was comparatively easy to incorporate in the overall process, its position on the border of 'black-box' and 'transformation' reflects the influence it can exert on the way the final process is operated, i.e. Business Express will have their own operating requirements, constraints, achievements and business objectives they will try to inscribe into this process.

6.4.4 Telephony & accommodation

Once again both 'telephony' and 'accommodation' occupy the black-box space, which reflects the 'commodity' nature of these components, and that the actors consistently see them as commodities in relation to this process.

6.4.5 Mailbrain, Logica, and EPSOM - Information Technology

The prime call centre software used in this case (Mailbrain), has been so heavily tailored to Boots requirements that it is no longer possible to upgrade to later versions of the software. The interests of the actors, which are numerous includes the vendors (Sandersons), the agents (Salestrac) and the customer (Boots), and are quite different with regard to this software which means that decision-making is difficult, system enhancements problematic, and change control almost non existent. The remaining two software components (Logica and EPSOM) are both wholly owned bespoke products either developed in-house by Boots own staff, or by a third party to Boots own

specification and are now both supported in-house, so while proprietary they do reflect the requirements of the process and are therefore aligned.

6.5 Summary

This is the third case and describes the approach taken by the Mother & Baby Direct team to establish a call centre process for mail order. This was an important first step for Boots as it planned to enter the 'alternative shopping' arena both to gain understanding of the customers requirements, and to provide a response to the competitive threat from other 'direct' mother and baby catalogues. As described in the earlier chapters the techniques of SCA, Activity Records, and the Inscription/Specialisation framework were used to understand the process, decision, and alignment logics in this case.

The preferred choice that emerged from the project team was to adopt the MODULAR – BESPOKE – NO - YES approach, which didn't feature as a feasible decision scheme when retrospectively applying the SCA technique. The post hoc analysis conducted here identified decision scheme 'A' (MODULAR – BESPOKE – YES – YES), as that which most closely fit the requirements as expressed by the actors in the network, which utilised the in-house call centre alongside the predominantly other 'in-house' components. The significant difference between the two is the decision to outsource the call centre, which appears to disregard the closely coupled nature of the components in this process. This close coupling is in complete contrast to the loosely coupled nature of the components observed in the Loyalty Card case in the previous chapter. This is reflected in the increase in the number of option bars and subsequent increase in sensitivity of each decision on every other decision. The preferred choice appears dysfunctional which is supported by the lack of alignment of the actors involved. For example, the lack of agreement that 'specialist' skills are required, and the numerous interests that exist in the provision of software.

The next chapter explores the final case study that examines the call centre process as required by Boots Health & Travel Insurance Services.

CHAPTER SEVEN:

CASE STUDY FOUR - HEALTH & TRAVEL INSURANCE SERVICES

7.1. Introduction

Boots Insurance Services (BIS) provides a range of health and travel insurance products to customers of Boots The Chemists including: Dental; Family Health; Accident, and Accident Insurance especially for children. Travel products include: Gap year; Annual; Single Trip; and winter travel packages. Products are available through Boots The Chemists high street stores, where upon completion of an application form instant cover is arranged upon paying the premium, (unique for this type of service), or by telephone through a call centre, or alternatively by post. All the products are underwritten by Royal & Sun Alliance¹⁹. BIS was launched in April 1998 and is a wholly owned subsidiary of The Boots Company PLC.

The call centre supporting the Boots Travel Cover products is operated by Royal & Sun Alliance (RSA) at their 'Corporate Partnership Division' in Bristol, from where they also operate similar schemes for companies such as Sainsburys, Lloyds and HSBC Bank. The call centre also receives some calls direct from BTC store staff that require assistance with product knowledge and product queries as they serve customers in store.

After only 24 months (April 2000) it has achieved market leadership in the direct travel market, with over 400,000 policies sold to three quarters of a million customers, with an income in excess of £15 million²⁰. The key objectives and general principles of the venture are shown below:

_

¹⁹ Royal & SunAlliance was created in 1996 with the merger of two of Britain's largest insurance companies, Royal Insurance and Sun Alliance. It is one of the worlds leading international insurance companies and the largest underwriter of UK general insurance risk. An FTSE 100 company it employs 50,000 worldwide and operates in over 130 countries.

12th November 1997

Objectives of the venture²¹:

To jointly contribute skills and assets for mutual (win-win) gain,

To ensure that both parties reach their acceptable minimum profit levels and then distribute additional profits on an agreed basis,

To review profit shares on a periodic basis (every three years) but to strive for cost and profit transparency at all times.

Source: BTC/RACE partnership statement of principles, 12th November 1997.

6th November 1997

Travel insurance general principles²²:

Cover will at all times be geared to provide the policyholder with genuine and beneficial cover, which at no time will contain so much small print to make a claim impossible.

To provide benefits that encompass the needs of the traveller in difficulty abroad, not as a vehicle purely by which financial recompense is received in the UK.

To give security and peace of mind of the Boots name and brand in a practical and meaningful way.

Source: Boots Travel working document, 6th November 1997.

7.1.1 The approach taken to this case study

The approach taken was the same as that described in the previous case (see 4.1.1). Three sections now follow which in turn examine: (i) the detail of the process under review, (ii) the approach to decision-making, (iii) and the alignment of the actors in the network. Interviews were conducted with BIS Operations Managers Mike Smith and Paul Wymark, and BIS Managing Director – Peter Smith, as well as other project team members. Unrestricted access was granted to project archives such as partnership agreements, business results, and claims history, as well as other related material and documentation.

²⁰ Source: Boots Internal Communications intranet announcement – 2nd April 2001.

²¹ Source: BTC/RACE partnership statement of principles, 12th November 1997.

²² Source: Boots Travel working document, 6th November 1997.

7.2 The Insurance Service process in focus (*Process logic*)

7.2.1 Introduction

This first section examines the work business process under review and, using the 'Activity Record' technique, presents the five prime activities and tasks that make up the process, namely: (i) Receive the 'inbound' calls; (ii) Identify the customer & information; (iii) Take the order; (iv) Initiate other processes, and (v) Close the call. It is not the intention to include all the processes that go to make up the complete end-to-end Insurance business. The call centre process starts with an inbound call from a customer, and ends with a finished policy including all the associated components (additional questionnaires, travel documents) are complete for despatch. Figure 7.1 shows an Activity Record of the call centre process as utilised for Health & Travel cover.

Insurance case

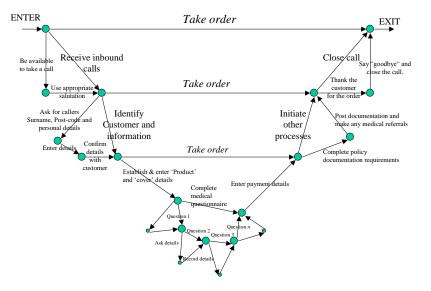


Figure 7.1: An Activity Record of the Insurance process

Each of the activities is described in full as follows:

7.2.2 Activity One: Receive 'inbound' calls

A workforce of approximately twenty-five, which are dedicated to the Boots account, work in three shifts to cover the 8 am to 8 pm operation five days a week, with an 8 am to 6 pm operation on Saturdays. The centre is not operated on Sundays. Staff are dedicated to Boots Health and Travel Cover but can, and do on occasions, provide overflow back up for the other clients serviced from the centre.

Grouped into three teams, each team works a rotation of the three shift patterns: 8 am to 4 pm, 9 am to 5 pm, and midday to 8 pm. Each shift has a break for lunch of one hour, and in addition a mid morning and mid afternoon break of ten minutes per occasion. Each team member has a regular workstation in the call centre which they are encouraged to personalise (family photographs as screensavers etc.), and each shift are seated together in teams which ensures that they are with their shift colleagues rather than being dispersed around the room. With a predominantly young workforce (the majority being under twenty-five years old), the atmosphere is lively and energetic; the room is decked with national flags from around the world to signify the link with 'travel', and the constant background 'noise' generated by the telephone conversations in progress at any time adds to the lively atmosphere.

7.2.3 Activity Two: Identify customer and information

The Agents use a system called 'ISAAC', which is an Image and workflow system developed in-house by RSA to service their Home Insurance business. This has subsequently been heavily modified and redeveloped to support the Boots Travel products. Upon answering a call the Agent enters the customers surname and postcode, which then takes the agent into the first of a series of logically related screens to enter the customers personal details. Unless a customer has previously purchased insurance products from BIS before, the customer will be 'unknown' to the call centre. However the information is retained for subsequent problem resolution and future orders.

7.2.4 Activity Three: Take order

The subsequent screens are: 'product and cover' details, 'medical questionnaire', and finally 'payment details'. The Agents enter the details on the screen by asking the customers a series of questions. The style isn't too prescriptive and although not totally flexible the system will allow the agent to skip to a relevant question should the customer offer that information out of the preferred sequence. The medical questions are the only 'scripted' questions the agents follow. The system is quite basic and doesn't extend to online help or features to handle frequently asked questions, and agents rely upon paper 'crib sheets' and the ability to ask for advise from a nearby colleague. The open plan environment facilitates such an interaction.

7.2.5 Activity four: Initiate other processes

Where more detailed medical information is required, referral to the medical team relies on the completion of the customer and product details form, which is passed to the referral team, all this while the customer is waiting 'on-hold'. Upon completing the call the data is passed via the mainframe systems to Birkenhead where policy documentation is printed and posted directly to the customer.

7.2.6 Activity five: Close the call

On conclusion of the telephone call the operator will thank the customer for the order and close the call. The associated documentation (Policy and cover papers) are produced automatically and dispatched to the customer. The process ends.

7.3 The approach taken to the business problem (Decision logic)

7.3.1 Introduction

This second section provides a detailed account of how the Insurance process was organised and managed from the original concept through to implementation and beyond.

The approach is documented following the steps involved in the Strategic Choice Analysis technique (SCA), and has therefore been split into the four logical sections used by SCA of shaping, designing, comparing, and finally choosing.

7.3.2 Step one: Shaping of problems

This first step examines the judgements about possible connections between one field of choice and another. The Decision Graph, as shown in Figure 7.2 depicts those decisions seen by the actors in this case to be key to the outcome of the project. The decisions shown within the boundary of the problem focus are given prominence over those outside the boundary, however it is realised that all the decisions shown are closely related. Clearly, in this case the initial decision to determine the overall approach was urgently required, as it would influence many of the associated decisions.

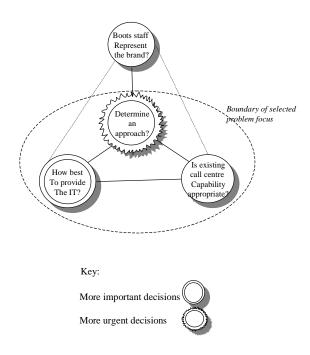


Figure 7.2: A decision graph of the key case decisions

The three key decisions within the boundary of the problem focus are: (i) Determine an approach?, (ii) How best to provide the IT?, and (iii) Is the existing call centre capability appropriate? To take each decision in order:

7.3.2.1 Determine an approach?

Two quite different approaches were considered to this problem, these were:

- (i) To conduct the administration of the schemes in-house, or
- (ii) To engage a partner to administer the schemes.

Whichever approach is adopted it was clear that it must abide by the BTC service philosophy, as this is central to the proposition and is documented within the 'Service Level Agreement' (SLA)²³, as follows:

December 1997

Service Level Agreement

"This agreement is subject to the underlying principle that in its administration of this business RACE²⁴ will reflect BIS customer service culture and values in respect of: quality of communications both written and verbal; quality and speed of response; complaint handling and escalation, and recruitment and training of staff.

Irrespective of the RACE location where administration is carried out, RACE staff will reflect BIS culture and values as though BIS themselves employed them.

In determining the levels and standards of service emphasis is being placed on qualitative delivery and measurement. The greatest focus is placed on the perceived value and feelings of BIS customers in all of their contact and dealings with RACE".

Source: BIS/RACE Service Level Agreement.

A pragmatic decision had already been taken not to initially 'de-couple' the call centre activity with that of the processing activity, which was a direct trade-off between the 'speed to market' and choice of operation. The city analysts had branded Boots as "unfashionable", "predictable", and "lacking in pace" when bringing new products and services to market when compared with the grocers. As one team member commented:

"At that time there was much criticism of Boots and its apparent lack of ability to bring new products and services to market quickly. Our preferred approach is to be 'retail engineers' and analyse everything precisely, rather than to act quickly and decisively".

Table 7.1 is an extract from an internal annual results presentation that compares the new products and services introduced by other well-known high street retailers over the preceding five years, and those introduced by Boots. Clearly Boots are not as pro-active as their competitors.

MARKS & SPENCER	TESCO	Sainsbury's	THE BOOTS COMPANY
Financial Services	Petrol	Wine on the internet	'Shapers' lunchtime range
Home Furnishings	Pharmacy	Loyalty card	
Gift Services	Banking	Banking	
	Photo	0-5 Club	
	Dry Cleaning	Home shopping	
	Gift Services		
	Home Shopping		
	Travel Insurance		

Table 7.1: A comparison of new products and services introduced by well-known UK high street retailers over the preceding five years. Source: The Boots Company Internal Annual Results.

-

²³ Source: BIS/RACE Service Level Agreement

7.3.2.2 How best to provide the IT?

The complete end-to-end process requires a number of systems changes and enhancements be made to existing systems. For example, that the in-store EPoS system can record the insurance product sale with an appropriate transaction type that will be recognised by the associated finance systems (sales ledgers) for subsequent reconciliation, or the allocation of Advantage Card loyalty scheme points, including any points awarded as an incentive to purchase. Policy proposal information will need to be captured at a store and transmitted for processing, and the telesales process will need to capture additional information such as the customers Advantage card number (7 digits), the staff discount number (17 digits), and any mailing preferences the customer has registered so that either the partner or Boots don't send unsolicited mailings to customers. Therefore, this was largely a choice between developing and/or enhancing bespoke applications, or utilising existing packed software products.

7.3.2.3 Is existing call centre capability appropriate?

The two previous projects to utilise a call centre in their process (Advantage Card and Mother & Baby at Home) had both chosen third party organisations to operate the call centre. Only the Boots Customer Service project had decided to set-up an in-house operation. A Telecommunications Business Analyst said of the telephony requirements for Health and Travel Insurance project:

"The requirements from a telephony point of view are very standard. We have the technical and telephony capacity in-house to satisfy 'all' of the outsourced call centres. There is no capital investment exposure and telephony is now cheaper in-house due to economies of scale".

At this point it was too early to know from the other cases which of the options chosen would be the most appropriate for this case. Therefore, the choices considered relevant by

²⁴ RACE was the project code name used for the potential partner in order to preserve their identity.

the actors involved in the case were: (i) utilise the existing internal call centre (i.e. Customer Service), (ii) Outsource the call centre activity to the insurance partner, or (iii) set-up a new internal call centre.

Only one key decision lay outside the boundary of the problem focus as follows:

7.3.2.4 Boots staff represents the brand?

Boots recognises the difference in brand values, as perceived by the customer, between traditional Financial Services organisations and is own 'trusted' brand image, of which it is extremely protective. As the BIS Operations Director put it: "We think we are the only ones capable of representing the brand properly" For this reason all Boots sales staff undergo 'Selling the Boots experience' training which provides background to the Boots Company, its ideology, and 'what Boots expects' in customer service. The aforementioned training is supplemented with sales techniques and telephone skills training which are provided by external organisations. Brand protection is important to Boots: "We like the ability to control the interface with the customer".

7.3.3 Step two: Designing the possible courses of action

This second step focuses on designing possible courses of action, and Table 7.2 summarises the key decisions to be taken along with their possible outcomes under consideration. A key feature of the decision making process is the interconnectedness of the decisions and the subsequent consequences of those decisions, and that the likely outcome will rely on a compromise between possible options. SCA utilises the Analysis of Interconnected Decision Areas approach (AIDA) to help in understanding the relatedness of these decisions and is useful here to understand how and what decisions have been made.

DECISION AREA	OPTIONS	OPTION LABEL
Determine an operating approach?	 In-house administration Partner to administer the scheme 	- In-house - Partner
How best to provide the Information Technology?	Predominantly BespokePredominantly Package	- Besp - Pack
Is existing call centre capability appropriate?	 Utilise existing internal call centre Outsource to the insurance 	ExistingPartner
	partner - Set-up new internal call centre	- New

Table 7.2: Options within the boundary of the decision area

Figure 7.3 shows the results from comparisons of options from each decision area, with the options from every other decision area. This pairing ensures that incomparable or doubtful combinations are highlighted and potentially excluded from future analysis.

	APPROACH?			
		In-house	Partner	
II.	Besp	•	•	
	Pack	X	X	

^{• =} Compatible combination

	CALL CENTRE?			
lT?		Existing	Partner	New
I	Besp	•	•	•
	Pack	•	?	•

	APPROACH?			
centre?		In-house	Partner	
	Existing	•	?	
Call	Partner	?	•	
\circ	New	•	X	

Figure 7.3: Analysis of interconnected decision areas (AIDA)

The Option Graph in Figure 7.4 diagrammatically represents the outcome from AIDA. Obviously, with fewer decision areas the potential for feasible combinations is also reduced. However, it can be seen that despite the possibility of up to twelve decision

X = Incompatible combination

^{? =} Doubtful compatibility

schemes, this was reduced to only five compatible decision schemes, and generated three option bars and three doubtful combinations (but some of these could be reversed with further work or analysis). Figure 7.4 demonstrates how by choosing 'partner' as the preferred operating approach it immediately creates difficulties (option bars) if using package software (as the partner is likely to use their own tailored products), and it would be unlikely to decouple the insurance administration undertaken by the partner and the administrative elements of the call centre, hence reducing the likelihood of the 'new' internal call centre option.

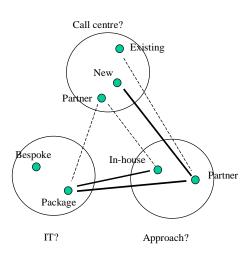


Figure 7.4: Option Graph – Insurance Services

Having determined which options are compatible it is then possible to establish which combination of those options can be realistically crafted into a feasible decision scheme.

A feasible decision scheme is one where it doesn't violate any of the incompatibilities established during earlier analysis, but their inclusion in the final solution is still not

automatic. Using a diagram similar to a decision tree it is possible to map the possible decision schemes so that they can be logically assessed for future consideration. Figure 7.5 shows that when the compatible options are re-presented to determine what feasible decision schemes are possible only five decision schemes emerge from the analysis, two of those having doubtful compatibilities that would need to be resolved in order to establish if they are truly feasible.

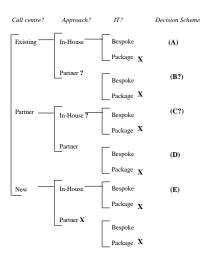


Figure 7.5: Feasible decision schemes for the Insurance Services case

7.3.4 Step three: Comparing the possible courses of action

Having determined a list of feasible decision schemes the next step is to compare each of the schemes in light of what their consequences might be. Table 7.3 lists those comparison areas that emerged to be of importance to the actors in this case, and a comparative measure has been assigned to each comparison type.

COMPARISON AREA:	COMPARATIVE MEASURE:
Speed to market: Seen as an important response to competition, and a positive impact with City analysts.	Fast ⇔ Medium ⇔ Slow
The ability to reflect BTC brand values and service: With one of the most trusted brands on the high street Boots are extremely cautious about damaging the brand.	Good ⇔ Average ⇔ Poor
Compliance with FSA and ABI regulations:	
These are mandatory requirements and non-negotiable.	Yes ⇔ No
Flexibility to undertake all of the administrative operations if desired: Any partner would have to demonstrate flexibility to allow Boots to undertake any or all of the administrative, underwriting or risk carrying activities within an agreed timetable and subject to legal and regulatory constraints.	Easy ⇔ Difficult ⇔ Unlikely

Table 7.3: List of comparison areas

A working shortlist can be developed from the feasible decision schemes identified earlier, and compared against those considered to be the top three comparison areas in this case, namely: 'speed to market', 'the ability to reflect BTC brand values and service', and 'flexibility to undertake all of the administrative operations if desired'. Figure 7.6 shows the working shortlist along with the assessment of how each comparison area compared with the desired minimum ratings of at least 'medium' for 'speed to market', at least 'average for 'brand values', and must not be 'unlikely' for 'flexibility'.

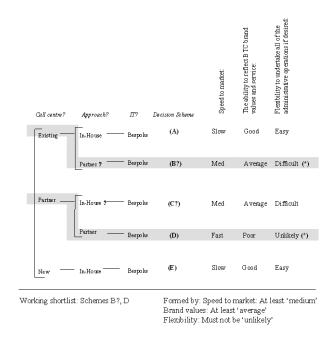


Figure 7.6: Forming a working shortlist

The outcome of the comparison ratings alone suggests that decision schemes 'B?' and 'C?' should form the working shortlist, as these two feasible decision schemes were the only ones that met at least the minimum requirements for all the comparison measures. However both these schemes had doubtful compatibility (signified by the question mark), and neither of these schemes had been chosen by BTC. The actual scheme chosen and later implemented by BTC was scheme 'D', despite the 'poor' rating of its ability to reflect brand values largely due to relying so heavily on partners, and its 'unlikely' rating for flexibility to undertake the administration, largely due to its dependence on third parties, it was actually chosen for its speed to market. For the purpose of further comparison and analysis, decision scheme 'C?' was substituted for decision scheme 'D' to provide working comparisons that are more aligned to the actual case. The comparisons of each of the three key decision areas (Call Centre, Approach, and IT) and the choices to be made are as follows:

Call centre (Existing versus partner versus new)

The most likely partner was based in the Bristol area, which is home to many blue-chip call centre operations, 'BT' and 'Orange' to name just two. Consequently there is a large pool of mobile and flexible workers, mostly seeking temporary work in the area, which might well have had relevant experience with other companies. Unlike some of the other call centres operated by RACE this one does not require agents with foreign language skills as most of the callers are English speaking, however previous sales experience and, obviously, a good telephone manner is essential. For this reason interviews for vacant positions are often conducted by telephone. Although agents develop an understanding of the medical conditions of customers they are not expected to make any judgements on this. A Medical referral team would be available to take calls where additional medical knowledge is required to have a conversation with the caller. Such a team would comprise experienced agents and medically trained staff such as nurses.

The decisions not to initially de-couple the call centre and the processing activity largely favours using a partner to handle both activities. However, it is perfectly possible to administer them separately, and any partnership agreement would need to reflect this.

Approach (In-house versus partner)

BTC wanted to retain the right to undertake all the administration should it so desire and therefore any partnership agreement had to reflect this. Compliance to the relevant FSA (Financial Services Act) codes of practice, and regulatory authorities such as ABI (Association of British Insurers), is satisfied by RACE, as the provider of the financial services, with BIS acting as agents only in this relationship. Boots Insurance Services products are VAT exempt, therefore to avoid any unnecessary tax complications BIS would have to be located in a separate office building and not in the new Head Office complex. An extract of the key relevant elements of a partnership statement of principles is shown below:

12th November 1997

Extract of the key elements of: Partnership statement of principles

- 1. RACE has agreed to assist BTC set up a 'virtual' or 'real' insurance company and for BTC to take (on an agreed basis) a shareholding in that insurer up to 100%.
- RACE will provide BTC with maximum flexibility in its aspiration to undertake any or all of the administrative, underwriting or risk carrying activities within an agreed timetable and subject to legal and regulatory constraints.
- 3. RACE will administer the business at an agreed cost.

Source: 'Partnership statement of principles', 12th November 1997.

There was a pressure to do the right thing, versus the increasing pressure from the Chief Executive to just 'do it quickly'. The BIS Operation Manager said:

"The desire for speed of launch precluded a trial, which might have given us an earlier indication of the size of the business, and provided some evidence and improved confidence".

IT (bespoke versus package)

The sale of Health & Travel Insurance through a high street pharmacy chain is not that common; expecting to purchase an 'off-the-shelf' software package to handle this was unrealistic. Many of the routines and procedures would need to be closely integrated with existing systems (payment at tills in stores), so interfaces with existing legacy systems was an important consideration. All five of the feasible decision schemes rely on utilising 'predominantly bespoke' IT in their solution. Typically any partner would already be using a tailored application (often bespoke) to administer similar business.

7.3.4.1 Comparisons under uncertainty

In Table 7.4 two of the five short-listed schemes (labelled B? and D) are compared with each other in terms of all four of the comparison areas listed earlier.

ı			ı		1
	В?			D	
	Existing Partner Bespoke	Appro	entre? oach? T?	Partner Partner Bespoke	
Comparison Ar	rea:			Compa	rative comment:
Speed to mark (Fast ⇔ Medium ¢		Medium	Fast	partners' infrast	d to market is where the ructure that is already in as in scheme 'D'.
The ability to reflect BTC brand values and service: (Good ⇔ Average ⇔ Poor)		Average	Poor	Scheme B? is considered to have slightly more control over brand values by being able to control the call centre operations. However, both schemes are unlikely to be 'good'.	
Compliance with FSA requirements (Yes ⇔ No)	:	Yes	Yes	Act (FSA) and	h the Financial Services Association of British code of practice is non-negotiable.
Flexibility to undertak administrative operation (Easy ⇔ Difficult ⇔	is if desired:	Difficult	Unlikely	undertaking all each option eith	rould easily facilitate BIS the administration. In her the call-centre or the rould need to pass to BIS.

Table 7.4: Comparison under uncertainty

This provides further opportunity to make additional forms of comparison to the crude assessments that were made in earlier short-listing. The 'textual' rather than 'numeric' descriptions convey uncertainty, which is explored in the following section.

7.3.5 Step four: Choosing commitments for action through time

The final step is the formation of proposed commitments to action through time, and the judgements about the management of uncertainty. Table 7.5 is a collection of uncertainty areas that have been identified throughout the analysis, which have been categorised into one of the three UE, UV or UR uncertainty types. The most salient uncertainties identified by the actors in this case were (i) retaining the call centre activity while outsourcing the operation to a partner (?CALLPART), (ii) using the existing call centre while a partner undertakes the administration only(?FLEXADMIN), and (iii) whether bespoke applications will actually be a better 'fit' with existing legacy systems than packages (?LEGACY).

UNCERTAINTY AREA	LABEL:	TYPE:	SALIENCE:
?Possible infeasibility of utilising the existing internal call centre while adopting the approach of working with a partner.	?CALLPART	UE	•••
From 'Flexibility to undertake all of the administrative operations if desired: comparison: ? The ability of the partner to undertake the administrative work while operating an in-house call-centre.	?FLEXADMIN	UR	•••
From <u>'Speed to market'</u> comparison: ? The ability for bespoke solutions to be a better fit with legacy systems than packages.	?LEGACY	UE	•••
? The unknown volume and frequency of call-centre traffic.	?TRAFFIC	UE	••
From 'The ability to reflect BTC brand values and service' comparison: ? The ability for a third party to adequately represent the brand values of BTC.	?BRANDVAL	UV	••

Table 7.5: Comparing uncertainty areas

Figure 7.7 shows the uncertainty graph for the Insurance case and the cluster of uncertainties of the UE type. This diagram would help in determining which uncertainties will be most influential on the final outcome and which can be deferred for the moment. Three uncertainties have been classified 'high' in salience (utilising an internal call centre while working with a partner, the ability for the partner to undertake the administration while operating an in-house call centre, and the ability for bespoke solutions to be a better fit with legacy systems than packages) and are therefore likely to have a significant influence on the final outcome. Indications of the options likely to resolve those uncertainties are also indicated.

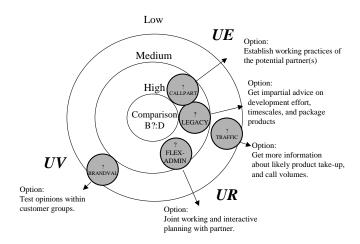
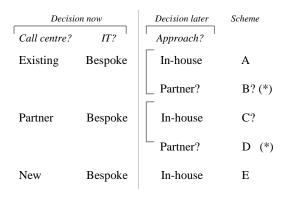


Figure 7.7: Uncertainty graph – salience of uncertainty to this comparison

7.3.5.1 Commitment package

A decision has to be made as to how much exploration should take place and what decisions can be made now. In practice the decisions are made throughout the project, and by rearranging the feasible action schemes so that the more 'urgent' decision areas can be brought forward to earlier branches of the decision tree, or those decisions where there is little or no choice, then flexibility can be engineered into later decisions. Figure 7.8 shows a reworking of the decisions to reflect those that must be taken sooner, and those that can be deferred.



(*) Short listed decision schemes

Figure 7.8: A comparison of the feasible action schemes

The decision regarding approach was considered the most urgent at the outset based on the assumption that all other decisions (call centre and IT) wound naturally follow on. However, in the interest of expediency it emerged that as long as flexibility was maintained (that is that no decision taken now would preclude the long-term flexibility of the approach), then the call centre decision should take priority. As the IT decision would remain the same (i.e. Bespoke) regardless of whichever scheme was chosen, then that decision had by implication already been made.

Strategic Choice Analysis uses the concept of the commitment package as the method for determining the choice between those actions that have to be taken immediately, those actions that require further exploration to reduce the salience of areas of uncertainty, and finally the other arrangements that need to be made to enable actions to be deferred. Table 7.6 sets out a summary of the actual decisions taken in this case now, and those deferred to later.

	DECISIONS NOW		FUTURE DECISION SPACE		
	Actions	Explorations	Deferred Choices	Contingency Planning	
Call Centre:	Utilise partners call centre capability.		Move call centre operation inhouse		
Approach:	Utilise partners administration capability.	Establish working practices of the potential partners.	Move administration activity in-house	Joint working and interactive planning with partner.	
IT:	Adapt partner software to support new business venture.	Obtain impartial advice on development effort, timescales.			

Table 7.6: Commitment package framework - Insurance Services

The decision scheme actually chosen by BTC i.e. (a 'partner' call centre, 'partner' approach, and 'bespoke' IT) was labelled as scheme 'D'.

7.4 The alignment of the actors in the network (Alignment logic)

7.4.1 Introduction

The third approach uses techniques from Actor Network Theory to understand the alignment of the actors to the proposed approaches. If we plot the process components for the Insurance case study on to a process inscription/specialisation framework, which represents the view as defined by Boots (Figure 7.9), the following can be observed.

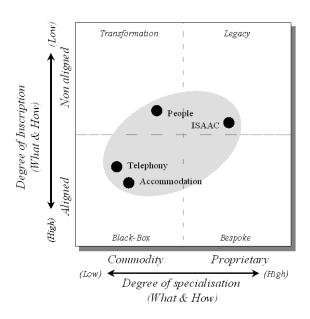


Figure 7.9: Insurance process inscription/specialisation framework

The final case (Insurance) shows a grouping of the process components around the centre of the framework, however there is no consistency to that grouping, with both 'people' and 'ISAAC' being in the non-aligned space. This would suggest that there is some ambiguity about the final solution. To take each component:

7.4.2 People – call centre agents

The positioning of 'people' in the transformation space reflects the non-alignment of the interests of Boots, and the employees of the Insurance Agents (Royal & Sun Alliance), who rigidly apply staffing levels that are consistent with the union agreements they have in place with their employees. Governance of call handling is considered excessive by BTC and staff turnover is high. Although there is some USDAW representation Boots is predominantly a non-unionised workforce, and an independent staff council represents the majority of employees and there is a 'clash' of culture and styles between the two organisations. However, RSA unions insist on what Boots consider to be a 'top-heavy'

management structure, and are prescriptive about ratios of call centre agents to supervisors.

Each new agent undergoes approximately three weeks of training in order for him or her to operate effectively. During week one they undergo a 'Freshman's course which is aimed at providing information on the basics of the Insurance industry, background the RSA, the Association of British Insurers (ABI) code of practice, and health and safety. Week two is an introduction to the BIS products they will be handling plus the opportunity to 'listen-in' on calls taken by experienced Agents so that they can be exposed to the appropriate techniques. In week three they will handle calls with the assistance of an experienced agent being on-hand to help should they have a problem.

7.4.3 ISAAC – Information technology

The ISAAC software is bespoke and is an adaptation of a Royal & Sun Alliance proprietary system and therefore occupies the 'legacy' space. BIS are wholly dependent on RSA to support this product and are heavily constrained by their capability (or lack of it), desire, and capacity to do the enhancements and changes required. Prioritisation of systems work is not easy when RSA have more 'value creating' activity to focus on.

7.4.4 Telephony and accommodation

Once again 'telephony' and 'accommodation' appear in the black-box space and have been consistent in doing so throughout all four cases. Agents sit at 'turrets' that receive the calls, and ceiling mounted electronic display units are positioned at strategic points around the call centre so that they are visible to all the Agents. The displays are constantly updated to show the incoming call traffic by client, the source of the call, either 'internal' i.e. transferred from another call centre or a normal customer call, the number of calls waiting, how long calls have been waiting, and the number of agents available to take the calls.

7.5 Summary

This case study describes the approach taken by the BIS team to establish an Insurance call centre process. The nature of this partnership venture is not only to satisfy the needs of both partners, but also to provide the peace of mind and security to customers that the Boots brand values brings to the Insurance market. As in the previous chapters the process, decision, and alignment logics are examined using the techniques described in detail in the earlier case studies. The actual choice of the BIS team was decision scheme 'D' i.e. PARTNER – PARTNER – BESPOKE approach. This decision reflects the desire of the Chief Executive for speed of implementation, which was to take priority over other considerations. As with all the previous cases telephony and accommodation components were considered commodities, so were the people once the mystique of the Insurance industry was understood. The limited choice of software and the need for speed of deployment led to the adoption of the partners' software, which in itself limited further future options. The non-alignment of BIS and the partner organisation on matters relating to governance of the call centre process reflects the different culture and approach of the two organisations.

The next chapter takes a collective and longitudinal view (5 years) of all four case studies.

CHAPTER EIGHT:

A LONGITUDINAL VIEW - THE NEXT FIVE YEARS

8.1 Introduction

In the previous chapters the individual case studies have been described in isolation with little or no reference to any other cases. This chapter attempts to put the cases in a single context, describe any temporal interconnectedness, and finally, using evidence of what actually happened, review the long-term development of each case over a five-year period. Figure 8.1 depicts the key events and milestones from the launch of the first call centre (Customer Service) in 1997, through subsequent launches of Loyalty Card (September 1997), and Mail Order and Insurance call centres (April 1998), and continues the story through to the end of 2001.

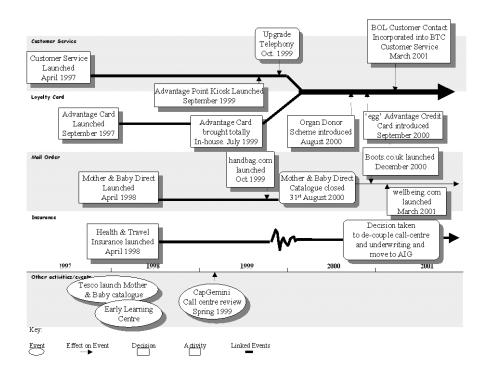


Figure: 8.1. Case study key events and milestones (After Langley & Traux 1994).

8.2 Customer Service

8.2.1 Introduction

Boots The Chemists Customer Service function has just entered its sixth year of operation and has recently expanded into new and diverse areas of service provision. Despite what was initially only a basic knowledge of how to operate a Customer Service call centre, with most of the experience being product related and largely tacit due to the absence of any formal mechanisms to capture and disseminate what was learned, the call centre has established itself as an effective and efficient operation. It has achieved its primary objectives of improving customer contact through better complaint handling, consistency of delivery, protecting and enhancing the Boots brand and reputation, and the provision of feedback to help improve sales and therefore profit.

8.2.2 Development of the call centre process (TEAMS) (PACKAGE) (IN-HOUSE) (YES)

The formation of a single Customer Service unit (TEAMS) has enforced the discipline of accurate and complete recording of calls, which can be converted into customer and product intelligence. Accurate metrics regarding the cost of operating the call centre along with detailed breakdowns of the costs of escalating complaints, responding to correspondence, and the associated cost and structure of telephony services has been established enabling accurate cost comparisons to be made with third party suppliers.

The decision to purchase a packaged customer contact software product (PACKAGE) was at the time universally accepted as being the most appropriate decision when set in the context of all the other activity required to establish a call centre. Customer 'Q' has been a stable and robust product, but increasingly this software is considered an inhibitor as the call centre develops into new areas of activity and a capability established. The inability to interface with existing legacy systems is also seen as an inhibitor, as the Call Centre Manager said, "If only we had betters systems we could be far more efficient".

A much better understanding has now been gained of the telephony elements of operating a call centre (IN-HOUSE) and the appreciation that these are largely commodities has been reinforced. A 'managed service' approach from a local cable company (Diamond Cable) was the preferred entry-level option. Alternatives from suppliers such as BT were initially found to be prohibitively expensive on a unit cost (per seat) basis, based on the number of operators currently engaged in the decentralised Customer Complaints functions within the individual Business Units, at that time approximately 15 - 25 people per function. However, in October 1999 Group Telecommunications (GT) purchased a 'Lucent Definity® ECS²⁵ Call Centre' system as a Group-wide asset. The growing trend in demand for call centre capability throughout the company is such that it will only become 'cheaper' to the Group over time, as once an investment has been made the equipment is there to be utilised. Sites around Nottingham are connected through a virtual private network (VPN) and Group companies are now recharged on a 'per-seat' and functionality basis. GT is effectively providing an internal 'managed service' to other Group companies.

Finally, the decision to use Boots own people (YES). Advisors are targeted to answer approximately 170 calls per day, which has been known to peak at around 250 calls per advisor a day. As the Call Centre Manager commented: "We don't want a 'battery hen' call centre, but when we are busy an advisor can experience almost continuous calls". Problem calls are passed to 'senior advisors' and customers appear to be reassured by the escalation and both the implied and real increase in experience and expertise that goes with the senior role.

²⁵ The DEFINITY® ECS Call Centre provides a powerful total solution for customers', sales and service needs. Building on the performance and flexibility of the DEFINITY ECS, you can select from a powerful assortment of features and capabilities, specially designed to enhance call centre operations. Features such as the patented Expected Wait Time and sophisticated routing algorithms make sure customers reach the appropriate destination and the agent best qualified to handle their call.

8.2.3 Support for new products and services

The Customer Service call centre has been actively involved in Boots' expansion into healthcare services (Dentistry, Health & Beauty Centres, and Pure Beauty), by being the main customer contact centre for these burgeoning businesses. Acting as the pre-launch contact centre, with a widely publicised telephone number on promotional literature and advertising hoardings, calls are received for new stores, dental practices and health centres before they open, in some cases being able to take bookings for treatment so that the new location can get off to a flying start. The Customer Service call centre is also the point of escalation for these new services along with 'Wellbeing.com', 'Hearingcare', 'LASIK', 'handbag.com', and more recently Health & Travel Insurance. Boots Opticians Limited (BOL) had traditionally operated its own Customer Service call centre, but as the following announcement (which appeared on the Boots Communications website) demonstrates, the bringing together of the BOL and BTC Customer Service call centres have joined forces:

5th March 2001

BOOTS OPTICIANS CUSTOMER CONTACT INCORPORATED INTO BTC CUSTOMER SERVICE

As a move towards a new Boots UK and Ireland structure is announced Boots Customer Service department will handle Boots Opticians Limited (BOL) customer contacts as well as those for BTC. This will mean an additional 7,000 customer contacts will be handled by the multi-skilled team in BTC Customer Services. This has been made possible by an investment in customer contact software and state of the art telephony.

Graham Hardy, Boots The Chemists Customer Service Manager Katy Sewell, Boots Opticians Customer Service Manager.

8.2.4 Customer Relationship Management (CRM) trial

The Customer Service call centre participated in a CRM trial by receiving all calls from one local large BTC store (Mansfield), which also incorporated a BOL implant. The trial was considered a great success with all calls being answered by the call centre in a professional and consistent way, enabling the store to concentrate on serving customers. A small number of calls were difficult to answer without reference to the store, for

example the customer who had left her shopping in the store and was describing its location, over the phone, as she thought she was talking directly to store staff. As the trial was conducted without the necessary IT systems support then appointment booking for BOL patients was unsophisticated relying on fax copies of paper diary sheets being shared between the store and call centre, however it proved the concept could work if adequately supported. The success of the initial trial encouraged an extended trial incorporating a mix of four quite different and geographically spread stores (Leicester, Woking, Ripley, and West Bridgeford), which mirrored the results from the original exercise.

While successful, any move to support c1500 stores in this way would required significant investment in information technology within the call centre, the appropriate telephony to be in place in all stores to enable call forwarding to the appropriate advisor, and a significant increase in call centre staff which would fundamentally change the nature of the call centre and the type of work it conducts. Further trials are planned.

8.3 Loyalty Card - Boots Advantage Card

8.3.1 Introduction

Such was the success and subsequent take-up of the Advantage Card (with applications running at 40,000 per day) it attracted five million users in its first sixteen weeks, and the associated card administration was also growing rapidly as: "more cardholders means more calls". Monthly Call Centre costs quickly reached six figures. This massively exceeded the budget, drawing attention to the Call Centre and it's operation. This prompted a number of reviews and close scrutiny of the arrangements with AT&T as it transpired that service level statistics were being 'massaged', the staffing levels previously agreed were not being honoured, and the service arrangements were inadequate. This coincided with the change in appointment of the Boots Director of Customer Services,

who was both very receptive and supportive of the proposals to bring the call centre inhouse as part of the existing Customer Services call centre capability.

8.3.2 Developing the call centre process (OUTSOURCE)(YES)(OUTSOURCE)

(BESPOKE)

The growing unease at the existing arrangements prompted a review of the outsourced call centre (OUTSOURCE), and the third-party administration of the loyalty scheme (OUTSOURCE), which coincided with an external consultancy review of call centre operations. The objectives, findings, and recommendations were as follows:

Spring 1999. CALL CENTRE STRATEGY STUDY - EXTRACT FROM THE EXECUTIVE SUMMARY Objectives: $f \Box$ Develop a consensus of opinion across BTC stakeholders on key call centre issues and priorities, $oldsymbol{\square}$ Understand the impact of future IT and systems requirements, and $oldsymbol{\square}$ Compare costs and benefits of three alternative models for implementation. The key findings of the review were: fluor That there were good foundations and base of expertise for bringing future call centres in-house $f \square$ Short contracts with outsourced companies allow flexibility - quick to set-up future services, $f \square$ Potential for breakdown in delivery of the 'Boots Experience' (through fragmented service offers) $oldsymbol{\square}$ Threat of escalating costs (due to potential for diminishing control of outsourced activities) $f \square$ No definitive single view of any individual customer of customer transactions. The recommendations were: $f \square$ Bring Advantage Card call centre activities in-house (establishing a consolidated Customer Service group), lacksquare Focus on developing consistency of customer service, ☐ Establish consolidated skill groups for 'Sales', 'Professional' help lines and 'Customer Services'. (Source: Call Centre Strategy Study - Executive Summary. Cap Gemini UK

Exiting the contractual arrangements with AT&T was not easy but close scrutiny of the contract revealed that a staged withdrawal was possible over a nine-month period, with store only calls coming in-house from November 1998, third party and a small percentage of store calls in house from early 1999, and all calls totally in-house by July 1999. This was possible by firstly transferring the calls from stores to the centre while the appropriate people and skills were put in place. The Advantage Card Programme Manager commented:

"There was a desire amongst Customer Service to take it on, and a recognition that the quality of call management was not at the level we would have liked it to be in external call centres. There was this tension between improving the quality of the call management but you pay a premium. For example, to answer every call within three rings will equate to additional staff. So we took a 'fit for purpose' approach, the majority of the calls weren't customer relationship threatening and so we went for the middle of the road response time in order to manage the cost".

"Customer Service agreed to take it on and could show clearly that they were going to be cheaper, clearly there was no third party margin involved. And the Marketing perspective of getting a better level of service for every pound you spend drove us to say we would do it internally, and it was just a matter of managing the terms of the contract".

The decision to use smart card functionality (YES) has not really leveraged the benefit as anticipated as new developments have been slower to materialise than originally predicted. In August 2000 Boots launched the Advantage Card Organ Donor Scheme a joint initiative with the Department of Health. This initiative, the first of it's kind in the

UK, allows new and existing card holders to join the NHS Organ Donor Register and carry the NHS Organ Donor symbol on their Advantage Card rather than having to carry a separate Donor card. The partnership with the NHS fits very strongly with Boots healthcare heritage and aims to build stronger relationships with customers and strengthen loyalty to the Advantage Card. By February 2001, 120,000 cardholders had joined the Organ Donor Register through the Advantage Card initiative. Cardholders can now join the Organ Donor Register through the Advantage Point²⁶. This is the first initiative of its kind and removes the need for paper based application forms as customer details are automatically sent to the NHS for inclusion on the register. From September 2000 the Advantage Card evolved into a "loyalty credit card". This hybrid card functions like a normal Visa card and is administered by Egg, the banking offshoot of Prudential. Those cardholders that join the scheme accrue one loyalty point for every pound spent on the card, or five points per pound if the purchase is at Boots. APACS (The Association for Payment Clearing Services)²⁷ required that any new issue credit/debit card must now be a smart card (i.e. contain a memory chip), which forms part of the new banking standards.

Both CDAS and LSOS (BESPOKE) continue to be the main operational and analytical software systems to support the Advantage loyalty card. Richard Caines of Mintel cited an example from Boots of how to use the customer data (CDAS) as a useful planning tool:

.

²⁶ Advantage Point kiosks were launched into Boots the Chemists stores in September 1999 as part of a £14 million investment. BTC has the largest retail kiosk network in the world, which offers real-time personalised promotions. A proportion of the offer is personalised, based on the shopping habits from the customers purchasing history. All offers are either money off or extra points. Boots has 1368 Advantage Points in 382 stores. Their location covers 75% of BTC transactions. 90% of all Advantage Card customers can visit an Advantage Point store within a 20-minute drive time.

²⁷ APACS (The Association for Payment Clearing Services) was set up in 1985 as a non-statutory Association of major banks and building societies and has become the umbrella body at the heart of the UK payments industry. APACS provides the forum for banks and building societies to discuss non-competitive issues relating to money transmission).

11th May 2000

"If a supermarket operates a loyalty scheme just to give away points, it's not good value. The value is in the data generated on shoppers' habits. If they use it for planning, then it's very useful".

"They [Boots] analysed shopping patterns among its loyalty cardholders, it found a link between the purchase of baby products and photographic goods - when you have a baby, goes the logic, you want to send pictures to grandparents. The store now puts its camera films close to its nappies".

Source: Richard Caines of Mintel. The Guardian Newspaper 11^{th} May 2000.

As Boots becomes more involved in CRM activity there is pressure to develop LSOS (by adding functionality) to be the core of a CRM application, and concern has grown to such an extent that a strategically important system such as LSOS is administered by a third-party, that arrangements are in place to bring it in-house. This new arrangement (IN-HOUSE – YES – INTERNAL – BESPOKE) is the decision scheme labelled 'J' in the earlier analysis. The promise of cost effective administration was not realised, and greater flexibility of scheme 'S' not tested.

8.3.3 The amalgamation of Customer Service and Loyalty Card call centres

Although initially operated as two separate call centres, albeit operating in adjacent areas, the newly combined Customer Service and Loyalty Card call centre now handles approximately 20,000 customer contacts per week, comprising telephone calls (85%), correspondence (13%), and emails (2%). Advantage Card scheme maintenance accounts for 54% of contacts, enquiries 25%, customer complaints 17%, support for stores colleagues 3%, and compliments 1%. Although Customer Service is still viewed as a *cost* rather than *profit* centre, people are valuing the work that is done by the department and are beginning to recognise the value adding activity of the gathering data cycle within the business, and the contribution it forces from suppliers. There is a cost advantage to Boots of operating this call centre in-house as the margin added on when a third party is involved is avoided. Phil Douty, the Advantage Card Programme Manager commented:

"It was predicated by a belief that we should simply do it, and should not have a myriad of call centres supporting BTC businesses. Risk of them exploding all over the place, there was the Asthma help-line, Advantage Card, Customer Services etc.. Sheila Patterson (Customer Service Director) was inclined to amalgamate them all anyway, and her reasons were that she could guarantee a more standardised level of service, efficiencies and so forth, and the investment she wanted to put into the Boots 'start-up' call centre by putting more pieces of business its way, and to leverage the technology base with new screens etc.".

The combined call centre now employs approximately ninety advisors (which peaks at one hundred during Christmas), who are arranged in five multi-skilled teams, and a dedicated escalations team, which now combine telephone, letter and email work. This is a change from the original postal/telephone arrangements. Skills' based routing²⁸ is used to automatically route specific calls to advisors with the appropriate skills to answer that complaint or enquiry. This enables the Customer Services team to supplement the Advantage card team at peak or difficult times; it helps in the development of Advantage Card advisors in their move to handle the generally more complex calls associated with Customer Services. It gives Advisors variety and develops their general business knowhow, which will make them more valuable to the business and gives them an opportunity to develop their career in other parts of the BTC organisation. This investment in people has clearly paid off, as the area now experiences lower than average absence and attrition levels, vacancies are quickly filled, and the role of 'Customer Service Advisor' is seen as a role to which others aspire. Key performance indicators for the department reflect this approach and in addition to the traditional measures for call handling statistics also

²⁸ Skills' based routing is a facility that enables inbound calls to be routed to an advisor with the appropriate skills. For example, simple name and address changes requiring basic telephone and systems know-how can be routed to a junior member of staff. More complex customer service enquiries or complaints can be routed to more experienced advisors.

include metrics on internal and external promotions, and the number of days training received.

Working in conjunction with the Advantage Card team, Advantage Card points are now being given in lieu of customer payments (i.e. cash compensation for poor service or products). Utilising the 'pending points' facility, Customer Service advisors can credit a customer's Advantage Card account, which is automatically credited with the points at their next visit to an in-store Advantage Card kiosk. This reduces the cost of administration, achieves footfall in store, and encourages the use of the kiosks while at the same time promoting the loyalty scheme.

8.4 Mother & Baby Direct - Mail Order

8.4.1 Introduction

From its launch in April 1998, the Mother and Baby Direct team went on to produce a further five catalogues, the last being produced mid year 2000, which was stretched out to the end of the year in the run up to the Christmas trading period. Despite being well received by its customers, (they were offered extended inventory that you couldn't get in a Boots store, Advantage Card points, deliveries to their home and price matching) the business was continually under review as it enjoyed below average margins on many of the lines, loss leaders on high volume lines such as nappies, and the cost of acquiring customers (marketing and mailing lists) remained expensive.

8.4.2 Developing the call centre process (MODULAR) (BESPOKE) (NO) (YES)

The general (MODULAR) approach towards this mail order venture can be characterised by the phrase "this is just another way to sell products". This attitude prevailed; even down to the way catalogues were produced, and a lack of appreciation of the interconnectedness of the components of the process. Despite the proliferation of consultants engaged in projects within the company at that time, Boots kept to a minimum

the external assistance on this project as they weren't prepared to pay for mail order consultants to understand the business of selling products. This led to poor decisions surrounding issues with Trading Standards e.g. that catalogue prices for items could differ from those sold in Boots stores (they subsequently convinced Trading Standards that this is not an issue), and the volatility of lines could be different (and changed frequently) during the six-month cycle of a catalogue. Boots The Chemists is also a prestige brand and most suppliers are extremely keen to include Boots on their lists of clients, which can lead to suppliers over promising and under delivering, as was the case with Salestrac on this occasion.

The decision not to utilise the in-house call centre (NO), was justified by Mother & Baby Direct customers. Regular positive feedback confirmed that they were happy with the outsourced call centre. Service levels agreements were in operation for answering calls whereby 80% of calls should be answered within 15 seconds, with no more than 3% of calls lost (i.e. hanging-up before being answered). However, it required rigorous governance to ensure the operators had comprehensive product knowledge, and that the service was provided in keeping with the Boots ethos. A member of staff from the local Exeter Boots store was permanently located within Salestrac to be the "eyes and ears on the ground". Gail Laxton (Call Centre Project Manager) commented:

"One thing we have absolutely learned about outsourcing a call centre is, if money is an object, and service is an object, then you need so much more control than you would probably need if you are just doing a short-term campaign",

There was a need to closely manage the third-party call centre. A tariff had been agreed for each of the services provided such as receiving an 'inbound' call; making an 'outbound' call; handling correspondence or fax transmissions; BTC is charged accordingly. There were examples where this has been abused with additional outbound calls being

engineered in situations when ad-hoc enquiries were made of the warehouse (outbound call), and then a return call to the customer (a further outbound call). Correspondence could also be generated requiring additional handling thus incurring additional charges. In this way the placing of a single order might have generated a number of additional chargeable activities, which is clearly beneficial to Salestrac, but not to BTC.

Meanwhile, Salestrac had been acquired by Cordena Call Management (Europe), who had subsequently been acquired by Client Logic, a privately held company, majority owned by Onex Corporation of Toronto, Canada. Although some of the original Salestrac management team were still involved with the company, the initial move to Cordena was threatening the relationship, and increased charges for the dedicated team that operated the MABD account were being actively pursued. However, this was short lived and the new management team from Client Logic brought a completely fresh approach to the way of doing business that was in the end to prove beneficial to both parties.

Salestrac used the 'Mailbrain' system, which was extensively modified to accommodate the requirements of MABD (BESPOKE). Such was the scale of the changes demanded by Boots that it has become impossible to migrate to the later fully supported versions of the Mailbrain system, which in itself became a limiting factor.

Internal organisation changes within the Marketing function saw the Mother & Baby Direct team move from being a stand-alone function within the Healthcare Business Unit to join forces with the Customer Development team. Meanwhile an e-commerce module was being developed for the Boots.co.uk website which was launched in December 2000, once again in time to capitalise on the Christmas trade. The website offered 1500 lines yet without the significant production costs of a catalogue, but having the flexibility to quickly make changes as the market demanded. Mother & Baby Direct was kept 'ticking-over' due to the latent demand while building 'www.boots.co.uk'. The warehouse at

Acton Road (YES), and Call Centre (Salestrac) previously used by Mother & Baby Direct were still needed to fulfil orders for the Internet operation. Orders via 'www.boots.co.uk' were emailed to Salestrac who took the payment using the 'Mailbrain' system, processed it via typing-in the order rather than receiving it as a telephone input, then sent the output to the warehouse for processing in much the same way as before. MABD officially closed for business on 31st August 2000.

4 July 2000

BOOTS MOTHER AND BABY DIRECT CATALOGUE CLOSES

The Boots Mother & Baby Direct Catalogue is closing on 31st August. The service has closed as we can no longer deliver the level of service required through the catalogue and see the internet as the best route to develop the Boots Direct services.

The Boots Direct service will continue through the online shop at www.boots.co.uk where additional health and beauty products may also be bought. Further announcements regarding the development of the Boots Internet site will follow shortly.

Boots Internet Ventures

The core Boots dedicated team was reduced in numbers towards the end. They had come to consider themselves as employees of Boots; staff discounts being the only Boots employment perk they didn't receive. The team liked dealing with Boots customers as they generally received less abuse and foul language from their customers than they did from other accounts. As call numbers reduced, the general customer service calls were redirected to the Customer Service call centre in head office, and any product related calls (then numbering only two or three per week) were directed to product managers.

8.4.3 The emergence of new e-commerce channels

The last quarter of 2000 saw the announcement of the Wellbeing.com initiative with Granada Media, and the focus of any new activity moved away from the Boots.co.uk site to the Wellbeing.com site. The following announcement was released on 12th October 2000:

12 October 2000

BOOTS AND GRANADA MEDIA TO LAUNCH HELTH AND BEAUTY INTERNET BROADBAND BUSINESS

The Boots Company PLC ("Boots") and Granada Media ("Granada Media") today announce the formation of a new, independent Internet and broadband company designed to be Britain's leading e-business for health, beauty and well-being.

Health and beauty are two of the worlds largest growth markets. In the UK alone, and excluding the National Health Service, sales of health and beauty products and services amount to £11 billion a year.

The new company will combine the complementary strengths of Boots and Granada Media to provide an exceptional range of health and beauty products and services, together with information and advice from leading experts. It will also provide an interactive forum for individuals to exchange personal experience and consult the experts online and on air by phone.

By creating the new media leader in consumer health and beauty in the UK, with 10,000 products available from day one, the company intends to become the natural platform for all those with an interest in well-being, including professional associations, government bodies, commercial organisations and interest groups.

2000 The Boots Company PLC. All rights reserved.

The combined TV and website had approximately 10,000 lines and was designed to be easy for customers to understand and operate, although it was still recognised that customers like to be able to contact you directly. By this time Cordena had been taken over by Client Logic, who successfully built on the existing partnership with Boots to offer a totally new service from a call centre newly established in Dublin, Ireland. Working in conjunction with several partners (Manhattan Associates for the warehousing and logistics, SAP for systems, Client Logic for call centre and email), Wellbeing.com was launched in March 2001. An overriding objective was to keep the new infrastructure as 'vanilla' as possible. As Richard Holmes the Managing Director, Boots Internet Ventures said:

"If we have to change a little bit to accommodate some quirks of SAP then question whether that is easier, or is it spending £200,000 to develop, configure or modify a system that then means we have to spend

half as much again every time we have another patch or another upgrade that gets offered to us almost for free, but we end up paying hundreds of thousands of pounds to configure it because of the mess we have made of standard systems".

8.5 Insurance – Health & Travel Insurance

8.5.1 Introduction

In April 1998 BIS entered a three-year agreement with RSA to provide health & travel insurance underwriting, as well as the call centre and administrative support required for their new venture. BIS valued RSA's experience, expertise and understanding of the insurance administration and underwriting markets, and the travel business grew quickly outstripping the most optimistic predictions, and a positive relationship developed between the two companies. Three years on, at the renewal of the contract, BIS entered into a new arrangement with AIG (Europe), a change largely transparent to their customers, and business continues to flourish. BIS now enjoy market leadership in its travel sector and are steadily developing its health insurance market.

8.5.2 Developing the call centre process (PARTNER) (PARTNER) (BESPOKE)

BIS's decision to outsource the call centre (PARTNER), and the administration (PARTNER), to RSA was influenced heavily by speed to market considerations. Upon entering RSA's Corporate Partnership Division call centre at Bristol, it's not easy to forget that this is a tele-sales environment. The top three performing agents names are emblazoned on a flip chart entitled 'Crazy Conversions', which is a fortnightly incentive scheme encouraging agents to exceed the target of 55% of calls converted into sales, of which 18% should be sales of the annual travel product. The rewards, a selection of digital cameras or portable CD players, are displayed to encourage performance. The

walls carry slogans such as " If you don't ask the question you can't sell the product". These initiatives are sponsored by RSA although BTC have sponsored some team initiatives resulting in a 'murder mystery' weekend at a local hotel. Some incentives are team based (shifts), which encourages a healthy inter-team rivalry. The amount the agent can directly influence a sale is limited principally to the telephone manner they adopt, and ensuring that they ask the right questions. For example, "are you travelling again?" is a direct lead into converting the customer to an annual travel product. Motivational games are used to break the routine monotony and quick 'buzz' sessions convened to fire-up the agents.

The use of an extensively modified in-house systems ISAAC (BESPOKE) had been a pragmatic decision based on speed of deployment, however there was an increasing frustration from BIS that they were disadvantaged by being locked in to a legacy system, with limited ability to change and develop functionality to suit the business need.

Following a first year interim review BIS expressed a desire to review two key areas over time: (i) the systems disadvantage, i.e. that it should not be locked-in to legacy systems, and (ii) BIS has a non-unionised workforce, however RSA unions insist on, in the opinion of BIS, a 'top-heavy' supervisory and management structure. The then Operations Manager expressed a view that "If we were doing this again today we would build our own call centre".

Qualitative and quantitative data is collected on call handling, call monitoring via questionnaires with customers, through stores, claims, and through telesales. The service levels in place are reviewed every three months and include specific targets for things such as response times 85/15 (85% of the calls answered in under 15 seconds), which has now been revised to 90/10, (90% of the calls in under 10 seconds). An agreement also exists where Boots could install a Call Centre Manager if necessary.

8.5.3 Analysis of the costs

BIS operate an 'open book' accounting approach with RSA so each party understands the cost dynamics of the operation. Despite having a healthy relationship between the two companies the regular reviews highlighted a significant issue that was to change dramatically the arrangements. When analysed closely it became clear that, at a cost of around £12 per insurance sale, RSA were losing money on the processing of each policy. Traditionally the systems and procedures in place were based around motor and household business, typically returning premiums of at least £300 per policy, which was more than adequate to cover the £12 administration charge. However, with travel premiums typically around £40 the £12 fee couldn't be sustained. This prompted a joint examination of the relationship and provided the opportunity to look for call centre alternatives. Although there were no issues with claims or loss ratios this also prompted a re-examination of the major insurance underwriters at that time. What also emerged was the existence of third-party administrators (TPA's), who position themselves as intermediaries by providing administrative support, typically call centre based and the associated mechanisms to support that, between a travel insurance underwriter and the company providing the brand, in this case Boots Insurance Services. The emergence of the TPA's (at that time only two major TPA's in the UK were separate from an insurance company), heightened the desire to de-couple the call centre activity from the underwriting, the direct opposite of the original decision taken some three years earlier to consider them as being closely-coupled. This de-coupling was now considered beneficial, and acceptable, as it increases flexibility to change underwriters independently of the call centre providers.

The outcome from this review was to move to AIG (Europe) for travel insurance underwriting, and Inter Group Insurance Services²⁹ (IGIS) for TPA services.

2 April 2001

HEALTH & TRAVEL INSURANCE

From 2^{nd} April 2001 Boots Travel Insurance will begin working with one of the largest insurance companies in the world, AIG Europe (UK) Limited³⁰.

(Source: BTC Internal Intranet site - 2nd April 2001).

The result was a significantly reduced administration fee of each policy sale to a third of that charged by RSA. It prompted RSA to consider the services of a TPA for its own travel insurance processing, and to consider a strategic decision not to enter arrangements of the type it had with Boots in the travel insurance market. Of course engaging a TPA would have been impossible three years earlier as they didn't exist. Typically starting as travel insurance providers these niche players have developed through their role as travel insurance providers to the trade. Leveraging technology, telephony and insurance knowhow, they used capabilities to become cost effective intermediaries.

The restructuring didn't stop here for BIS, as this new approach also facilitated the use of a portfolio of underwriters to support a range of product types. For example, they used Marsh McLellan for Dental insurance, Westfield for health and cash plan, each using different TPA's. The BIS Operations Manager said:

_

²⁹ Inter Group Insurance Services (IGIS), based at its purpose developed head office premises in Alton Hampshire, assist group clients with travel fulfilment and claims handling. Inter Group Insurance Services Limited and its subsidiary and partner companies now provides travel, Pet and Household insurance services to over 3,000,000 individuals every year. The group will handle around 10,000 medical evacuation and assistance cases in 2001, along with over 100,000 insurance claims.

³⁰ AIG Europe (UK) Limited is a member company of American International Group, Inc. (AIG), the leading international insurance organisation. AIG member companies provide leisure and business travel insurance in over 40 countries world-wide. The UK operation was established in 1953.

"The business model of using third parties but branding it as Boots is a really efficient way to operate as a division, it enables moving in to new products with the same business model".

The BIS team when reviewing the recent changes, as follows, expressed that they are now more relaxed about changing underwriters as they now have the experience of having been through it. It helped that AIG and IGIS had worked together previously, resulting in AIG allowing IGIS to settle claims directly (thus improving the customer service to Boots customers) in the event of a claim. There was however some initially apprehension when IGIS were taken over by Churchill Insurance. IGIS provided a Windows based system (developed in-house) as well as an Internet site for on-line business, which now accounts for 4% of all policy sales.

8.6 Summary

In contrast to the earlier chapters that focussed on an individual case this chapter puts the four cases in a single context, describes the temporal interconnectedness, and explains their long-term development over a five-year period (1997 – 2002). For each decision, the call centre requirement showed some unique features. But the subsequent developments show that in fact many of the call centre functions could be handled in a similar way. At the time of the decision recent history, organisational imperatives and external market supply factors dominated the decision made. In time the functional requirements and basic economics work their way through. Governance of third party organisations proved to be more difficult than originally expected, and opinions of actors can change over time. Interestingly functions initially outsourced were later brought in-house. For many other company functions the movement has been in the other direction.

CHAPTER NINE:

CASE STUDY ANALYSIS

9.1 Introduction

In chapters 4 to 7 the emphasis was on within-case analysis by developing detailed descriptions of what had been observed in each case using the framework of the three logics. Chapter 8 put the cases in a single context and reviewed the development of each case over a five-year period. The purpose of this chapter is to analyse in detail the findings from each of the four case studies both individually and collectively using crosscase analysis. To do this the chapter is split into four sections: Firstly, the process logic is examined to understand what the processes are actually about, their individual characteristics, and how similar (i.e. common) is each to the other processes under review. The second section examines the decision logic i.e. what decisions were considered and how they were made. It uses the tools and techniques of the SCA approach to do that, namely decision areas, options, decision schemes, comparison areas, and uncertainty. The third section examines the alignment logic, i.e. alignment and nonalignment of the actors in the network with the aid of three concepts from actor network theory: inscription, translation, and irreversibility. It uses the inscription/specialisation analysis framework to help understand these concepts as seen in the four case studies. Finally, the concluding section discusses the 'patterns of activity' identified and the integration of the three logics using a conceptual model of commodity business process adoption.

9.2 Process logic

9.2.1 Introduction

The purpose of this first section is to understand the process logic, which for the purpose of this research, concentrates primarily on the characteristics of the call centre process. In

addition to determining whether the processes are similar (i.e. common) to the other processes under review, it also examines some of the related non-process characteristics that influence the eventual make up of a process. In the original research design it was envisaged that 'structure', as one of the business process characteristics, would form a subunit of analysis to enhance the insight into the cases. In practice, the analysis has been conducted at a level below that at which structural issues emerge, therefore no structural analysis has been included. Activity Records of the four cases are used to help with the comparisons.

9.2.2 The language used to describe business processes

Keen & Knapp (1996) maintain that there is no established body of common language about business processes as a whole; however despite this the language used to describe processes is important. For example, the 'call centre' process as researched in this thesis has quite reasonably been described as:

- ☐ A 'complaint handling' process in the Customer Service case,
- ☐ An 'account servicing' process in the Loyalty Card case, and
- ☐ An 'order taking' process in the Mail Order and Insurance cases.

All three examples above are principally the same, and the components of the process are similar. However, those concerned with the 'workflow' or 'industrial engineering' school would find a description that describes the inputs and outputs of the process more informative (i.e. complaint handling or taking an order), whereas the 'work coordination' school would prefer a more generic descriptor (call centre). Pentland (1994) describes the development of a grammatical model of organisational processes that consists of a lexicon of basic elements and rules or constraints for combining them (Malone et al 1993). He uses an example from Salancik and Leblebici (1998): a simple grammatical model for a restaurant might be 'order, cook, serve, eat, pay', or 'cook, order, pay, serve, and eat' if a fast food restaurant. A simple description would fit this analysis also, as the call centre process could (and was in earlier chapters) be described as 'receive the

inbound calls, identify customer & information, handle the complaint/enquiry/order, initiate other processes, close the call'. Halē (1995) would describe the generic or horizontal process as the 'call centre' process, whereas the departmental or functional process (vertical) would be described as the order taking, complaint handling, or loyalty card administration. However this process view of organisations is not fully realised, and Stanton (1999) describes as 'cognitive dissonance' the integrated processes yet fragmented organisations pulling in different directions. It is clear that the terminology is confusing and a lack of clarity surrounding process descriptions does add to the confusion when trying to establish the nature of a process, its content, and purpose. In this research the approach taken has been wherever possible to describe the generic (or horizontal) process, i.e. 'call centre'.

9.2.3 The similarity of the processes under review

What is immediately noticeable with the processes as depicted in Figure 9.1 is the similarity of the tasks and activities that make up that process. At the highest level of detail then each process comprises five activities: (i) Receive inbound calls, (ii) Identify customer and information, (iii) the process specific activity be it handle a complaint, service the account, or take an order, (iv) Initiate other processes, and (v) close the call. At a lower level of detail the sub-activities are again similar, i.e. questions are asked of the caller and their responses recorded, or linked processes such as documentation (invoices or shipping details) are initiated. It is only at the lowest level of detail that the dialogue or questions might appear to be different; the links to systems that are specific to that process, for example the links to the Loyalty Scheme Operating System (LSOS), or Underwriting System (ISSAC), and the linked processes could be quite diverse, for example to a logistics system or gift vouchers catalogue. The question therefore is, do the specific activities and tasks justify different approaches for the whole, which is common? Davenport (2000) asks this question of systems and processes when considering the role of ERP's in an organisation. He makes the distinction between small single business

organisations where there is really no decision to be made, suggesting that systems and processes covered by the system should be the same wherever they appear within that business.

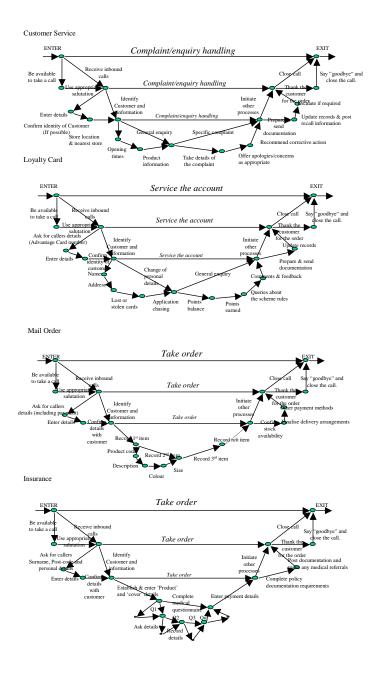


Figure 9.1: Activity record composite

However, in larger more complex or multi-business organisations the problem is more acute. This is particularly true for global organisations where products, customers,

regulations and taxation can vary widely in different parts of the business and different countries. In the four case studies researched there isn't a global dimension but four quite different business areas are covered. We have already seen that, depending on your frame of reference, the process under review could be considered to be 'order taking', 'complaint handling', or even 'account servicing'. With such diversity of views on a single business process it is not hard to see why the final solution can turn out to be so different in each case. If the tasks and activities that are actually conducted within the call centre were the only consideration, then in this particular process it might be possible to do it in a common way. However, in addition to the activity within the process there are other characteristics of a process, ranging from how the 'Boots culture' may differ from case to case, through to the nature of any 'investment specificity' of the process, or the impact of history (administrative heritage), timing, individuals, their knowledge and competence in that particular part of the business. In order to understand this further there follows a series of issues that bear on the question of whether the processes can be treated as similar or not. The issues are grouped into four categories: (i) information and knowledge, (ii) cultural differences, (iii) administrative inheritance (where we are now), and (iv) agents, governance and commoditisation.

9.2.3.1Information and knowledge

9.2.3.1.1 How closely coupled is the process with other processes?

Clearly the more closely coupled a process is to any other process then the more likely that information and data is exchanged between the two. Dependencies between processes can be critical, for example in the mail order case the interdependency of the call centre, supply chain, and a third party delivery courier was key, in contrast to the loyalty card case where although links to other processes exist (card fulfilment) the association is loosely-coupled and easily managed. Teng et al (1994) argue that these degrees of mediation (inputs and outputs) can be reduced, and collaboration (information exchange) can be increased, by the appropriate use of information technology. In the case of call

centres as described earlier, the customer is demanding more closely coupled processes, as the call centre manager in the Customer Service case commented:

"Initially just getting the job done was good enough and links with other processes were ignored, today customers expect more. Customers expect to do several transactions while, in their perception, on the phone to Boots".

Kock et al (1997) determined that there is a correlation between data, information and knowledge exchanges within business processes. From their research they conclude that there exists an information exchange threshold above which knowledge is likely to be transferred as well. A process that has a low information exchange threshold (i.e. a high proportion of knowledge is exchanged) might indicate training needs, or an opportunity for method improvements or re-engineering. A low information threshold is unlikely to be consistent with a 'commodity' process, or those that require minimalist involvement. However, a high information threshold would be supportive of a commodity i.e. lots of data but little knowledge is passed. In all four cases, although varying in each case, the thresholds of information is high (i.e. a low proportion of knowledge is exchanged between functions engaged in the processes).

9.2.3.1.2 Attainment of the call centre capability

It might sometimes be obvious when an organisation has attained a capability in a particular process, but how does an organisation recognise when it has attained that capability, is there a formal announcement or a public celebration? Depending on the particular capability, a firm might have to go through a long and difficult learning process in order to acquire that capability. Where this exists (and there is no way to avoid it), it is said to be path dependent (Barney 1999). The combined Advantage Card/Customer Services call centre is, by any analysis (i.e. people involved, know-how, technology deployed, structure, or calls handled), a fully operational and functional call centre. However, during the interviews the Customer Services Manager commented: "Now that

we own the technology we can now handle calls as efficiently as a 'proper' call centre". This Freudian slip does perhaps reveal how the organisation actually perceives this facility, as somehow not being 'proper' when compared with that of third parties. Is this a reflection of the general alignment of actors towards the Customer Service call centre? Do they think that just because it is internal it can't be effective and efficient? Even the most passionate supporter of the centre (the Customer Services Manager) was 'conditioned' to think that it was, in some way, sub optimal:

"The Advantage Card call centre is perceived as being small, which it is in commercial call centre terms, but the value and impact of it is important".

When it is not clear what actions an organisation should take to create a capability it can be described as 'Causal ambiguity'. Barney (1999) suggests that this causal ambiguity is likely to exist where the capabilities are "taken for granted, unspoken, and tacit attributes of a firm". In making an asset specific investment by purchasing the Lucent telephony equipment, Group Telecommunications had 'taken for granted' that the call centre capability had been achieved, or was at least achievable, yet they had no real clarity about this when entering into the transaction.

9.2.3.1.3 Know-how

Know-how spans both the process and decision logic but will be discussed here. Consider the different types of know-how in these cases: (i) the know-how of the process under investigation (in this case call centres), (ii) know-how of the industry/channel type e.g. mail order, insurance, loyalty schemes, and (iii) know-how of adopting processes (relevant particularly to decision logic).

Know-how of the process (call centres) in each case is similar. The telephony know-how was easily available in-house, and advice was sought from Group Telecommunications at different points in the process depending on the project. Customer Service being the first

initiative involved Group Telecommunications (GT) from the outset. Loyalty Card was heavily influenced by the third party organisations involved in the trials (AT&T) that already have knowledge of call centres, and might not have known of the existing internal call centre capability. GT were not approached with regard to the telephony arrangements until the decision to outsource had already been taken. For Mother & Baby Direct, the approach was very much "we want to do it this way, is there a problem?" This was partly because they had learnt a little about call centres, and partly because they didn't believe that they needed advice. Know-how of the industry/channel is specific to each case. Typically the knowledge (know-how) transfer was good in technical areas between GT and Information Systems as they had some continuity across the projects such as telephony and systems integration. Some people were involved in all the different initiatives. However, knowledge transfer was poor in the business areas such Marketing.

"Before a customer can buy a new product first they must learn about it" (Doyle 1994). Know-how of adopting processes is similar to the know-how required by a customer buying a new product; they need to learn about it. Building on the earlier work of Rogers (1962), Doyle describes the 'adoption process' as comprising five stages: Awareness, Interest, Evaluation, Trial, and Adoption.

- ☐ Awareness: Awareness has to be created for the product,
- ☐ *Interest*: Adopters need to be encouraged to find out more about the product or service,
- □ *Evaluation*: Decisions are made as the whether the product or service will meet the particular needs. Opinion formers are important at this stage,
- ☐ *Trial*: Trials are conducted and a decision to adopt (or not) is made, and finally
- □ *Adoption*: Regular use is made of the product.

In the Insurance case elements of this adoption cycle can be observed as the BIS staff became more *aware* of the capabilities of third party organisations, had the opportunity to evaluate and trial this approach during the initial contract with RSA, they were ready to embrace (i.e. adopt) that method when prompted by a contract renewal.

9.2.3.2 Cultural difference between 'retail' and 'financial services'

The Boots brand values and the customers' 'trust' in that brand is engrained in everything the organisation does, which extends beyond how it sells its products and services. Although difficult to describe or capture, there is most definitely a 'Boots way of doing things' which is liberally applied in its processes and procedures. This 'Boots way' is accompanied by an arrogance of 'knowing best', which is brought into sharp contrast when its processes or procedures come into contact with those of other organisations, "If you want a job done properly, then do it yourself" (Sappington 1991). A quite noticeable cultural difference was observable between the financial services call centre agents and BTC store staff. The call centre staff that only ever deal with customers 'remotely' find it difficult to understand why BTC store staff appear hesitant to sell financial services products. They would often contact the call centre to check product details or ask for advice. However, the call centre only has four products to deal with, whereas the diversity in the store is much greater. Typical questions asked by the stores are:

"Is Tenerife included in Europe or is it World-wide"? "Do I have to put the product through the till (Epos) twice if two people are travelling"? "The customer has a medical condition, can they still purchase the cover at store or do they have to telephone you"?

9.2.3.3 Administrative inheritance (where we are now)

Davenport (2000) describes how companies instead of 'starting from scratch' will 'start from what is possible or easily accomplished' in one of the leading enterprise systems. He describes a shift in how companies engineer (or reengineer) processes by thinking in parallel about the supporting information systems needs rather than by designing an elegant solution that is then supported by the appropriate technology. However there is

evidence to suggest that this extends beyond purely enterprise systems. For example, in the Mail Order case the BTC stores EPoS system, because of its ability to check stock in and out of a stock file, calculate payment, and then link to the central accounts system, was bastardised and used as a warehouse system. Mailbrain, the mail order system used by Salestrac, was heavily modified to suit the needs of the call centre. ISAAC, RSA's bespoke insurance underwriting system, was modified and used as the basis on which the health & travel insurance products were sold. In contrast to enterprise systems that largely incorporate 'best practice' designs, this approach was driven by the desire for convenience, pace, and perceived low cost. This approach of redesigning packages as presented and making them firm specific by blending them with the existing organisational practices is referred to in the literature as 'Appropriation' (Clark & Staunton 1989). Appropriation undermines the notion of 'plain vanilla' implementation and any best practice prescription from the vendor, and therefore 'appropriation' has to be distinguished from 'implementation'. Hislop et al (1997) describe how a company might implement a new technology but not actually use it in terms of it becoming routine or fully embedded; it is the unpacking and re-blending of new ideas to develop firm specific solutions.

9.2.3.4 Assets, governance and commoditisation

9.2.3.4.1 Asset specific investments

Asset specific investments are likely to be more effective in their optimal application, but less widely applicable than general investments. The contribution to value of an asset specific investment is high but outside options are weak, and the organisation is then effectively locked-in to a relationship with that asset. In contrast, a general investment though not as effective in enhancing value, strengthens outside options and hence may be chosen to avoid lock-in. The decision of the Boots Group Telecommunications function to purchase telephony equipment as a group-wide asset can still be considered as a general investment, as a whole industry of independent firms utilises a common asset

technology, thus avoiding lock-in to any one firm (Williams 1996). However, the dominance of Lucent Technologies in the telephony market could give rise to fears of it being an 'owner-specific' investment, especially if the technology purchased is unique to that firm. The investment in this technology does imply that there is an expectation that it will be utilised within the Group and that there will be benefit from providing this capability.

9.2.3.4.2 Telephony is a commodity

It is an important finding of the research that the telephony, a key component of the call centre process, is actually a commodity, and in all four cases it was also seen, and accepted as, a commodity. Although not the case at the commencement of the research, all four cases will end up operating on telephony equipment from the same supplier (Lucent Technologies)³¹. Despite the deregulation in the telecommunications industry, and the breaking-up of monopoly supplier's contracts with increased competition from the many new players, the telecommunications industry is heavily regulated and standardised. This facilitates an approach where any number of supplier's equipment can be connected to a growing number of networks. Such is the ubiquitous nature of telecommunications; in both the Customer Service and Loyalty cases it was possible to 'rent' the telephony requirements from a local cable supplier as a 'managed service'. This also provided flexibility to grow the requirements as the business grew by renting more capability. Later, as the need became more understood, the service was brought in-house when GT purchased the Lucent equipment. Telephone numbers are easily transferred (albeit attracting a fee) as in the Loyalty case where previously AT&T had the number that was later transferred to Boots, thereby removing the need to change the published number to customers. Alignment of interests (and therefore low interest in telephony) was

³¹ LUCENT Technologies, formerly the research division of AT&T, is one of the world's largest manufacturers of telecoms components.

made possible, as everything you wanted to do was achievable and relatively simple thereby raising few problems.

9.2.3.4.3 Location and accommodation

Modern telephony allows the call centre to be positioned anywhere. There are numerous examples, such as BT Directory Enquiries and IBM Global Services help desk, where call centres are located in different parts of the country (or even the world) and service customers elsewhere around the globe. In the cases researched, while proximity to the customer might not be a critical factor, the distance from other elements of the supply chain could well be (such as the warehouse and supply facilities). Technology has reduced the impact of physical distance as files and data can be passed electronically, thus removing the need for physical proximity. There is added value for Customer Service staff from being 'physically close' to the marketers. Governance can be made more difficult if call centre staff is 'out of sight and out of mind'. Standard office environments are suitable for call centres although out of hours access and staff facilities (such as restaurant facilities) might need to be available around the clock.

9.2.3.4.4 Governance

Four different business models appear across each of the four cases: The first being the in-sourced service provision of customer services; the second is an in-sourced loyalty card service having previously been outsourced; the third is the outsourced provision of a sales function (mail order); and finally a 'joint venture' sales operation (insurance). Clearly in a joint venture the freedom to act, and flexibility is limited. The governance issues are more restricting and joint consultation and decision-making is likely. The individual interests of the companies could be competing because of the separation of ownership and control, which gives rise to and agency relationship (the subject of agency theory). For example, when operating an outsourced call centre what will be the behaviour, approach and empathy of the agent with the customer? Will they have the

ability to escalate any issues to someone with sufficient authority to handle a potential life threatening complaint?

9.2.3.4.5 The automatic association between commodities and outsourcing

There appears to be an automatic association that some people make between a business process that might usefully be classified as a commodity, and that of outsourcing, the emphasis being placed on 'how' the process is undertaken rather than 'what' is done. This association while understandable is perhaps a little misleading. Using the definition of commodity processes as described earlier, it could reasonably lead you to think that if the process isn't specific to your business, and is readily available to you and does not return 'excessive' value to your business, then why not let someone else perform it for you? This might be a 'reasonable' conclusion, but not necessarily an effective or sensible solution when considering costs, potential sources of innovation, or a portfolio of processes. Does anyone ask the question 'could the commodity process be made firm specific, unique, and therefore be a source of excessive value or competitive advantage'? In isolation it might not be, but when considered alongside a portfolio of processes, be they commodity or not, then this could change. An example from the core Boots business (Dispensing Services) shows that for a nationwide chain of Pharmacies such as Boots The Chemists, it was possible to turn the commodity process of 'dispensing drugs' into a leveraged process, i.e. a processes that, while not specific to a particular company, is more valuable to it than to others, because its national coverage and economies of scale will allow it to offer added value services to its customers such as Medilink³² (patient prescription records held centrally). Medilink enables any Boots pharmacist to have access to patient records and be aware of any drug interactions from previous prescriptions, thus providing a safer and more convenient service at any store the customer chooses to visit.

³²Medilink is a record of all the prescribed medicines dispensed for the cardholder at any Boots Pharmacy. It has a unique registration number ensuring a confidential service is offered and is free of charge to all customers.

To take this even further, Boots could turn this now leveraged process into a proprietary one, i.e. *the company-specific processes around which an organisation builds a business*. To use a 'loyalty card' example Walgreens³³, the American Drug Store Chain, through their subsidiary Walgreens Health Initiative (WHI), have done just that, by positioning themselves as the providers of a pharmacy ID card, linked to their health plans, that electronically checks claim-processing eligibility, prescription price, and reviews the prescription for possible conflicts. This service operates not only in its own 2,500 stores but is now extended to a retail pharmacy network of over 43,000 pharmacies including other participating leading "big-name" chain pharmacies such as Wal-Mart, Kmart, Eckerd and Albertson's.

By thinking of some processes as *commodities*, companies outsource products and services to third parties. Callon (1991) suggested that by doing so they risk not being able to disentangle themselves from former users, producers and prior context. Once a transaction has been concluded, it is necessary to sever the 'purchaser/vendor' relationship that existed during the transaction. If the purchaser remains entangled then they can never escape from the web of relations. Boots appear to follow the broad maxim that commodity can't be valuable or important so outsourcing (non core) processes must be the right approach.

9.2.4 Process logic summary

Returning to the question posed earlier, do the 'specific' activities and tasks justify different approaches for the whole, which is common? Despite the diversity that occurs at the very lowest level of the process, and the fact that processes are described differently in different situations, there seems to be a 'core' that is common, with a 'surround' that is

_

³³ Founded in 1901, Walgreens is a national retail pharmacy chain with over 3000 stores, and Walgreens Health Initiatives is the managed care division of Walgreen Co. Walgreens Health Initiatives designs prescription drug benefit programs that meet organizations' goals for cost containment, while providing members with comprehensive and convenient pharmaceutical care.

fairly specific. Throughout the examples cited in this section there is evidence to support that the core of the call centre process is common, while the same evidence reinforces the specific nature of some of the surrounding factors. It has been established that the tasks and activities undertaken at the heart of the process are the same in all cases. It has also been established that two key components of the call centre process (telephony and accommodation) are in themselves commodities. They were identified as such in all four cases. They were also seen to be commodities by the actors in the network. Investment in telephony is not considered asset specific and is generally applicable, as telephony can be used in any call centre process. Know-how of the process is fairly common and readily available. Call centres aren't generally location specific, and standard office facilities are suitable for most requirements.

There are however some notable differences that support the 'surround' being' specific. It has been established that a process can differ in its information exchange (i.e. if knowledge is also passed), and in its closeness of coupling with other processes. Information exchange and close coupling introduce dependency. Industry or channel know-how will be specific depending on the nature of the call centre. The culture (norms, values and beliefs) of the organisation will be specific to that business, as will utilising existing software products as a fast or inexpensive entry strategy. Utilising existing software products compounds the uniqueness of that particular situation. A lack of (i) any obvious mechanisms for recognising when a relevant capability has been achieved in an organisation, and (ii) know-how of the commodity adoption process, may lead to confusion and lost opportunities.

9.3 Decision Logic

9.3.1 Introduction

In the previous section the emphasis was on the nature and composition of the business process. This section examines what decisions were considered and how they were made.

It uses the tools and techniques of the SCA approach namely decision areas, options, decision schemes, comparison areas, and uncertainty. In each of the four case studies some initial decisions were implicit from the approach adopted to solve the problem. In the Customer Service case it had been decided to address the problem of poor complaint and enquiry handling, probably by incorporating a call centre, but they didn't know how they were going to go about it. The initial trials of the Loyalty Card had indicated that it would be well received and sought after by customers however, issues such as whether to use 'smart-card' technology were central to the deployment strategy. In the Mail Order case the decision to enter the mail order business for mother and baby items had already been taken, but the proposed method of operation was not clear at that time. Finally, in the Insurance case it was clear that the products were the first in a range of health and travel related insurance products to be sold through BTC stores, but once again the method of deployment was vague. This analysis examines those decisions that were in focus at the time of determining how to satisfy the requirements of the call centre process, which in each case was integral to the success of the operation. Table 9.1 is a summary of the results from the various analytical techniques used. The descriptions that follow stepthrough the table contents and explore the underlying reasons for the outcomes.

CASE	APPROACH	DECISION AREAS		OPTIONS		DECISION SCHEMES			
	'Structured' or 'Anarchic'	Inside problem boundary	Outside problem boundary	Option bars	Doubtful options	Possible Decision schemes	Incompatible decision schemes	Doubtful decision schemes	Feasible decision schemes
CS	Structured	4	5	10	3	24	20	0	4
LC	Structured	4	4	3	4	36	15	13	8
МО	Structured	4	2	7	9	24	18	4	2
INS	Structured	3	1	3	3	12	7	2	3

Table 9.1: Summary results of the decision logic analysis techniques

9.3.2 Approach - structured versus anarchic decision making

In all four cases the decision making approach can be characterised using Pinfields' (1986) taxonomy as being 'structured', that is it followed an ordered progression from

recognition to resolution, as described by Mintzberg, Raisinghani and Theoret (1976). This is in contrast to being 'anarchic', that is the decision is a result of a fortuitous combination of problems, solutions and participants (or happenstance) as described by Cohen, March and Olsen (1972). Despite the obvious lack of overall decision making techniques or framework used in the case studies, the approach to these initiatives typically recognised that there was a strategic consequence for the organisation, that goals and objectives were relatively clear and understood, participation in the process was expected, and a recognition of the need for orderly progression through the decision phases.

9.3.3 Decision areas

As seen in earlier chapters the decision areas, as represented by the decision graphs, map the terrain of the decisions in focus and comprise a rich mix of policy, operational, financial and other decision types within a single approach. This diagrammatic representation of the decision areas and their connectedness with each other further enhances the analysis by describing 'links' between decision areas, notably where their joint consideration might materially alter any decision outcome. Therefore the boundary surrounding the selected problem focus encapsulates those decisions that were considered key at that time by the case study actors and Table 9.2 is a summary of the decision areas considered both within and outside the problem focus in each case. It also shows the decisions split between (i) those decisions which relate directly to the call centre process (i.e. 'process specific'), and (ii) those associated decisions that are closely-coupled with the process specific ones but could apply equally to other processes as well ('related decisions').

		CUSTOMER	LOYALTY CARD	MAIL ORDER	INSURANCE
Inside	Process specific decisions	SERVICE Obtain or acquire call centre capability? Boots own staff to handle enquiries or complaints?	Obtain or acquire call centre capability?	Is existing call centre capability appropriate?	Is existing call centre capability appropriate?
problem focus boundary	Related decisions	Determine an approach? How best to provide	Determine an approach? How best to provide	Determine an approach? How best to provide	Determine an approach? How best to provide
		the IT?	the IT? Whether to use Smart-card technology?	the IT?	the IT?
				Whether to use inhouse Logistics?	
	Process specific decisions	Separation of written and oral work?			
		Effective complaint handling?			
		Provision of the telephony?	Obtain or acquire call centre telephony?		
Outside problem			Whether to move the call centre in-house?		
focus boundary			Use Boots staff to handle the calls?		Boots staff represents the brand?
boundary	Related decisions	Match the in-store experience?		Match store deals and offers?	
		Maximise customer relationships?			
			Extend scheme to other Boots companies?	Offer Advantage Card points?	

Table 9.2: Summary of the decision areas inside and outside the boundary of the problem focus, split by process specific and related problems³⁴.

What is immediately clear from Table 9.2 is that despite the apparent similarity of the processes in question: (i) there is a wide variety of decisions inside the problem focus boundary; (ii) the impact, importance, and variety of the *related decisions* that are within the boundary of the problem focus, which include those decisions labelled by the actors involved as most 'important' and 'urgent', and (iii) how a single decision, such as whether to use Boots own staff, could be treated so differently across all the cases or even not considered at all. The next section examines these questions in more detail.

³⁴ Naming conventions: Although in each case the terminology used by the actors might have been slightly different, for the purpose of analysis I have been as consistent with descriptions as possible so that it is clear that the same decision is actually being considered. Where this application of common terminology would be misleading or could imply a different decision under consideration then it has remained unchanged.

9.3.3.1 Process specific decisions within the boundary of the problem focus

The primary 'process specific' decision, and one considered by all four initiatives, is 'how to provide the call centre capability?' Table 9.3 further summarises the 'process specific' decision areas and includes the options considered in each case.

		CUSTOMER	LOYALTY	MAIL ORDER	INSURANCE
		SERVICE	CARD		
Inside problem focus boundary	Process specific decisions	Obtain or acquire call centre capability? * Develop in-house * Outsource to third party	Obtain or acquire call centre capability? * Utilise internal call centre * Outsource * Set-up new internal call centre	Is existing call centre capability appropriate? * Yes * With development * No	Is existing call centre capability appropriate? * Utilise existing internal call centre * Outsource to the insurance partner * Set-up new internal call centre
		Boots own staff to handle enquiries or complaints? * Yes * No			

Table 9.3: Summary of the process specific decisions

The following sections take each question within each case in order.

9.3.3.2 Customer Service - Obtain or acquire call centre capability?

The requirement for a call centre was first encountered during the Customer Service case, and as no other in-house call centre existed at that time the possible options for that case were perceived as being restricted to either developing an internal call centre from scratch, or outsourcing it to a third party. The strong preference by all the actors to use Boots own staff to represent and protect the brand (discussed in the next section), was a key driver to the decision making process and the task altered to become 'achieve this' rather than a choice of alternatives. The ready availability of experienced Customer Service staff already employed as Customer Service Advisors, albeit with limited telephone skills, was a main influence. The trend by retail industry competitors was to make available the opportunity for customers to get closer to the company and the company to its customers, and to handle complaints/enquiries in a more immediate way (i.e. by telephone). This more immediate interaction provides the occasion to try to turn a

negative situation into a positive one, therefore an in-house option was certainly generally favoured by the industry.

9.3.3.3 Customer Service - Boots own staff to handle enquiries or complaints?

Considerable emphasis had been placed on the importance of accountability and a strong feeling existed among many of the stakeholders in the Customer Service case that this had to be a Boots operated call centre if they were truly going to provide the level of service required, have the commitment and wherewithal to resolve complaints, and to fulfil the 'psychological contract' between employer and employee as first described by Schein (1988), i.e. the assumptions, expectations and mutual obligations with the organisation to ensure that this happens (Guest et al 1996). This subsequently favoured the use of inhouse staff, which ultimately led to the setting up of the in-house call centre. The Customer Service Manager commented:

"Customers trust Boots so much that they are offended if they find out they are talking to someone not from Boots. Customers expect us to be fair, and that we treat them in a quality way, like they are in a store".

Significantly, the managers in the Customer Service case were the only ones to express such a strong view of the importance to Boots of using their own staff in this situation. The managers in the Loyalty Card case, who openly regarded the task as relatively simple, and those in the Mail Order case, who considered that 'Mail Order specialists' were key to the success of the business and subsequently outsourced that part of the operation, did not share this feeling. However, there was considerable anxiety about Financial Services staff handling calls from Boots customers on their behalf in the Insurance case. A clear objective of the insurance proposition from Boots was that the experience should be in keeping with the quality, safety and security customers have come to expect from the Boots brand; as protection of that brand is seen as all important, and it was questioned whether this really could be performed by Financial Services staff who were notorious for poor service. Despite this view the related decision area 'Boots

staff to represent the brand?' was included as a decision area in the Insurance case but outside the problem focus.

9.3.3.4 Loyalty Card - Obtain or acquire the call centre capability?

Although the cases are unrelated, their chronology is important when considering these decisions. In the second case (Loyalty Card), which lagged behind the Customer Service case by five months, the existence of the Customer Service call centre provided an additional option. However, in complete contrast to the first case the prevailing view in the relevant part of the business at that time was that the call centre provided little opportunity for competitive advantage and was relatively 'low priority' when compared with the other operational issues under consideration, specifically smart-card production, and mass marketing of the card launch. This view was expressed quite clearly by the Loyalty Card Programme Manager:

"We didn't have a call centre established in Boots at that time, and the BTC (Customer Service) call centre was in its infancy. We had no idea about the volumes of calls we were going to get, therefore staffing up internally was going to be tricky. Our expectations were that the loyalty card was going to be 'big', but it had the potential to be 'enormous'. Sourcing it externally would make the lead times to establishment quicker than trying to do it ourselves. The call centre was subcontracted to AT&T during the two trials so we didn't learn much about call centres because of the way we had done it".

This call centre process was initially considered a commodity in this case, as the services had been (and could continue to be) purchased from a third party and the related routines were reasonably simple. The decision not to utilise the existing in-house call centre probably made setting up an alternative dedicated call centre an unviable proposition. Although an uncorroborated observation, it was suggested by the Loyalty Card Programme Manager that at launch there was an expectation that in the future the call

centre would be moved to the BTC site. Uncertainty surrounded the likelihood of settingup a new internal call centre when one already existed for another service.

9.3.3.5 Mail Order/Insurance - Is existing call centre capability appropriate?

Both the Mail Order and Insurance cases had the benefit of following, and therefore learning from, the progress made by the Customer Service call centre, which by the time of their launch had been in operation for twelve months. This could have been a rich source of information and possibly an additional option when determining how to proceed. However, there is little evidence to suggest that this opportunity was actively pursued, or that a Customer Service call centre would be an acceptable alternative for a mail order or financial services call centre. There was uncertainty surrounding the potential of any call centre to expand to the predicted demand of the mail order operation, or the as yet unknown volumes of the insurance operation.

9.3.3.6 Related decisions within the boundary of the problem focus

The *related decisions* within the boundary of the problem focus are not process specific decisions but nonetheless are closely coupled with the process in question. Two particular decisions (overall approach, and how best to provide the IT requirements) arise in all cases. Two other decisions are considered i.e. whether to use smart-card technology, and whether to use in-house logistics. Table 9.4 shows a summary of the related decisions along with options under consideration.

9.3.3.7 Determine an approach?

Decisions regarding the method of approach appear to be the most important or critical ones surrounding this particular process. They include a diverse range of decisions on organisation structure (such as centralisation), procurement (in-house versus outsourcing), acquisition of companies or service providers, and partnership (as in the Insurance case). In all four cases the outcome of this decision significantly shaped the outcome of other

related decisions. For example, the decision to approach the problem in a modular fashion in the Mail Order case set the scene for a complicated mix of packaged, legacy, and bespoke software development. Alternatively, entering a partnership with another company, as in the Insurance case, introduced significant compatibility issues such as working practices, location of offices, and staff recruitment.

		CUSTOMER	LOYALTY	MAIL ORDER	INSURANCE
		SERVICE	CARD		
		Determine an approach? * Do nothing * Centralisation of teams * Centralisation management of teams	Determine an approach? * Controlled trial or pilot * Get a third party to administer the scheme * In-house administration	Determine an approach? * Modular * Acquisition (e.g. Littlewoods)	Determine an approach? * In-house administration * Partner to administer the scheme
Inside problem focus boundary	Related decisions	How best to provide the IT? *Predominantly Bespoke *Predominantly Package	How best to provide the IT? *Predominantly Bespoke *Predominantly Package	How best to provide the IT? *Predominantly Bespoke *Predominantly Package	How best to provide the IT? *Predominantly Bespoke *Predominantly Package
			Whether to use Smart-card technology? * Yes * No		
				Whether to use in- house Logistics? * Yes * No	

Table 9.4: Summary of the related decisions inside the problem focus boundary

9.3.3.8 How best to provide the IT?

The call centre process is 'information intensive' (Porter & Millar 1985), and the closely coupled nature of the call centre process to related processes introduces the potential for a high information exchange, and as IT is the principle exchange mechanism this is a significant factor. Typically any debate was around software and not hardware. Although there were some compatibility issues surrounding the use of different operating systems or centralised versus distributed models, hardware was not an issue and the general 'open' nature of hardware made most likely combinations possible. At that time there was no formal IT strategy in place across these operating divisions and there was a general

backlash by business users to bespoke systems, which they perceived had limited functionality, were slow and difficult to change. A general preference prevailed (albeit unofficial) for packaged software. However, interfaces with existing legacy systems would not be easy, and there was the increasing challenge of 'customisation' of packages to the way Boots wants to operate.

The call centre process relies on the timely provision and capture of information, typically in 'real time' while talking to a customer. It is also likely that the software is the link to related processes, and in some instances this association will be a closely coupled one. All four cases faced a similar decision regarding the use of either packaged software (i.e. a pre-written software application package specifically for a defined purpose such as customer contact, warehousing or mail order), or alternatively bespoke software, which could be provided either internally by in-house development staff or subcontracted to a third party. It was also the case that decisions that might initially appear to be unrelated to any technology decisions actually had significant technology consequences. For example, the decision taken to use a mail order bureau for Mother & Baby Direct determined by association that the software product eventually used was the same as that used by the bureau, which in turn required the bespoke development of an order fulfilment system.

9.3.3.9 Whether to utilise smart-card technology?

In the loyalty card case a key consideration in the operation of the card was to avoid the 'home store' concept as adopted by most retailers (i.e. a pre-designated or 'home' store at which customers regularly shop and where their personal card details are retained on-line) in order to circumvent the problems associated with centralised data storage and retrieval. This approach works well when the card is used regularly in the home-store only (as often the case with supermarkets), and is more memory efficient for the in-store technology that holds the data, but is less convenient or customer-friendly when used in other stores. Unlike supermarkets, Boots customers prefer the freedom to shop at any store and will

regularly use three or four different stores. A card that uses a memory chip rather than a magnetic stripe will enable the use of the card at any store, and can also accommodate the data required for some of the likely future initiatives such as additional information in the form of a talisman including drug interactions, allergies, patient medical records, in addition to the standard loyalty card details such as the loyalty points accrued and personal details. However, this does have far reaching consequences. Firstly, it requires the installation of memory-chip card reader technology at all 1400 Boots stores; secondly, as all current loyalty card administration software assumes a magnetic stripe card and the 'home-store' configuration, bespoke software needs to be developed to administer the scheme.

9.3.3.10 Whether to utilise in-house logistics?

A fundamental feature of the Mother & Baby Direct operation is the provision of warehousing, order picking and fulfilment. The existing logistics infrastructure to support 1400 Boots stores is an extensive operation, employing c6000 staff in central and regional warehouses, as well as seventeen regional distribution centres, plus a limited workforce of drivers, the majority being provided through three preferred contract haulage companies. With such a pedigree it is easy to understand why, when faced with the decision to either make new arrangements for this associated process or to utilise what was already in operation, the in-house option is the most pragmatic. However, the closely coupled nature of the call centre process to the other processes (fulfilment, logistics, and delivery), make it a highly integrated operation that requires close coordination of all the components.

9.3.4 Process specific and related decisions outside the boundary of the problem focus

The range of decisions that appeared outside the boundary of the problem focus varied between cases. The decisions ranged from the separation of written and oral work in the Customer Service call centre, through to extending the Advantage loyalty card scheme to other Boots Group companies. It also included some decisions that might have been

expected to be positioned within the problem focus boundary, such as the provision of telephony (Customer Service case). However, it transpired that this was quite legitimate as the telephony in this case was considered a commodity and although central to the proposition in the case was easily obtained. The actors in the case were happy to accept its 'black-box' status.

9.3.5 Decision options and decision schemes

This section considers the impact of doubtful and incompatible option bars on the ability to generate feasible decision schemes. Figure 9.2 is a composite of the four option graphs used in this case that represent the option bars (solid lines), and doubtful options (dashed lines). We can see from the case studies that the number of option bars (including doubtful options) is inversely proportional to the number of feasible decision schemes generated, i.e. the greater the number of option bars the fewer feasible decision schemes can be generated. The range of possible options derived from the decision areas takes no account of the interconnectedness of these options, other than each option within a decision area should ideally be mutually exclusive. By comparing linked pairs of options from the different decision areas a 'compatibility matrix' is produced. This approach enables the determination of possible decision schemes; incompatible decision schemes (i.e. those schemes that include option bars), doubtful decision schemes where additional information is required or the likelihood is uncertain, and feasible decision schemes from which a likely solution might be found.

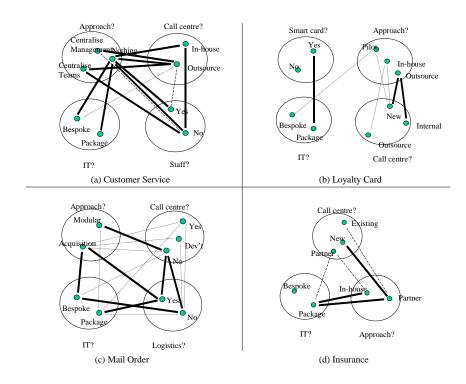


Figure 9.2: A composite of all four option graphs

Table 9.5 shows the summary of the output from the compatibility matrices for the four cases.

CASE	DECISION SCHEMES			
	Possible Decision schemes	Incompatible decision schemes	Doubtful decision schemes	Feasible decision schemes
CS	24	20	0	4
LC	36	15	13	8
МО	24	18	4	2
INS	12	7	2	3

Table 9.5: Summary of the compatibility matrix results

There were a wide variety in the number of possible, incompatible, and doubtful decision schemes. This had a direct impact on the number of feasible schemes that are accessible to each case. For example, in the Loyalty Card case the highly compatible nature of the decisions under consideration, as can be seen by the number of feasible decision schemes available to it (i.e. eight, four times that of the Mail Order case), with significantly

reduced incompatible or doubtful options, could be treated as a commodity and easily outsourced. In contrast, the Mail Order case has only two feasible decision schemes available to it thereby suggesting a limited range of alternatives and reduced flexibility. It can therefore be seen that having high compatibility of options and a greater choice in decision schemes (i.e. flexibility), is important for a process to be considered a commodity.

9.3.6 Comparison areas of decision schemes

The comparison areas were derived from the outputs, objectives, or goals that were considered important by the actors in each case, and act as a measure of appropriateness of the alternative decision schemes. There is a significant spread of comparison areas being used in the four cases, which surprisingly includes few outputs, objectives or goals relating purely to the call centre. Table 9.6 displays the comparison areas in logical groupings along with the description of the comparison used and the associated measure. Notwithstanding a concentration of 'customer service' comparative criteria, which might be expected in the Customer Service case, there is no real pattern to the comparisons. Once again the uniqueness of each situation has been reflected in the variety and range of comparators emerging.

9.3.7 Managing uncertainty

SCA recognises three types of uncertainty when faced with decision making, these are (i) uncertainties about the working environment (labelled UV), usually resolved by obtaining more information, (ii) uncertainties about related decisions (labelled UR), usually resolved by improving coordination, and (iii) uncertainties about guiding values (labelled UV), usually resolved by providing clearer objectives. Tables 9.7, 9.8 and 9.9 contain the uncertainties expressed by the actors in each case, grouped into the three categories and ranked in order of salience (most salient first).

C	OMPARISON	AREAS OF DECISION SCHEMES	
COMPARISON AREA	CASE	DESCRIPTION	MEASURE
	LC	Cost effective administration:	Effective ⇔ Break even ⇔ Ineffective
COST/PRICE/VALUE	CS	Cost:	High ⇔ Medium ⇔ Low
	МО	Value Based Management (VBM) case positive:	High ⇔ Medium ⇔ Low
	CS	Prompt and effective resolution of complaints:	Greater than 90% ⇔ Less than 90%
CUSTOMER	CS	Consistency of delivery in performance and communication:	High ⇔ Medium ⇔ Low
RELATIONSHIP/SERVICE RELATIONSHIP	CS	Opportunity for information feedback contributing to increased sales and profit:	Yes ⇔ No
	CS	Maximise customer relationship opportunities:	High ⇔ Med ⇔ Low
	МО	Risk:	High ⇔ Med ⇔ Low
RISK/COMPLIANCE	INS	Compliance with FSA and ABI requirements:	Yes ⇔ No
	LC	The ability to enhance new initiatives:	Yes ⇔ No
GROWTH/SCALABILITY/		Scalability to include other Boots Group companies:	High ⇔ Medium ⇔ Low
EXPANSION	LC	The ability to support new retail products and services:	Good ⇔ Average ⇔ Poor
	МО	Expansion potential:	Yes ⇔ No
	LC	Flexibility to cope with high demand:	High ⇔ Medium ⇔ Low
FLEXIBILITY	INS	Flexibility to undertake all of the administrative operations if desired:	Easy ⇔ Difficult ⇔ Unlikely
	CS	Protection and enhancement of BTC's reputation:	Good ⇔ Poor
BRAND/REPUTATION/VALUES	ATION/VALUES INS	The ability to reflect BTC brand values and service:	Good ⇔ Average ⇔ Poor
	MO	Brand protection:	Good ⇔ Poor
	INS	Speed to market:	Fast ⇔ Medium ⇔ Slow
SPEED -	МО	Speed to market:	Fast ⇔ Medium ⇔ Slow

Table 9.6: Comparison areas of decision schemes

CASE:	UNCERTAINTY AREA - UE	LABEL:	TYPE:	SALIENCE:
CS	From 'Managing customer relationships' comparison: ? That packaged software will be more difficult to integrate than bespoke software.	?PACKINT	UE	•••
CS	? The ability of an outsourced call centre to use 'company specific' bespoke software.	?BESPOUT	UE	•••
CS	? No real 'Customer Service' call-centre experience.	?EXPERT	UE	•••
CS	? Will a call centre improve customer service	?SERVPLUS	UE	•••
LC	? The true cost of outsourcing.	?OUTCOST	UE	•••
INS	From <u>'Speed to market'</u> comparison: ? The ability for bespoke solutions to be a better fit with legacy systems than packages.	?LEGACY	UE	•••
INS	? Possible infeasibility of utilising the existing call centre while adopting the approach of working with a partner.	?CALLPART	UE	•••
CS	? The uncertainty of the project being worth the investment in in-house telephony	?TELINVEST	UE	••
LC	? The ability to cope with the rapid take-up as indicated by the trials.	?TAKE-UP	UE	••
МО	? The doubtful ability to support a mixed range of in-house and/or external modules with packaged software.	?PACKFIT	UE	••
МО	From 'Speed to market' comparison: 'The 'real' time differences between package adoption and bespoke development.	?BESDEV	UE	••
МО	? The likely levels of customer demand, average order size, and the impact of cannibalisation of sales.	?SALESPROF	UE	••
INS	? The unknown volume and frequency of call-centre traffic.	?TRAFFIC	UE	••

Table 9.7: Uncertainty areas (UE)

			1	
CASE:	UNCERTAINTY AREA - UR	LABEL:	TYPE:	SALIENCE:
INS	From 'Flexibility to undertake all of the administrative operations if desired: comparison: ? The ability of the partner to undertake the administrative work while operating an in-house call-centre.	?FLEXADMIN	UR	•••
CS	From 'Cost' comparison: ? The assumption that in-house development resource will be available to bespoke an application.	?DEVSKILLS	UR	••
LC	? The likelihood of setting-up a new internal call centre when one already exists for another service.	?NEWCALL	UR	••
LC	? The likelihood of outsourcing the call centre when an 'in-house' administration option has been chosen.	?IN-OUT	UR	••
CS	? Availability of suitable office accommodation.	?ACCOM	UR	•
МО	From 'Speed to market' comparison: ? The ability to trade off quality in favour of speed.	?SPEEDQUAL	UR	•

Table 9.8: Uncertainty areas (UR)

CASE:	UNCERTAINTY AREA - UV	LABEL:	TYPE:	SALIENCE:
CS	? Soft benefits are difficult to quantify.	?SOFTBEN	UV	••
LC	From 'Scalability to include other Boots Group companies' comparison: ? The real likelihood that other Group companies will require the loyalty card.	?GROUPCARD	UV	••
INS	From 'The ability to reflect BTC brand values and service' comparison: ? The ability for a third party to adequately represent the brand values of BTC.	?BRANDVAL	UV	••
МО	From 'Expansion potential' comparison: ? Will expansion potential be truly favourable, and more practical with third parties.	?EXPANPOTL	UV	•

Table 9.9: Uncertainty areas (UV)

Uncertainties about the working environment appear to be the most frequent but according to Friend and Hickling (1987) this is quite normal for this type of analysis. Only those with a high salience (•••) are likely to make any great impact in the case, and there is an even distribution of uncertainties listed against all four cases. The related decisions gave rise to uncertainties of availability of suitable office accommodation, the lack of Customer Service' call centre experience, and the ability to cope with the rapid take-up as indicated by the trials. The true cost of outsourcing was unknown, and doubt was being expressed as to whether an in-house call centre could be used even if a partner was acquired, or the ability of a partner to undertake the administrative work while operating an in-house call centre. Uncertainties arising during the decision-making stages included doubt that packaged software would be more difficult to integrate than bespoke software, the assumption that in-house development resource would be available to build a bespoke application, the ability of an outsourced call centre to use 'company specific' bespoke software, the doubtful ability to support a mixed range of in-house and /or external modules with packaged software, the real time differences between packaged software adoption and bespoke development, and finally the ability for bespoke solutions to be a better fit with legacy systems than packages.

9.3.8 Bounded rationality and Satisficing

In three of the four cases (CS, LC and INS) the actual decision outcome in the case and the outcome from the SCA were closely aligned (i.e. the outcome was contained within the decision scheme options). As the analysis is based on the views of the actors involved this confirms the validly of this approach as it should represent those views as it was meant to do. However in one case (MO) the actual outcome was not represented as a possible decision scheme, which suggests that if the analysis was accurate (as it appears to be in the other cases), then the actual outcome is inconsistent with the objectives as described within the case. Bounded rationality, as described by Simon (1997), is a central theme in the behavioural approach to economics, which is used to designate rational choice that takes into account the cognitive limitations of the decision maker. What this in fact does is to recognise the actual capacities (limitations) of the human mind in a decision-making situation, recognising that the optimum decision is not computable within feasible limits of effort. While there is no evidence to suggest that bounded rationality is the cause for this rogue outcome, it is useful to consider that there are practical limitations exaggerated by speed of decision-making, limited time, or just a shortage of know-how that could lead to a decision of this type.

9.3.9 Slow and strategic versus fast and technical

Davenport (2000), when describing the implementation alternatives for Enterprise Resource and Planning systems (ERP's), utilises a simple grid (Figure 9.3) to focus on the two key dimensions of 'speed of implementation', versus 'the amount of business change and value' to which the company aspires. Described as the 'fast-technical' implementation, this focuses on speed of implementation with as little business change as possible. This can mean quick relief to an existing system or new product/business initiative launch. The two options labelled 'strategic' attempt to maximise business change and value through a 'quick win' or 'long-term competitiveness'; while the 'slow-

technical' approach characterises a poor implementation. A common theme emerging from the four case studies in this thesis is the desire for a fast implementation, and there are numerous examples of how this desire for 'speed' has forced a tactical rather than strategic solution. While these might result in short-term benefits, they do not make for a robust long-term business solution. For example, the decision to utilise the BTC store stock system in the Mother & Baby Direct warehouse in order to provide stock control functionality quickly was a 'fast-technical' implementation but at best could only provide quick relief without long-term stability.

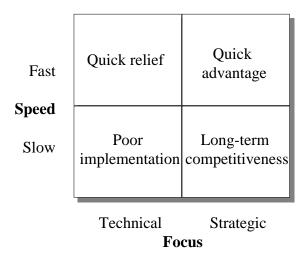


Figure 9.3: Alternative implementation approaches (Davenport 2000)

9.3.10 Decision logic summary

Building on the process logic summary in the first section, once again the uniqueness of each situation has been reflected in the variety and range of decisions that were taken in each case. The decision-making in all four cases was approached in a 'structured' way, i.e. recognising that they had strategic consequences, goals and objectives, an expectation of participation, and a recognition for orderly progression. The decision areas fell into two types labelled 'process specific' decision areas, and 'related' decision areas. There were a wide variety of decisions made within the problem focus boundary, which reflects the

differing order in which they are taken, at different times, having different requirements, comprising different tasks, made by different actors, with different skills and abilities. For example, one component of the call centre process (people) was observed being treated in three different ways (the insistence of them being Boots own staff; the use of mail order specialists; and the low skill /low cost option). The variety and influence of the 'related decisions' also has a considerable impact on the final outcome. These decisions will often have no direct connection with the process in question, but they will influence the final outcome. For example, the chain of dependent decisions that arose from the decision to use a smart card in the loyalty card case, which in turn triggered software and hardware decisions. Uncertainty about the working environment is prominent in the related decisions, and the speed of implementation can force short-term and unsustainable decisions. Option bars and doubtful options are inversely proportional to the number of feasible decisions schemes generated, and there were a wide variety and range of comparison areas in use.

One important observation is that where there are more feasible decision schemes processes are treated as commodities. This leads to the question – how do processes (in their business aspects) come to be treated as commodities? See the next section that discusses how processes are viewed as commodities.

9.4 Alignment Logic

9.4.1 Introduction

This section examines the alignment (and non alignment) of the actors in the network with the aid of three concepts from actor network theory: *inscription* – embodied patterns of use or behavior, *translation* - how actors manipulate or force other actors into positions that suit themselves, and *irreversibility* – the strength of the inscription. The analysis in this section uses the inscription/specialisation analysis framework to help understand these concepts as seen in the four case studies. The areas of alignment and non-alignment

for the components of each process are considered initially, followed by evidence of inscription and translation. This then leads to an analysis of the movement between different states over time and the subsequent irreversibility of the inscriptions and translations.

9.4.2 Alignment of the actors in the network

Figure 9.4 shows the inscription/specialisation analysis framework with the process components from each case plotted together in groupings of (a) software, (b) people, (c) telephony, (d) accommodation, and (e) miscellaneous. Once again it is apparent that despite the similarity of the processes in question there are significant differences in alignment of the actors, for example: (i) the telephony and accommodation components occupy the 'black-box' space in all cases and are therefore fully aligned; (ii) there is a significant difference between the alignment of the 'people' components in the Customer Service and Loyalty Card cases (black-box), and the alignment in the Mail Order and Insurance cases (Transformation); (iii) the relative isolation that the software application package for Customer Service enjoys in the 'black-box' space, when compared with all the other software deployed in the cases, and (iv) in the Mail Order case the use of Business Express as a courier on the border of the aligned and non-aligned space reflects the third party translation that is present, however there is total alignment that it is a commodity, reflected in its positioning to the left of the framework.

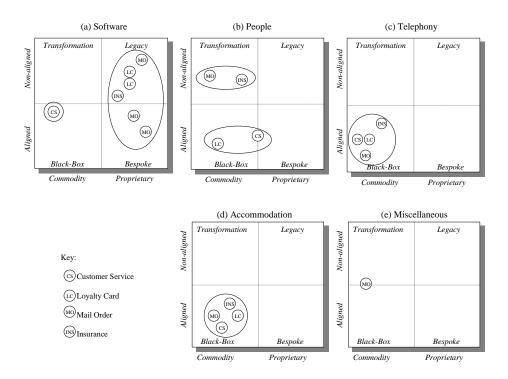


Figure 9.4: Case study process components grouped by type

The sections that follow examine the telephony and accommodation, the people, and the software in more detail.

9.4.2.1 Telephony and accommodation

Telephony and accommodation consistently appeared in the black-box space, but there is a need to be clear that this is not suggesting that telephony and or accommodation would always occupy this space. In a quite different process the accommodation required might be central to the proposition, for example the location and proximity of a retail outlet to its customers as part of a sales process, and therefore be more susceptible to changes in requirements. Standard office accommodation was adequate in each of the cases studied. The telephony requirements in these cases were also very similar, and although provided through different means i.e. rented from a cable company, or a system purchased from a vendor and operated in-house, the functionality was consistent. It was generally accepted by the actors that whatever was required from a telephony perspective was likely to be possible, and it was accepted (at least in this industry sector) that the equipment and services would have the capability to do what was required of it. The telecommunications

industry is strictly regulated and compliance with standards and protocols is vital to preserve connectivity and the integrity of the telephone networks. Consequently there are a variety of vendors offering managed services, lease and rental arrangements, as well as companies such as BT and Lucent selling the telephony capability (equipment and services) for the provision of DIY services, but all comply to the same standards and protocols. However, the choice of deployment can have an impact on the degree of inscription. For example, the influence a telephony provider can have on the business process will be restricted as far as the functionality it provides, but it can have significant commercial and contractual influence through the rents charged for the use of the equipment or service.

In the Mail Order case the telephony component was so closely coupled to the provision of the call centre capability from a third party, that it almost disappeared from the view of those involved. While this does give the vendor (in this case Salestrac) the opportunity for a high degree of inscription, it had reached a point where the actors in the network were so comfortable with such a low visibility of the telephony that it became almost undetectable despite its criticality. Latour (1987) is quick to point out that the more automatic something appears, even the most simple device, which might attract little or no attention, will not persist without the intervention of people. For example the Kodak instant camera, which we all take for granted, requires an army of technicians, engineers and scientists to make it work and to continue to develop and enhance it. If this has become a 'black-box', then the "blacker the black box is", the more likely it is that it will rely on 'people' to ensure that it has momentum.

9.4.2.2 People engaged in the call centre process

The people involved in the call centre process have commodity skills: knowing how to handle calls by following pre-defined scripts and prompts is no longer a proprietary skill, any competent person can do it. Stewart (1997) describes this unskilled or semiskilled

labour as "easy to replace and low value add", and while any organisation might need plenty of these people its success does not depend on them as individuals. One candidate is likely to be as good as another, typically training time is short, and one good advert would attract many suitable candidates.

In the Customer Service and Loyalty Card cases there was clear alignment of the interests of the actors in the network with regard to the people involved albeit for quite different reasons. In the Loyalty Card case the task of the call centre operators was considered quite simple, the routines were easy to handle and required no specialist know-how or training, and all the actors agreed with this view. However, in the Customer Service case there was a perceived 'value' to Boots that the Customer Service Advisors should be their own employees, even though the skills of the people engaged in the call centre were fundamentally viewed as commodity skills. Being the shared view of all the actors involved legitimised this view. Despite the circumstances being very different the important issue is that there is active support for both these respective views and therefore they are both fully aligned.

In the two cases where the call centre was outsourced (Mail Order and Insurance) there was little alignment of the interests of the actors in the network with regard to the people engaged in the call centre process, and there is evidence of opportunities being taken to translate other actors in the network. For example, this non-alignment manifests itself in both cases as 'intermediate governance' (Barney 1999), i.e. the complex contracts, procedures and arrangements, Boots put in place so as to guard against opportunism. This included insisting on being involved with the delivery of training to their agents' employees, on being involved with the recruitment, and on having an on-site presence to check how the business was being managed.

9.4.2.3 Software used in the call centre process

An immediate contrast can be seen between the software package used in the Customer Service case (Customer Q) which is within the black-box space, and that of the remainder of the software products that are largely bespoke developments with varying degrees of alignment of the actors in the network. In the customer service case, a standard product Customer Q was purchased and, using the parameter driven software and 'user exits' that allow for local customisation, was modified to suit the then limited requirements. It was a conscious and deliberate action by the project team to contain the implementation of procedures that could be supported by this software product in an attempt to keep ongoing support costs and complexity to a minimum. However, on a number of occasions it was acknowledged that the limited functionality was placing a restriction on the business requirements (for example the integration of Customer 'Q' with the Loyalty Card Operating System). Abrahamson's (1996) work on fads and fashions emphasises how firms adopt what appear to be effective and efficient solutions, rather than because they actually are. Scarborough (1995) extends this by describing how suppliers build on this perception by 'blackboxing' new solutions suggesting that they will 'fit' in any situation. However, at the time of implementation the actors involved in this case universally accepted this approach. The benefits of using 'vanilla software³⁵, are described by Robertson and Powell (1997) as 'tactical' flexibility, i.e. the flexibility gained by utilising a standard product was at the expense of long-term strategic flexibility. Robertson and Powell suggest that flexibility, albeit a nebulous attribute may be either tactical or strategic. 'Tactical flexibility' attempts to account for perceived (or known) future occurrences, and strategic flexibility concentrates on the ability to differentiate for competitive advantage.

³⁵ Vanilla software refers to using the developers standard product i.e. as in a 'vanilla ice cream (no additional flavours).

In contrast, the software that handled the loyalty card operation (LSOS) was originally commissioned as a bespoke development from a third party, as at that time Boots 'Advantage Card' was the only 'smart-card' based loyalty scheme in Europe, and had quite specific requirements when considering its longer-term development. Its accompanying software (CDAS) was also a bespoke development by a third party, both products being supported by third parties. Fleck (1987) described as 'Innofusion' the concept where users' system design changes are reflected in the vendor's product and adopted as best practice (an opportunity for inscription from the customer to the supplier). These modifications to systems design introduced by users are taken up by the IS suppliers, and further diffused to the wider community.

In the Insurance case the service being provided was a new business venture and didn't exactly fit with any existing software products on offer. However, the know-how of the insurance requirements at RSA facilitated the approach of taking one of their in-house bespoke software systems and adapting it to suit the BTC products. Although recognised as an expedient approach, the inflexibility of the software, lack of functionality, and reliance on RSA to make changes generated a negative perception of the software, and the ever growing list of enhancements and changes was testimony to this, hence its non-aligned status.

In the Mail Order case there are three main software components: the mail order system, the warehouse stock management, and the order placing system. Choosing a specialist mail order partner meant that the preferred software product of that partner (in this case Mailbrain) became the default software option. This resulted in many changes to Mailbrain, some of them quite detailed, in order to provide the functionality required. This was further complicated by the need to interface with several other non-standard software products that were required within the process such as the Advantage Card interface and the promotional deals system. The reliance on the vendors to coordinate the

changes, the inability to support similar promotional activity as in-store, plus the inability to remain on supported versions because of the number of changes applied all contributed to the non-aligned view of this product. The other two software products, one the stores stock system (EPSOM), the other a bespoke order placement system (Logica) while not ideal were accepted as being aligned for what they were intended.

9.4.2.4 Externalities and overflowing

Callon (1999) describes 'the impossibility of total framing' or what he calls 'overflowing' when externalities (that is what economists describe as all the connections, relations and effects which are not taken into account when entering a market transaction) have an impact on a process. For example, Business Express had an agenda in the mail order case to influence the returns procedures in use so that it suited their own method of working. This need not be a negative impact because the outcome of the changes might be mutually beneficial to both parties. However it does highlight the different approaches and drivers of the actors involved. Where 'fusion' of external knowledge/artefacts/methods with internal knowledge/procedures/systems, had changed both in the process phenomenum, has been labelled as 'Articulation' (Hislop et al 1997). Hislop et al go on to assert that the degree of commodification of the process will influence the articulation process. "In general, the more commodified a technological system is, the more easily transferable it is. Conversely, the more commodified a system is the more difficult it is for the company adopting it to modify and contextualise it".

9.4.3 Methods of inscription observed during the cases

9.4.3.1 Trials, pilots, and speed of implementation

Adopting the trial or pilot approach to implementation is an ideal opportunity to legitimately facilitate translation and inscription activity, and several of the cases suggested that the approach to the business problem was as if it were a trial or pilot. Trials and pilots can easily become 'de facto' standards (i.e. they default to the trial option and

never get reviewed and become a legacy), but the incomplete nature of trials and pilots openly allows alternative suggestions and operating options to be legitimately tabled at the expense of a prolonged implementation process.

9.4.3.2 Hierarchical, intermediate, and market governance.

In the Mail Order case the call centre was under the control of a third party organisation, yet Boots insisted on being actively involved in the governance procedures (i.e. the direction and control of affairs, policies, and functions of the call centre). For example, the recruitment and training of staff and the incentive schemes used to motivate staff. Barney (1999) describes three types of governance that have their roots in transaction cost economics; they are market, intermediate, and hierarchical governance. Market governance is perhaps that which is most associated with the provision of commodities. Where companies deal at arms length and rely on market-determined prices to manage an exchange, but they do run the risk of opportunism when a transaction-specific investment is involved. In contrast, hierarchical governance is applicable when an exchange is brought within the boundary of the firm. For instance when the Loyalty Card call centre was brought in-house the parties to the exchange were no longer independent so control could be exercised in any decision-making. Finally, Intermediate governance, the use of complex contracts, strategic alliances, and joint ventures is applicable when partnering to form a joint venture. An example is the joint venture between BIS and RSA in the insurance case. Therefore the successful commoditisation of a process will rely on a healthy market governance approach to issues, which is both manageable by the agent and acceptable to the principal.

9.4.3.3 The influence of key actors in the network

Although actors need not be people, typically the arbiters on decisions concerning the 'design' of a process (and for design read 'what' is done rather than an elaborate engineering activity) are those most closely concerned with the product or service. They

will view the process (if they even consider it as a process), from a viewpoint of the 'what' is done and less so the 'how'. Describing a concept called the 'deeper structure', Kutschker (1994) suggests that:

"The designers produce designs of business processes based on their perception, explanation, and understanding of organisational reality."

Values, beliefs, attitudes, and facts are the bits of knowledge of organisational reality".

In each of the cases examined earlier key actors emerged as being dominant, yet despite this domination and regardless of their position of power, without the alignment of the actors in the network the impact was not sustained in the long run. For example, the insistence by the Mother & Baby Direct Product Manager to use third-party resources in the call centre was eventually overturned, or the pressure applied by the BTC Chief Executive to launch the Insurance products quickly and the subsequent change of arrangements at contract renewal. It would take more than the decision by a key actor for a non-commodity process to be considered a commodity, or vice versa just because they want it to be.

9.4.3.4 Evidence of translation and inscription activity taking place in the non-aligned space

A number of the cases had components that were considered 'commodities' but they also occupied the 'non-alignment' space of the framework, thus signifying the pressure of potential translations from actors in the network. Table 9.10 utilises Hanseth and Monteiro's (1998) 'four key aspects of inscription' to illustrate the current translation activity for those components that were categorised as 'non-aligned'. The table consists of four columns: Column (i), which identifies the explicit anticipations (or scenarios) held by some of the actors during translation; Column (ii), describes how the inscriptions are translated and inscribed into the materials of the inscription (e.g. systems, procedures

etc.); Column (iii), lists the actors who inscribe them; and, Column (iv), describes the strength of the inscription (i.e. the effort it takes to oppose or work around them).

EVIDENCE OF TRANSLATION AND INSCRIPTION ACTIVITY IN THE NON-ALIGNED SPACE					
(i) Anticipations (Scenarios)	(ii) How they are being translated	(iii) Who inscribes them	(iv) The strength of the inscription		
That the Loyalty Scheme Operating System (LSOS), should provide the core of a Customer Relationship Management (CRM) facility.	Constant requests for new functionality, coupled with the citing of inadequacies of LSOS, as the reason for not implementing new ideas and business initiatives.	Marketing departments who have these requirements and are not associated with the Loyalty Card scheme.	Despite the obvious advantages, to date this inscription has always ranked less important to those who have the decision-making authority.		
That LSOS and CDAS should be operated in-house by the Information Systems Department who have a wealth of experience in running large mainframe applications.	The indifferent service provided by IBM has provided numerous opportunities to challenge the current arrangements, and to demonstrate a lower cost of ownership if operated inhouse.	Information Systems Department Management	Very strong. Upon the expiry of the existing contract new arrangements are being made to remove the support from a third party and bring it inhouse.		
The mail order courier 'Business Express' wants to incorporate the Boots work into their normal operating procedures.	By being prescriptive about the methods they should operate (e.g. the returns procedures if goods previously delivered are faulty or damaged).	The Account Management team at Business Express.	Some minor changes to the refunds procedures have been instigated by Business Express.		
That the design of the 'Mailbrain' system should be modular and kept as generic as possible.	Encouraging long lead times for changes and enhancements, and inflated costs for systems development work.	The systems vendors (Sandersons), and the Agents for the system (Salestrac).	The bespoke changes made to the Boots version of Mailbrain cannot be upgraded to any later versions supplied by the vendor.		
That the skills and experience required for a quality mail order operation were only available from 3 rd parties.	An emphasis on the need to use a call centre that had a strong 'sales' orientation and a blue-chip client base (e.g. Harrods).	The call centre Project Manager.	Although a view that was seen as important at the time of the process design, there is a subtle shift to now consider alternatives.		
The implementation of manning levels and supervisory structures at RSA were considered by Boots to be excessive.	The rigid adherence to agreements made with the incumbent Trades Union.	RSA Management Team and Union representatives	Very strong. These were never amended (despite much activity) during the life of the case.		
The inability to take a flexible approach and adapt the ISAAC software to meet the business requirements.	Constant requests for amendments and changes to the bespoke software.	Boots Insurance Operations and Marketing Teams.	Considered an irreconcilable issue when reviewing contract renewals.		

Table 9.10: Current translation activity in the four case studies

The anticipations or scenarios are a mix of both 'what' should be done, for example that LSOS should form the core of a CRM approach; and also 'how' they are conducted, e.g. the outsourcing of the Mail Order call centre in order to secure access to staff perceived as having the appropriate 'specialist' skills. The inscriptions are a mix of formal and overt activity, such as compliance with union regulations or the willing acceptance of advice given by an internal legal advisor; through to uncooperative behaviour taking every opportunity to discredit that that is the subject of the inscription. Typically the inscribers are formal groups or individuals (a mix of both internal and external to the organisation), but could also be informal groups (competitors), or even intangible artefacts such as the organisations culture. The strength of the inscription is a relative measure rather than an absolute one.

9.4.4 Movement around the inscription/specialisation framework

The case studies (chapters 4 to 7) as summarised in Figure 9.4 describe the positioning of the process components at their inception. Figure 9.5 shows the movement of some of the process components over a three-year time period, as described in chapter 8.

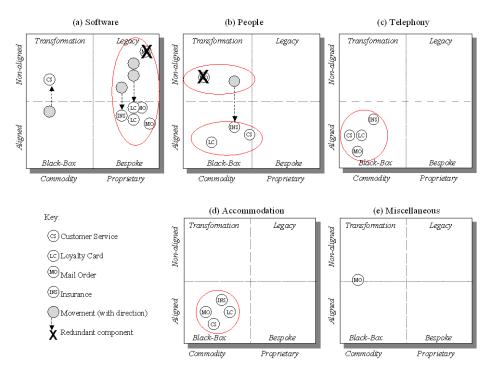


Figure 9.5: Movement due to inscription/translation over time

Initially two of the process components in the Insurance case (people, and software (ISSAC)), were positioned in the 'transformation' and 'legacy' space respectively. A key decision taken early on was to keep the call centre and the associated administration closely coupled, and to use the services of the partner organisation (RSA) to provide these services, a view that RSA clearly supported and inscribed. This meant that BIS were using third party staff and systems to run their business. There had been a keen desire by BIS to influence the staff, their training and development, and concerns were expressed about the flexibility and functionality of the ISSAC system. Although this was the view at the inception, when reviewing the arrangements some three years later, with the benefit of the experience of running the operation, the views had changed significantly. The joint realisation by both partners that the unit cost of administering each sale, coupled with the emergence of third party administrators (TPA's) who could undertake the administration separately from the underwriting of the insurance risk, meant that new opportunities were now possible. This de-coupling was legitimised by RSA who now had new information about their own cost structures for this product type that influenced their own strategic direction. This helped in the translation to their new view. Although this process was not considered a commodity at its inception, these developments actively move 'people' and 'software' into the aligned space, as BIS had learned that third parties can effectively operate such a call centre. This positively reflects the growing confidence BIS has in third parties to undertake the work to the required standard. Similarly, the new software provided by the TPA's is significantly better than the ISAAC system. This looser coupling (or commodification) means that the power of the single third party has been reduced and flexibility to utilise other third-party organisations has been created.

In complete contrast the Customer Service software (Customer Q) has been a stable and robust product, but as the call centre develops into new areas of activity this software is increasingly considered an inhibitor to undertaking CRM activity. The inability of the

product to interface with existing legacy systems is also seen as an inhibitor. For these reasons the software has moved into the non-aligned space as the pressure mounts to choose an alternative.

The same CRM activity has created pressure to develop LSOS by adding functionality to become the core of a CRM application. As a result concern that a strategically important system such as LSOS is administered by a third-party has grown to such an extent that the decision has been taken to bring it in-house at a suitable point when the contract allows. CDAS has also been fully adopted and is administered in house. Although both are bespoke applications they have now moved into the aligned space.

Telephony and accommodation components remain unchanged. This continues to endorse their commodity status in this process. Business Express (mail order couriers) remaines on the aligned/non-aligned border. Several of the mail order components eventually perished as the mail order business was subsumed into the e-commerce channel.

9.4.5 Alignment logic summary

Using the inscription/specialisation analysis framework the alignment of the actors in the network was assessed for the components of the call centre process. As was the case with both the process logic, and the decision logic, it is apparent that despite the similarity of the processes in question there are significant differences in alignment of the actors in the network. The strength of the alignment of actors (irreversibility) was demonstrated by two decisions in the Customer Service case (to insist on using Boots own staff in the call centre, and the determination to work within the boundary of a software package to limit complexity). Both were fully supported by the actors in the network. In complete contrast the decision to outsource LSOS did not have the same degree of support and subsequently that decision was overturned.

The evidence of inscription and translation activity highlights the eclectic mix in the sources of inscription/translation activity. For example, the opportunities for inscription that trials and pilots present, the impact of intermediate governance, the influence of key or powerful actors such as the Chief Executive. The alignment of actors is a dynamic phenomenon as was demonstrated by the movement over time of the people in the Insurance case, the software in the Loyalty Card and Insurance cases, and ultimately the shift from an aligned view of the packaged software in the Customer Service case to a non-aligned view as the business requirements changed over time.

9.5 Integration of the three logics of commoditisation

9.5.1 Introduction

In this final section, the 'patterns of activity' identified in the earlier sections can be represented in a model by the three central logics of commodity business process adoption, which are the process logic, decision logic, and alignment logic. The term 'model' is used as per Suppe (1977), and later Pettigrew and Whipp (1991), as "a projection in detail of a theoretical position, which depicts a possible system of relationships, events and actions". It is not intended as being prescriptive, or a complete checklist, but as a representation of how the mechanisms operate. The model has emerged from examining four internal corporate ventures in one major UK retailer, each endeavouring to establish a call centre process. The result is the identification of a pattern of activity that arises from the observable differences in the way that components of the process, decision, and alignment logic act as either 'facilitators' of commodity adoption, or in contrast 'inhibitors'.

9.5.2 The construction of the model

The model (Figure 9.6) is made up of three vertical sections headed in turn 'process logic characteristics', 'decision logic characteristics', and 'alignment logic characteristics'.

Overlaid upon each section are the characteristics that are principally associated with the

process, the decision-making, or alignment of actors. The characteristics are not exclusive to one section, some overlap as they apply in both sections. For example, 'low uncertainty' can be characteristic of a reasonably straightforward decision to be made, or similarly of a commodity process. Some of the characteristics could also be linked, for example 'high uncertainty' is linked to 'trials and pilots' thus highlighting the relationship between the propensity to enter trials and pilots where uncertainty is high. It follows that the uncertainty can be reduced from the experience of a trial or pilot. The characteristics shown here are not considered a complete set, as it is envisaged that others might emerge when examining different processes. The process characteristics identified within the case studies are plotted on the model (in a vertical plane) according to their ability to 'inhibit' commodity adoption i.e. above the inhibitor threshold line, or 'facilitate' commodity adoption i.e. below the facilitation threshold line. Those appearing between the two thresholds are neither conclusively inhibitors or facilitators (labelled crossover). Although the model implies a continuous graduation from the most inhibiting characteristic at the top, to the most facilitating at the bottom, the relative positioning is perhaps the most meaningful. For example, the positioning of 'asset specific investment' in the inhibitor space reflects the lack of general applicability and flexibility of such an investment that is much better suited to optimisation. Similarly, 'commodity components' would clearly be synergistic to, and a facilitating characteristic of, commodity processes (such as telephony in a call centre). The four segments of the inscription/specialisation framework graduate the alignment logic from 'legacy' as the most inhibiting to commodity process adoption, through 'bespoke' and 'transformation' to 'black-box' as the most facilitating.

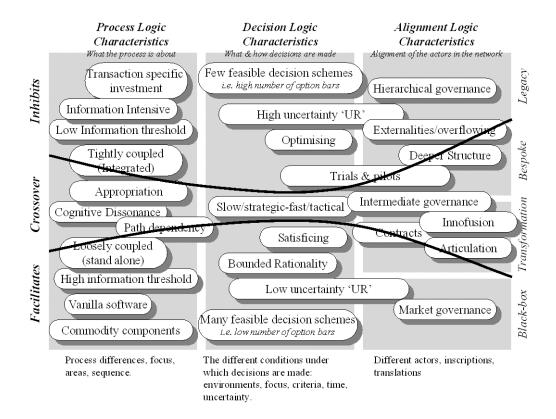


Figure 9.6: Conceptual model of commodity business process adoption: the three central factors

To take each section in order:

9.5.2.1 The process logic

The first section shows the 'process logic characteristics', i.e. what the process is actually about (Figure 9.7).

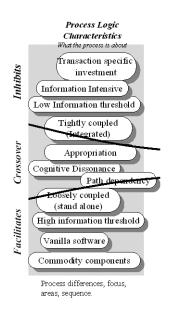


Figure 9.7: Conceptual model – Process Logic characteristics

The characteristics in this section relate directly to the process e.g. that it is information intensive, or has commodity components, or alternatively that it might be the subject of a transaction specific investment. The characteristics of a particular process at any given time might not all reside within one area of the section, and characteristics of a process can change, placing it in different areas of the section over time. For example, the change in strategic importance of the Customer Service call centre as it migrates to become the heart of the bourgeoning CRM activity. Therefore the process characteristics aren't necessarily static, but can be dynamic.

9.5.2.2 The decision logic

The second perspective is the 'decision logic characteristics', i.e. 'what' decisions are made, and 'how' those decisions are made, which will also reflect the different conditions under which decisions are being made (Figure 9.8). For example, where there are few feasible decision schemes to choose from, i.e. there are a high number of option bars, then this naturally limits the possible scope making it more difficult to conform to a process

which might need to be prescriptive (a feature of its commodity status). However, where there are few option bars this then increases the relative number of feasible decision schemes, and along with them the realistic chance of conformity to a commodity process, i.e. greater choice.

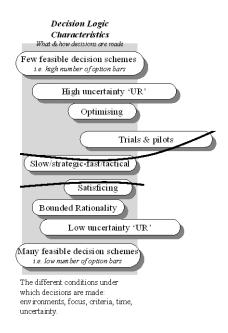


Figure 9.8: Conceptual model – Decision Logic characteristics

Davenport & Prusak (1998) describe as "frictions" the many cultural factors that inhibit and prevent knowledge transfer as it tries to move through an organisation, for example, lack of trust, dissimilar culture, vocabulary or frames of reference. Similarly, they also assert that the size of an organisation will be a critical factor. While the probability of the required knowledge being resident within a large and more complex organisation is greater than in a smaller organisation, so is the likelihood that the knowledge is not held locally, or in fact that anyone knows where it exists. What became apparent during this research is that the know-how about call centres didn't transfer very well between cases despite being established at about the same time and the wealth of information and experience the Customer Service call centre had amassed. Once again, depending on individual circumstances the decision characteristics need not be static within one area, as

was observed in the Loyalty Card case where despite the initial outsourced implementation being a 'fast/tactical' and satisficing approach, this quickly changed to a slow/strategic optimising approach when 'insourced'.

9.5.2.3 The alignment logic

The final perspective is that of the 'alignment logic characteristics', i.e. 'the alignment of the actors in the network'. The alignment logic space is divided into the four characteristics as determined from the inscription/specialisation analysis framework, with 'legacy' being the most extreme inhibitor, through bespoke, transformation, and finally black box, which is the most facilitating characteristic (Figure 9.9).

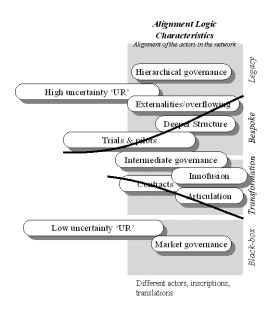


Figure 9.9: Conceptual model – Alignment Logic characteristics

The alignment of the actors is an important and powerful characteristic, which was emphasised by the almost unanimous alignment of the actors in the Customer Service case to support an in-house call centre against all the odds. This alignment was even strong enough to resist making changes to the software products. We have already seen how alignment moves through inscription/specialisation due to inscription and translation

activity, and as a growing group of actors consider CRM to be a strategic way forward then the interest in Customer Service, and the functions it operates, are scrutinized.

9.5.3 Movement over time

Figure 9.10 shows a plot of the conceptual model of commodity business process adoption for each case over three time periods (years 1, 3 and 5). The figure emphasises the variety between cases at different stages of their development, with year one (highlighted) showing a completely different pattern of activity, and starting position for each case, and the subsequent moves through the following years.

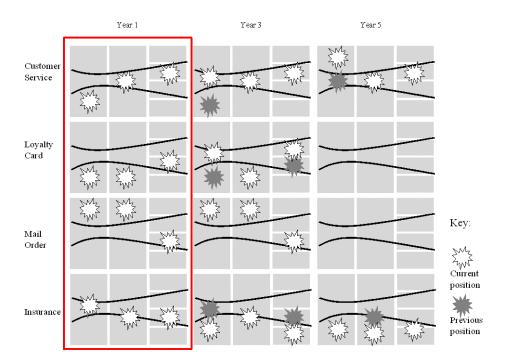


Figure 9.10³⁶: Plot of the conceptual model of commodity business process adoption

The Customer Service case has seen a significant shift in process logic from 'facilitating' to 'inhibiting'. This was largely the result of the shift away from a relative straightforward customer service facility, to a more complex and integrated CRM approach. The decision

logic has remained static within 'crossover', and alignment logic within 'bespoke'. The

_

³⁶ Year 5: Loyalty card had merged with Customer Service, Mail Order had ceased to operate, and Insurance had only been trading for four years at that time.

Loyalty Card case now appears to be treated less as a commodity as it has moved out of the 'facilitating' area in both process and alignment logic that will have been influenced by the amalgamation with the Customer Service call centre. The Mail Order case showed no discernable changes before it was closed. However, the Insurance case has shown a significant movement towards commodity with all three logics now considered facilitating. This reflects how it is possible to learn to adopt a commodity process over time. This accurately reflects the Insurance case make up of commodity components, flexibility in options, and acceptance of market governance.

9.5.4 Commodity adoption at different levels of the firm

Although not explicitly discussed within each case, the adoption of commodity business processes in practice takes place at a number of different levels within the businesses concerned. From the four cases we have seen how commodity adoption (of components or full processes) can be at the level of (i) the department, as in the Customer Service case; (ii) the Strategic Business Unit (SBU), as with Mother & Baby Direct; or (iii) at the corporate level, such as Group Telecommunications act of purchasing the telephony equipment on a group-wide basis. This adds a level of complexity to the final outcome as we have seen that decisions are made within the context of the particular business need or situation at a particular point in time. This being the case, then consistency across a multibusiness organisation will require specific activity to ensure architectural alignment at the level of the project, programme, department, or corporate levels can be achieved. The adoption of a complete commodity business process could be a multi-step operation, which might involve a mix of commodity, leveraged and proprietary components while working towards adoption.

9.5.5 Summary

This penultimate chapter brings together the within-case and cross-case analysis from earlier chapters, and concludes by integrating the three logics of commoditisation (process, decision, and alignment). The chapter opens with the analysis of the process logic, which concludes that despite the 'core' of the process being similar (i.e. the tasks and activities undertaken), the unique context (surround) in which each process is operating is fairly specific to that situation. The surround can be specific in its information exchange content; its connectedness with related decisions, processes and systems; the culture within which it operates; and the practical limitations of utilising existing infrastructure, software and equipment. Similarly, the mechanisms available to recognise when the relevant capability has been achieved, or the existence, availability, and level of relevant know-how, all go towards creating a distinctive situation in each case. The decision logic follows-on and continues the theme of uniqueness, which is significant enough to generate major differences in the decisions being taken in each case. Typically comprising 'process specific' decisions and 'related' decisions, there is a wide variety in the scope, order, requirements, timescales, and uncertainty contained within them. Despite the similarity at the core of the business process, the process specific decisions cover a wide range of issues, as do the related decisions which contain those decisions that are fundamental to the process in question and reflect the diversity of contexts in each case. The flexibility to choose between feasible decision schemes is inversely proportional to the number of option bars, and thus the degree of difference between cases builds up. The alignment logic exemplifies the variety in the way that actors view the decisions to be addressed, and how the individual views of the actors involved influence the final outcome. The strength of that alignment (irreversibility) to either adopt or reject commodity business processes (or their components) is dynamic and can change over time. Finally, components of business processes can act as 'facilitators' or 'inhibitors' of commodity process adoption, and the conceptual model of business process adoption reflects the interconnectedness of those components, and that of the three logics. For commodity process to be adopted:

 the process itself has to have features that are similar to other commonly used processes supported by other actors;

- (ii) the decision process must not be constrained by too many factors that mitigate against commodity adoption:
- (iii) the various actors involved (internal and external) must be aligned behind the belief that the process is a commodity.

In the cases examined here over time the nature of the process itself ultimately dominated the choice of whether to treat a process as a commodity or not. The distorting factors in the decision process and initial lack of alignment tend to play themselves out. This led in some cases to the adoption of a commodity approach and in others to its rejection. The availability of suitable commodity processes to adopt also changes over time as illustrated by the appearance of third-party administrators in the insurance case. As the market matures and more options become available a commodity approach becomes more feasible. However, it is open to a company to decide to reject the notion of a commodity approach and make the design of their in-house processes a source of differentiation.

CHAPTER TEN:

CONCLUSIONS AND CONTRIBUTIONS

10.1 Introduction

This final chapter builds on the findings identified in the analysis chapter and details the main contributions to the body of knowledge. The research set out to determine:

- ☐ How key architecture decisions are taken?
- □ What are the conditions under which commodity adoption takes place? and
- □ What is the influence of commodity work business processes in that decision-making?

The answers to these questions are necessarily multifaceted and context specific. They will be addressed in depth in the discussion that follows. Five types of contribution are described here: relational, analytical, empirical, practical, and, methodological, and each is developed in more detail. Suggestions for future research, development and applications are included, and the chapter concludes with conclusions and a summary of the contribution.

10.2 The Relational

In all four cases the actors involved adopted a 'structured' approach to decision making following an ordered progression from recognition to resolution, as opposed to an anarchic approach. The findings of this research are therefore predicated on there being a structured approach to decision making and cannot assert that the same outcome would be observed if an anarchic approach were adopted. The research identified that there is a need to understand the closely coupled relationship between process logic, decision logic, and alignment logic. Their relationship in many ways is similar to the well known 'fire triangle', i.e. the components of fire being fuel, heat, and oxygen, where by removing one

side of the triangle results in it collapsing (no fire). The commodity process adoption is much the same. The three sides of the triangle, as illustrated in Figure 10.1, are the process logic, decision logic, and alignment logic, and all three sides need to be in place (i.e. facilitating commodity process adoption) in order for there to be a sustained adoption of a commodity business process. Each is dependent on the other two.

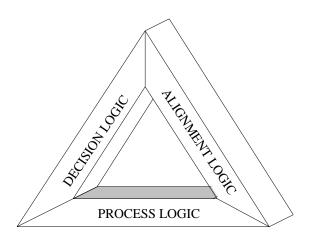


Figure 10.1: Commodity business process adoption triangle

This understanding arises from studying the call centre process in four completely different businesses ventures whereby it became apparent that even where the components and characteristics of a process might be commodities (i.e. they are not specific to any particular business, are readily obtained, and are more or less equally valuable to any number of businesses), alone this is not sufficient to determine that a commodity process is adopted. The differing conditions under which any decision was made, and the alignment of the different actors in the network, is of equal influence and importance. For example, a strong desire by the actors in the network for a process to be a commodity will not succeed without the components of that process being facilitative, and the conditions under which the decisions are made being supportive to such a

commodity approach. Similarly, just because the CEO orders a commodity approach it does not mean that it will be a successful commodity adoption if (i) it does not have the support of the actors involved, and (ii) the process does not have characteristics that are supportive of commodification. Therefore, the components and characteristics of a process not only have to be *facilitative*, but also the conditions under which the decision is taken have to be *supportive*, and it has to be *seen* to be a commodity by the actors in the network.

10.3 The Analytical

This research has demonstrated that commodity business process adoption operates in a dynamic context and not a steady state. It is necessary to conceptualise the dynamic nature of the process, decision, and alignment logics over time, as the characteristics move through different states (facilitating - inhibiting); decision-making at multiple levels in the organisation, and at different times, with different actors in the network. All of which make commodity adoption problematic. Evidence from the process logic findings has highlighted two critically important process characteristics that influence commodity business process adoption, as follows.

10.3.1 Processes are similar in the core but have a surround that is specific.

The activities at the core of the processes examined were broadly similar, for example in all four cases calls are received, information is exchanged, and details passed to and received from other processes. However, despite this common 'core' there appears to be a 'surround' that is specific to a process, in a particular situation, at a particular time. This was highlighted in examples from the Mail Order case where the uniqueness of its situation (i.e. a mix of outsourced call centre, in-house warehousing, and third-party logistics) made for a situation that was distinctive to those circumstances only, and despite the 'core' elements being broadly similar the context or 'surround' was anything

but typical. By using clear terminology (via Activity Record diagrams) some of the descriptive uncertainty can be removed.

10.3.2 The characteristics of a process differentiate it from any other processes.

The 'surround' as described earlier contains situational and other characteristics that distinguish the process in question from other processes. These characteristics are diverse and unique to a particular situation, but those observed can be usefully grouped into the four categories: (i) 'informational and knowledge', which considers the amount and level of information and know-how that is contained within the process and passed between other processes; (ii) 'culture', the norms, value and beliefs of the organisation, and how they compare with those of other organisations; (iii) 'administrative inheritance', which recognises that organisations start from what is easily accomplished and that they have to accommodate legacy systems, procedures, and processes; and (iv) 'assets, governance', which recognises the impact of the asset specific investments organisations make to support processes, and the issues of governance associated with processes. This is not intended to be a complete or exhaustive list, but is representative of the characteristics observed in these situations. The surround cannot be ignored as it informs the subsequent decisions made, and influences the interests of the actors in the network.

Building on the underlying theory of actor networks, evidence from the alignment logic findings has highlighted two critically important factors that influence commodity business process adoption, as follows.

10.3.3 The significant difference in the alignment of actors in a network.

The alignment logic recognises the difference in interests of actors in a network. Actors need not always be human individuals but can be non-human entities, and the inscriptions and translations that take place between them emphasise those differences. Throughout the case studies there were numerous examples of how actors (companies, individuals,

software products, project teams, managers, and suppliers etc.), had embedded interests within their policies, terms of trading, contracts, products, literature, and procedures, which informed their actions, decisions, and behaviour. An understanding of this variety is key to recognising the inevitable differences it will generate, and that a single or unified view of any situation is seldom automatic.

10.3.4 A commodity process has to be seen to be a commodity by the actors in the network.

The strength of any inscription (or irreversibility) must be sufficient to resist the challenges of translations from actors that are not aligned. Therefore, even when a process has facilitating characteristics it will require the alignment of the actors in the network to be such that it is also 'seen' by those actors to be a commodity. The inscription/specialisation framework highlighted the range of interests that could exist when considering the components of a process (i.e. people, technology, know-how, structure and plant & machinery), and the desire for an aligned-commodity (or 'black-box') situation where high inscription and low specialisation components coexist, thereby facilitating commodity adoption. The strength of an inscription can equally legitimise non-commodity alternatives such as the insistence of using Boots own staff in the Customer Service call centre. The irreversibility of the inscription to use Boots staff was such that it gave this approach a legitimacy that was sufficient to see off any other approach. The research also highlighted how 'hierarchical' and 'intermediate' governance can be used as a mechanism to translate actors in a network.

10.4 The Empirical

This research has collected detailed information on the logic surrounding commodity business process adoption across four independent business ventures within one UK retailer, over a five-year period. This work has made a significant contribution to the understanding of the logic required to go about adopting commodity business processes.

Such detailed accounts are still rare. Above all the research shows how adoption of a commodity business process cannot be taken for granted and that the conditions for adoption and the logic applied must be supportive. Three key decision-making conclusions from the study can be drawn.

10.4.1 The mix and variety of the decisions taken compounds the differences between processes.

The decision logic has demonstrated that the different conditions under which decisions are made i.e. environments, focus, criteria, uncertainty, and time, and how each of these impact on the decisions taken, as well as what is included and excluded from the decision focus, increases the variety thereby compounding the differences. Every new project appears as a unique situation and is therefore treated differently. Therefore, given all the legitimate *differences* that exist, in even a quite regulated and discrete process such as a call centre, it is not unreasonable to expect that the outcome of a particular business decision might not always conclude that a commodity process would be appropriate.

10.4.2 Decisions regarding processes take place at multiple levels within a business

The research has shown that decisions take place at multiple levels within a business and that perfect knowledge about those decisions, and why those decisions have been taken, is not always available. For example, decisions are taken at the level of the 'individual', a senior manager or persuasive project team member; at the 'departmental' level, such as in the Customer Service case; or at the 'company' level, as in the Mother and Baby Direct example; and finally at the group of companies level, such as when Group Telecommunications made the asset specific investment in call centre telephony. The outcomes will reflect the rich mix of actors, situations, and contexts. It is not proposed that these comprise a definitive list of levels or types, but that they are indicative of how organisations make decisions about processes.

10.4.3 The closely coupled nature of 'related' decisions and the influence on the final outcome.

The variety and scope of 'related' decisions, i.e. those that don't correlate directly to the process but are closely coupled to it (such as whether to use smart card technology in the Loyalty Card case), are huge and unpredictable and reflect the uniqueness of the context in which a process resides. This uniqueness amplifies the differences between processes, and related decisions have emerged as being important and influential during decision-making and have resulted in a significant impact on the final outcome.

10.5 The Practical

This research was not designed to produce a definitive checklist of actions and 'tips;' for managers, however it is worth emphasising some of the practical insights gained from this study that could inform the way managers and practitioners might approach similar situations. Commodity process adoption will not always be the subject of a rational approach, as it relies heavily on the ability of an organisation to:

- ☐ First, clearly identify the work business processes it requires to achieve its business objectives, and in doing so establish the characteristics and components of that process;
- Second, recognise and understand the different conditions under which commodity business process adoption decisions are taken and the impacts of those conditions;
 and
- ☐ Third, develop a thorough understanding of the alignment of actors in the network and the significance to the process of inscription and translation activity,

In short, observance of the commodity adoption triangle.

This research has shown that without any formal intervention the dynamic nature of commodity business process adoption makes any sustainable adoption unlikely if left to chance. The configuration of all three of the central logics will at any given decision point rarely be perfectly aligned, however where they are aligned then the likelihood of a sustained adoption of a commodity process is significantly improved. Adoption is more likely where the process logic comprises commodity components, is loosely coupled to other processes, has a high information threshold, and utilises (if required) standard information technology. The decision logic approach would be low in uncertainty, have a choice from many feasible decision schemes, and have adopted a satisficing rather than optimising approach. Finally, the alignment logic would have 'black-box' characteristics (i.e. being highly aligned and a low degree of specialisation), and market governance prevails.

The reality is that when 'real people' are involved then so are their associated prejudices. The adoption of a commodity business process isn't something that all human actors will necessarily do instinctively, why should they? Instead they have to 'learn' to adopt commodity processes, as was demonstrated in the Insurance case. The know-how of commodity adoption is not easily or reliably transferred between actors despite the learning that is available. The research insights generated by the research could easily be developed into practical guidelines for company practice.

10.6 The Methodological

Two principal methodological contributions are discussed here. Firstly, the use of Strategic Choice Analysis (SCA) as a research framework to reconstruct the decision logic used within the case studies with hindsight, as told to the author by those involved. The traditional use of SCA is to provide a framework for decision-making by building incremental progress towards a final decision by examining alternative ways of managing uncertainty. The four central themes (shaping, designing, comparing, and choosing) are supported with a variety of techniques to assist in the decision making process. However, in this study the technique was used to *record* the decision-making activity applied to the

problem in focus by interviewing actors involved in the original projects. Using the information made available, supplemented by archival records, documents, and direct observation, the decision making process was recreated in each case in a way that captured all the relevant data while providing a complete 'chain of evidence'. This methodology could easily be 'packaged' so that a research student could follow the method and continue this research in other industries or processes.

Secondly, the unique combination of Activity Records, SCA, and Actor Network Theory, in order to analyse the logic of commodity process adoption. The three complimentary techniques provide a holistic approach to understanding the process, decision, and alignment logics at play in commodity adoption. Activity records provide an explicit visual and narrative description, which reveals the structure of the activity (particularly hierarchy and boundaries), while providing processual context. For example, it has been used by its inventor to document cultural difference in Navajo communities. The recording of the decision logic applied using SCA as discussed above. Finally, the insight provided by Actor Network Theory of the inscription and translation activity of actors in the network.

10.7 Future research, development and applications

"Learning to see the structures within which we operate begins a process of freeing ourselves from previously unseen forces and ultimately mastering the ability to work with them and change them" (Senge 1990). Through the results of this research there has been some insight into the adoption of commodity business processes, using call centres as the focus of the analysis, from the perspective of a single UK retailer. Using the conceptual model of commodity business process adoption as a framework, the model could be applied to different settings (i.e. a different industry or country), or to different work business process such as procurement, business accounting, innovation management, or insurance claims management. Alternatively, different organisational process types could

be the focus such as strategic planning, budgeting, and performance management. Building on the findings of this research it would also be possible to investigate how organisations might best approach the design of business architecture in a way that takes advantage of commodity business processes.

10.8 Conclusions

It is concluded that despite the apparent similarity of situations on the surface, and the expectation that broadly similar processes located in the same overall business context would adopt similar solutions in terms of commoditisation, governance, and resourcing (architecture), key architecture decisions of this nature are taken: (i) in a variety of business contexts, (ii) at varying levels within an organisation, (iii) where the views of the actors involved (as to whether each element could be treated as a commodity) can be wide ranging, and can change over time, (iv) in an environment where imperfect knowledge and know-how transfer exists, and (v) where there is no mechanism to recognise when capability has been achieved in a process activity.

The conditions under which commodity adoption is most likely to take place are where (i) the process logic comprises commodity components, is loosely coupled to other process, has a high information threshold, and utilises standard information technology, (ii) the decision making is low in uncertainty, has a choice from many feasible decision schemes, and the decision makers have adopted a satisficing rather than optimising approach, and (iii) the actors are highly aligned, specialisation is low and market governance prevails.

The influence of a commodity work business process alone is not enough to ensure that the decision to adopt a commodity is achieved, and requires the support of both the decision logic and alignment logic for a successful and long lasting adoption to take place.

10.9 Summary of Contributions

The contributions the research has made to the subject of the commodity business work processes is in summary:

- 1. Relational: The research has shown that, in a context where a structured approach to decision making is the norm, process commoditisation decisions can be considered as the triangular relationship between three aspects, (i) the business process itself and its relationship to other processes, (ii) the decision procedure that includes whether or not to treat the process and its components as a commodity together with other decisions which were considered at the time to be relevant, and (iii) the alignment or not of the actors involved behind the belief that the process and its components can indeed be treated as a commodity. For a commodity approach to be taken the three components must mutually support such a commodity approach.
- 2. Analytical: The detailed analysis of the dynamics of the commodity adoption process through time has highlighted the need to conceptualise the nature of the process logic, the decision logic and the alignment logic over time. Four issues have been identified as being critical, (i) processes that appear on the face similar, in practice turn out to have a similar core but unique surrounds, (ii) the surround, which is unique to a particular process, can usefully be considered under the four headings, information and knowledge, culture, administrative inheritance, and assets and governance, (iii) the variety of different interests and alignments of the various actors (human and other) contribute to situations that cannot be simply represented in a single or unified view, and (iv) the interests and alignments of key actors over time need to be sufficiently inscribed so that the process in question is 'seen' as a commodity.
- 3. Empirical: The research presents detailed findings of how the three logics apply to commodity business process adoption with evidence from four longitudinal case studies in different business contexts within one major UK retailer. The detail of the research found that (i) seemingly small differences in the processes, decision making and attitudes interact to give quite different outcomes between the cases, (ii) the fact

that decisions take place at different levels in the hierarchy resulting in a rich mix of actors and contexts, and (iii) in each case 'related' decisions had a major impact on the decisions taken, amplifying the differences between the processes studied.

- 4. Practical: The implications for management practice of the insights gained from this research can be used to inform the way managers and practitioners approach similar situations. In particular, companies would benefit from a better understanding of the three logics to help them recognise situations likely to favour the adoption of a commodity, where (i) the process logic comprises commodity components, is loosely coupled to other process, has a high information threshold, and utilises standard information technology, (ii) the decision making is low in uncertainty, has a choice from many feasible decision schemes, and the decision makers have adopted a satisficing rather than optimising approach, and (iii) the actors are highly aligned, specialisation is low and market governance prevails.
- 5. Methodological: The use of SCA as a research instrument is a novel feature of the research approach. The combined use of Activity Records, SCA and Actor Network Theory is almost certainly unique in the analysis of the logic of commodity process adoption.

APPENDIX ONE

INTERVIEW GUIDE:

□ Team sizes

	Wh	What are the key sequences of actions, what superseded what, what were the key						
	traı	transition points and who were the critical personalities?						
	What events at other related levels of analysis impacted on the core stream of							
	act	ivity?						
	Wi	With the exposure of the historical time series, what were the underlying continuities,						
	the key moments of emergence and mobilisation of an idea or group of key power							
	fig	ures?						
	Is t	Is there evidence of path dependency in the process under review?						
	Wh	Who are the winners and losers in the process, the doubters, the disengaged and the						
	champions for change?							
	Is t	Is the pace of change faster in this part of the organisation than that part? If so why						
	anc	and how?						
	Wh	What features of context and action are driving the process?						
	Is the sequence of action critical in accelerating or decelerating the process?							
	If o	claims are being made for change what was happening at time t1 and what is						
	hap	ppening now?						
	What indicators can be assessed at each of the two time points to corroborate							
	mo	movement?						
	Wh	nat are the intended and unintended consequences of the revealed pattern of						
	continuity and change?							
	Str	ategic intent?						
SE	MI-S	STRUCTURED INTERVIEW FRAMEWORK – CALL CENTRES:						
PF	OPL	F·						
L								
		Number of staff (FTE's)						
		Skills (Commodity, leveraged, proprietary)						
		Unions/Staff associations						
		What is the customer's role in the process?						
		•						
		Incentive schemes						

		Governance procedures					
		Location/accommodation					
KN	KNOW-HOW:						
		Call centre staff					
		Adopters/Project teams					
		Information threshold					
		Knowledge transfer					
INI	FOR	MATION TECHNOLOGY:					
		Specialist technology – Hardware/Software					
		Closely/loosely coupled to other processes					
PL	AN]	Γ & MACHINERY:					
		Telephony (Features and equipment) Rental/Purchase					
CC	MP	ATABLE STATISTICS:					
		Number of calls					
		Time of operation					
		Duration of calls (Sequencing/flow)					
		Own staff					
		Dedicated staff to BTC					
		Environment					
		Working hours breaks etc.					
		Incentives					
		Pay & Benefits					

		Training & Recruitment					
		Service Level Agreements (SLA's)					
GENERAL:							
		Process content (Tasks & activities)					
		How is the process seen by the organisation?					
	□ Rank in criticality						
		Is there any competitive advantage?					
Does any pa		Does any payment transactions take place?					

☐ Is it a new process?

☐ Is it a new business (to Boots)?

REFERENCES / BILBLIOGRAPHY

ABRAHAMSON, E., 1996. Management Fashion. Academy of Management Review, 21 (1): 254-285.

AKRICH, M., 1992. The de-scription of technical objects. In: BIJKER, W. and LAW, J. (eds.) *Shaping Technology / Building Society: Studies in Sociotechnical Change*. London: MIT Press. 205-224.

ANDERSON, I., BORUM, F., KRISTENSEN, P., and KARNOE, E., 1995. On the art of doing field studies: An experience-based research methodology, Handelshojskolens Forlag Distribution, Munksgaard.

BAATZ, E.B., 1996. Ready or Not. CIO Magazine. June.

BARNEY, J.B., 1999. How a firms capabilities affect boundary decisions. *Sloan Management Review*, 40, (3) 137-145.

BETTIS, R.A., BRADLEY, S.P. & HAMEL, G., 1992. Outsourcing and Industrial Decline. *Academy of Management Executive*, 6(1), 7-22.

BLAIKIE, N., 1993. Approaches to social enquiry. USA: Blackwell.

BLAXTER, L., HUGHES, C., and TIGHT, M., 1996 *How to research*. Buckingham, England: Open University Press.

BOULDING, K.E., 1981. Evolutionary Economics. London: Sage.

BRADLEY, K., 1997. Intellectual Capital and the new wealth of Nations. *Business Strategy Review*, 8, (1), 53-62.

BROWN, J.S., and GREY, E.S., 1995. *The people are the company*. In: Fast Company Premiere issue. p78.

BRYNJOLFSSON, E., RENSHAW, A., and VAN ALSTYNE, M., 1997. The matrix of change. *MIT Sloan Management Review. Winter*, 38, 2.

CALLON, M., 1991. Techno-economic networks and irreversibility. In J. LAW ed. *A sociology of monsters. Essays on power, technology and domination.* London: Routledge. p 132-161.

CALLON, M., 1993. Variety and Irreversibility in networks of Technique conception and adoption. *In:* D. FORAY AND C. FREEMAN, eds. *Technology and the Wealth of nations: Dynamics of Constructed Advantage*. London: Pinter. 232-268.

CALLON, M., 1999. Actor-network theory – the market test. *In:* J. LAW AND J. HASSARD, eds. *Actor Network Theory and After*. Oxford: Blackwell and Sociological Review, 181.

CALLON, M., and LATOUR, B., 1981. Unscrewing the big Leviathan: how actors macro-structure reality and how sociologists help them to do so. In K. KNORR-CETINA and A. V. CICOUREL, eds. *Towards an Integration of Micro- and Macro-Sociologies*. Routledge & Kegan Paul. p 259-276.

CALLON, M., and LATOUR, B., 1992. Don't throw the baby out with the Bath school! a reply to Collins and Yearley. In A. PICKERING, ed. *Science as practice and culture*. Chicago, IL: he Univ. of Chicago Press.

CAULKIN, S., 1997. The Knowledge Within. Management Today, August 1997, 28 - 32.

CHECKLAND, P. and SCHOLES, J., 1990. *Soft systems methodology in action*. London: Wiley & Sons.

CLARK, P. and STAUNTON, N., 1989. *Innovation in Technology and Organization*. London: Routledge.

CLEGG, S. R., 1989. Frameworks of power. London: Sage.

COASE, R.H., 1990. The Firm, the Market and the Law. London: University of Chicago Press.

COHEN, M.D., MARCH, J.G and OLSEN, J.P., 1972. A garbage can model of organisation choice. *Administrative Science Quarterly*, 17, 1-25.

COLLINS 1991. English Dictionary, third edition. Glasgow: HarperCollins.

COMMONS, J.R., 1961. *Institutional Economics: Its place in Political Economy. Vol.1.* Madison, Wisconsin: University of Wisconsin Press.

COMPASS 1996. The Compass IT Strategy Census 1996. London: London School of Economics.

CRICHTON, C., (Ed.) 1966. *Interdependence and Uncertainty: a Study of the Building Industry*. Tavistock: London.

CURRIE, W.L., and SELTSIKAS, P., 2001. Delivering Business Critical Information Systems through Application Service Providers: The need for a market segmentation strategy. *International Journal of Innovation Management*. 5. (3) p323-349.

DAVENPORT, T.H., 1993. Process Innovation: Reengineering work through Information Technology. Boston: Harvard Business School Press.

DAVENPORT, T.H., 1996. Why Re-engineering Failed: the fad that forgot people. *Fast Company, Premier Issue, 70-74*.

DAVENPORT. T.H., 1998. Putting the Enterprise into the Enterprise System. *Harvard Business Review*, July-August, 121-131.

DAVENPORT, T.H. and BEERS, M.C., 1995. Managing Information about Processes. *Journal of Management Information Systems*, 12, (1), 57-80.

DAVENPORT, T.H., and PRUSAK, L., 1998. Working Knowledge: How organizations manage what they know. Boston, MA: Harvard Business School Press.

DAVENPORT, T.H., HAMMER, M. and METSISTO, T.J., 1989. How Executives can shape their company's Information Systems. *Harvard Business Review*, March-April 1989, 130 – 134.

DAVENPORT, T.H. and SHORT J.E., 1990. The New Industrial Engineering: Information Technology and Business Process Redesign. *Sloan Management Review*, 11-27.

DAVENPORT, T.H., 2000. Mission Critical, Realizing the promise of Enterprise Systems. Boston, MA: Harvard Business School Press.

DELAMONT, S., ATKINSON, P., and PARRY, O., 1997. Supervising the Ph.D.: A guide to success. Buckingham: Open University Press.

DOYLE, P., 1994. Marketing Management and Strategy. England: Prentice Hall.

DRUCKER, P.F., 1993 "Professionals Productivity", *Across The Board*. November - December, V.3 No.1, 1996, pp31-41.

DYER Jr., G.W., and WILKINS. A.L., 1991. "Better Stories, Not Better Constructs, to Generate Better Theory: A Rejoinder to Eisenhardt," *Academy of Management Review*, 16 (3), 613-619.

EARDLEY, A., AVISON, D. and POWELL, P., 1997. Strategic Information Systems: development techniques to incorporate flexibility. *Journal of Organisational Computing*, 7, (1), 57-77.

EGGERTSSON, T., 1990. *Economic Behaviour and Institutions*. Place: Cambridge University Press.

EISENHARDT, K.M., 1989. Building Theories from case Study research. *Academy of Management Review*, 1, (4), 532-550.

EISENHARDT, K.M., and BOURGEOIS, L.J., 1988. Politics of strategic decision making in high velocity environments: Towards a mid-range theory. *Academy of Management Journal*, 31, 737-770.

FLECK, J., 1987. *Innofusion or Diffusation? The Nature of Technological Developments in Robotics.* PICT working paper No.4. Edinburgh University.

FLINN, M.W., (Ed.) 1957. *The Law Book of the Crowley Ironworks*. Durham: The Surtees Society, Andrews & Co., Quaritch.

FRANCIS, A., and SOUTHERN, G.,1995. Epochs and institutions: contextualizing business process re-engineering. *New Technology, work and employment*. 10, 2.

FRIEND, J.K. and HICKLING, A., 1987. *Planning under pressure: the Strategic Choice Approach*. Oxford: Pergamon.

FRIEND, J.K. and JESSOP, W.N., 1977. *Local Government and Strategic Choice*. 2nd edition. Oxford: Pergamon.

GALBRAITH J.R. and KAZANJIAN, R.K., 1986. *Strategy Implementation: Structure, systems and process.* St. Paul, Minnesota: West.

GALLIERS, R.D. and SUTHERLAND, A.R., 1991. Information Systems management and strategy formulation: the 'stages of growth' model revisited, *Journal of Information Systems* 1, 89 - 114

GARVIN, D. A., 1998. The Processes of Organisation and Management. *Sloan Management Review, Summer*, 33-50.

GIBBONS. M., LIMOGES, C., NOWONTY, H., SCHWARTZMAN, S., SCOTT, P., and TROW, M., 1994. The new production of knowledge, London: Sage.

GLASER, B. and STRAUSS, A., 1967. *The discovery of grounded theory: Strategies of qualitative research.* London: Wiedenfeld and Nicholson.

GUEST, D., CONWAY, N., BRINER, R. and DICKMAN, M., 1996. *The state of the Psychological Contract in Employment: Issues in People Management*. London: Institute of Personnel and Development.

HALE, J., 1995. From concepts to capabilities – understanding and exploiting change as a competitive advantage. London: Wiley.

HAMMER, M., 1990. Reengineering Work: don't automate, obliterate. *Harvard Business Review*, July-August, 104-112.

HAMMER, M. and CHAMPY, J., 1993. Reengineering the corporation: A manifesto for Business Revolution. London: Nicholas Brearley.

HANDY, C., 1989. The Age of Unreason. London: Century Business.

HANNAN, M.T., and FREEMAN, J., 1989. Organisational Ecology. Cambridge, MASS: Harvard University Press.

HARRINGTON, H.J., 1991. Business Process Improvement. New York: McGraw-Hill.

HARRIS, S., and SUTTON, R. 1986. Functions of parting ceremonies in dying organizations. Academy of Management Journal, 29, 5-30.

HISLOP, D., NEWELL, S., SCARBOROUGH, H., and SWAN, J., 1997. Innovations and Networks, In: *British Academy of Management Annual Conference, September 1997, London*. London: London Business School. P669.

JENSEN, M., and MECKLING, W., 1986. Theory of the firm: Managerial Behaviour, Agency Costs, and ownership structure. In: L. PUTTERMAN, and R.S. KROSZNER (eds). *The Economic nature of the firm*. A Reader: Cambridge University Press.

JOHANSON, J.H., McHUGH, P., PENDLEBURY A.J., and WHEELER III, W.A., 1993. *Business Process Reengineering: breakpoint strategies for market dominance*. New York: John Wiley & Sons

JONAS, N., 1986. The Hollow Corporation. *Business Week Special Report*, 3 March 1986, 56-59.

KEEN, P.G.W. and KNAPP, E.M., 1996. Every managers Guide to Business Processes: a glossary of key terms and concepts for today's business leaders. Boston: Harvard Business School Press.

KERLINGER, F.N., 1986. Foundations of Behaviour Research, 3rd edition. NY: Rinehart Winston Inc.

KIDDER, T., 1982. The soul of a new machine. London: Allen Lane.

KOCK, N.F., Jr., McQUEEN, R.J., and CORNER, J.L., 1997. The Nature of Data, Information and Knowledge Exchanges in Business Processes: Implications for Process Improvement and Organisational Learning. *The Learning Organisation*. 4, 2 pp.70-80.

KRANSDORFF, A., 1998. Forgetting the lessons of corporate history. *Strategy*, July 1998, 6-8.

KUTSCHKER, M., 1994. *Re-engineering of Business Processes in Multinational Corporations*. Working paper (No. 95-4). Katholische Universität Eichstratt, Germany.

LANGLEY, A., 1998. *Strategies for theorising from process data*. Working paper. Ecoile des science de la gestion, Universit du Quebec & Montreal, Canada.

LANGLEY, A. and TRUAX, J., 1994. A process study of new technology adoption in smaller manufacturing firms. *Journal of Management Studies*, 31, (5), 619-652.

LATOUR, B., 1987. *Science in Action*. Cambridge, Massachusetts: Harvard University Press.

LATOUR, B., 1991. Technology is society made durable. In: J. LAW (ed). A Sociology of Monsters. Essays on Power, Technology and Domination. London: Routledge pp. 103-131.

LATOUR, B., 1992. "Where Are the Missing Masses? The Sociology of a Few Mundane Artifacts" In: W. E. BIJKER, & J. LAW eds. *Shaping Technology / Building Society*. Cambridge, Mass: MIT Press p241.

LATOUR, B. 1997. The trouble with Actor-Network Theory, in: OLSEN, F., 1997. "Om aktor-netvaerksteroi. Nogle fa afklaringer og mere end nogle fa forvikinger", Philsophia (Danish philosophy journal), vol. 25, n3 et 4, 47-64.

LAW J., 1992 (ed). *Shaping Technology/Building Society Studies in Sociotechnological Change*. Cambridge, MA: MIT Press.

LAW, J and HASSARD, J., (eds), 1999. Actor Network Theory and After. Oxford: Blackwell and Sociological Review.

LEONARD-BARTON, D., 1990. A dual methodology for case studies: Synergistic use of a longitudinal single site with replicated multiple sites. *Organisational Science*, 1, 3, 248-66.

LEAVITT, H.J., 1965. Applied Organizational Change in Industry: Structural, Technological, and Humanistic Approaches. In: J. MARCH (ed) Handbook of Organizations. Chicago: Rand McNally.

LITTLEJOHN, M., 1996. Pacific Bell (HBS Case 9-195-098))

LONGMAN 1984. Family Dictionary. London: Chancellor Press.

LUCKMAN, J., 1967. An approach to the management of design. *Operational Research Quarterly*, 18, 345-58.

LYLES, M.A. and REGER, R.K. 1993. Managing for autonomy in joint ventures: A longitudinal study of upward influence. *Journal of Management Studies*, 30, 3, 383 – 404.

MACINTOSH, R., and FRANCIS, A., 1997. The Market, Technological and Industry Context of Business Process Re-engineering in the UK. *International Journal of Operations and Production Management*, No 17 pp344-364.

MALONE, T.W., CROWSTON, K., LEE, J., & PENTLAND, B.T. (1993). <u>Tools for inventing organizations: Toward a handbook of organizational processes</u>. In *Proceedings of Second Workshop on Enabling Technologies: Infrastructure for Collaborative Enterprises* (pp. 72-82). Morgantown, WV: IEEE Computer Society Press.

MILES, M.B. and HUBERMAN A.M., 1994. Qualitative Data Analysis: An expended sourcebook. California: Sage.

MILES, R.E., SNOW, C.C., MEYER. A. and COLEMAN. H., 1978. Organisational Strategy, Structure and Process. *Academy of Management Review*. 3. 546-562.

MINTEL, 2000. Call centre & Financial Services. London: Mintel Organisation.

MINTZBERG, H. and RAISINGHANI, D. AND THEORET, A., 1976. The structure of unstructured decision processes. *Administrative Science Quarterly*. 21: 246-275

MINTZBERG, H., 1979. An emerging strategy of direct research. *Administrative Science Quarterly* 24, 4, 582-589.

MORRIS, D. and BRANDON, J., 1993. Reengineering your business. New York: McGraw-Hill.

NELSON, R. R., and WINTER, S.G., 1982. *An evolutionary theory of economic change*. Cambridge, MA: Harvard University Press.

OLSEN, F., 1997. Om aktor-netvaerksteroi. Nogle fa afklaringer og mere end nogle fa forvikinger. *Philsophia (Danish philosophy journal)*, 25, 3 et 4, 47-64.

OUCHI, W. G., 1980. Markets, bureaucracies, and clans. *Administrative Science Quarterly*, 25,pp. 129-141.

PASCALE, R.T. and ATHOS, A.G., 1981. *The Art of Japanese Management*. Harmondsworth: Penguin,

PASTIN, M., 1988. The Hollow Corporation. *Executive Excellence*. 5, May 1988, 11-12.

PATCHING, D., 1995. Business Process Reengineering: Getting to the heart of the matter. Essex: SSETS.

PATTON, M. Q., 1987. How to use qualitative methods in evaluation. Newbury Park, Sage.

PEARSON, J., and SKINNER, C., (1993). Business Process Reengineering (BPR) in the UK Financial Services Industry. University of Bristol.

PENTLAND, B.T., 1994. Process Grammars: A Generative Approach to Process Redesign. In: *New Imperatives for Managing in Revolutionary change, Tokyo, Japan, August 1994*.

PETTIGREW, A., 1990. Longitudinal field research on change: Theory and Practice. *Organization Science*, Volume 1, (3), 267-292.

PETTIGREW, A., 1997. What is processual analysis? *Scandinavian Journal of Management*, 13(4), 337 – 348.

PETTIGREW, A. and WHIPP, R., 1991. *Managing change for competitive success*. London, Blackwell.

PEPPER S.C., 1942. World Hypotheses. Berkeley: University of California Press.

PHILLIPS, E.M. and PUGH D.S., 1994.How to get a Ph.D. Buckingham: Open University Press.

PINFIELD, L., 1986. A field evaluation of perspectives on organizational decision-making. *Administrative Science Quarterly*, 31, 365-388.

PORTER, M.E. and MILLAR V.E., 1985. How information gives you competitive advantage. *Harvard Business Review*, July-August.

POULSON, B. and ARNOTT D.C., 1996. *Process Benchmarking in Retail Financial Services, A Market Research Report*. (Working paper). Warwick Business School.

PRAHALAD, C.K. and HAMEL G., 1990. The core competence of the organisation. *Havard Business Review*, May-June.

ROGERS, E. M., 1962. Diffusion of Innovations. New York: Free Press.

RITZER, G., 1996. The McDonaldization of Society. California: Pine Forge Press.

ROBERTSON, S. and POWELL, P., 1997. In search of flexibility: The Mercator Case. *ECIS97 Conference Proceedings, June 1997*.

ROSENHEAD, J., (Ed). 1989. Rational analysis for a problematic world: problemstructuring methods for complexity, uncertainty, and conflict. Chichester: John Wiley.

ROWLINSON, M., 1997. Organisations and Institutions. London: Macmillan.

SALANCIK, G.R., and LEBLEBICI, H., 1988. Variety and Form in Organizing Transactions: A Generative Grammar of Organization. In: N. DiTomaso and S.B. Bacharach (Eds.). *Research in the Sociology of Organizations*. Greenwich, CT: JAI Press. 1-32.

SAPPINGTON, D.E.M., 1991. Incentive in Principal-Agent Relationships. *Journal of Economic Perspectives*, Vol.5, (2), 45-66.

SCARBOROUGH, H., 1995. Blackboxes, Hostages and Prisoners. *Organization Studies*, 16 (6), 991-1019.

SCHEIN, E., 1988. Organisational Psychology. New Jersey: Prentice Hall.

SENGE, P.M., 1990. The Fifth Discipline: The Art and Practice of the Learning Organisation. New York: Doubleday/Currency.

SIMON, H.A., 1997. *Models of Bounded Rationality, Volume 3, Empirically Grounded Economic Reason*. Cambridge, Massachusetts: MIT Press.

SMITH, J. F., 1999. Blue skies, no risks. Manufacturing Systems, April 1999. 81-86.

SOMMERVILLE, I. 1998. Actor-Network Theory: A useful paradigm for the analysis of the UK cable/on-line socio-technical ensemble? Department of Communication and Information Studies, Queen Margaret College, Edinburgh, Scotland

STANTON, S., 1999. How process enterprises really work. Harvard Business Review, November/December, 108.

STEVENS, P., SCHADE, A., CHALK, B. and SLEVIN, O., 1993. *Understanding Research: A Scientific approach for Health Care Professionals*, Edinburgh, Campion Press.

STODDARD, D., JARVPENNA, L., and LITTLEJOHN, M., 1996. The reality of business process engineering: Pacific Bell centrex provisioning process. California Management Review, V38, n3, pp. 57-76.

STEWART T. A., 1997. Intellectual Capital: The new wealth of Organisations. New York: Doubleday.

STRAUSS, A., 1987. *Qualitative analysis for social scientists*. Cambridge, England: Cambridge University Press.

SUCHMAN, L., 1987. *Plans and situated actions: The problems of Human-Machine Communication*. Cambridge: Cambridge University Press.

SUPPE, F., 1977. The structure of scientific theories. Urbana: University of Illinois press.

TAYLOR, F. W., 1929. *The Principles of Scientific Management*. New York: Harper and Bros.

TENG J.T., GROVER V. and FIELDER K.D., 1994. Business Process Reengineering: Charting a strategic path for the information age. *California Management Review*, 36, (23), 9.

THE ECONOMIST 1999. Lock and key. September 18th.

THE HENLEY CENTRE, 2000. *Teleculture 2000*. Place of publication: Publisher, Report number.

THE SUNDAY TIMES 14th November 1999. "Gates could do worse than settle for 'Baby Bills". Irwin Steizer.

THOMAS, N., 1991. Entangled Objects, Exchange, Material Culture and Colonialism in the Pacific. Cambridge, MASS: Harvard University Press.

VAN MAANEN, J., 1988. *Tales of the field: On writing ethnography*. Chicago: University of Chicago Press.

VENKATRAMEN, N., 1991. IT-Induced Business Reconfiguration. *In:* M.S. SCOTT-MORTON (ed.). *The Corporation of the 1990's*. New York: Oxford University Press, P 122 – 158.

WERNER, O. and SCHOEPFLE, G.M., 1987. Systematic fieldwork: Vol.2. Ethnographic analysis and data management. Newbury Park, CA: Sage.

WILLCOCKS, L. and FITZGERALD, G., 1993. Market as opportunity? Case studies in outsourcing information technology and services. *Journal of Strategic Information Systems*, Volume 2, (3), 223-242.

WILLIAMS, I., 1996. *Integration and Investment Specificity*, Discussion paper in Economics and Econometrics No. 9614. University of Southampton.

YIN, R.K., 1994. Case Study Research: design and methods case study research methods. London: Sage,

INTERNET SOURCES:

ECONOMIST, THE 1996

http://www.economist.com/editorial/freeforall/current/index_fn8228.html

ECONOMIST, THE. 2000. Business this week June 3rd - 9th 2000. Available from: http://www.economist.com

HANSETH, O, and MONTEIRO, E., 1998. *Understanding Information Infrastructure, Manuscript 27, August 1998*. Available from: http://www.ifi.uio.no/~oleha/Publications/bok.html

HELPDESK MANAGEMENT WEBSITE http://www.bruton.win-uk.net

KNOWLES, A., 1999. Deal gives IBM access to Dell's build-to-order process. PC Week [On-line], March 4.

TECHNOLOGY FORESIGHT 1995.

http://www.foresight.gov.uk/servlet/docviewer/ver=422/chap5.html

LIST OF INTERVIEWEES:

NAME: JOB ROLE / TITLE:

Trevor Banbrook, Support Analyst – BTC Information Systems

Hazel Bloomfield, Group Telecommunications Business Manager

Simon Cadby BTC Category Manager

Paul Chamberlain, Project Manager – BTC Information Systems

Simon David Operations Manager – Boots Internet Ventures

Phil Douty, Programme Manager, Boots Advantage Card

Kevin Figgitt, Business Analyst – BTC Information Systems

Robert Fraser, Manager – BTC Logistics Supply Chain Initiative

Ron Furniss Director of Information Systems - BTC

Julie Hague, Systems Support Analyst – BTC Information Systems

Graham Hardy, Customer Services Manager, BTC

Gwyneth Hazzleton Mother & Baby Direct Team

Tony Kemmer Director of Corporate Development

Gail Laxton, Mother and Baby Direct – Product Manager

Katy Leech, Call Centre Team Leader – Royal & Sun Alliance

Jim Marsh Business Risk Manager

Ray Page Business Development Manager (BTC)

Carolyn Park, Development Project Manager – BTC. IS.

Kate Purcell, Category Team - BTC Baby Category

Georgina Sharpe, Project Manager – BTC Information Systems

Mike Smith, Operations Manager – Boots Insurance Services

Peter Smith, Managing Director, Boots Insurance Services Limited

Mark Wells Business Development Manager (BHI)

Paul Whymark Operations Manager – Boots Insurance Services

THE BOOTS COMPANY ARCHIVE DOCUMENTS & ANNOUNCEMENTS:

1996:

The Customer service complaint handling review (Interim report) August 1996.

1997:

Investment Decision Meeting documentation. Ref. No. B197, 7th July 1997

The Boots Company annual results presentation to staff (Internal) – Summer 1997

Travel Insurance general principles – Boots Travel working document, 6th November 1997..

BTC/RACE Partnership statement of principles – 12th November 1997.

BIS/Race Service Level Agreement – December 1997

1999:

Call Centre strategy study – Executive summary. Spring 1999.

2000:

'Boots Mother & Baby Direct closes' – BTC Intranet. 4th July 2000.

Mother & Baby Direct catalogue – Spring/Summer 2000.

'Boots and Granada Media to launch health & beauty Internet broadband business. BTC Intranet. 12th October 2000

2001:

Customer Service Integration (Graham Hardy & Katy Sewell). Internal announcement, 5th March 2001.

Health & Travel Insurance – Internal Intranet site, 2nd April 2001.

The Boots Company plc Annual Report and Accounts – March 2001.