

**THE ASSIMILATION OF
INFORMATION TECHNOLOGY IN
MARKETING PRACTICE:
A STAGES THEORY –
TRANSACTIONAL TO RELATIONAL
MARKETING APPROACH**

**Thesis Submitted for Degree of PhD to the
Department of Marketing
University of Strathclyde**

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ABSTRACT

Two major contemporary marketing issues are the focus of this research, namely the assimilation of IT and relationship marketing into marketing practice. The particular focus of this study is on the inclusion of an IT dimension to marketing practice. Following the literature review two frameworks were chosen for this study. The suggested continuum of transactional to relational marketing approaches (Coviello et al., 1997; Coviello et al., 2001 a) and the Stages Theory (Nolan, 1973, Nolan, 1979, Nolan, 1993).

Against this background the research objective for this study was to research the how and why issues related to the concept that

IT assimilation in marketing practice occurs in stages and there is an IT dimension to the transactional to relational continuum.

A multiple cross sectional case based research was designed. Fourteen cases were selected, seven with automational and seven with informational assimilation of IT in marketing. Data collection techniques were predominantly in-depth interviews and observations of IT systems in operation. The data was analysed with the aid of the nudist software package.

The findings revealed that there is an IT dimension to relationship marketing practices and that IT assimilation does occur in stages. More particularly it was evident that there were major challenges to IT assimilation in marketing related to the stages of IT assimilation in companies.

The main contribution of this theory building research is the development of an IT relational exchange and managerial dimensions along the transactional to relational perspectives of marketing approaches (Coviello et al., 1997). A further contribution was the inclusion of the stages theory of automational, informational and transformational IT assimilation. This highlights the continuous nature of IT assimilation in marketing and the practical steps that marketers can take to progress and exploit IT in marketing.

Certification of Dissertation

I certify that the ideas, research work, results, analyses and conclusions reported in the dissertation are entirely my efforts, except where otherwise acknowledged.

I also certify that the work is original and has not been previously submitted for any award, except where otherwise acknowledged.

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Professor Nikolaos Tzokas

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TABLE OF CONTENTS

Declaration of Author's Rights	ii
Abstract	iii
Certification of Dissertation	iv
Acknowledgements	v
Table of Contents	vii
Appendixes	xiv
List of Tables	xv
List of Figures	xix
Table of Terminology	xx
Publications Produced During the PhD	xxi

PART 1: INTRODUCTION AND LITERATURE REVIEW

CHAPTER ONE: INTRODUCTION

1.1	Introduction	1
1.2	Overview of Chapter	2
1.3	Background to the Research	2
1.4	Research Objective and Propositions	3
1.5	Research Methodology	5
1.6	Outline of Thesis	7
1.7	Scope of Thesis	10
1.8	Conclusions	12

CHAPTER TWO: CONTEMPORARY MARKETING ISSUES – INFORMATION TECHNOLOGY AND RELATIONSHIP MARKETING

2.1	Outline of Chapter Two	14
2.2	The Future of Marketing in the 21st Century	14
	2.2.1 The Regeneration of Marketing?	17
	2.2.2 Marketing Challenges in an IT Enabled Environment	18
2.3	The Nature and Responsibilities of the Marketing Department	21
	2.3.1 The Role of the Marketing Department in Relationship Marketing	25
2.4	Relationship Marketing - An Introduction	26
	2.4.1 Relationship Marketing- A New Paradigm?	27
	2.4.2 Historical Development of Relationship Marketing	29
	2.4.3 The Economic Benefits of Relationship Marketing	32

2.4.4	Extended View of Relationship Marketing	33
2.4.5	Relationship Marketing Implementation Issues	36
2.5	Conclusions	39

CHAPTER THREE: THE IT DIMENSION TO THE TRANSACTIONAL TO RELATIONAL APPROACHES TO MARKETING PRACTICE

3.1	Outline of Chapter Three	40
3.2	Relationship Marketing – The IT Dimension	40
3.3	Levels of Exchange – The Transactional to Relational Continuum – The IT Dimension	45
3.3.1	Transactional to Relational Perspective Continuum	46
3.3.2	Pluralism of Approach of Contemporary Marketing Practice	60
3.3.3	The Consumer Perspective – The IT Dimension	64
3.4	The Role of IT Along the Transaction to Relational Continuum – Databases and IT based Interactions	66
3.4.1	The Internal and External Perspective	66
3.4.2	The Role of IT: Databases, IT based Interactions and Networks	67
3.4.3	Database Marketing – The IT Dimension	70
3.4.4	IT Based Interactions	73
3.4.5	Interactions in the Consumer Market	74
3.4.6	Empirical Studies into IT Based Interactions	76
3.4.7	Network Marketing	90
3.4.8	The IT Dimension in Networks	94
3.5	Conclusions	96

CHAPTER FOUR: THE ASSIMILATION OF IT – A STAGE THEORY APPROACH

4.1	Introduction and Outline of Chapter	97
4.2	IT Evaluation Frameworks, Challenges and Empirical Studies	97
4.2.1	IT Evaluation Frameworks	100
4.2.2	Empirical Studies into Current IT Evaluation Practice	112
4.3	The Stages Theory Framework	116
4.3.1	Progression Thorough the Stages Theory Framework	120
4.3.2	Further Developments of the Stages Theory Framework	122
4.3.3	Marketing Specific Stages Theory Frameworks	126
4.3.4	Justification and Limitations of the Stages Theory Framework	129
4.3.5	The Stages Theory - Automational, Informational and Transformational	131
4.3.6	Technological Discontinuity and Movement Through the Stages	135
4.3.7	Empirical Research: Automational Stage of IT Assimilation in Marketing	137
4.4	Barriers to the Assimilation of IT into Marketing Practices	143
4.4.1	Technical Barriers the Assimilation of IT in Marketing Practices	147
4.4.2	Human Barriers to the Assimilation of IT in Marketing Practices.	148
4.4.3	Organisational Barriers to the Assimilation of IT in Marketing Practices	150
4.4.4	Intrafunctional Issues	153
4.5	Conclusion	160

PART TWO: RESEARCH METHODOLOGY AND DATA ANALYSIS

CHAPTER FIVE: RESEARCH METHODOLOGY

5.1	Introduction	162
5.2	Key Research Objective and Propositions	163
5.3	Research Philosophy and Methodology	165
5.4	Theory Building and Theory Testing	175
5.5	Research Methodology - Case Based Research	181
5.5.1	Justification for Case Based Research	185
5.6	The Research Design – Multiple Case Study Research	188
5.6.1	Unit of Analysis	189
5.6.2	Single or Multiple Case Studies	191
5.6.3	Case Selection Decisions	193
5.7	Data Collection Techniques	199
5.8	Data Analysis and Management	202
5.8.1	The NUD*IST Software Package - Database and Data Analysis	208
5.8.2	Data Displays Techniques	214
5.9	Limitations of Case Studies Research	215
5.10	Conclusions	221

CHAPTER SIX: DATA ANALYSIS - INFORMATIONAL CASES

6.1	Introduction	223
6.2	Structure of Data Analysis	223
6.3	Case Features - General Review of All Cases	224
6.3.1	Industry Orientation of the Cases	225

6.3.2	General Situational Issues for All Cases	226
6.4	Proposition One	229
6.4.1	Summary for Proposition One	241
6.5	Proposition Two	241
6.5.1	Summary of Proposition Two	249
	Proposition Three	250
6.6.1	Marketing Specific Database Developments	250
6.6.2	IT Based Interactions	255
6.6.3	Summary of Proposition Three	258
6.6	Proposition Four	259
6.7.1	The Automational Stage of IT Assimilation	262
6.7.2	Summary of Proposition Four	269
6.8	Summary of all Propositions	271

CHAPTER SEVEN: DATA ANALYSIS – AUTOMATIONAL CASES

7.1	Introduction	277
7.2	Structure of Data Analysis	277
7.3	General Outline of the Five Automational Cases	277
7.4	Proposition One	279
7.4.1	Summary of Proposition One	289
7.5	Proposition Two	289
7.5.1	Summary of Proposition Two	297
7.6	Proposition Three	298
7.6.1	Marketing Specific Database Developments	299
7.6.2	IT Based Interactions	301
7.6.3	Summary of Proposition Three	306
7.7	Proposition Four	306
7.7.1	The Automational Stage of IT Assimilation	313
7.7.2	Sources of Bias	318

7.7.3	Summary for Proposition Four	319
7.8	Summary of all Propositions	320

PART THREE: CONCLUSIONS AND IMPLICATIONS

CHAPTER EIGHT: CONCLUSIONS AND RECOMMENDATIONS

8.1	Introduction	323
8.2	Structure of Chapter 8	323
8.3	Overview of Study	324
8.4	Significant Findings of the Study	325
8.5	Consideration of the Findings in Light of Existing Research Studies	336
8.6	Implications of the Study for Theory, Professional Practice and Educators	338
	8.6.1 Managerial Implications	339
	8.6.2 Implications of the Study for Educators	340
8.7	Limitations of the Study	341
8.8	Recommendations for Further Research	343
8.9	Conclusions	345
	BIBLIOGRAPHY	347

APPENDIXES

Appendix A

Brady, M., Saren, M., and Tzokas, N., (1999) The Impact of Information Technology on Marketing: An Evaluation, *Management Decision*, 37(10), 758-766

Appendix B

Interview Protocol – Marketing Informants

Interview Protocol – IT Informants

Appendix C

1. Introduction to Case Summaries
2. Case Study A
3. Case Study B
4. Case Study C
5. Case Study D
6. Case Study E
7. Case Study F
8. Case Study G
9. Case Study H
10. Case Study I
11. Case Study J

Appendix D

Cover Letters Sent to Case Companies

- 1 Dublin Institute of Technology
- 2 Marketing Institute of Ireland

List of Tables

Table 2.1	Transaction To Relationship Marketing	31
Table 3.1	Exchange Levels in Marketing – The IT Dimension	47
Table 3.2	Detailed Description of the Range of Marketing Relationships	51
Table 3.3	Marketing Classified by Relational Exchange Dimensions	56
Table 3.4	Marketing Classified by Managerial Dimensions	57
Table 3.5	e-Marketing Approach Classified by Exchange and Managerial Dimension	59
Table 3.6	The internal/external dimension of IT along the transaction to relational trajectory	67
Table 3.7	The Application of Information Technology in Marketing	69
Table 3.8	Selected Empirical Studies into IT Based Interactions	77
Table 3.9	Effects of EDI Use on Inter-Organisational Relationships in the Automotive Industry	80
Table 3.10	Five Interorganisational Configurations and Relationship Types Based on the Level of IT	84
Table 3.11	Internet Usage in Irish Businesses	88
Table 4.1	Difficulties in Evaluating IT	100
Table 4.2	Information Technology Evaluation Methods	102
Table 4.3	Information Economics Framework	105
Table 4.4	Stages Theory Frameworks	117
Table 4.5	Four Stages of Growth	118
Table 4.6	Six Stages of Data Processing Growth	121
Table 4.7	Organisational IT Markets	122
Table 4.8	Benefit/Beneficiary Matrix	124
Table 4.9	Dimensions of IT Business Value	125
Table 4.10	Marketing Specific Stages Theory Frameworks	126
Table 4.11	Impact/Value Framework	127
Table 4.12	An IT Application Framework	128

Table 4.13	Technological and Market Maturity	128
Table 4.14	Amalgamation of Stages Theory Frameworks for Marketing	129
Table 4.15	Comparison of Traditional DP versus Personal Computing	136
Table 4.16	Range of Suggested Barriers to IT Use - General Studies	144
Table 4.17	Empirical Studies of Barriers to IT Assimilation in Marketing	145
Table 4.18	Stages of IT Department's Development in Organisations	154
Table 5.1	Structure of Chapter 5	163
Table 5.2	Basic Beliefs (Metaphysics) of Alternative Inquiry Paradigms	167
Table 5.3	Deductive and Inductive Approaches to Research	170
Table 5.4	Ontological Assumptions of Realism	173
Table 5.5	Relevant Situations for Survey or Case Based Strategies	187
Table 5.6	Research Design- Data Collection and Analysis	189
Table 5.7	Replication Approach To Multiple Case Studies	193
Table 5.8	Case Selection – Cross Sectional Design	198
Table 5.9	Steps in Developing Theory from Case Research Data	207
Table 5.10	Questions of Reliability, Validity, and Generalisability	216
Table 5.11	Case Study Tactics for Validity and Reliability Issues	220
Table 6.1	Organisational Characteristics of the Informational Cases	228
Table 6.2	Main Informant for the Five Informational Cases	229
Table 6.3	Main Areas of Responsibility for Informational Cases	230
Table 6.4	Changes to Marketing Practices for the Informational Cases	231
Table 6.5	Main Changes in Marketing Practices for the Informational Cases	230
Table 6.6	Marketing Classified By Relational Exchange Dimensions	232
Table 6.7	Marketing Classified By Managerial Dimension of Marketing	233
Table 6.8	Evidence of Relationship Marketing Practices in the Marketing Department	237
Table 6.9	Evidence of an Informational Stage of IT Assimilation in Marketing	242

Table 6.10	Internet Site Development and Control	243
Table 6.11	IT Skills in Marketing, Vision, Orientation and Drivers for the Informational Cases	246
Table 6.12	Range and level of development of ITs in Marketing	247
Table 6.13	Dominant IT Development in Marketing and the Departments Driving These Developments	248
Table 6.14	Evidence of the Automational Stages of IT Assimilation	249
Table 6.15	Database Developments	251
Table 6.16	Evolutionary Stages of New Database Development	255
Table 6.17	Barriers to IT Assimilation In Marketing	260
Table 6.18	Solutions to the Automational Focus of the IT Infrastructure	266
Table 6.19	Overview of IT Assimilation in Marketing Within the Stages Theory Perspective	270
Table 6.20	Support for the Propositions for the Informational Cases	271
Table 6.21	IT Dimension to the Continuum of Transactional to Relational Marketing for the Informational Stage of IT Assimilation	273
Table 6.22	The Assimilation of IT: The Stages Theory and Marketing Approaches Classified by Relational Exchange Dimension	274
Table 6.23	Addition of an IT Dimension to the Marketing Approaches Classified by Relational Exchange and Managerial Dimension for Informational Assimilation	275
Table 7.1	Organisational Characteristics of the Automational Cases	278
Table 7.2	Main Informants for the Five Automational Cases	279
Table 7.3	Changes to Marketing Practices for the Automational Cases	280
Table 7.4	Main Areas of Responsibility of the Marketing Departments	281
Table 7.5	Marketing Classified By Relational Exchange Dimensions	284
Table 7.6	Marketing Classified By Managerial Dimension of Marketing	285
Table 7.7	Lack of Relationship Marketing Focus	286
Table 7.8	Evidence for the Automational Stage of IT Assimilation in Marketing	289

Table 7.9	IT Skills, Vision, and Orientation in Marketing	295
Table 7.10	IT Developments and the Departments Driving These Developments	281
Table 7.11	Range and level of development of ITs in Marketing	297
Table 7.12	Evidence of the Automational Stages of Development	298
Table 7.13	Database Developments	299
Table 7.14	IT Dimension to the Marketing Transactional to Relational Continuum from an Automational Perspective	305
Table 7.15	Addition of an IT Dimension to the Marketing Classified by Relational Exchange and Manager Dimension From an Automational Perspective	306
Table 7.16	Barriers to IT Assimilation In Marketing	308
Table 7.17	Internet Site Development and Control	314
Table 7.18	Solutions to the Conflict and Automational Focus of IT	317
Table 7.19	Overview of IT Assimilation in Marketing Within the Stages Theory Perspective	319
Table 7.20	IT Dimension to the Continuum of Transactional to Relational Marketing for the Automational Stage of IT Assimilation	320
Table 7.21	The Assimilation of IT: The Stages Theory and Marketing Approaches Classified by Relational Exchange and Managerial Dimension	321
Table 7.22	Support for the Propositions for the Automational Cases	322

List of Figures

Figure 3.1	The Ladder of Customer Loyalty	53
Figure 3.2	Transaction to Relationship Marketing	54
Figure 3.3	Buyer Seller Exchange Situation Matrix	55
Figure 3.4	Direct Marketing and e-Marketing Relative to Other Aspects of Marketing	60
Figure 3.5	The Marketing Strategy Continuum	62
Figure 3.6	Database Marketing and IT based Interaction Relative to Other Aspect of Marketing	68
Figure 4.1	Techniques Matrix	106
Figure 4.2	The Stages of IT Developments from DP to Network Eras	120
Figure 5.1	The Research Paradigm of the Researcher	174
Figure 6.1	Dominant Industry Orientation for All Cases	226

Table of Terminology

The following table provides brief explanations for some of the abbreviations used in this thesis.

Glossary of Terms Used in this Thesis

Abbreviation	Explanation
Bespoke	System designed and developed internally to suit the specific requirements of the company
CRM	Customer relationship management
DBM	Database management
DDS	Decision support systems
DOS	The basic PC operating system. Though an antiquated system it is still popular
Download	Transfer a file from another computer to your computer
EDI	Electronic Data Interchange
ERP	Enterprise resource Planning
ETMS	Electronic territory management systems
File server	A computer with data that can be accessed by other computers
Home page	An introductory page or starting point on a part of the web
In-house developed	System designed and developed internally to suit the specific requirements of the company
ISDN	A telephone telephony that allows high speed data transmission
IT	Information technology
LAN	Local area network. A collection of computers connected together
MIS	Management information system
MKIS	Marketing information system
Net	Abbreviation of the internet
OMS	Order management system
Protocol	An agreed standard way of computers talking to each other, on computer says one thing and expects a specific answer from another
SAP	SAP is a brand name for an enterprise resource planning system
Service provider	Organisation offering connections to the internet
TBIS	Transaction based information systems

Publications Produced during the PhD Process

Academic Journal Articles

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Brady, M., Saren, M., and Tzokas, N., (1999) 'Information Technology and its Relationship to Marketing and Marketing Relationships'. Conference proceedings of the *IMP Conference*, University College Dublin, September, CDROM

Brady, M., (1999) 'Information Technology and Marketing – An Important Research Agenda'. Conference proceedings of the *Irish Academy of Management Conference*, University of Limerick, September, 1-18

Brady, M., Saren, M., and Tzokas, N., (1999), 'The Impact of Information Technology on Marketing: Methodological Considerations'. *Conference proceedings of the Academy of Marketing*, University of Stirling, July, CDROM.

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Brady, M., (1998) 'How Technology Led Changes are Impacting on Marketing and Contributing to Business Success', *The First Post Graduate Research for Industry Conference*, Dublin Institute of Technology, November.

Brady, M., (1998), 'Technology Evaluation: Competitive Advantage and Marketing', *The Irish Academy of Management Inaugural Conference*, Sustaining Competitive Advantage: Challenges and Contradictions, University College Galway, September.

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CHAPTER ONE

INTRODUCTION

1.1 Introduction

This thesis focuses on two contemporary issues in marketing practice which are challenging academics and practitioners; namely developments in relationship marketing and information technology (IT). There is an expanding body of literature discussing the relationship marketing perspective of marketing practice (Gummesson, 1987, 1994; Gronroos, 1991, 1994, 1997; O'Malley and Patterson, 1998; Piercy and Craven, 1995; Schultz et al., 1996; Piercy, 1998; Snow, 1997; Payne, 1995; Tzokas and Saren, 1997; Sheth and Parvatiyar, 1995; Brodie et al., 1997; Coviello et al., 1997; Pels, 1999; Thomas, 2000; Wolfe, 2000; Coviello et al., 2001a). There is also a less well developed focus on information technology and its current role in marketing (Galzer, 1991; Webster, 1992; Bruce et al., 1996; Leverick et al., 1997, 1998; Sheth and Sisodia, 1995; McKenna, 1991,1995,1998; Coviello et al., 2001b and c).

The theories and practices of marketing, developed from the marketing mix and related concepts, have been intensively scrutinised and criticised, with a concentration of critical articles in the years preceding the turn of the century (Wensley, 1995; Brownlie et al., 1999; Thomas, 1994; Brownlie and Saren, 1997; O'Driscoll and Murray 1998; Day and Montgomery, 1999).

Within the discussion of changes to marketing practices and theories, various themes have emerged, two of which are central to this research:

- Contemporary marketing practice has a relationship marketing focus though practiced along a continuum from transactional to relational marketing;
- Contemporary marketing practice has a strong IT dimension.

The central contribution of this thesis is to build a foundation for studying the assimilation of IT within marketing and specifically along the transactional to

relational perspectives of contemporary marketing practice. This thesis suggests that a stages theory approach is a suitable framework to study the assimilation of IT by marketing practitioners. It further argues that IT should be included as a dimension of contemporary marketing practice along the transactional to relational continuum.

1.2 Overview of Chapter

This chapter provides an overview of the thesis. Section 1.3 contains a brief background to, and justification for the research. The research objective and the research propositions, which guided this study, are presented in section 1.4, with the research methodology of the study included in section 1.5. Section 1.6 briefly outlines the overall thesis, through a brief description of the contents of each chapter. Full references are provided in the chapters for issues discussed in this outline. Section 1.7 focuses on the scope of the study and alludes to the definitional difficulties with the term information technology (IT). The conclusions to this chapter appear in section 1.8.

1.3 Background to the Research

The field of study for this thesis is the assimilation of IT within marketing practice. The particular marketing practice focus is on the progression from a transactional perspective based on the marketing mix and the marketing management model of marketing, to the relationship marketing perspective, focused on the long term value of the customer (Gronroos, 1997; Gummesson, 1987, 1998; Payne, 1995; Day and Montgomery, 1999; Baker, 2000; Berry, 1995; O'Driscoll, 1998; Glazer, 1991). The IT dimension to relationship marketing is discussed in the literature and it is suggested that IT assimilation in marketing enables and enhances transactional and relationship marketing practices (Webster, 1992; Pine et al., 1995; Payne, 2001; Pels, 1999; McKenna, 1991, 1995, 1998; Thomas, 2000; Zineldin, 2000; O'Malley and Tynan, 2000; Mattsson, 1997; Peppers and Rogers, 1995, 1997; Peppers et al., 1999). There is a lack of research into IT and marketing practices particularly along the transactional to relational dimension, with the notable exception of Coviello et al., (2001 b and c). This thesis is designed to extend this discussion and to contribute empirical research to these important developments in marketing.

The primary focus of this research is on marketing practitioners and their assimilation of IT. In order to understand contemporary marketing practice, there is a need for research into the specific IT dimension of current practice. An important consideration for undertaking this study was to therefore provide marketers with detailed knowledge and practical assistance in relation to this issue.

This is an important area of academic study on two main grounds. Firstly, it will contribute to the two important areas of contemporary marketing practice that are under researched. These themes are also important issues for the future developments of marketing theory and so this study will contribute to theory development in both areas. Secondly there is a lack of exploratory and in depth research into actual marketing practice (Bonama, 1985; Webster, 1992; Brownlie et al., 1994; Brownlie and Saren, 1997; Brownlie et al., 1999; Hunt, 1994; Saren, 1999; Gummesson, 1991; Laurent and Pras, 1999). The findings should provide an important and practical contribution to marketing theory development and practice.

1.4 Research Objective and Propositions

In brief, IT is an important and developing dimension of marketing practice and relationship marketing is also challenging the traditional assumptions on which marketing practice is based. Against this background, and developed from issues identified in the literature review, this research addresses the key research objective that,

IT assimilation in marketing practice occurs in stages and there is an IT dimension to the transactional to relational continuum.

Essentially, this thesis seeks to demonstrate that IT is an important but challenging component of marketing practice and is of critical importance for contemporary marketing practices.

Though there is solid support for relationship marketing in the industrial and services markets (Gronroos, 1991; Ford, 1990; Hakansson, 1986), there is much discussion in

the marketing literature about the applicability of relationship marketing in the consumer markets. Many academics believe that relationship marketing can be practiced in consumer markets, particularly with the aid of IT (Webster, 1992; Copulsky and Wolfe, 1990; Sheth and Parvatiyar, 1995; Schmitz and Rovner, 1992; McKenna 1991, 1995; Brown, 1999; Pine et al., 1995; Peppers and Rogers, 1995, 1997; Peppers et al., 1999). These discussions lack a framework for research of these areas.

However a review of relationship marketing literature has provided a framework for marketing approaches linking to levels of exchange, from the transactional to relational approaches (Bagozzi, 1975; Dwyer et al., 1987; Gronroos, 1991; Webster, 1992; Gummesson, 1994; Payne 1995; Pels, 1999; Coviello, et al., 1997; Coviello et al., 2001 a, b and c). Much of this discussion lacks an IT dimension, with the notable exception of Coviello et al., (2001b and c). Following a review of the frameworks and their applicability for this study the Coviello et al., (1997) framework was chosen as the most well developed and empirically tested framework (Brodie et al., 1997). It was hoped that the findings from this study would then contribute a critical, but omitted, IT dimension to this framework, by confirming that there is an IT dimension along the continuum.

Within the IT literature, the stages theory framework (Nolan, 1973, 1979, 1993; Gibson and Nolan, 1974; Nolan and Segar, 1993; Nolan and Croson, 1996) has been discussed and developed by various authors (Haeckel, 1985, 1998; McFarlan and McKenney, 1984; Gogan, 1988; Hirschheim et al., 1988; Zuboff, 1988; Remenyi et al., 1991; Mooney et al., 1995; Gibson and Jackson, 1988; Davenport; 1993; Cash et al., 1994; Farbey et al., 1999) could offer a framework for the study of IT assimilation. Though lacking empirical support in the marketing area, there have been discussions of this stages approach to IT in marketing (Hammer and Mangurian, 1987; Little 1987; Baker, 1994; Peattie and Peters, 1997). An adaptation of the stages theory was considered as a suitable method for studying the assimilation of IT within marketing practice which would also highlight the barriers to IT assimilation in marketing.

Therefore the key research objective developed from issues identified in the literature review. This was further developed into four research propositions which were used to direct the focus of the data collection and analysis and thus to contribute towards answering the research objective.

The first proposition relates to the changes in marketing practices focusing on the transactional to relational perspective. The second proposition analyses the assimilation of IT in marketing following a stages theory perspective and suggesting that IT assimilation should be at the informational stage. The third proposition links the first two propositions and suggests that there should be an IT dimension to relationship marketing practice. Proposition four centres on the marketing specific barriers to IT assimilation in marketing.

Proposition One – There is a major relationship marketing perspective to contemporary marketing practices.

Proposition Two - There is a major IT component in contemporary marketing practices and the assimilation of IT in marketing is at the informational stage.

Proposition Three - There is a dominant IT dimension to relationship marketing, which will be evidenced through database and IT based interactions in marketing.

Proposition Four - There are barriers to IT assimilation in marketing.

1.5 Research Methodology

This section presents an overview of the methodology employed in this study. More complete explanation and support is provided in Chapter 5. The research paradigm is realism, utilising the research methodology of multiple case based research, designed to facilitate an explanatory study of the process of IT assimilation by marketing practitioners. Case based research was chosen as most applicable due to the nature of the research objective, the research paradigm of the researcher, the dominant call from leading academics for in-depth exploratory and theory development studies of

current marketing practices. This research design therefore permits the development of theory, which can be tested in later studies.

The primary purpose of the research is to answer the 'how' and 'why' questions and to describe the underlying process of IT assimilation in marketing and therefore suggests case based research. The application of case studies as a qualitative research methodology has been recognised by some researchers (Huberman and Miles, 1994; Eisenhardt, 1989; Patton, 1990; Parkhe, 1993; Yin, 1994). Qualitative research is more appropriate than quantitative research in a new research area, where the phenomena are not well understood and where inter-relationships between phenomena are not well known (Parkhe, 1993, Marshall and Rossman, 1998) which is the situation for this research project. It is also a very suitable methodology within the realism paradigm of this researcher (Easton, 1998; Perry et al., 1998).

Case selection is a critical dimension of the research design. A sound research design was achieved by selecting multiple cases, using theoretical and literal replication logic (Yin, 1994). The selection was based on selecting confirming and disconfirming cases (Morse, 1998) or what Pettigrew (1988) refers to as extreme situations and polar types. The case selection was cross-sectoral and included cases for comparative analysis between different stages of IT assimilation.

It is suggested that the selection of sample size in qualitative research is determined by what the researcher wants to know and by the amount of time and resources available (Patton, 1990; Yin, 1994). Fourteen cases were selected for this study and data was gathered from forty eight in-depth interviews, all of which were transcribed and broadly analysed. Seven of the case studies had a dominant automational focus to their IT assimilation and seven had a transformational focus to their IT assimilation. This choice allowed the researcher to research cases at different levels of assimilation. Due to the considerable bulk of material, thirty interviews in ten organisations were selected for detailed analysis. The case selection was cross sectoral and thus the research presents findings that are general rather than sector or industry specific.

Particular attention was paid to the issues of validity and reliability in order to enhance the quality of the overall research (Easterby-Smith et al., 1991; Yin, 1994; Miles and Huberman, 1994). To conform to good case study research practice, a case study interview protocol was designed (see appendix B) and a database of information was compiled and maintained with the aid of the NUD*IST software package.

The data collection techniques relied on personal interviews from a range of informants in case companies, the observations of IT systems in use and documental evidence. The data analysis was aided by the Nudist software programme and involved the interpretation of the data collected, with the aid of nodes, codes, and hierarchical trees.

The main data presentation techniques were tables and matrixes to clearly delineate the findings. Illustrative quotes were also included from the cases, to provide transparency and to lend support to the findings from the data analysis. Summaries of the ten cases studied in depth are included in appendix C. These summaries are designed to provide an overview of the case situation and support for the propositions.

1.6 Outline of Thesis

The following section briefly outlines the chapters in this thesis. Full references for the discussion below appear in each chapter.

Chapter 2 reviews the literature which is critical of current marketing practices and the ability of marketing to operate in a dynamic and changing environment. It is suggested that there is an urgent need for a review of the concepts and theories of marketing practice. The literature suggests that marketing departments are in a period of transition and that the speed and effects of these changes are challenging academics and practitioners, with no clear and distinct overview of the outcomes for marketing practice. The challenges for marketing practitioners in an IT enabled world is introduced in this chapter.

There is debate in the literature in relation to relationship marketing as the new paradigm for marketing practice. Various authors suggest that relationship marketing is the new focus of marketing practice while others suggest that relationship marketing is not new or that it is merely a marketing tactic. This chapter briefly traces the historical development of relationship marketing, the suggested economic benefits and the extension of the dyadic focus to a broad view of relationship marketing practices. Though there are advocates of relationship marketing there is criticism of various tenets of relationship marketing with a contention that though it is theoretical attractive it is very challenging in practice.

Chapter 3 reviews the limited literature in support of a dominant role for IT in relationship marketing practices. The main focus of this chapter is on the body of literature discussing the concept of a transactional to relational continuum for marketing practice. Following a review of this literature the major observation is the lack of an IT dimension to much of this discussion. The concluding sections of this chapter concentrates on reviewing the discussion and empirical studies into a range of IT applications which can be used for marketing practice along the transactional to relational continuum. The particular focus is on databases and IT based interactions. The main findings from the empirical studies, is that there is a slow rate of diffusion of these applications and major challenges to marketers as they endeavour to assimilation them into marketing practice.

Chapter 4 concentrates on the IT aspect of this study and discusses the major difficulties that companies are experiencing as they endeavour to evaluate ITs' contribution to their operations. It confirms that there is no universally used and commonly accepted IT evaluation technique, though a range of techniques, which have various levels of successful use, are discussed. The most popular framework for the empirical study of IT is the stages theory of IT growth. This particular framework and the various developments of this framework, are discussed in detail. The marketing perspective of the stages theory is discussed and justification of its use within the marketing discipline is provided. The concluding section of this chapter

reviews the barriers to IT assimilation encountered by marketers, particularly within the stages theory view of IT assimilation.

Chapter 5 discusses the research methodology utilised in this study and justifies case based research as the most appropriate research method. This choice was based on the nature of the research objective, the researcher's paradigm of realism and in support of the calls for more in-depth theory building research in this area. Following a review of research design techniques a cross sectional multiple case based research was selected. Data collection, management, analysis and presentation techniques are discussed, centring on the use of the NUD*IST software package, which is both justified and explained in detail.

Chapter 6 commences with an overview of the ten cases selected for in-depth analysis. This chapter then presents the analysis of the five informational cases and chapter 7 presents the analysis of the five automational cases. The structure of these chapters follows the research propositions (section 1.3) and the data is analysed under each proposition, with the patterns for support or rejection of the proposition clearly outlined. Illustrative quotes are used throughout this section to provide informative insights into the actual cases.

Summaries of the ten cases studied in-depth are included in Appendix C. These summaries are designed to illustrate the main aspects of each case relating to the research propositions. They are not an exhaustive analysis of each case but are included to lend transparency to the findings in the data analysis chapters and to provide insight into specific aspects of the study. To avoid tedious repetition, they do not include all the evidence related to all the propositions, but rather focus on the most interesting and revealing aspects of each case. The ten cases provide a general overview of the issues in this study.

Chapter 8, the last chapter of the thesis, presents the research findings from this study. It introduces a suggested framework for the study of the assimilation of IT within the transactional to relational perspective, which develops the frameworks

discussed in chapter 3 and chapter 4. This chapter also includes the limitations of the research method, suggestions for further research and the implications of this study for management, academics, educators and theory development.

1.7 Scope of Thesis

This research focuses on IT and marketing practice in Ireland and expands the limited research in this area (see Domegan and Doyle, 2000). This focus was chosen because this is the researcher's area of interest. In addition despite the Irish focus and due to the dominance of multinational companies in Ireland, this study has a global perspective as all of the cases had some level of internationalisation and six of the cases are multinationals. Many IT developments and marketing practices are dictated from the head office of the organisation (outside of Ireland). Therefore, there is some applicability of the findings of this study outside of the Irish marketplace.

Another boundary of this research is large companies*. The rationale for this choice centres on the fact that these companies are more likely to have a marketing department and also to have the investment ability to pursue IT developments in marketing.

This study focuses on the marketing department and does not include the sales department or other marketing related departments and is therefore specifically focused on marketing practitioners, their assimilation of IT and their use of relationship marketing approaches as they practice marketing. A study of the impact of IT and relationship marketing practices on the sales force or other non marketing departments would be an interesting aspect of both dimensions, but is outside the scope of this thesis.

Definitional Issues with the Term Information Technology: There are many different perspectives, or aspects, to information technology (IT). For the purpose of this thesis, the term is briefly outlined. There have been definitional issues with IT

*Large companies in Ireland are companies which appear in the top 500 companies in Ireland judged by turnover (Business and Finance and ERSI).

since Leavitt and Whisler (1985) first introduced the term (Braun, 1998; Glazer, 1991). Academic research has lacked a clear and uniform definition, which has resulted in major research difficulties (Preston 1997; Hitt and Brynjolfsson, 1996; Koppes et al., 1991), particularly in the marketing arena (Glazer, 1990; Leverick et al., 1997).

Various perspectives include:

1. IT as a social construction;
2. IT as an information provider;
3. IT infrastructure – hardware and software;
4. IT as business processes and systems.

With respect to the social construction of IT, individuals, due to their levels of knowledge, have their own views and definitions (Koppes, et al., 1991; MacKenzie and Wajcman, 1999), depending on the purpose of the definition (Braun, 1998) and their subjective vantage point (Hitt and Brynjolfsson, 1996).

For the purpose of this thesis, IT is viewed as a collective term for a wide range of software; hardware; telecommunications and information management techniques; applications and devices (Leavitt and Whisler, 1985; Porter and Millar, 1985; Willcocks, 1996). The focus of this thesis is on IT as the answer to business problems, on how IT supports and changes business operations, rather than a focus on the technological aspects of IT (Sethi and King, 1994; Zuboff, 1988; Kench and Evans, 1991; Norris, 1996; Day and Glazier, 1994; McDonald et al., 1993; Capon and Glazer, 1987). Ultimately we should not be looking at the technology itself, or at IT spend, but on better management of IT and improved IT skills in order to reap the benefits from IT (Mooney et al., 1995; Mata et al., 1995; Feeny, 1997). *'Information systems do not deliver benefits, but can only facilitate improved business performance if used in the proper manner'* (Ward et al., 1997:425).

The focus on IT must be on the human element of IT, how people use the outputs of IT and how they contribute to the inputs to IT (Bloomfield, et al., 1994; Davenport, 1994, 1997). *'The use of information technology to its full potential means using human beings to their full potential'* (Walsham, 1993:19). This is of particular

importance in the marketing department, as this is a people based department. *'Of all the management disciplines, marketing is the one where human emotions, values and personal goals all interact together in the most heady brew* (Holtham, 1994: 22). People are different and it is people that will make the difference. They are adaptive and flexible, while IT is static. *'Information managers must begin thinking about how people use information, not how people use machines'* (Davenport, 1994:121).

From an IT perspective, this is a holistic study of IT assimilation, rather than a focus on an individual IT. IT, as referred to throughout this study has been maintained as the broad view of IT, rather than a focus on an individual IT. This led to major challenges during the literature review, data collection and analysis stages. However this feature is one of the major contributions of this study, as this research provides an overview and description of how a range of ITs are being assimilated into contemporary marketing practice.

Definitional Issues Marketing: Definitional issues in marketing from both a transactional and a relational perspective are discussed in detail in chapter 2 and 3. For the purpose of this thesis a generic broad definition of marketing is used as a basis for this study. Baker (2000:2) following a review of the historical and current development of marketing purports that *'the true essence of marketing (is) mutually satisfying exchange relationships – and its evolution over time in parallel with stages of economic growth and development.'*

1.8 Conclusions

The chapter laid the foundation for this thesis by introducing the research objective and the propositions which this research will study. It also briefly introduced the rationale for this study and provided an outline of the chapters in this thesis. An overview of the multiple case based research design and methodology was briefly explained. The structure of the data analysis chapters and the ten case summaries were discussed. The boundaries for this research were also presented. The references for much of the discussion in this chapter appear within the relevant chapters.

This thesis was initiated through the interest of the researcher in developments in IT over the last decade and her belief that IT assimilation will influence and also herald new developments for marketing practice. It is hoped that the findings from this research will contribute to marketing's advances in this dynamic and IT enabled era and that they will encourage more empirical research into the complex issue of IT assimilation in marketing and particularly along the transactional to relational continuum.

The following chapter introduces the two main themes of this research, relationship marketing and the IT component to marketing practice, within the debate on the need for changes to current marketing practice and theory. These issues will be further developed in chapters 3 and 4.

CHAPTER TWO

CONTEMPORARY MARKETING ISSUES – INFORMATION TECHNOLOGY AND RELATIONSHIP MARKETING

'How do we break out of the paradigms that currently constrain the marketing field, so that we can best respond to the opportunities and requirements of the new environment of interactivity and other aspects of information technology'

(Webster, 1998: 54).

2.1 Outline of Chapter Two

This chapter reviews the discussion in the marketing literature on the suggested changes to marketing theory and practice required in this new era (section 2.2). This review briefly introduces the IT dimension to current marketing practice (section 2.2.3), along with a discussion of the nature and responsibility of the marketing department (section 2.3). Relationship marketing is suggested by many, as the new marketing paradigm or transformational model. Section 2.4 reviews this discussion, the historical development, the relational economics benefits, the extended view and the difficulties in the practical implementation of relationship marketing practices. This chapter therefore briefly introduces many of the issues which will be discussed in greater detail in chapters 3 and 4 and is designed to set the scene for the rest of the thesis.

2.2 The Future of Marketing in the 21st Century

As the millennium approached a rash of doomsday predictions for marketing's continuing existence were published. These discussions were augmented by literature offering prescriptive and descriptive, though diverse views, on the future of marketing. The general thrust of this literature was that marketing is in need of a radical overhaul, with authors providing a range of explanations and directions for this new marketing era.

Marketing practice, some contend, is in a state of change, redirection, and refocus, searching for relevance and applicability (Wensley, 1999; Brownlie et al., 1999; Thomas, 1994; Brownlie and Saren, 1997; Murray and O'Driscoll, 1998; Day and Montgomery, 1999), with a variety of different approaches, methods, and theories abounding (Saren, 2000).

'Many leading academics and practitioners are experiencing crises of faith, thinking heretical thoughts, casting doubt on the wisdom of their intellectual calling and in some extreme cases, openly suggesting that the end of marketing is nigh' (Brown et al., 1996:9).

Marketing practice through its own short sightedness, mismanagement and inability to change with the times is in a period of reflection (Brown, 1999, 1998; Brownlie et al., 1994; Brownlie et al., 1999; Brown et al., 1996; Thomas 1994; Mitchell 1994; Brady and Davis, 1993; Murray and O'Driscoll, 1998). Many experts maintain that *'the assumptions on which the organisation has been built and is being run, no longer fit reality'* (Brown et al., 1996:9). Brownlie et al., (1994:8) concluded that *'marketing as a domain of knowledge and practice is itself becoming as myopic, complacent and inward looking'*. Thomas (1994:55) suggests that *'the very premises on which the edifice of academic marketing management has been built are under severe scrutiny and criticism'*. Brady and Davis (1993:17) add that *'doubts are surfacing about the very basis of contemporary marketing'*. There has been a fall from grace of marketing (Reichheld, 1995), with a suggestion that marketing, as currently practiced, is not successful (Wolfe, 1998).

A review of marketing's tenets and applications is now needed, requiring marketing academics to ponder the very nature of marketing's justification and existence (Brownlie and Saren, 1992; Fletcher 1995; O'Malley and Patterson, 1998). The limitations of academic research and the resulting research based developments highlight an urgent need for theory development of the practices of marketers, in this era (Hunt, 1994; Day 1996; Thomas, 1994; Marion, 1993; Murray and O'Driscoll, 1998; Lynch, 1994). *'New directions challenge academic marketing to provide meaningful measures, inferences and calibration; understand functional interfaces and rethink the role of theory'* (Day and Montgomery, 1999: 3). There is considerable

discussion of a mid life crisis in marketing (Brady and Davis, 1993; McDonald, 1994; Brown, 1995). According to Baker (2000) a mid life crisis for marketing is probably a good development for the discipline, though we must be aware that crises in marketing are not new, that crises in marketing are not necessarily unhealthy, and that marketing has made an enormous contribution to business over the last 60 years.

Marketing practice is struggling to keep pace with and react to the dynamic changes in the marketing environment (Palmer and Ponsonby, 2001; Piercy, 1998; O'Driscoll, 1998; Lynch, 1994; Brady and Davis, 1993; Achrol, 1990). The marketplace is changing for a variety of reasons including globalisation, growing audience fragmentation, increased media proliferation, escalating costs of new and traditional media, the diffusion of new information technologies and new business practices (Murray and O'Driscoll, 1998; Mitchell, 1994; Meenaghan and O'Sullivan, 1995).

'Many firms are recognising that a metamorphosis is taking place in business ... what modifications this requires of the practice and philosophy of marketing is still unclear, but unless the discipline of marketing wishes to be subsumed it must rise to meet the challenges' (Fletcher, 1995: 392).

A central issue is that marketing is currently over reliant on tactics and strategies designed for and only suitable for a bygone era (Glaser, 1994; Marion, 1993; Brownlie and Saren, 1995; Piercy and Craven, 1995).

'The business paradigms predominating today - which are revealed through firm strategies and organisational structures - are functions of an older, more capacity-constrained information environment. As that environment changes, so too does the paradigms, strategies and structures that evolved with it' (Glazer, 1991:2).

There is also pressure on marketing to prove that it does create value and that it is necessary for business success (Thomas, 1996; Sheth and Sisodia, 1995) with a perception that marketing departments have not lived up to the expectations of dynamic and market orientated departments (Gronroos, 1994). There is a sense that

marketing is not driving companies forward and developing with the new era. Marketing practices are offering companies nothing new. *'They had the old game down pat and there seemed little need for breaking new ground'* (Brady and Davis, 1993:22).

Within the academic field the same morose seems to exist, captured in Glaser's, (1994) criticism of all business strategy textbooks, which he contends should be regarded as history books for a bygone era. As Marion (1993:166) observes,

'It is by no means certain that thirty years of teaching of marketing based on marketing management textbooks has given North American and European companies the success they had been promised ... there has been nothing new since the 1960s or even well before'.

2.2.1 The Regeneration of Marketing?

Marketing practices are in a transitional period, with marketing practitioners struggling to implement different solutions, many of which are failing (Mitchell, 1994). There will be no all-encompassing generic solution (Mitchell, 1994; Littler and Leverick, 1993; Pels, 1999). Therefore, the difficulty lies in agreeing on the level of regeneration and change needed. Discussion and decisions abound in regards to *'what to add, what to retain, what to modify, what to delete from the current inventory of ideas, concepts, analytic framework tools and techniques'* (Varadarajan, 1999:88).

Some contend that the very tenets of marketing need to be reviewed and that a radical change of approach should occur (Brady and Davis, 1993; Brownlie and Saren, 1992; O'Malley and Paterson, 1998; McKenna, 1991). Marketing is changing and therefore marketing managers must change their practices (McKenna, 1995). That in order to survive *'marketing will have to take the lead in engineering its own future'* (Brady and Davis, 1993:28). Mitchell, (2000) contends that marketers should see this era as an opportunity for marketing to reverse many of their concepts and ideas and to ultimately save time, energy and money, by finally changing from a make and sell, to 'sense and respond' orientation.

There is an alternative view that the basics will stay the same augmented by an increased ability to target and differentiate customers and major developments in communications (Murray and O'Driscoll, 1998). As Lynch (1994) observes, the fundamental core of customer focus and competitive advantage still holds true, and that other than these, much of marketing practice is irrelevant.

Marketing by nature should be an ever changing, developing, creative and progressive discipline, which is constantly regenerating itself (Rapp and Collins, 1995). There is a contention that finally marketing has arrived and it is now capable of being '*interactive, co-creational, integrative and dynamic*' (O'Malley and Patterson, 1998:840). We are witnessing the maturing of the marketing discipline (Palmer and Ponsonby, 2001; Baker, 2000). Schultz et al., (1996: iv) concur that contemporary marketing is nothing like the marketing that has been taught and used since the 1940/50s. They suggest that the major changes centre on:

- Real customer orientation;
- Long-term relationships between buyer and seller, user and supplier;
- Two way reactions between the customer and the marketer - acting, reacting and interacting to benefit both parties;
- Customer satisfaction, not just volume and market share as indicators of success.

What we are experiencing is the move away from mass production, mass marketing and mass organisation, to flexible production, niche marketing, customisation and networked organisations (Webber 1993; Molenaar 1996; O'Driscoll, 1998; Thomas et al., 1994).

2.2.2 Marketing Challenges in an IT Enabled Environment

Current marketing practices operate within an IT enabled environment and the increasing reliance on IT by marketing practitioners provokes interest in how marketing is managing in this new IT era (Jiang et al., 1997; Webster, 1992; Bruce et al., 1996; Leverick et al., 1997, 1998; Sheth and Sisodia, 1995). Most commentators ascribe a role for IT in much of the discussions on a new era of marketing, highlighting the importance of IT's role in the ability of marketing to capitalise on this new era of business (Moncrief and Cravens, 1999; O'Driscoll, 1998; Mitchell,

1994; Molenaar, 1996; McKenna, 1991; Furness, 1996). *'The impact of technological revolution is changing the nature and activities of the marketing institutions'* (Sheth and Parvatiyar, 1995:409).

The importance of IT acceptance and use in marketing is that the reshaping and realignment of marketing will be driven to some extent by the use of IT in marketing, and marketing's continuing and future development is now closely intertwined with technological issues (Webster, 1992; Schultz et al., 1996; Schmitz and Rovner, 1992; McKenna, 1991; Boshoff and Terbanche, 1996; Porter and Millar, 1985; Bruce et al., 1996; Leverick et al., 1997). *'A profession, no less than a craft is shaped by its tools ... clearly, marketing's toolkit is experiencing unsettling amounts of innovation today'* (Deighton, 1996:151).

Marketing is context dependent and when a contextual element (IT) changes, it can have significant impact on the nature and scope of the discipline (Sheth and Sisodia, 1999). New and evolving IT based techniques present challenges and opportunities, obliterating, augmenting, or improving traditional practices and processes. Many of the impacts of IT however, are as yet unknown and unpredictable (Saffo, 1997; Drucker, 1994), As Porter and Millar (1985:160) states, *'The question is not whether information technology will have a significant impact on a company's competitive position; rather the question is how this impact will strike'*. As Mintzberg et al., (1995:7) observes, marketing strategy has remained the same for generations, but with the arrival of IT there will be changes, *'yet with few exceptions - largely introduced by modern technology - the most basic principles of strategy were in place and recorded long before the Christian era'*.

IT could, according to some authors, fundamentally change marketing. *'It creates new ways to configure businesses, organise companies, serve customers, and has profound effects on the structure, strategy and competitive dynamics of industries'* (Butler et al., 1997:6). Bruce et al., (1996:192) contend that IT effects will be widespread and encompass changes to the structure and organisation of marketing. Venkatesh (1998) is of the view that there will be a radical new marketing era courtesy of IT, with the emergence of cyberspace or the networked world, changing

how marketing is practiced, leaving marketers with no foundation stones to rely on. McDonald et al., (1993) emphasises that the most significant benefit of IT to marketing is to change the way companies do business, concentrating on using IT in innovative and unique ways, which is a focus not on the technology, but on the business operations. Peattie and Peters, (1997) contend that IT will change the content, context, and process of control, but not the marketing concept. McKenna (1991:72/73), advocates technology as the saviour of marketing, each needing the other to survive and excel.

'Technology embodies adaptability, programmability and customisability; now comes marketing that delivers on those qualities ...marketers who follow and use technology, rather than oppose it, will discover that it creates and leads directly to new market forms and opportunities'.

As Webster (1992:15) notes, technical competencies are becoming a central issues in marketing.

'The core firm will be defined by its end-use market and its knowledge base, as well as its technical competence, not by its factories and its office buildings. Customer focus, market segmentation, targeting and positioning, assisted by information technology, will be the flexible bonds that hold the whole thing together'.

In many ways marketing and IT could appear to be a contradiction and there are challenges for marketing as they attempt to assimilate IT into their practices. There are major conflicts and issues that need to be addressed before the transition to IT assimilation is complete. These issues will be discussed throughout the literature review. McKenna (1998: 78) crystallises the difficulties as follows.

'Technology and marketing once may have looked like opposites. The cold, impersonal sameness of technology and the high-touch human uniqueness of marketing seemed eternally at odds. Computers would only make marketing less personal; marketing could never learn to appreciate the look and feel of computers, database and the rest of the high-tech paraphernalia. On the grounds of cost, a truce was eventually arranged.'

Very simply, marketers discovered that real savings could be gained by using technology to do what previously had required expensive, intensive and often risky, people directed field operations.'

2.3 The Nature and Responsibilities of the Marketing Department

There is a contention that the crisis in marketing, if it exists, is centred on marketing personnel and the marketing department, with the level of marketing department's reorganisations, indicating a department in crises and a major marketing rethink by companies (Mitchell, 1994; Thomas, 1996; Piercy and Cravens, 1995; Bruce et al., 1996; Piercy, 1998; Brady and Davis, 1993). Achrol (1990:77) observed that despite environmental changes marketing's strategic concepts remain rooted in a functional orientation and that *'unusual forms of marketing organisation (that are ambidextrous and highly flexible) will be needed to cope with the dynamic task environments'*. Robert Smith of Coopers and Lybrand states that *'the marketing department is critically ill; urgent treatment is needed'* (Mitchell, 1994:49). Webster (1992) traces the development of marketing and suggests, following an outline of the intellectual and pragmatic roots of changes that are occurring in marketing, that a new paradigm focusing on the reconceptualization of the marketing department's role within the firm, is needed. *'That the marketing function as we know it is undergoing radical transformation and in some cases has disappeared altogether as a distinct management function at the corporate level'* (Webster, 1992:10). Scholten (1995:8) states that *'the difference between the way we organise our marketing function now and in five years' time maybe just as great as the transition from farm to factory, almost one hundred years ago'*. What Piercy and Craven, (1995:7) describe as the *'shifting role of marketing in the modern corporation'*.

In many ways marketing has diminished its own role by focusing on tactical practices, with major strategic decisions dictated from outside of marketing (Doyle, 1995; Brady and Davis, 1993; Piercy, 1998). That marketing practitioners have abdicated responsibility in certain pivotal areas (Day and Montgomery, 1999) with many of marketing's traditional functions taken over by other departments (Sheth and Sisodia, 1995).

'Unfortunately the only decisions where marketing had sole responsibility tended to be tactical; promotions, line extensions and superficial positioning policies. The real strategic decisions which do determine competitive advantage, product innovation, total quality service and cost structure are inherently controlled outside the marketing function' (Doyle, 1995:2).

Achrol (1990) notes that through globalisation, IT, flexibility, and speed, the vertical organisation will be weakened and replaced by a more complex multilateral system. He suggests two new forms; the marketing exchange company (information systems will be central) and the marketing coalition company. The trend in marketing is towards breaking hierarchies, self managing teams consisting of multifunctional players, re-engineering and process management (Piercy and Cravens, 1995; Thomas, 1996). This view of marketing and new organisation structures could lead to marketing having responsibility for their own marketing tasks and tactics and for the internal and external network management (Piercy and Cravens, 1995, Doyle, 1995; Webster, 1992).

Alternatively, McKenna (1991, 1995) notes that marketing must be all pervasive and a way of doing business, an expression of the company's character and therefore belonging to the whole company.

'In the 1990's the critical dimensions of the company - including all of the attributes that together define how the company does business - are ultimately the functions of marketing. That is why marketing is everyone's job, why marketing is everything and everything is marketing' (McKenna, 1991:79).

Though the concept of a marketing department appears to be under threat, there is also increased recognition of the importance of marketing to companies. The boundaries between marketing and other divisions are dissolving and at the same time the process of marketing decisions are changing (Glazer, 1991; Webster, 1992). *'Marketing as a philosophy would appear to have triumphed even as its activities*

have become too important to be left to the marketing function' (Galzer, 1991:17). Baker (2000) suggests that it is the success of the marketing concept that is responsible for this change. As the philosophy of the company has become the philosophy of marketing, and as the dominant culture of successful companies, marketing can be seen as 'everyone's' business. *'The result is that this common ownership dilutes the claims of marketing to be its sponsor and custodian'* (Baker, 2000: 308). Having noted this, he concludes that marketing will remain as a distinct function, that

'while all may share the vision and espouse the culture, the management of the interface and the creation and delivery of customer value will still remain the responsibility of what we currently recognise as marketing' (Baker, 2000:308).

Achrol and Kotler (1999) also review whether marketing will disappear into general management, as it becomes all persuasive, but they suggest that marketing will stay as a powerful functional area, but the role and functions of marketing will change. They suggest that marketing's role will change to include real time marketing, marketing as an internal infomediary, marketing as a creator of marketing knowledge, marketing as an integrator and marketing as a coordinator.

It is further suggested that there is no need for a marketing department, that marketing should never have had a functional operationalism and it should permeate through the organisation and exist only through the co-operation of other departments (Thomas, 1996; Doyle, 1995; Bruce et al., 1996; Gummesson 1987, 1998; McKenna, 1991; Bonoma, 1984; Gronroos, 1997; O'Malley and Patterson 1998). Marketing departments have developed as functional silos separated from other functions and also from direct customer contact, often isolating marketers behind reports and analysis, rather than real customer understanding and contact (Gronroos, 1997). This functional orientation has contributed to the crisis in marketing departments.

'Marketers have generally made the mistake of seeing the subject as a functional discipline rather than an integrative business process. Marketing directors have sought to make marketing decisions rather than

share responsibility for satisfying customers with cross-functional teams'
(Doyle, 1995:2).

By isolating marketing within a function, marketing has come into conflict with other departments and also discouraged staff from participating in marketing (Baker, 2000).

There has been a call for marketing, in line with other departments, to focus on process management (Thomas, 1996; Piercy and Craven, 1995; Murray and O'Driscoll, 1998, 1996; Brady and Davies, 1993). Murray and O'Driscoll (1996), observe that companies and markets are evolving rapidly, and at this stage of the evolution, there is an important move away from the traditional marketing perspectives to a more process-based view. Webster (1992) suggested three major categories for marketing processes, value defining processes, value developing processes and value delivering processes.

There has been limited research into the influence or role of marketing in companies (Homburg et al., 1999). Bruce et al., (1996) in a quantitative study, focused on the role of IT in the marketing department, offering some insights into marketing activities. They observed changes to work practices in marketing, due to the impact of IT, and that marketing departments are becoming less functionally based. Their research showed a limited reduction in marketing staff, but with an expectation that there would be future staff reductions. They noted a flattening of the structure of the marketing department, fewer decision-making layers and increased tele working. They suggested that these changes may result in marketing as a centralised function ceasing to exist, as the marketing tasks are diffused throughout the organisation.

Alternatively, recent research shows that marketing continues to maintain a substantial influence and exist as a functional entity, rather than having a process management perspective (Homburg et al., 1999). They found no evidence that the relative influence of marketing had decreased, even for companies that had adopted boundaryless, process based, organisational forms. They utilised institutional theory and noted that organisations were slower to react to market forces with business

practice and organisational forms continuing to exist even after they are no longer efficient. They found that marketing's influence and structure varies as a result of internal and external contingency factors and the corporate and societal context, rather than the industry context. Marketing departments, in their study, continued to play a major role both within and outside their own domain and maintained a central and dominant role in strategic decision-making. Their research was limited to manufacturing companies and they noted that many of the variances remain unexplained.

It is suggested that IT has a pivotal role in changing the operations of marketing departments (McKenna, 1991). Bruce et al., (1996; 189) confirms that IT plays a dominant role and can influence a redirection of marketing effort by changing the economics and effectiveness of what is feasible. They contend that the company-wide dissemination of marketing information through IT could

'weaken marketing as marketing tasks are diffused throughout the organisation ... this would weaken marketing as a function and IT can facilitate such a reconfiguration of marketing activities'.

Glazer (1991) argues that ultimately the marketing departments must change because marketing departments and departments in general are from an era lacking a dominant IT dimension. The new focus must be on sharing skills and information, with departments operating, from the same IT systems to improve overall operations.

2.3.1 The Role of the Marketing Department in Relationship Marketing

The changing role of the marketing department can also be linked to the development of relationship marketing practices. *'The relations become strategic issues as they set an infrastructure, a network, in which the marketing game is played'* (Gummesson, 1991:63). This section is a brief introduction to the issue, as relationship marketing will be reviewed in detail in chapter 3 and also section 2.4.

Relationship marketing practices suggest a move to cross-functional processes as opposed to organisational functions relating to the interfunctional dependency concept, which is a key issue in the Nordic School (Gronroos, 1989). The interaction/network school, highlights that companies will have a multitude of

relationships and the marketing department is only one unit, within a web of complex relationships (Gummesson, 1987). Gronroos (1989), from a relationship marketing perspective, delineated the marketing function as spread throughout the organisation and the marketing department as an organisational solution. He further suggested that transaction orientated marketing practice does not have the same requirement for internal interfaces between functions, while the relational perspective includes a definitive interdependency between departments, of strategic importance (Gronroos, 1991, 1997).

Within the relationship marketing perspective, marketing personnel are responsible for only a limited portion of marketing practice and the marketing department should be regarded as a supplement to points-of-marketing, providing overall strategies and resources, rather than the apex of marketing activity (Gummesson, 1991). There is a strong level of interdependence among departments and marketing cannot live isolated from other departments (Gummesson, 1987, 1991). *'When companies do not consider the linkages between all functions they end up with 'broken chains' and 'tribal warfare' (Gummesson, 1991: 65).*

This concept of marketing practices as spread throughout the company (Gronroos, 1989, 1991), is what Gummesson (1987, 1991, 1998) refers to as part-time marketers. Within relationship marketing all the operations in the company, who operate as part time marketers, must be aware of and have an understanding of the marketing impact of their operations (Gronroos, 1989, 1991). Marketing can no longer be left to the specialists but *'everyone in the company must take responsibility for understanding and contributing to developing and delivering value for them'* (Webster, 1992:14).

2.4 Relationship Marketing - An Introduction

The following section discusses developments in relationship marketing and expands on issues briefly introduced above. Chapter 3 further develops these issues.

2.4.1 Relationship Marketing- A New Paradigm?

The concept of a new paradigm, where one world view is replaced by another (Kuhn, 1970) has been discussed in the marketing literature. There is a contention that there is a search for a new marketing paradigm and that a paradigm shift is needed for marketing to survive in this era (Mitchell 1994). Gronroos (1994, 1997) suggests that the new paradigm has been found in the guise of relationship marketing.

This concept of relationship marketing as the new paradigm is much discussed with support, criticism and a lack of agreement on many aspects of this suggested new paradigm. A paradigm according to Kuhn (1970), can be identified and used to guide research even if there is a lack of agreement on it, or a full set of interpretations or rationalisations for it. Paradigms as used by marketing academics represent a loose consensus regarding the fundamental nature of the marketing discipline, defining the issues to be studied and the methods to be employed (Greenberg, 1998).

There is some contention that relationship marketing can be viewed as a new transformational marketing model (Gummesson, 1987, 1994; O'Malley and Patterson, 1998; Piercy and Craven, 1995; Schultz et al., 1996; Piercy, 1998; Snow, 1997; Payne, 1995; Tzokas and Saren, 1997; Sheth and Parvatiyar, 1995; Pels, 1999; Thomas, 2000; Wolfe, 1998).

Relationship marketing is seen as a necessity for some companies and industries (Gronroos, 1996) and '*a clear sign of the bright future*' for marketing (Tzokas and Saren, 1997: 105) and viewed as '*the saviour of marketing replacing the negativity of transaction marketing*' (Thomas, 2000:524).

There is some support for relationship marketing as a genuine paradigm shift (Gronroos, 1994,1997; Morgan and Hunt, 1994). Gronroos (1997) suggests that the marketing mix paradigm has restricted and narrowed the focus of marketing and that relationship marketing as the new paradigm allows for the multi-faceted nature of marketing practices to emerge. Others suggest that there is some dispute about whether a paradigm shift is actually occurring (Coviello et al., 1997; Pels, 1999;

Gummesson, 1998; Piercy, 1998). In addition it could be simply viewed as *'the flavour of the month' becoming a buzzword which lacks real meaning'* (Barnes, 1994;1). As Palmer and Ponsonby (2001:1) observe *'marketing is no stranger to 'big new ideas', which purport to be new paradigms for the study of the discipline, many of which, they contend, 'say more about the proclaimer than the subject being proclaimed'*.

Saren,(2000) suggests that rather than a completely new paradigm it could be the core of a unified general theory of marketing Brodie et al., (1997) note a 'shift' in managerial thinking, rather than a paradigm shift. They observe that there is a move from transactional marketing to a more customer focused or relational marketing perspective.

There is also the contention that relationship marketing could not be a new paradigm because relationship marketing is not new. That relationship marketing techniques have been utilised for centuries, but academic interest in this area has only developed in the last two decades (Palmer, 2000; Brown, 1998; Palmer, 2001). As Webster (1992:7) stated;

'relationship marketing is not new in management thinking. However, there appears to have been a fairly long period of time when it was not a top priority for most companies and it was not part of the basic conceptual structure of the field as an academic discipline'.

Relationship marketing can be seen as a reconceptualization of marketing to a relationship orientation (Gummesson, 1994; Payne, 1995), a *'reincarnation of the practices of the pre-industrial era'* (Sheth and Parvatiyar, 1995: 403), *'taking marketing back to its roots'* (Gronroos, 1996:12). Where it may to some extent appear new in some consumer markets, its has been widely practiced in industrial and services markets (Mattsson 1997).

Despite the inconsistency and ambiguity about the nature of relationship marketing it can be noted that as a dominant approach to marketing it has profound implications for the marketing discipline. To conclude there are many schools of thought; that

relationships are an addendum to traditional marketing theory, that relationship marketing is a new paradigm, that the two paradigms co-exist (see Pels, 1999), that relationship marketing is simply a new tactic in marketing or that relationship marketing is a focus shift rather than a paradigm shift (Greenberg, 1998).

2.4.2 Historical Development of Relationship Marketing

Relationship marketing, as an academic field of study, developed from a variety of literatures which were critical of the dominant marketing mix focus of marketing theory, particularly for business to business and services operations (Gummesson, 1987; Gronroos, 1989, 1994; Hart et al., 1999; Pels, 1999; Coviello et al., 1997; Brodie et al., 1997; Ford, 1994; Baker, 2000). Much of the developmental work was carried out within the IMP group at the macro social network theory level, with a focus on marketing for industrial markets (Ford et al., 1986; Ford, 1990; Mattsson, 1985), in the Nordic School of Service Management and the Anglo-Australian investigation into the nature of relationships in marketing (Gronroos and Strandvik, 1997). This development is also implicit in the Germanic/Alpine school of capitalism (Baker, 2000). Relationship marketing borrows heavily from other literatures, at the dyadic level borrowing from social psychology and human relations literature and at the macro level using sociometric methods, agency theory, exchange theory and even chaos theory (Saren, 2000).

Relationship marketing in its simplest form is a progression from the dominant and often criticised, traditional transactional 4p's focus (Gronroos, 1997, Gummesson, 1987, 1998; Payne, 1995; Day and Montgomery, 1999; Baker, 2000). It is a move away from the economic origins of marketing based on '*concepts such as exchange, profit maximisation, utilities, specializations, the economic man and rationality*' (Heeler and Chung, 2000: 63). McKenna (1991:67) stresses that marketing is moving beyond '*simple market-share tactics, raw sales and one-time events*'.

At the macro dyadic level, relationship marketing is a focus on the development and enhancement of long term relationships with customers, as distinct from a focus on gaining new customers (Payne, 1995; Fletcher et al., 1994; Berry, 1995; O'Driscoll, 1998; McDonald et al., 1993; Glazer, 1991). It focuses on relationships, networking,

interactions, interdependence, mutuality, commitment, trust, consumer choice and reciprocity (Sheth and Parvatiyar, 1995; Bagozzi, 1995). The new role for marketers is away from optimisation of the mix elements to the thorough responding to and developing of long term customer relationships and deciding on what functions and activities to purchase, to perform internally or to engage in with a strategic partner (Webster, 1992). Based on his analysis of the evolution of exchange relationships, Webster (1992:10) states that

'the intellectual core of marketing management needs to be expanded beyond the conceptual framework of micro economics in order to address more fully the set of organisational and strategies issues inherent in relationships and alliances'.

Definitions of relationship marketing abound and continue to develop (see Harker, 1998, Morgan and Hunt, 1994; Hunt, 1997; Mattsson, 1997). Gronroos' (1994:355) widely used basic definition states that relationship marketing is to

'establish maintain and enhance relationships with customers and other partners at a profit, so that the objectives of the parties involved are met. This is achieved through mutual exchange and fulfilment of promises'.

There are definitional difficulties at both operational and theoretical levels (Brodie et al., 1997; Coviello et al., 1997; Stewart and Durkin, 2000). Relationship marketing has in some instances become a 'catch-all' phase at its broadest level and has led to the term being 'prone to an abundance of vague interpretations' (Brodie, et al., 1997:385). A flexible view of relationship marketing is not necessarily a negative aspect, because it may be beneficial for relationship marketing not to be 'strait jacked' by one definition or another (Gronroos, 1994).

Transactional Marketing: Transactional marketing, is the traditional view of marketing focusing on the marketing mix and customer acquisition. Table 2.1 compares transactional marketing to relationship marketing along a variety of dimensions.

Table 2.1 Transaction to Relationship Marketing

Transaction Marketing	←————→	Relationship Marketing
One-off exchange, brand management	Focus	Ongoing exchanges, customer management
Short term focus	Time perspective	Long term focus
Mass communications	Primary Communication	Personal communications
Isolated market research	Customer Feedback Mechanism	Ongoing dialogue
Mass markets or market segments	Market Size	Market of one
Market share	Criterion for Success	Mind Share (Share of Customer)

Source: Youngme Moon (2000) modified from Gronroos (1991)

Traditional transaction marketing is primarily based on the manipulation of the 4 (or more) P's of the marketing mix and the mass marketing of packaged goods in the US (Gummesson, 1991; Gronroos, 1991) centred on the dominant 'marketing management model' or the Kotler School of Marketing.

'The marketing management model is production orientated due to its preoccupation with what marketers 'do' to consumers. Its emphasis is essentially short-term and transactional. Furthermore it is concerned primarily with the production and sales of fast-moving consumer goods, which represent only a fraction of all commercial exchanges' (Baker, 2000: 3030).

The focus of marketing was on mass production and mass consumption and marketing success was judged by sales, market share and brand profitability, with a focus on competition and its effects on profit (Sheth and Parvatiyar, 1995).

Discrete transactions focus solely on the exchange of money for a measured commodity. This is the traditional microeconomic profit maximisation paradigm, where the price contained all necessary information and the role of marketing was to find a buyer (Webster, 1992). The centralising concept is the lack of a relationship between the parties to the exchange. Transactions *'are characterised by limited*

communication and narrow content (and) the identity of parties must be ignored or relations creep in' (Dwyer et al., 1987:12). Transaction orientation is where *'marketers become more concerned with sales and the promotion of goods and less with building ongoing relationships'* (Sheth and Parvatiyar, 1995:406). Webster (1992:6) suggests that *'a pure transaction is a one-time exchange of value between two parties with no prior or subsequent interaction'*. It must be noted that pure transactions are rare and most transactions have a level of relationship, even if it hidden (Webster, 1992; Saren and Tzokas, 1997) but the focus of the transactional perspective, has been on the single sale (Webster, 1992).

2.4.3 The Economic Benefits of Relationship Marketing

The main tenets of relationship marketing relate to the level and duration of the relational engagement of buyers and sellers, arguing that close longer-term cooperative relationships, are more profitable than transaction based relationships. The interest in relationship marketing centres on the understanding that increased use of relationship marketing techniques will result in increased benefits to companies.

It is suggested that there will be increased profitability for companies related to the costs benefits of retaining customers, rather than a continuous focus on customer acquisition (Reichheld and Sasser, 1990; Payne, 1995; Peppers and Rogers, 1993; Buttle, 1996; Raval and Gronroos, 1996). Thus, the focus is on retention as opposed to attraction, moving from a value exchange to a value creation focus *'where the process of the relationship exchange is equally as important as the outcome of exchange'* (Sheth and Parvatiyar, 1995: 415).

Various authors offer views on the economic benefits of relationships. Reichheld (1995) developed the 'loyalty based business system model' to document the first and second order effects resulting in increased profits for companies, while Gummesson, (1997, 1998, 1999) discussed the return on relationship concept, customer relationship cycles and profit chains. He described return on relationships as *'the long-term net financial outcome caused by the establishment and maintenance of an organisations' network of relationships'* (Gummesson, 1999: 183). Sheth and Parvatiyar (1995: 401)

have a slightly different view and refer to the ability of relationship marketing to increase the efficiency and effectiveness of marketing.

‘Several relationship-marketing practices can help achieve efficiency, such as customer retention, efficient consumer response (ECR) and the sharing of resources between marketing partners. Each of these activities have the potential to reduce operating costs for the marketer. Similarly, greater marketing effectiveness can be achieved because it attempts to involve the customer in the early stages of marketing program development, facilitating the future marketing efforts of the company. Also through individualisation marketing and the adoption of mass customisation processes, relationship marketers can better address the needs of each selected customer, making marketing more effective’.

Relational economics is not well developed, and there is criticism of the lack of definitive research in this area and the oversimplification of the concept, that a long-term customer must be a profitable customer (Storbacka et al., 1994; Clarke and Payne, 1995; Saren and Tzokas, 1997; Sheth and Sisodia, 1999). Storbacka et al., (1994) offer a relationship profitability model, which highlights the difficulties in matching the concept to profitability. They suggest that in reality, though the benefits are not explicit, it makes some logical sense that having a customer for life, or for a period of time, will be more profitable than dealing with a new customer, each time. The prevailing view is that relationship marketing should be mutually beneficial for both the company and the customer and is *‘based on the notion that the existence of a relationship between two parties creates additional value for the customer on top of the value of products and/or service that are exchanged’* (Gronroos, 2000:5).

2.4.4 Extended View of Relationship Marketing

The traditional view of relationship marketing focused on the customer supplier dyad or the micro level. This view has been expanded to include a more strategic and an extensive intra and inter organisational focus, encompassing a range of relationships at the macro or network level, which was lacking in the traditional marketing mix perspective (Piercy and Cravens, 1995; Gronroos, 1996, 1997; Gummesson, 1998; Little and O’Driscoll; 1999). There is no consensus on the range of relationships that

can be included in relationship marketing, with many authors in between the two views (see Coviello et al., 1997).

Bagozzi (1975) questioned whether exchanges should relate to a narrow focus or expand to include all organisational relationships. Morgan and Hunt, (1994:22) suggest that relationship marketing should include customers and non customers and *'all marketing activities directed toward establishing, developing and maintaining successful relational exchanges'* This links to the interactions /networks school (Ford, 1990; Ford et al., 1994) and is a trend in the literature towards expansion of the scope of relationship marketing. The focus is on *'developing relatively long term relationships with such stakeholders as customer, suppliers, employees and competitors'* (Hunt, 1997:431). The extended view relates to long term, interactions with mutual dependence and includes the interconnectedness of relationships (Mattsson, 1997).

The extended context, expanding the view of where relationship marketing can be applied is evidenced by Payne's (1995) development of a 'six markets framework' for relationship marketing's role. Gummesson (1994, 2000) outlined 30 different relationships, at the customer level, nano level (internal) and mega level (external), that combine together to form total relationship marketing. Morgan and Hunt (1994) suggest four partnerships and ten discrete forms of relationship marketing, grouping them into supplier, lateral, buyer and internal partnerships. Similarly Doyle (1995) suggests four partnerships of customers, suppliers, internal and external partnerships. As Ford et al., (1986:34) suggest

'a company can be viewed as a node in an ever widening pattern of interactions, in some of which it is a direct participant, some of which affect it indirectly and some of which occur independently of it. This web of interactions is so complex and multifarious as to deny full description or analysis'

The reality is that relationships are often very complex multifaceted entities, serving many purposes, which are difficult to isolate and research (Bagozzi, 1995; Araujo, 1999; Ford et al., 1986; Gummesson, 1991).

The Interactions/Networks approach to marketing was developed in Sweden, as a new theory for industrial marketing and studied the various interactions between parties in a network, viewing marketing '*as an interactive process in a social context where relationship building and management are a vital cornerstone*' (Gronroos, 1997; Gummesson, 1987). Goods, information, financial and social interactions form a large market of network interactions.

There are various interpretations of both interactions and networks and these terms have been used interchangeably and indistinguishable in relationship marketing (Brodie et al., 1997). The interaction approach focuses on individuals in dyadic buyer-seller relationships and the social process based on mutual goals of trust and commitment, while networks focus on the totality of relationships (Gummesson, 1994; Coviello et al., 1997). Interactive marketing consists of two way communications with consumers and other bodies leading to the development of an informational exchange which, within the context of relationship marketing, should enable easier customer retention (Hofacker, 2001). Interactive relationships suggest interdependence and close economic, emotional and structural bonds (Sheth and Parvatiyar, 1995).

The interaction approach of the IMP group focused on relationships as co operational, rather than adversarial, with the interaction effected by multidimensional constructs contending that '*interactions are a series of short-term social interactions, that are influenced by the long-term business process that binds the firms together*' (Wilson, 1995:337). There is a clear move away from the adversarial mind-set implied by bargaining power, towards a cooperative perspective based on mutual gain (Sheth and Sisodia, 1999). According to Webster (1992) '*the focus shifts from products and firms as units, to people, organisations and social processes that bind actors together in ongoing relationships*'. The trend towards networks and interactions challenges definition, as they '*make it difficult to pinpoint the beginning and the end of companies*' (Gummesson, 1996:15).

The role of marketing in the myriad of relationships that can exist is not very clear and all exchanges have an impact on the relationships, though many of these interactions occur between non-marketing personnel (Gronroos, 1997, 1994, 1991, Coviello et al., 1997). There is evidence that much of the control of relationship management is outside the domain of marketing (Easton, 1995; Gummesson, 1996; Gronroos, 1997). There are advocates of a very central role for marketing in relationship marketing and network approaches (Webster 1992; Mattsson, 2000) *'Marketing should be regarded as an investment process that is instrumental for building, developing and maintaining exchange relationships to customers and intermediaries* (Mattsson, 2000:156). Alternatively, there is the view that bringing all elements of relationship marketing into the marketing domain may result in too many areas that are the domains of other specialists, incorporated into the domain of marketing (Baker, 2000). Gronroos, (1989: 55) commented that *'all of the activities which have an impact on the current and future buyer behaviour of the customer cannot be taken care of by marketing specialists only'*. The central tenet is which business unit *'owns'* the customer (Peppers et al., 1999) or in a wider audience, who is responsible for the relationship between the consumer, reseller, and manufacturer, which can be a source of conflict (Mattsson, 1997).

2.4.5 Relationship Marketing Implementation Issues

There is considerable criticism of the academic tenets and practical applications of relationship marketing and the embryonic stage of theory development, both academically and practically, raises many difficulties. For instance, it has been noted that relationship marketing is *'powerful in theory but troubled in practice'* from both the consumers and the marketers perspectives (Fournier, et al., 1998:44).

'Senior managers often talk relationships, while the managers charged with implementation operate in a transactional mode, which makes trust development and the achievement of mutual goals difficult if not impossible' (Wilson, 1995:344).

There is a growing band of academics who contend that there are major inconsistencies in the relationship marketing rhetoric and that it is a means for companies to extract more from their customers, with companies renegeing on their

part of the relationship (Fournier et al., 1998; McDonagh and Fitchett, 1999; Brown, 1999). As Tzokas and Saren, (1997) observe, many of the tenets of relationship marketing appear contradictory in practice. In reality the extent to which it is possible to build relationships with the customer is unknown (Barnes, 1997). Relationship marketing can also confuse customers, many of whom do not want or perceive the benefits of a relationship with the company and even when they do, they may not be developed to their customer's specification (Fournier et al., 1998; Palmer, 2001). In other instances companies, mainly for economic reasons, do not want to pursue relationships with customers (Tzokas and Saren, 1997).

Another area of criticism is the lack of detail of the practical implementation of relationship marketing (Brodie et al., 1997; Gummesson, 1994), '*with few guidelines for developing, implementing and monitoring programmes or for measuring the effectiveness of such programmes*' (Lindgreen, 1999:46). According to Saren and Tzokas (1997), calls for the adoption of relationship marketing have not been followed by sufficiently detailed empirical evidence of what strategies and policies firms can use to enhance their customer relationships. There is very little published research in the area of retention marketing and integrated customer retention strategies (Clark and Payne, 1995) and '*relatively little effort has been directed at developing frameworks and analytical tools to help achieve*' the retention of existing customers (Payne, 1995:29).

Some broad implementation strategies for relationship marketing exist, often with an IT dimension. For instance, Peppers et al., (1999:151) suggest four stages for successful relationship management which are identify, differentiate (internal), interact and customisation (external), though noting that '*the mechanics of implementation are complex*'. In reality, relationship marketing will develop in companies through incremental steps, as companies will develop expertise in certain methods and then develop these methods (Peppers et al, 1999). Youngme (1999:11) links relationship marketing and interactive technology and offers the relationship process as involving '*an iterative cycle of knowledge acquisition, customer differentiation and customisation of the entire marketing mix,*' what he refers to as the

'learning relationship'. Copulsky and Wolfe, (1990) concentrate on the need for a database for consumer based relationship marketing. Lindgreen and Crawford (1999) case based research, focused on a company, which had implemented relationship marketing principles, identifying activities and patterns, which represent relationship marketing. They found that for best practice there were three stages to relationship marketing implementation – the design, implementation and assessment phase. They suggest the following as necessary for relationship marketing.

- Listening to customer (through focus groups and questionnaires);
- Project teams;
- Marketing communications;
- Trust building activities;
- Systems to monitor and measure customer loyalty, retentions share and employee satisfaction.

Their research confirmed difficulties in implementing relationship marketing, with their focus firm only concentrating on two main relationships between the customer and employee markets, though they intended expanding this focus. Reichheld and Schefter (2000) confirmed that companies are struggling to utilise relationship marketing practices and that less than 20% of companies track customer retention, try to learn from deflections or utilise creative customer retention strategies. Freedman and Sudoyo's (1999) research also confirms that companies are struggling to build effective relationships with their customers.

Our knowledge of relationship marketing is at an early stage and we need research which clarifies and develops scales of the key concepts (Wilson, 1995). What is needed is a focus on the processes of relationship engagement (Sheth and Parvatiyar, 1995) as there is a lack of conceptualisation of relationship marketing (Bagozzi, 1995). An important aspect of the evolution from transactions to relationships is the need to re-examine marketing's role and purpose within this perspective (Webster, 1992). It is also worth noting that because relationship marketing has a strong emphasis on management processes that are cross functional it can also be viewed as

relationship management though this issue is considered outside the scope of this thesis.

2.5 Conclusions

This chapter reviewed the debate in the literature on the suggested need for marketing regeneration and changes to marketing theory and practice required in this new era. This discussion was linked to the developments in relationship marketing, which are viewed by many as the new transformational model, finally moving marketing away from the dominant traditional transactional focus on the marketing mix variables and the marketing management model. Within a discussion of relationship marketing as a suggested new paradigm, a range of important issues were introduced including its historical development, the relational economic benefits and implementation difficulties.

As relationship marketing is practiced in an IT enabled world, both relationship marketing and the IT dimension should be reviewed and researched together and though this chapter only briefly introduced these twin topics, the following chapters will develop these dimensions in greater detail.

The following chapter builds on this chapter by tracing the development of relationship marketing along the transactional to relational perspective, with a study of the IT dimension to this discussion. In addition empirical research of IT applications, particularly databases and IT based interaction applications, which can be used along the transactional to relational continuum, are reviewed.

CHAPTER THREE

THE IT DIMENSION TO THE TRANSACTIONAL TO RELATIONAL APPROACHES TO MARKETING PRACTICE

'Despite the anxious hand-wringing that exists today amongst modern marketing practitioners at the complexity of data, the complexity of media and the complexity of technology, information technology itself may well show the way to a new era of extraordinarily productive relationships'

(Schmitz and Rovner, 1992: 228).

3.1 Outline of Chapter Three

This chapter continues the literature reviews of the developments in IT and relationship marketing (section 3.2). Section 3.3 focuses on the continuum from transaction to relationship marketing and reviews the limited discussion of an IT dimension in this literature. The final section (3.4) reviews the discussion of and empirical research into the IT applications of databases and IT based interaction applications and their key role in marketing practice along this continuum. This chapter supports the contention that there is a gap in the literature centring on the IT dimension of marketing practice and suggests the transaction to relational perspective as a suitable framework for a study of this important area.

3.2 Relationship Marketing – The IT Dimension

This section develops the IT dimension to relationship marketing practice. IT is just one of the many literature from which relationship marketing has developed which include services literature, inter-organisational exchange relationships, resource dependency theory, social exchange theory, channels literature, networks theory, and the strategic management literature (Brodie et al., 1997).

The importance of this IT focus is that as relationships both internally and externally are developed and maintained much of this development is enabled by a variety of

ITs, which are themselves in the process of continuous development. What is needed is an understanding of the IT utilised in relationship marketing and the challenges for marketers in implementing IT within a relationship perspective.

It is suggested that the role of IT in the management and control of relationships is an important though often overlooked component of relationship marketing with calls for research into IT linkages between companies and customer and how these developments are impacting marketing practice (Webster, 1992; Pine et al., 1995; Thomas, 2000; Payne, 2001). The fact that more and more relationships are now IT based, controlled and managed through IT, purposes that an understanding of the role of IT in the process, is of paramount importance to marketers. Many authors have ascribed a dominant role to IT in relationship marketing (Talvinen and Saarinen, 1995; Gronroos, 1996; Brodie, et al., 1997; Peattie and Peters, 1997; Copulsky and Wolf, 1990; McKenna, 1991, 1995). As Morgan and Hunt (1994:22) observe *'what should be central to understanding relationship marketing is whatever distinguishes productive, effective, relational exchanges from those that are unproductive and ineffective'*. IT could be one of these features.

The multifaceted impact of IT within the broad range of marketing relationships is highlighted throughout this section.

'The impact of information technology on marketing strategy goes beyond the firms relations with its competitors and customers. It extends to the firm's dealing with the other players in the value-added chain; upstream to suppliers and downstream to distributors and retailers'
(Glazer, 1990:14).

Relationship marketing activities, particularly for networks, have a strong IT dimension, with the technical interdependence and the technical competence of parties, as an important determinant of the outcome of the relationship (Mattsson, 2000; Webster, 1992).

There is a contention that IT is a major driver of the orientation (or reorientation) to relationship marketing and that without IT, relationship marketing practices would be

curtailed (Zineldin, 2000; O'Malley and Tynan, 2000; Mattsson, 1997). Sheth and Parvatiyar (1995: 409) suggest that IT is one of the five macro environmental forces changing relationship marketing practice. *'The impact of the technological revolution is changing the nature and activities of the marketing institutions.'* Palmer (2001), within a review of the move to relationship marketing, utilising an environmental audit, highlights the pivotal importance of the technological environment, as a core driver. Zineldin (2000), contends that without effective use of IT, relationship marketing is not achievable and that the time has come to stress the indispensable role of IT in marketing. Viewing IT in a supporting role only, ignores the fact that IT will fundamentally impact on all aspects of marketing. Pine et al., (1995) confirm the need for IT in relationship marketing, but comments that marketers are struggling to utilise IT effectively.

The applicability of relationship marketing for consumer markets is a key area of much discussion (see also section 3.9). Originally, relationship marketing was not considered applicable to consumer markets (O'Malley and Tynan, 1999). IT is seen by many, as the key enabler of relationship development at the consumer interface and that without IT relationships with consumers would be very difficult (McKenna 1991, 1995; Brown, 1999). *'The ability to 'individualise' mass markets, due to modern information, communications and production technology, is an important reason for this development'* (Mattsson, 2000: 153). Webster (1992), concurred that though relationship marketing's importance can be seen in industrial markets, it is through the use of IT and direct contact between consumers, resellers and manufacturers that it can exist in consumer markets. Sheth and Parvatiyar (1995: 409) add that

'the current development and introduction of sophisticated electronic and computerised communication systems into our society is making it easier for consumers to interact directly with the producers. Producers are also becoming more knowledgeable about their consumers by maintaining and accessing sophisticated databases that capture information related to each interaction with individual consumers at a very low cost'.

A range of articles in Harvard Business Review, particularly from the Peppers and Rogers Group, suggest strategies for relationship marketing within the consumer market, which utilise IT extensively (Pine et al., 1995; Peppers and Rogers, 1995, 1997; Peppers et al., 1999). Peppers et al., (1999), noted that relationship marketing sets specific IT demands in the guise of databases and data warehouses, integrated cross function systems, information systems containing standardised customer information, sales force automation, web sites, call centres, and integrated mass customisation manufacturing technology. Developments in IT applications which provide linkages between customers and companies, including asynchronous and synchronous interactions, widespread computer networks and ongoing and rapid information processing applications, increasing the importance of IT in relationships.

This aspect of relationship marketing is not sufficiently developed in the literature to offer either guidelines or explanation for the usage of IT within relationship marketing. As IT proliferation increases the understanding of the role of IT in the relationship marketing is of paramount importance to marketers.

'No longer is ICT used to automate well defined tasks within an organisation which can be left to ICT specialists and/or manufacturing people, but ICT is the framework and key instrument for designing and managing company's external relationships' (Schlegelmilch and Sinkovics, 1998:166).

The importance of the IT link does not negate the importance of understanding that it is the relationship that is pivotal. *'Relationships are more important than low price, flashy promotions or even advanced technology'* (Gummesson, 1987:12). It is critical, that with all the information processing and interaction technologies, we do not overlook the pivotal relationship dimensions and the need for a deep understanding of customer behaviour, consumers experiences, philosophy, communications, counselling, psychology and so on and to consider relationship marketing from the consumer or other parties perspective (Fournier et al., 1998).

There are negative aspects to the increased use of IT in relationship marketing, which cannot be overlooked or underestimated. IT based, or IT augmented, relationships can

change the balance of power, disrupt processes, result in changes to the profit base and operations of companies, increase transparency of operation and automate functions that were previously people based practices (Palmer and Ponsonby, 2001). There is a danger that *'the technology 'allows me to do' approach is totally production orientated'* (Pels, 1999:33). The utilisation of IT does not mean that a relationship will develop. Palmer (2001), argues that the virtual relationship, or the ability to fake a relationship thorough IT, will not replicate a holistic relationship based on social and physical contact. IT is only one dimension of relationship marketing, one aspect of the multidimensionality of exchange. IT can be viewed simply as an instrument of relationship marketing, as an enabling feature that can be practically utilised to aid in the development of relationship marketing.

IT diffusion issues (though outside of the scope of this thesis) are often underestimated and a pertinent observation is that customers and companies do not change their habits or practices very quickly. There is slow consumers acceptance of various ITs (Schmitz and Rovner, 1992; Nugent, 1996).

'The evolution of marketing can be traced from the early phases of mass marketing to the current vogue for ultra micro marketing fuelled by the advances in IT. For any new marketing stance to be productive in this area it is important that the enabling technology is well diffused throughout the population (Ranchhod and Hackney, 1996:787).

There are also high levels of hype and rhetoric and many exaggerated claims for the impact and benefits from IT in business (Granham, 1994; Galliers and Baets, 1998).

'Like other organisation functions, marketing has been showered with sometimes exaggerated claims for what IT can offer, for example in terms of enhanced organisational competitiveness, greater functional efficiency, improved decision making and more comprehensive environmental monitoring' (Leverick et al., 1998:929).

IT is not the panacea for all the difficulties that marketing is experiencing and IT alone does not improve the skills and successes of marketing practices (Moriarty and Swartz, 1989; Burstein and Kline, 1995).

'Technology had not succeeded in reducing marketing campaign failures and problems, or in helping to promote cross selling ... nor has it apparently a very positive effect on cost reduction or the control of marketing budgets ... achieving faster competitor response, increasing customer profitability, forecasting and speed/time savings' (Shaw, 1994:90).

IT on its own will not deliver benefits, what is needed is a transformation in marketing activities to harness the opportunities from IT (Ward et al., 1996). Ultimately with IT *'the wisdom of its use, depends on the wisdom of the user'* (Glaser, 1997:251).

3.3 Levels of Exchange – The Transactional to Relational Continuum – The IT Dimension

This section reviews the literature on the concept of levels of exchange in marketing approaches as offered by various authors, with a discussion of the role of IT within these approaches.

The concept and the importance of patterns of exchange have long been central to marketing theory and practice (Bagozzi, 1975; Glazer, 1991; Dwyer et al., 1987) but *'the advent of the relational paradigm is likely to alter the basic foundations of marketing, anchored on exchange theory* (Sheth and Parvatiyar, 1995:411). Within the focus on relationship marketing is the concept that different customer groups will require different levels of relationships (Peppers et al., 1999; Fournier et al., 1998; Gummesson 1994; Pels, 1999). There is a concept of the movement or development of relationships from one stage to another. The higher the stage the stronger the relationship is with the company and this contrasts with transactional marketing, where there is no desire to encourage customer relationships to develop (Gummesson, 1999). This development also relates to the economic benefits of relationship marketing as discussed in section 2.4.3.

Different companies, depending on the level of variety in customer needs and the value of the customer (skewness) to the company will necessitate different levels of

relationship (Peppers et al., 1999). By understanding the different levels at which relationships occur, marketing management is in a better position to develop products and services that lead to profitable long-term relationships (Saren and Tzokas, 1997). Deciding on which customers should experience which level of relationship is difficult (Gummesson, 1994) but though *'tracking the process of relationships is a daunting task ... we may fare better by focusing on the different stages to gain a better understanding of how relationships progress'* (Wilson, 1995:343). Hunt (1997:441) suggests that a relationship portfolio be developed through time.

'Ideally a firm would wish to calculate the profit potential of each relationship, both existing and potential. Because the explicit calculation of profits to be derived from a specific relationship is frequently impossible, addressing the relationship portfolio conundrum requires focusing in a more qualitative manner, on the efficiency/effectiveness enhancing characteristics of each relationship'.

3.3.1 Transactional to Relational Perspective Continuums

The concept of levels of exchanges has been formalised in various frameworks or continuums with authors, to varying degrees, suggesting strategies and tactics, which could be pursued, depending on the level of the relationship. The particular focus of this research is on the role of IT in marketing developments from transactional to relationship. This section reviews each author's development of a relationship marketing continuum and their inclusion of an IT dimension in their discussion (see table 3.1), which will be reviewed in greater detail throughout this section.

Table 3.1 Exchange Levels in Marketing – The IT Dimension

Levels of Relationship	Authors	Role of IT
Restricted, generalised and complex exchange.	(Bagozzi, 1975)	No mention of IT in the discussion of marketing exchanges.
Discrete and relational exchange. Awareness, exploitation, expansion, commitment, and dissolution.	Dwyer et al., (1987)	Suggests the adoption of databases, to track customers and to increase understanding and also improvements in communication channels.
Strategic relationship continuum.	(Gronroos, 1991)	Information systems highlight the move to relationship marketing.
Transactions – repeated transactions – long-term relationships – buyer seller partnerships – strategic alliances – network organisations and vertical integration	(Webster, 1992)	The IT dimension is seen as pivotal for various aspects of relationship marketing.
Relationships, interactions and networks	Gummesson, (1994)	Notes the existence of ' <i>electronic relations</i> ' in a number of industries.
Ladder of Customer Loyalty. Prospect, customer, client, supporter, advocate, partners.	Payne (1995)	No mention of IT.
Transaction to relationship marketing	Payne (1995)	Limited mention of IT.
Buyer Seller Exchange Situation Matrix: Transactional – relational and hybrid in consumer markets	Pels (1999)	That the absence of IT hindered the development of relationship marketing in consumer markets and new options for relationships in industrial markets.
Tactical issues, transactional marketing relationship marketing and developmental relationship marketing	Wolfe (2000)	Dominant IT dimension
Transactions perspective to Relationship perspectives Transaction, databases, interactions, and network marketing	Brodie et al., (1997); Coviello, et al., (1997); Coviello et al., (2001 a, b and c)	IT was included at the managerial investment and formality dimensions at the database marketing approach and was discussed within the findings of the study. In later articles the IT dimension was developed and was included as a separate approach called e-Marketing.

Bagozzi (1975) suggested two core dimensions in his exchange framework – three exchange types (number of actors) restricted, generalised and complex; and exchange meaning (reason) utilitarian, symbolic and mixed. Restricted exchange is the most popular form of marketing exchange on the ‘*gives to receives from*’ type or the dyadic exchanges, such as customer-salesperson and wholesaler-retailer. These relationships are designed to maintain equality and mutually reciprocal relations. Generalised exchange includes univocal reciprocal relationships with three or more actors in the exchange situation, where the benefit of the relationship is more indirect than direct. Complex relationships are epitomised by channels of distribution, where three or more parties are involved in at least one direct exchange and the system is an ‘*interconnecting web of relationships*’ (Bagozzi, 1975:33).

The IT dimension: As this was written in 1975, the reality of IT developments, at that time, would explain the lack of an IT dimension to his discussion.

Dwyer et al., (1987) offers a comparison of discrete and relational exchange and suggests a five stage model. They trace the buyer seller relationships through the stages of awareness, exploitation (communication and bargaining, power and justice, norm development and expectation development), expansion, commitment, and dissolution. Over time the range and depth of mutual dependence increases, deepening the seller buyer relationship and leading to a web of interdependency. The stage of exploration includes communication, bargaining, interactions and the exchange of information in a two-way flow with ‘*bilateral communications of wants, issues, inputs and priorities*’ (Dwyer et al., 1987:17). At the expansion stage there is increased benefits and interdependence and at commitment stage there is implicit or explicit pledge to the relationship, linked to inputs, durability and consistency. The stage of the relationship is an important determinant, as relationships grow qualitatively at different stages.

The IT dimension: They suggest, as a fundamental management practice, the improvement in the conduit of communication and information and the utilisation of

databases to track high quality information on customer priorities and satisfaction, and so have a minimal IT dimension.

Gronroos (1991) views transaction marketing (focusing on customer acquisition) as the zero point on the relationship marketing scale. He suggests that the scope of the relationship can be enhanced until customer and suppliers are practically the same organisation. He refers to this as the strategic relationship continuum and suggested time perspective, dominating marketing function, price elasticity, dominating quality dimension, measures of customer satisfaction, customer information systems, interdependence between marketing operations and personnel, the role of internal marketing and the product continuum, as the different marketing implications for companies depending on their place on the transaction to relationship marketing continuum.

The focus of this scale is on the nature of the relationship, which varies between strategies for an anonymous mass customer to knowledge of individual customer values and focused on,

- The nature of the relationship towards the customer;
- Different types of information systems (IT);
- Levels of interdependence between functions.

The IT dimension: He observed that the resources, people, technology, and systems, utilised by companies are part of relationship marketing interactions.

'Firms pursuing a relationship marketing strategy, develops over time, more and tighter ties with its customer; these ties may be technological, knowledge or information-related or social in nature' (Gronroos, 1991:10).

The existence of various information systems would highlight the move to relationship marketing. He suggested that there would be different levels of IS requirements for firms operating a transactional (mass numbers and anonymous customers), while firms with a relational focus will require systems which shows

people rather than numbers and includes personal reactions and opinions, with on line real time information, on levels of satisfaction and dissatisfaction.

He later further developed this IT dimension and includes various ITs as components in the planned communication process, noting that the various communication devices must be integrated into a consistent process. That for the interaction process – the '*real process*' of interaction can be with '*physical products, service processes, systems and technology, e-commerce processes, administrative and financial routines etc*' (Gronroos, 2000:10).

Webster (1992) commenting on the lack of consensus on the terminology and typologies for describing new organisation forms suggested a continuum from transactional to full integration. His discussion centres on the role of the marketing department and how it will change along the continuum and the major role of IT within these developments (see table 3.2)

Table 3.2 - Detailed Description of the Range of Marketing Relationships

Relationship levels	Transaction	Repeated Transaction	Long Term Relationships
Description of Relationship Level	Focus on the single sale	Repeated frequent purchase of product or service	Relatively long term contractual arms length commitments. Managed as strategic assets and based on mutual dependence and often interdependence
Role for IT	Due to IT, individual consumer can have direct contact with the reseller/manufacturer		No mention of IT
Relationship levels	Mutual Total Dependence Buyer Seller Partnerships	Strategic Alliances Including Joint Venture	Networks
Description of Relationship Level	Higher quality and low cost based on total reliance on a network of sole-source vendors in a system of total interdependence and stability	Each partner is aiming towards a long-term strategic goal to change or improve competitive position. There are shared objectives and resources by both parties .	Complex, multifaceted organisation structure, a confederation guided from the hub, that results from multiple strategic alliances. The focus is on small specialised independent entities.
Mention of a role for IT	No mention of IT, though he observes that the sharing of information is critical	No mention of IT though sharing of resources is a critical component	Coordination of technology and managing information resources are critical and bind the network. IT is a key facilitator of these entities.

Source: Adapted from Webster (1992)

Webster (1992) suggests that the role and responsibility of marketing will change as companies move along the continuum as the move from the microeconomic paradigm introduces many new challenges for marketing. He cites political economy, organisational psychology, legal analysis, political science and cultural anthropology as areas where marketing needs increased understanding. He calls for empirical

research, which analyses the forces and factors that cause firms to move along this continuum.

IT Dimension: There was an IT dimension throughout the discussion of the range of relationships, as can be seen from table 3.2. He commented that from a consumer goods marketing perspective research was needed into the IT dimension and how marketers can manage long term relationships, given the power of databases and interactive IT. That for consumer markets the focus was on the trade and the sales force taking responsibility for the relationships aided by interactive information management capability. In his conclusion he had a dominant IT theme, commenting on the importance of investments in IT.

'Distributors must be treated as strategic partners linked to the manufacturing firm with sophisticated telecommunications and data-processing systems that afford seamless integration of manufacturing, distribution and marketing activities through out the network' (Webster, 1992:17).

He concluded this articles suggesting that technical competence was a core asset of companies and that IT could be the *'flexible bond'* that will hold the whole (network) entity together.

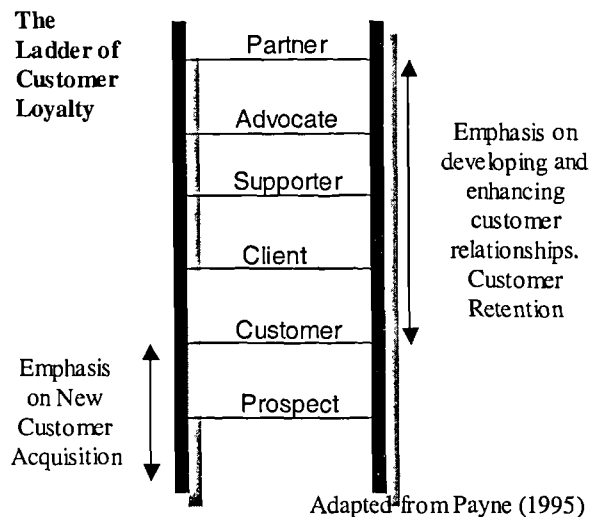
Gummesson (1994) classified relationship marketing as relationships, networks and interactions. He describes relationships as the dyad parent relationship between a supplier and a customer, and networks as an amalgamation of these with interactions as the active contact between the parties.

The IT Dimension: Gummesson (1994) refers to computer services as indirectly affecting customer relations, through back office support. He also specified that 'points of marketing' can occur between human and non-human phenomena and that how customers interacts with the provider's systems and routines are important issues in relationship marketing.

In other articles, and within his discussion of the 30 forms of relationships, he included *'the automated electronic relationship where the conduit is emphasised'*, noting that though these are prominent in some industries, we are only at the beginning of this development, and that they supplement rather than cancel the need for personal or social networks. He also included the quality of the links between the technical and market functions, at the non marketing (nano) level. He suggested that the concept of networks or virtual organisations, with an emphasis on IT, as the basis for the network organisation, is a brother to relationship marketing. He is clear that relationship marketing has an IT dimension and includes contact through IT (Gummesson, 1994, 2000).

Figure 3.1 The Ladder of Customer Loyalty

For consumer markets, Payne (1995) developed the relationship marketing *'ladder of customer loyalty'*, which outlines this argument in more detail, with a customer focus (see figure 3.1). Relationships can progress up the ladder; from 'prospect' toward 'partner'. Movement up the ladder requires companies to develop a deep understanding of what the

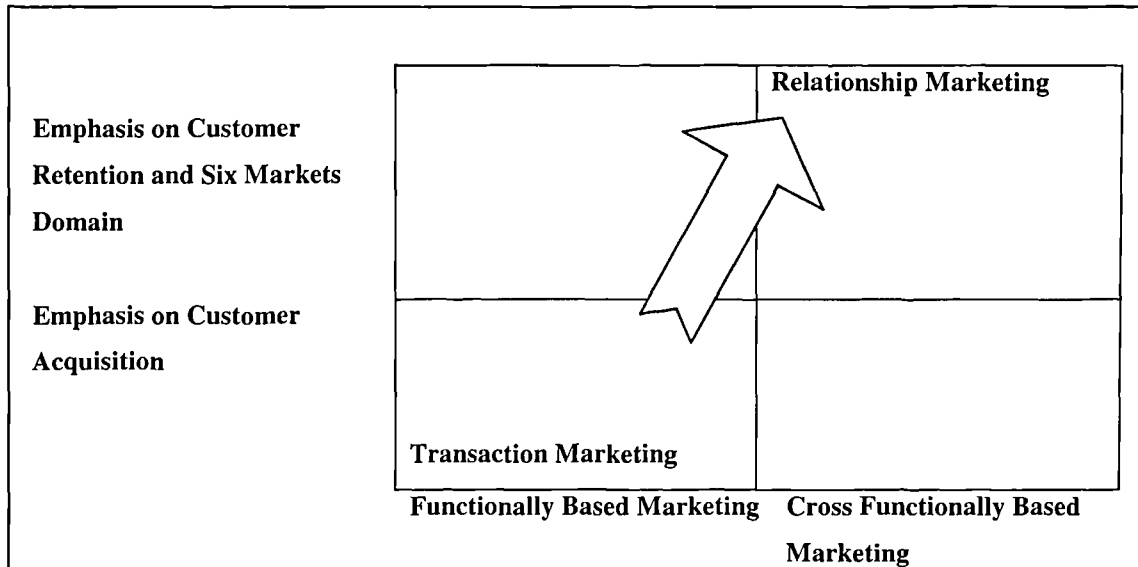


customer is buying and how it can differentiate its product offering to attain additional customer satisfaction. Many organisations concentrate their focus on the lower rungs of the ladder, never moving beyond simple 'customer catching', yet the higher rungs are ultimately more rewarding. By building and enhancing customer relations, customers become strong supporters of the company, purchasing more, more frequently. If 'advocate' status is reached then customer satisfaction has been replaced by customer delight. The company has surpassed customer expectations and created 'raving fans' (Blanchard, 1998).

The IT Dimension: There was a lack of an IT dimension to this development.

Payne (1995) also suggests a transition from transaction to relationship marketing characterised by a cross functional and customer retention emphasis (see figure 3.2).

Figure 3.2: Transaction to Relationship Marketing



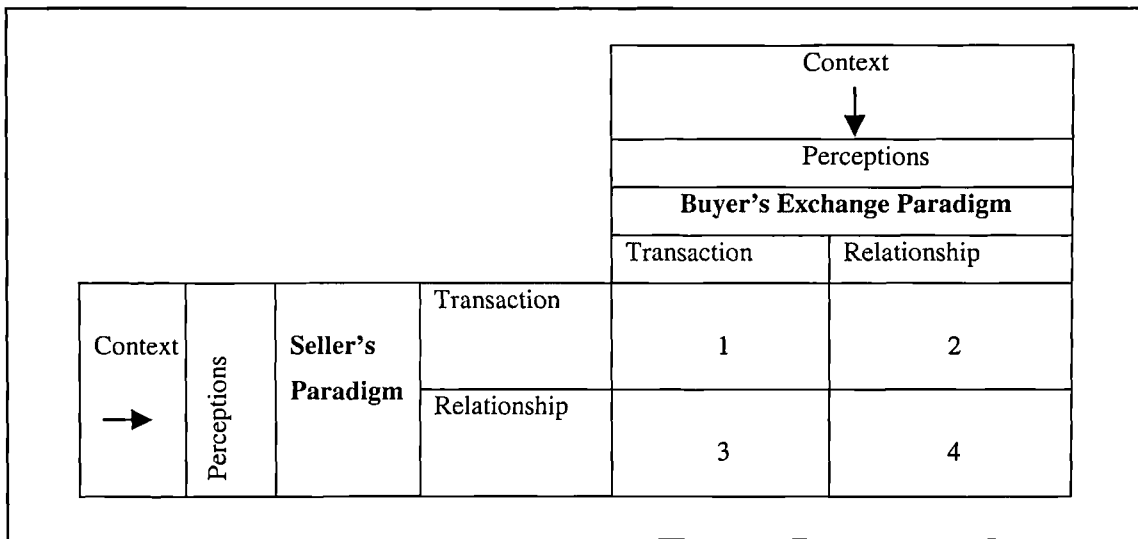
Source: Payne, 1995

The IT dimension: There was no mention of IT in this discussion, though in a related article, Clark and Payne (1995b) develop the concept of stronger multiple links with the customer. They suggest that EDI can be a 'tie that binds' in sharing information, while commenting that this can be a coercive development and can be viewed negatively. In a more recent article (Payne et al., 2000), they call for further research into the impact of IT on relationship marketing, noting that relationships and alliances with technology partnerships will have an increasing important role and that there must be a fourth domain of technology value.

Pels (1999) suggests (see figure 3.3) that three levels of relationships, transaction, relational and hybrid exist in different market types and are often viewed considering behavioural or perceptual aspect. She focuses on relationships within consumer markets and suggests 'that where a firm finds itself in the transaction/relationship

continuum is the result of the actors exchange paradigm and the environment' (Pels, 1999:32).

Figure 3.3 Buyer Seller Exchange Situation Matrix



Source: Pels (1999)

The IT dimension: She suggests the advent of IT as one of the many drivers of the changes to the buyer seller exchange matrix, where IT allows for a dialogue between the seller and buyer. That the absence of these IT tools hindered the development of relationship marketing in consumer markets and new options for relationships in industrial markets. The main IT related changes are linked to the growth of IT and world wide instantaneous dissemination and the reduction of the cost of IT, particularly databases.

Coviello et al., (1997) developed a framework encompassing management activities and processes at the various stages of the Continuum. This framework identifies four distinct, yet related types of marketing perspectives, from transactional to relational (databases, interaction and network marketing). They classified both transactional and relational exchange on various dimensions, which can be used to judge the focus of marketing practice. They suggest 12 variables for judging the level of exchange or the existence of relationship marketing (see table 3.3 and 3.4).

Table 3.3 Marketing Classified by Relational Exchange Dimensions

	Transactional perspective	Relationship Perspective		
	<u>Transaction Marketing</u>	<u>Database Marketing</u>	<u>Interaction Marketing</u>	<u>Network Marketing</u>
<u>Relational exchange dimensions</u>				
Focus	Economic-transaction	Information and economic transaction	Interactive relationship between a buyer and seller	Connected relationship between firms
Parties involved	A firm and buyer in the general market	A firm and buyer in a specific target market	Individual sellers and buyers	Sellers, buyers and other firms
Communication Patterns	Firm to market	Firm to individual	Individuals with individuals	Firms with firms
Type of contact	Arms-length, impersonal	Personalised	Face to face, interpersonal	Impersonal interpersonal
Duration	Discrete	Discrete over time	Continuous	Continuous
Formality	Formal	*Formal (personalised through IT)	Formal and informal	Formal and informal
Balance of Power	Active seller - passive buyer	Active seller less passive buyer	Seller and buyer mutually active and adaptive	All firms active and adaptive

Source: Coviello et al., (1997)

Table 3.4 Marketing Classified by Managerial Dimensions

Managerial Dimension				
Managerial Intent	Consumer attraction (to satisfy the customer at a profit)	Customer retention (to satisfy the customer, increase profits, and obtain other objectives such as increased loyalty, decreased customer risk, etc)	Interactions (to establish, develop, and facilitate a co-operative relationship for mutual benefit)	Co-ordination (interaction between sellers, and buyers, and other parties across multiple firms for mutual benefit, resource exchange, market access, etc)
Decision Focus	Product of a brand	Product - brand and customers	Relationships between individuals	Connected relationships between firms (in a network)
Managerial Investment	Internal marketing assets (focusing on product - service, price, distribution, promotion capabilities)	External market assets *(emphasising communication, information and technology capabilities)	External market assets (focusing on establishing and developing a relationship with another individual)	External market assets (focusing on developing the firm's position in a network of firms)
Managerial Level	Functional marketers (e.g. sales manager, product development manager)	Specialist marketers (e.g. customer service manager, loyalty manager)	Managers from across functions and levels in the offer	General manager
Time Frame	Short term	Longer term	Short or long term	Short or long-term

Source: Coviello et al., (1997)

* Relational exchanges and management activities, which have an explicit IT focus.

The dimensions used are relevant to actual marketing practice, rather than all constructs used for relationships and there are no prescriptive or normative guidelines. They suggest that these are not mutually exclusive approaches, and that firms can operate along the continuum (see section 3.3.2). An empirical benefit of the

framework is that it can be used for comparative analysis across a range of firms. Empirical research has justified the use of these four classifications and the twelve dimensions (Brodie et al., 1997; Coviello, et al., 1997; Lindgreen et al., 2000; Coviello et al., 2001a and c).

The IT Dimension: Though they did not include IT as a separate dimension for all stages, it is implicit in many of the dimensions and is included at the database stage related to formality of relational exchange and managerial investment. In their research the use of IT and the impact of IT, both organisationally and within the industry sector, was included in the questionnaire and their companies were divided by technology base (high versus low technology). Findings from their research highlighted that services firms noted an increase in use of technology for advertising and communications. Each firm in their case based research, utilised IT to 'stay close' to their customer and to monitor and target customers, using email, bulletin boards and databases. It must be noted that these were software companies, operating in the business to business sector and we could assume that they would be both IT aware and IT friendly.

They also found industry specific dominant marketing practices related to the level of sophistication of a company's technology (see section 3.3.2). They observed that large older consumer goods companies had a transactional perspective or a database perspective, if they had more sophisticated use of technology. Industrial goods with low turnover usually had an interactions perspective, while joint or foreign owned companies with sophisticated use of technology, operated a network perspective. Therefore, IT played a role in the level of development of relationship marketing and they particularly noted the need for sophisticated IT, as a prerequisite for network development. Commenting on their research findings, they observed that the impact of IT on marketing practices needs research.

Recent publications by Coviello et al., (2001 b and c) developed this framework further and added a definitive IT dimension. They reviewed and amalgamated frameworks from Day (1998) and Iacobucci and Hibbard (1999) and interactive

marketing themes from a variety of articles, many of which are cited in this study, and included a new distinct approach to marketing practice, labelled e-Marketing, with the dimension which appear in table 3.5.

Table 3.5 e-Marketing Approach Classified by Exchange and Managerial Dimension

	e-Marketing
Purpose of Exchange	Information-generating dialogue Between a seller and many identified buyers
Nature of Communication	Firms using technology to communicate “with” and “among” many individuals (who may form groups)
Type of Contact	Interactive (via technology)
Duration of Exchange	Continuous (but interactivity occurs in real time)
Formality in Exchange	Formal (yet customized and/or personalised via interactive technology)
Managerial Intent	Creation of IT-enabled dialogue
Managerial Focus	Managing IT-enabled relationship between the firm and many individuals
Managerial Investment	Internal operational assets (IT, website, logistics) Functional systems integration
Managerial Level	Marketing specialists (with) technology specialists Senior managers

Source: Adapted from Coviello et al., (2001b)

The intent of e-Marketing is real time dialogue that is enabled and mediated by IT. They do confirm that all five approaches can have an IT dimension, along a stages of IT development perspective (see chapter 4), though they suggest that only the e-Marketing approach has the potential to use IT to transform their practices.

In quantitative empirical research from the UK and New Zealand, they confirm the e-Marketing approach is not widely utilised with firms concentrating on more traditional marketing practices, and that where it is practiced, it occurs in conjunction, rather than as a separate marketing approach (Coviello et al., 2001c). They suggest that the practical application of interactive technologies is only in its infancy. They did find a strong positive relationship between database and e-Marketing practices and noted that database marketing was the only practice correlated with all other

practices and may be viewed as the start of e-Marketing. Figure 3.4 links database marketing and e-Marketing approaches to IT practices, across the range of approaches, which is a similar approach to the focus of this thesis.

Figure 3.4 Direct Marketing and e-Marketing Relative to Other Aspects of Marketing

Transaction Marketing	Interaction Marketing	Network Marketing
Database marketing	←-----▶	e-Marketing

Source: Coviello et al., (2001c)

These developments mean that the framework now includes a major IT dimension and they suggest that

‘decisions as to the implementation of e-Marketing will require a clear understanding of both the firm’s capabilities to implement and support “e” operations and their customer’s preferences/capabilities to participate in electronically-interactive relationships’ (Coviello et al., 2001c: 24).

3.3.2 Pluralism of Approach to Contemporary Marketing Practice

There is criticism of the linear nature of these continuums. As Wilson, (1995:344) confirms,

‘a firm may be called upon to operate some segment under an adversarial competitive model, in other segments it may have a dyadic relationship with a supplier or customer, and in another segment it may operate as a key player in a network of firms that competes against another network’

Brodie et al., (1997; 397) note that *‘firms practice more than one if not all types of marketing’*.

Rather than viewing the stages separately and as a move away from transaction marketing, the stages can and do occur concurrently and simultaneously and the marketing mix or transaction perspective can and is used with relationship marketing

strategies (Gronroos, 1991; Brodie et al., 1997; Coviello, et al., 1997; Lindgreen et al., 2000; Coviello et al., 2001a). Though the concept of a continuum suggests a movement away from the static marketing mix view of marketing practice, it does not underestimate the continued importance of the marketing mix (Gronroos, 1989, 1991; Clarke et al., 1995; Gummesson, 1994). There is a contention that for certain companies the demise of transactional marketing is premature and that certain aspects of marketing practice are best handled through a transaction approach (Gummesson, 1994; Kotler, 1997) and this should be decided related to the option which is most profitable for the company (Gronroos, 1997). As Gummesson (1994:15) notes '*not all relationships are important to all companies all the time ... some marketing is best handled as transaction marketing.*' There is also the view that every transaction has a relationship potential, even if it is hidden (Dwyer et al., 1987; Coviello et al., 1997; Saren and Tzokas, 1997).

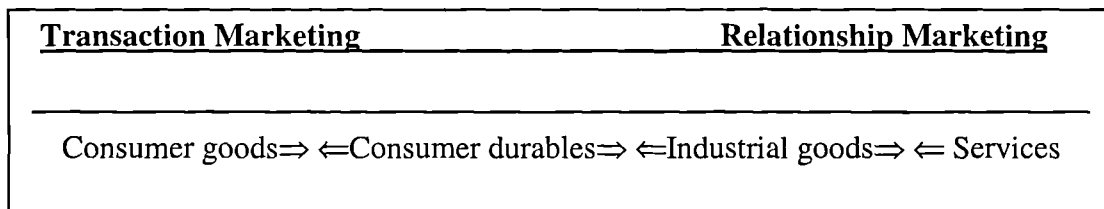
The suggested industry specific nature of relationship development is an important issue of relevance to both this continuum and the influence of IT at the various stages. Relationship marketing in business to business and service marketing has existed for a long time (Gronroos, 1991; Ford, 1990; Hakansson, 1986) but now with increased IT networks and applications, producers targeting large numbers of anonymous customers, can have relationship with consumer (Webster, 1992; Copulsky and Wolfe, 1990; Sheth and Parvatiyar, 1995; Pels, 1999; Peppers et al., 1999). Coviello et al., (2001a) following a review of the extent empirical studies in this area, concluded that the distinction between consumer and business marketing is unjustified.

There is a need for research into whether business to business and services firms will practice relationship marketing to a greater extent than consumer packaged goods firms (see section 3.4) and whether there is a different emphasis on transactional and relational perspectives, under different marketing conditions (Webster, 1992; Brodie et al., 1997).

Dwyer et al., (1987) commented that relationships have always existed in consumer markets, at the communication and bargaining stage, particularly suited to high priced durable goods and complex services, though they note that it relates to the stakes. Wilson (1995) also suggests that relationship marketing is applicable for both interfirm and consumer markets. Peppers and Roger (1999) suggest that for consumer markets companies can have relationships with their channel members so that relationship marketing exists within companies, even if it is not with the final consumer. Lindgreen and Crawford (1999) observed that the nature of the industry dictates whether relationship marketing occurs. Pels (1999) suggests that the interactions/network approach can be applied to consumer markets and that transactional and relational marketing can co-exist in all markets, for products and services. She suggests that the exchange transactions and the relationship exchange are difference types of exchanges, based on different exchange paradigms and the different exchange paradigms co-exist in all markets.

Gronroos (1991) linked levels of exchange to company type (see figure 3.5).

Figure 3.5 The Marketing Strategy Continuum



Source: Gronroos, 1991

He suggested that firms pursuing a transactional marketing perspective would most likely be consumer goods firms and so on through the continuum. That these were probable, more than absolute divisions, but the contention is that not all situations will be suitable for relationship marketing. He further assumed that database information systems were only suitable for companies pursuing a relationship marketing strategy and that transaction based consumer goods firms would not utilise databases. By 1997, Gronroos had reviewed his observation and noted that through databases and particularly on line real time information systems in transaction based

situations, even marketers to anonymous masses of customers are attempting to identify their customers. Ultimately many companies are mixtures of orientations. *'Few marketing situations are clear cut cases of consumer/industrial or goods/services; those dichotomies are arbitrary'* (Gummesson, 1987:20).

Brodie et al., (1997) in their empirical research found support for the pluralistic nature of marketing with both transactional and relational marketing practiced concurrently. They observed that all four types of marketing are practiced by most firms to varying degrees, confirming the non-linear aspect of the continuum. Their research revealed that firms practicing transactional marketing were likely to practice database marketing, but not interaction marketing. There was no clear pattern for transaction and network marketing. If firm's practiced database marketing they also practiced interaction marketing and to a lesser extent network marketing, while interaction and network marketing were often practiced together.

Brodie et al's (1997) study, though offering some level of support for the marketing strategy continuum, fails to indicate that one type of marketing is more prevalent in a particular sector. In their research, they observed that large older consumer goods companies had a transactional perspective or a database perspective, if they had more sophisticated use of technology. Industrial goods companies with low turnover, usually had an interactions perspective, while joint or foreign owned companies with sophisticated use of technology, operated a network perspective. Therefore IT played a role in the level of development of relationship marketing and they particularly noted the need for sophisticated IT, as a prerequisite for network development.

Further case based research by Lindgreen et al., (2000), utilising this framework, also confirmed the pluralism of practices. Coviello et al., (2001a) in cross cultural quantitative research of marketing practices again confirmed the pluralism of approach though revealing that there was a prevalence of transactional marketing practices particularly for consumer goods companies. There were dominant roles for transaction and interaction marketing, which they contend are the two more developed areas, while the database and network approaches are more recent

developments. In further research Coviello et al., (2001c) again confirmed the pluralism of approach but noted increased use of network marketing, than in the other studies. They suggest that marketing practices are becoming more complex and more IT based. The current dominant focus is on interaction marketing, followed by transaction and network marketing.

These studies offer some support for the Gronroos (1991) continuum, though they noted that there were business to business and service companies that practiced transactional marketing. The general consensus is that relationship marketing is relevant across all types of firms (Day and Montgomery, 1999).

3.3.3 The Consumer Perspective - The IT Dimension

This section develops the above discussion, focusing on the applicability of relationship marketing within the consumer markets. It is argued that the role of IT is a critical component of the applicability of relationship marketing within the consumer marketing perspective. This issue is expanded on in sections 3.8, and 3.9.

In the consumer manufacturer relationship, a huge informational distance had developed, which with the aid of IT can now disappear and heralds major changes (Schmitz and Rovner, 1992). Pels, (1999) suggest that when a consumer wants a relationship with a company, than marketers should use all the new technologies to allow this relationship to develop. *'The passiveness of consumers was more related to the lack of possibility to interact than a natural desire to be passive'* (Pels, 1999:31). Gronroos, (1997) noted the move towards dialogue and relationship building for consumer markets. He argues though that interactions whether technical, knowledge or information are dominant in binding the customer to the company in business to business and services marketing, whereas for consumer markets the product and branding are the binding features.

The cornerstone of marketing is customer satisfaction and the impact on consumers of increased IT usage by marketers both internally and externally is an important research agenda (Thomas, 2000). Customers are more demanding, educated and knowledgeable than ever before (Meenaghan and O'Sullivan, 1995; Cova, 1999). As we encounter the era of the never satisfied consumer (McKenna, 1991), consumer

who are looking for *'total quality'* or *'zero defects'* (Reichheld and Sasser, 1990; Ford and Saren, 1996), we have reached the age of *'unpredictability in consumer behaviour'* (Cova, 1999). Consumers have high levels of choice (Venkatraman and Henderson, 1998), increased ability to self-sell and less defined buyer/seller roles (Schmitz and Rovner, 1992), with IT aided reverse marketing (Hagel and Armstrong, 1997). It is the *'age of addressability'* (Blattberg and Deighton, 1991), the *'age of software'* (Swerdlow, 1997) what Stone (1994) refer to as the *'era of collaborative commerce'* suggesting that power will return to the consumer, heralding a return to the marketing concept of consumer sovereignty. The danger of greater market diversity is that it is increasingly difficult to create meaningful segments, but the trend, due to advances in IT, is for mass customisation, which customises products, while maintaining the advantage of mass production (Sheth and Sisodia, 1999).

The range of ITs which can be used at the consumer interface, are increasing rapidly (see section 3.4). Venkatesh (1998) provides a diagram which highlights the high levels of IT used by consumers which include, internet, online services, interactive technologies, multimedia television, virtual reality television, internet, databases, email, fax, telephones, atms, store debit cards, electronic payment and a variety of online services. He notes that

'what was considered the technology of information has now become a technology of communication ... the recent convergence of communication and information technologies has created possibilities that were unthinkable only a few years ago' (Venkatesh, 1998: 670)

IT is often used to automate the service element, resulting in consistency of service (Fletcher, 1995), increased efficiencies and effectiveness (Heskett et al., 1990) and in lightening speed (Negroponte, 1997). There is also a trend toward self service technologies (Meuter and Bitner, 1998; Meuter et al., 2001). *'As computers make the professional's arcana accessible to the layman, potential customers will increasingly handle routine problems themselves, or opt for a software-armed paraprofessional'* (Ross 1997; 44). To some extent, IT is now redundant as it is taken for granted by customers and is *'expected, accepted, disposable and transparent'* (Barnes and Glynn,

1993:43) and the utilisation of IT can *'empower service providers enabling them to deliver superior service to sometimes astounded and often very satisfied customers'* (Heskett et al., 1990:185).

3.4 The Role of IT Along the Transaction to Relational Continuum – Databases and IT Based Interactions

This section develops the IT dimension with a particular focus on a range of IT applications which are applicable to a broad range of marketing practices. The range of ITs and the multifaceted impact of IT within marketing practice are highlighted throughout this section. Rather than a full discussion of each available IT for marketing practitioners, the focus of this section is on the more relational and dominant ITs. This section emphasises the choices, challenges and to a limited extent the impacts of the assimilation of IT in marketing.

3.4.1 The Internal and External Perspective

A facet of IT's importance lies in its ability to span the boundaries between departments and the external environment (intra and inter organisationally) (Talvinen and Saarinen, 1995; Glazer, 1991; Zineldin, 2000). This is marketing's natural habitat, the boundary spanning areas of control (Piercy, 1998; Doyle, 1995), and it is at this dual internal and external focus where major changes and redefinitions are occurring (Garvin, 1998; Ling, 1999; Henderson and Venkatraman, 1993). Much of IT developments has centred on internal (see section 3.4.1) rather than external IT's. This dual focus creates major challenges for marketing personnel who are struggling to understand and react to a variety of systems and the effects of these systems internally and externally (Henderson and Venkatraman, 1993).

IT can be viewed as operational (external customer focus) and administrative (decision making focus) processes of work (Garvin, 1998). It is suggested that the internal factors often causes the most difficulties (Ling, 1999). These are often researched separately, but are mutually supportive and few researchers have integrated both activities into a coherent whole (Garvin, 1998) particularly from an IT perspective (Sabherwal and Grant, 1994). The difficulties lie in the fact that operational processes are often redesigned while administrative processes have been

overlooked (Garvin, 1998). There is a tendency to focus on internalising the IT operation, to focus on one or the other, but it must be both, and the inadequacies of fit between external and internal focus is a major reason for the failure of IT to deliver benefits (Henderson and Venkatraman, 1993).

Competitively the investments in IT are internal, while cooperatively the investments in IT are designed to link the company with suppliers and buyers and rivals (Nolan et al., 1993). This study seeks to ascertain the level and applications of IT at both the internal and external interfaces and also for administration processes internally (see table 3.6).

Table 3.6 The Internal/External Dimension of IT Along the Transaction to Relational Continuum

	Transactions	Database	Interactions	Networks
Focus of IT	Internal	Internal/external	Internal/external	Internal/external

There is a lack research into the holistic view of the range of IT's in use in marketing, with the focus on individual ITs, rather than the important interconnections between various IT systems in operation in a company (Chan and Swatman, 2000).

3.4.2 The Role of IT: Databases, IT based Interactions and Networks

The focus of this study relates to Brodie et al., (1997) continuum of transactional to relational and cites transactions, databases, interactions and networks perspectives as the stages of relationship development, which are utilised in this study as they relate to IT development. This framework permits the inclusion of levels of IT assimilation (see chapter 4) and the internal (database) and external (interactions) perspective. The following section groups and reviews various ITs in the two areas of databases and interactions, as the current stage of the majority of IT developments with some similarity to the Coviello et al., (2001c) focus (see table 3.6).

Figure 3.6 Database Marketing and IT based Interaction Relative to Other

<u>Aspect of Marketing</u>			
Transaction Marketing	Database Marketing	Interaction Marketing	Network Marketing
Database Marketing ←-----→ IT Based Interactions			

Source: Adapted from Coviello et al., (2001c)

It must be noted that various IT's can be used under a variety of the headings and for network marketing an amalgamation, or sophisticated use, of the various IT is a prerequisite. This research focuses on the type of usage of various IT's within and across the framework. Each section is a review of limited research, into the various IT's available, but a full and detail discussion of either the stages or the full range of IT's is outside the scope of this thesis. This section is designed to discuss the IT dimensions and supports the need for holistic study of ITs and the contention that for each of the approaches, there are a myriad of IT requirements that marketers need to be aware of and to utilise and therefore this dimension needs to be included in the framework.

The Range of ITs in Marketing: The sheer range of systems and software that can be classed as IT usage in marketing is extensive (see Holtham, 1994, Leverick et al., 1997; Marchall, 1996). There are over 200 software products targeted at sales and marketing (Hewson and Hewson, 1994) and a myriad of internet and telecommunication based IT applications. There is no distinct list of marketing related IT's, and many marketing IT's are non specific to the marketing department. Wilson and McDonald (1999) suggest a range of applications that IT in marketing can be used for (see table 3.7).

Table 3.7 Applications of Information Technology in Marketing

Marketing Analysis and Planning			
Analysis Modelling - sales/share -market size -elements of the marketing mix Forecasting Product/market positioning Portfolio position and balance	Strategy Formation Gap analysis Definition of marketing objectives, strategies, tactics New product evaluation		Management Information Slicing/consolidation Graphical presentation Geographical presentation
	Plan Documentation Plan drafting Document distribution		Management Control Product performance Market performance Channel performance
▼			
Market Research ▼	Data; Market/product group level		
	Involvement with market Satisfaction of market needs NPD Market sales Market/product group profit	Market Market needs Market size Market trends Competitor performance	Environment Economic, Political, Legal
External Data Source ▼	▼		
▼	Segmentation	Aggregation	Segment Profitability
▼			
Data: Customer/product level			
Involvement with customer; Transaction history;	Contact history; Pricing; Cost, margins, NPV Promotions	Customer/competitor Customer (actual/potential) Profile; Competitor purchases.	
▼			
Marketing Operations			
Sales management	Direct mailing	Telemarketing	ECommerce/other channels media

Source: Adapted from McDonald and Wilson (1999)

Even with the current wide range of applications 'many of the more innovative and potentially fruitful IT applications remain to be exploited' (Leverick et al., 1998: 931), which will be continuously challenging for marketing. 'Altering the technology to fit the marketing and sales environment, then altering the environment to fit the technology' (Moriarty and Swartz, 1989:185). There is also contention that the level of IT developments can overpower the marketing department.

'Current developments in information technologies are unfolding so fast in so unsettling and complex a manner, that it is very easy to see only thousands of different trees and get thoroughly lost in the wood. But one has to see the wood to grasp why and how the new one to one marketing will become so important' (Mitchell, 2000; 355).

3.4.3 Database Marketing – The IT Dimension

The use of IT based databases facilitate the acquisition and management of customers more effectively. The challenges of database and datamining amid the flood of information available to marketers through information technology, is a wide literature with a full range of database and datamining tools and techniques (see Peacocks, 1998). Database marketing is not a new concept and database developments have challenged companies since the introduction of databases (Nolan, 1973). Databases have existed in marketing since the early 80's. Traditional IT based databases were DOS systems with limited functionality for marketing practice. Current IT developments and the speed and availability of user friendly applications and also the ability to link information to real time on line information, has changed the usability and relevance of databases in marketing. For example POS and SFA applications, geo-demographic and psychographics targeted techniques as well as highly developed datamining techniques now exist (Mitchell, 1994).

Many current customer databases are simply automation tools for manipulating data, rather than creativity-based systems for maximising customer satisfaction in a dynamic and demanding market place. There exists a wide diversity of databases ranging from standard finance systems accessed by marketing to very sophisticated systems containing extensively detailed soft and hard data repositories, with psychographic and life style systems tracking (McDonald and Wilson, 1999). Many databases are increasingly providing *'SMART customer information such as profitability, purchase propensity and loyalty'* (Berry, 1995:183), though systematic data mining is still in its infancy within organisations (Wolfe, 1998) and *'separating the gold from the dross is the real challenge'* (Ranchhod and Hackney, 1996:784).

Databases can be used to analysis markets and to support marketing planning and more tactically as direct contact bases for direct marketing, which is a focus on the database to communicate with customer, so as to attract a direct response. IT based database systems have the ability to hold, manipulate, and then disseminate data (Berry, 1995). *'Organisational memory ... corporate databases now provide an enormous reservoir of information that can be used for constructive management of organisations ... establishing a record that allows for the detection of patterns'* (Scott Morgan, 1991:11). IT is fundamental to database marketing and as the speed, power and investment increases, and marketing's ability to use these applications develops, there will be enhanced usage of databases and sophisticated direct marketing tactics (Fletcher et al. 1994, Murray and O'Driscoll, 1996, Hart et al., 1999). Fletcher et al., (1995:278) comments that;

'There is general agreement that DBM is a customer orientated approach to marketing, that its special power lies in the techniques it uses to harness the capabilities of computer and telecommunications technologies' .

The bulk of empirical studies of IT use in marketing (which will be expanded on in chapter 4) reveals that databases are the dominant IT (Higby and Farah, 1991; Hewson and Wilson, 1994; Shaw, 1994; Bruce et al., 1996). There is a danger that the over emphasis of the role of databases in relationship marketing ignores the relationship between the company and its customer base and other broader aspects of relationship marketing (Brodie et al., 1997). The dominant role of databases can mean that marketers often ignore the current wide range of ITs, available to them to develop relationships with their consumer, like call centres and internet discussions, and opt for number crunching database information, which will not reveal the important gems of information (Fournier et al., 1998). ITs ability to enhance relationships with a large group of customers is dependent on whether the company needs the IT and the information it can supply and whether this is different information to which they held previously (Palmer, 2001).

The database concept for consumer relationship marketing relates to the ability to track consumers throughout their interactions and to make the interactions easier (by reducing transaction costs and operating faster cycle times) both of which have a strong IT dimension (Peppers et al., 1999). Copulsky and Wolfe (1990) highlighted the dominant role of databases in consumer relationship marketing and suggest that for consumer markets creating a database, sending differentiated messages and tracking consumers, are the cornerstones of relationship marketing and that the database will become as important strategically as the brand, permitting consumer product companies to gather individual consumer information. *'Armed with new database and communication technologies, advertisers can deal with their customers as valued individuals and create an environment in which people want to hear the messages they receive'* (Copulsky and Wolf, 1990:18). Empirical research by Eisenhart (1990) observed that consumer marketers, with their access to huge data sources and complex analytical models, have adopted the systems more rapidly than business marketers, but that success is highly dependent on the decision making skills of the user. In later research Fletcher et al., (1994) disagreed and observed that consumer manufactures were struggling to utilise IT, due to a lack of perceived value and the lack of appropriate internal information systems.

'Accurate, reliable information about customers and their needs is crucial to the success of an organisation, yet many organisations hesitate to actively seek out this vital market data because they are afraid of the cost and the complexity' (Champlain 1997:1).

The question is whether marketing departments are capitalising on these ITs, and have they the ability to process the information from these systems (Glazer, 1990). The ownership of a database does not indicated database marketing. Empirical studies indicate some level of database development in marketing, but neither sophisticated use or high levels of satisfaction with databases. Fletcher and Wright (1995) in their financial services study observed that 54% of their sample had a marketing database, but similarly to Domegan and Donaldson, (1994), at a low level of sophistication of use. Utilising findings from the financial services sector Fletcher and Wright (1996) observe the lack of strategic use of databases and in a further study confirm that there

is a lack of sophisticated use with a focus on *'tactical transactional level'* of operations (Fletcher and Wright, 1997:47).

Related to automational use of IT, (see section 4.7.3), database usage is one of the first major technical challenges for marketing personnel. Using IT based marketing databases, analysing and segmenting customers, using demographic information, transaction and contact histories and moving to data warehousing and data mining, are major challenges for many marketers. The IT investment in databases necessitates the need for database skills in marketing either managed internally or externally. IT developments will herald even better and more sophisticated database tools. *'What is really going to be exciting in creating the buyer/seller relationship is the way in which technology will make it possible to track individual preferences'* (Komenar, 1997:505). The main barriers to database marketing are the lack of understanding of the concept of database marketing, and skilled staff shortage in this area (Fletcher et al., 1994; Mitchell, 1996).

3.4.4 IT Based Interactions

Interactions can occur at any level of the relationship and the variables, which influence interactions, are numerous including power/dependence, cooperation, expectation, closeness, the environment of the interaction and technological levels (Wilson, 1995), but the focus of this section is on the IT based interactions.

The interactions a customer has with a firm are pivotal to the relationship, with the marketing impact of customer contacts with the company determining whether a customer will return (Gronroos, 1991). When this contact occurs through an IT link the importance cannot be overlooked. Interactions can take place with systems, physical resources and employees rather than marketers (Gronroos, 1997). As one subset of the nine issues that challenge the marketing concept, Gummesson (1987), in relation to interactive relationships (services), suggests that the interactions between the buyer and seller and systems, machines and routines, are pivotal to the relationship and can create favourable moments of truth, emphasising that relationships do not only occur with individuals. Coviello et al., (1997) highlight the four units of analysis, the relationship, the people, interfirm relationships and also of

interest to this study, the interactions between people and various technologies and systems. Though there is much discussion of interactivity (Deighton, 1996) there is a lack of holistic research into IT based interactions. A recent study by Coviello et al., (2001b) into IT-enabled interactivities impact on contemporary marketing practice, is a notable exception.

Interactions, aided by IT are forecast to increase. Butler et al., (1997; 10) in a study of interactions comments that *'all modern forms of interaction are shaped by computing and communications technologies'*. Interestingly they add that *'our ability to manipulate and process data has far outstripped our ability to communicate and interact'*. Fletcher et al., (1994:140) predicted that *'as the marketing and computing sophistication of firms grow, and competitive pressures increase, more and more firms will move towards a long term, interactive view of their customer relations'*. Marketers can use IT to interact and to learn from the interactions with customers. IT will have a major impact on interactions particularly as the ability and speed of interaction increases (Peattie and Peters, 1997). Mitchell, (2000) referring to recent research from McKinseys, which reveals that interaction costs, account for just over a half of all US labour activity, noting that interactions are not new, they are now just easier and cheaper.

IT developments are driving the creation of new electronic markets (Schlegelmilch and Sinkovics, 1998). As Sheth and Parvatiyar (1995:413) note

The boundaries of time, place and transaction are unclear in many relation arrangement. For example in the world of bits and bytes, where electronic data interchange (EDI) is becoming common, payments transfers are not linked to the transaction any more. Payments flows, goods and services flows and knowledge flows between marketing actors are becoming less anchored to exchange'.

3.4.5 Interactions in the Consumer Market

Interactivity has the ability to reshape marketing by providing marketers with the ability to gather and remember responses of customers at the individual level and then communicate with the individual customer in a way that takes cognisance of their

prior interaction (Blattberg and Deighton, 1991). IT can play a dominant role in the links between consumers and companies, as the ability of IT to interact with consumers allows for increased participation by consumers in a more direct relationship with companies (Ranchhod and Hackney, 1996; Schmitz and Rovner, 1992).

IT, even for the traditionally distant manufacturer can now ensure a move from an *'electronic shout to a tap on the shoulder'* (McKenna, 1995). IT can allow customers to remotely experience products and services, participate in customisation and create customers communities, through the mouse and the remote control, which puts control into the hands of the customer and moves them away from physical contact (Venkatraman and Henderson, 1998; Hagel and Armstrong, 1997), challenging the notion that the customer and the company need a physical proximity (Kasper, 1997; Swerdlow, 1997). *'The challenge for companies in information-intensive markets is to manage the velocity of the shift from physical to electronic infrastructures'* (Venkatraman and Henderson, 1998: 37). There is some contention that the remote encounter should be easier to control and of improved quality (Shostack, 1995). Alternatively though the use of IT at the customer interface heralds a new era of non-physical services encounters, the benefits of this development are still unclear (Kasper, 1997; Meuter, et al., 2000). Ultimately though IT results in information for companies and a myriad of distribution options it depends on consumers agreeing and wanting to interact with the IT (Kasper, 1997; Palmer, 2001; Venkatraman and Henderson, 1998; Gronroos, 1991).

Year on year surveys, conducted by Freedman and Sudoyo (1999), show that companies are struggling to build effective relationships with their customers and that even if the first contact is initiated through IT, the human element is then critical, with IT only acting as a facilitator. Utilising a convenient ethnographic sample of 174 companies, they found that despite having a strong IT element, the human element (or the level of personalisation on the internet), were the important factors in the interaction. They observed very poor levels of service among the participating organisations and noted that *'the real key to good customer service is not technology*

but dialogue' (Freedman and Sudoyo, 1999:343). Peppers and Rogers (2000: 243) confirm that the service element is pivotal.

'For many people contacting customer service representative can be an excruciating experience. Between navigating lengthy menus of push-button options, waiting on hold for what seems an eternity, never getting a reply to an email and not having you or your problems remembered the next time you call back, its no wonder many customers think customer 'service' is a cruel joke'.

Meuter et al., (2000) in a study of critical incidents in self service technology encounters show that we have much to learn from IT based interactions.

3.4.6 Empirical Studies into IT Based Interactions

A range of ITs will be briefly reviewed below (see table 3.8). Many of them are in their infancy, with a lack of a definite research supported literature. The rapid pace of technological developments and the slow rate of IT diffusion creates research difficulties in this area.

Table 3. 8 – Selected Empirical Studies into IT Based Interactions

Focus	Authors	Key Findings
EDI	Bamfield (1994)	Slow development of EDI links due to the range of developments that management is coping with.
	Reekers and Smithson (1995)	Enables both parties to rationalise their operations, but that manufactures were the dominant beneficiaries of the development.
	Naude and Holland (1997)	Used mainly for purchasing, selling and fund transfer with low levels of sophistication.
	Chan and Sweetman (2000)	EDI and internet for ecommerce between firms introduced new aspects to relationships.
Information System Between firms	Zaheer and Venkatraman (1994)	Business process, asset specificity and trust are important determinants of electronic integration.
	Bensaou and Venkatraman (1995)	Five interorganisational configurations and relationship types were developed, based on the level of IT.
Marketing Information Systems	Higby and Farah, (1991)	High levels of adoption of marketing information systems for customer profiling, sales forecasting and budgeting.
	Li, (1995)	Increased sophistication of marketing information systems but the systems are under utilised by managers who are dissatisfied with the systems.
	Talvinen and Saarinen (1995)	They observed that due to compromises in system development the information content and usability of systems were inadequate for specific marketing and sales tasks.
Intranet	McNaughton et al., (1999)	Weak link between intranets and increased inter-functional communication and the slow development of the learning curve of intranet expertise was highlighted.
	Quinn et al., (1996)	Andersen Worldwide had to stimulate a cultural shift to encourage information sharing over the intranet.

Table 3. 8 – Selected Empirical Studies into IT Based Interactions (Continued)

Internet	Kierzkowski et al., (1996)	Lack of use of the full capacity of internet sites by consumer marketers.
	Sahay et al., (1998)	Perception of more opportunities than threats from new interactive media, including the internet.
	Bauer et al., (1999)	There is a close connection between satisfaction, trust and commitment in relationships through the internet. The interactivity potential of the internet is primarily suited for increasing customer satisfaction, within business relationships.
	Dutta and Segev's (1999)	A lack of transformational impact from the internet for large companies, who are risk adverse, and the main role is as a publishing medium
	Geiger and Martin (1999)	Three strategies for internet presence: the ornamental, the informational and the relational.
CRM	Dunne (1999)	There are a range CRM based techniques but the more interactive applications are still at the development stage.
	SAS Institute (1999)	A lack of returns from CRM in the financial services sector.
	Dempsey (2000)	A majority of companies had a customer relationship strategy but 90% of companies had difficulties in amalgamating integrated data for a complete picture of their customer.
	Payne (2001)	Many CRM strategies had not reached expectations and only 10% had exceeded expectations. The lack of IT was considered a major barrier to CRM developments.

Electronic Data Interchange (EDI): Every day, there are millions of transactions among computers spread all over the world. One visible form of inter organisational IT based interactions, are EDI systems. EDI is utilised in this study as an example of an IT based interaction and as the first stage in the development of electronic commerce. Firm specific IT applications like EDI, reflect the development of a common electronic infrastructure between companies, which will impact on relationships.

EDI, the most common form of electronic commerce, is the replacement of the paper documents, for financial transactions, by an electronic message, structured to an agreed standard and passed from one computer to another, without manual

intervention (Hall, 1993). Any network, such as the Internet, can be used and this system has huge implications for the marketing of products and services.

Naude and Holland's (1997) study, focused on the potential of EDI to alter marketing practices, through increased customer relations, economic and value creation. They found that it was used mainly for purchasing, selling and fund transfer, with a slow rate of maturity of systems. Bamfield (1994) in an earlier study noted that companies were only beginning to realise the business potential of EDI. This study revealed that the main benefits of EDI were: cost and productivity benefits; reconfiguring the value chain; and increased benefits for relationship marketing. He observed that the main reasons for acceptance of EDI was to develop innovative networks and added that, EDI innovation was not a single event, but the culmination of a variety of changes, which can be imposed on companies. *'EDI is a technological enabling device for supply chain partnerships, although the enforced adoption of EDI by many suppliers is a poor basis for a working marriage'* (Bamfield, 1994:8). He observed that the slow development of EDI links was due to the number of innovations that managers had to cope with and confirmed that EDI can be regarded as a requirement, rather than as a competitive advantage.

Reekers and Smithson, (1996) in case based research within the automotive industry and utilising transaction cost theory, resource theory, and the network perspective, found that the use of EDI enables both parties to rationalise their operations, but that manufactures optimise their production at the expense of their suppliers, which may have a long-term impact on the supplier/manufacture relationship.

'EDI can be seen as a prerequisite for these externally focused systems with its ability to provide fast, frequent and reliable information exchange ... but EDI does not only affect the efficiency of coordination, its impact may be even more fundamental on the power-dependency relationships. EDI can shift the balance of power and control between the supplier and the manufacture, making for a possibly unhealthy dependence on either side. As EDI can increase the efficiency of an entire network of organisations, conflicting interests between the

organisations will often need to be resolved' (Reekers and Smithson, 1996:120).

Depending on the level of EDI and the nature of the linkage, EDI can impact on relationships in a variety of ways and the three levels of effects (a concept which will be dealt with in greater detail in chapter 4), can be seen in table 3.9.

Table 3.9 Effects of EDI Use on Inter-Organisational Relationships in the Automotive Industry

Level of EDI	Efficiency	Dependence	Network Structure
Low	Increased operational efficiency through improved information handling. Investments are relatively low.	Supplier is free to plan and optimise own production and stock levels. Manufacturer has little or no influence over internal production sequencing.	EDI supports existing business structures.
Medium	Partial integration into internal systems increases efficiency but also adaptation costs to ensure flexibility.	Adjusted production planning systems and disclosure of internal information to business partners.	New logistical arrangement; some suppliers lose direct contact with manufacturers and become sub suppliers to system suppliers.
High	Potential to rationalise production and eliminate buffer stocks. Sub-optimal production planning for externally determined schedules.	Organisational, technical and informational interdependence leading to loss of entrepreneurial autonomy (mainly for suppliers).	Hierarchical production networks blur traditional organisational boundaries. System suppliers manage their own network of sub suppliers.

Source: Reekers and Smithson, (1996)

Their findings show that firms had reaped first order or efficiency benefits from EDI but there was no post implementation analysis performed, with EDI viewed by manufactures as a productivity enhancing tool, while suppliers noted its service enhancing capabilities, rather than for cost savings.

In recent research of the assimilation of EDI and the Internet for ecommerce within the supply chain, the Shell experience highlighted the use of IT to take the business into the *'realm of truly cooperative relationships between suppliers and customers'* (Chan and Swatman, 2000:81). They observed that EDI was the first stage of the implementation of ecommerce and confirmed that the driving forces for EDI and ecommerce developments changed significantly overtime, from technical issues to management issues and business issues.

In general IT based interactions between organisations are fraught with difficulties and are only slowly developing in the marketplace.

'These IT technologies, whose very purpose is to facilitate the exchange of information, across organizational boundaries, draw into collaboration and competition many firms from disparate technical and historical backgrounds ... Such systems are characterized by initial technological diversity (and ultimate convergence), prolonged uncertainty, high capital investment, the lack of a dominant design and very complex patterns of competition. The successive waves of technical developments and innovations compete with each other and also compete with recently established design configurations already on the market' (Cuningham, 1996: 3).

Marketing Information Systems: Information processing is the core requirement of our age and utilising a value chain perspective Weiber and Kollman (1998) suggest that we are entering a new era of information based marketing with interactive transactions. *'Marketing, which is a quintessential information processing activity, finds itself at the epicentre of these developments'* (Mitchell, 2000:355). From a relationship marketing perspective, information is pivotal. *'In any buyer-seller relationship, information can determine the relative bargaining power of the players'* (Evans and Wurster, 1997:73). Information provides the basis for initiating a dialogue with the customer, which with mutual understanding, confidence and respect, can be cultivated (Saren and Tzokas, 1997).

Traditionally the exchange of information occurred predominantly through personal contacts, but the process of interchange of information is possible through IT. IT based interactions within firms and between firms are increasing, and many upstream relationships now include a transactions based information systems (TBIS), which is a visible effect of IT on the firms strategy and the automation of internal and external processes (Glazer, 1990).

'When fully integrated these networks, process and communicate information about every transaction between the point-of purchase (whether it is at a retail location or eventually in the home) for the distributor, the firm and perhaps even the firm's suppliers. The entire channel can be described as an information processing 'organism' whose efficiency improves through continued use and experience' (Glazer, 1990:15).

Information processing encompasses the amount of communications within and between departments and the degree to which information is used to solve problems. The capability to process large amounts of marketing information is critically important for many organisations (Jaworski, and Kohli 1993; Quinn, 1990; Vorhies, 1998). Vorhies' (1998) research showed that the willingness of marketing personnel to exchange information was an important factor in marketing capability development and a key factor in marketing effectiveness. They also found that marketing work groups, that have higher information processing capabilities, will have more effective capabilities as they share information throughout the company. The use of IT is critical as information is transferred and used, information increases in value and can be leveraged along the chain from suppliers, distributors and customers.

'From the perspective of the firm as an information processor developing strong channel relationships and sustainable strategic alliances helps ensure that information is used, thus creating value. Ultimately what begins as a mechanism for increasing transaction efficiencies, and evolves into a way of binding channels to the firm, ends up as the cornerstone of marketing strategy' (Glazer, 1990: 16).

In general there are low levels of MIS systems in marketing and there is criticisms of the information systems as unsuitable for marketing's requirements and particularly decision making (Gorry and Scott Morton, 1997). Due to compatibility issues and the fragmented nature of many systems, there is a trend towards standardised information systems. This introduces the dangers of over conformity of information, lack of meaningful information and misinterpretations of information (Piercy, 1981; Davenport, 1994; Tenaski and Boland, 1996). This area is expanded on in Chapter 4.

In a US based quantitative exploratory study of the penetration and usage of marketing information systems, DSS and ESS, in the marketing department the Higby and Farah (1991) study found high levels of MIS (92%) and lesser levels of DS (32%) and ES (6%) by marketers and commented that marketing practitioners were adapting computer technology very rapidly. The major MIS uses were for customer profiling, sales forecasting and budgeting. In a study of the MIS use in the Fortune 500 companies Li et al., (1993) found that there was a lack of satisfaction with the MIS system and that there was conflict between the marketing and IT personnel in relation to this area (see chapter 4). A more recent study by Talvinen and Saarinen (1995) confirmed these findings and observed that due to compromises in system development, the information content and usability of MIS systems were inadequate for specific marketing and sales tasks. On a related theme Hewson and Hewson (1994) survey of IT in marketing found that few sales and marketing systems had interfaces with other company systems. Domegan and Donaldson (1994) noted a dominant line of communication between marketing and accounting, but with limited information flows between marketing and other staff.

From the perspective of information systems between firms, Zaheer and Venkatraman (1994) studied 120 independent agencies and the role of IT in influencing the pattern of interfirm arrangements, to observe if relationships are fundamentally impacted by IT. They developed a model of electronic integrations, which centres on the development of an information system, between actors in the value chain. They showed that business process asset specificity and trust are important determinant of electronic integration and that reciprocal investments have

only a weak correlation. Bensaou and Venkatraman (1995) in a survey (based on 447 buyer/supplier relationship in the automobile industry) of international interorganisational relationships, from an information processing needs and capabilities perspective, observed that the two main mechanisms for intraorganisational co-ordination are structural and technological mechanisms (though neither marketing or sales were included as departments). They established that there are multiple ways to balance the needs and capabilities of information processing and suggested five configuration and relationship types based on the level of IT (see Table 3.10).

**Table 3.10 Five Interorganisational Configurations and Relationship Types
Based on the Level of IT**

Relationship Type	Orientation of IT
Remote relationships	Low levels of IT other than operationally necessary, and in low uncertainty situations;
Electronic control	Low level of IT with an emphasis on IT to mediate control, particularly in purchasing;
Electronic Interdependence	IT exchanges are rich and intense and represents some of the best practices in EDI use and these firms operate in high uncertainty situations with high personal and IT contacts;
Structural relationships	Hybrid and operate in low capacity, low dynamism but high complexity situations, but with restricted use of IT and poor informational exchange;
Mutual adjustment	Limited IT, but related to coordination and for continuous improvement as opposed to control.

Source: Bensaou and Venkatraman (1995)

Internet: Despite the importance and growth of the internet and its increased utilisation for relationship marketing, a full discussion of the internet is outside the scope of this thesis. The Internet is the newest and possibly the most revolutionary communications medium since the television *'No communication medium or consumer electronic technology has grown as quickly: not the fax machine, not even the PC'* (McGovern, 1996:33). There are over 1.6 million commercial web sites all competing for buyers (Hoffman and Novak, 2000). The challenges of internet usage

in marketing have been well documented, with many industries struggling to utilise it successfully (Chaffey, 2000; Clarke, 2001; Chan and Swatman, 2000; Porter, 2001).

There are various suggestions for the impact of the internet on marketing practice ranging from radical and far reaching changes to a more narrow focus on the internet as a channel or as a communications device or to augment current practices. Clarke (2001) observes that viewing the internet as another tool in the marketing arsenal, similar to advertising, personal selling and sales promotion is the most common use of the internet for marketing. Porter (2001: 64) concurs that it should be viewed as an enabling technology and that; *'many of the companies that succeed will be ones that use the Internet as a complement to traditional ways of competing, not those that set their internet initiative apart from their established operations'*. He further suggests that its greatest impact will be in the ability to reconfigure existing industries that have been constrained by the high costs of communications, information gathering and transactions, though its development will put pressure on profitability. For the foreseeable future it will complement and add to existing distribution and communication strategies rather than replace them (Hymers 1996; Brody 1995).

We are only beginning to understand the value of the internet and internet marketing is at the development stage.

'Marketing on the World Wide Web is currently a grand experiment. No dominant business model has emerged and the majority of commercial Web sites do not report profits ... most companies are learning by trial and error how to use the Web effectively in marketing' (Clarke, 2001:66).

Kierzkowski et al., (1996) suggest that the internet presents major challenges and profound changes, as it develops through stages from ad hoc to focus to formalisation to the institutional stage. As internet usage is still immature and unproven, how it will develop will be an interesting study in technology diffusion and the skill of marketers to use this new medium. There is an urgent need for research into the impact on marketing as a result of the internet (Sheth and Sisodia, 1999).

The internet can contribute to increased database ability and interactive capabilities as an important feature of the internet is the ability to build a database from the internet, compiled during internet based interactions (Clarke, 2001).

'Companies who prosper on the Internet will pay as much attention to the creation and management of relationships, as to the creation and management of more data and information' (McGovern 1996: 67).

To some, the internet will result in instant data on the marketplace and genuine one to one marketing (Hymers 1996; Zineldin, 2000). One to one marketing still usually means the company first and directed at the consumer (Wolfe, 1998) though the advent of the internet was supposed to reverse that.

'The marketing function was primarily organised as going forward from the producer to the customer. Increasingly the whole process is becoming reversed; as often as not customer take the initiative in electronic commerce' (Sheth and Sisodia, 1999:75).

The internet allows customers to remotely experience products and services, actively participate in dynamic customisation and create mutually reinforcing customers communities (Venkatraman and Henderson 1998). Hoffman and Novak (1996) addressing the role of marketing in hypermedia computer-mediated environment of the internet, observe that it offers a working model of many to many communications and allows the consumer an active part in an interactive exercise of multiple feedback loops and highly immediate communication, all of which represent new challenges for marketing. The three primary capabilities of the internet are content, communications and commerce.

In empirical research in this area, a study by Sahay et al., (1998) suggest that firms believe that there will be more opportunities than threats from new interactive media, including the internet and the impact will not be uniform. They note that with what they refer to as bit based products and services experiencing greater opportunities but also more threats than atom based products. Kierzkowski et al., (1996) revealed that consumer marketers did not utilised the full capacity of their web sites. The found that though 90% of US Fortune 500 companies had information and email provision

only half provided links to other sites or any sort of interactivity. Their main finding was the lack of any effort to collect customer information from the sites or to encourage user to user communications. Utilising a collaborative cross sectional research design, and the classical strategic marketing model of the 4p's and a customer relations factor,

Dutta and Segev's (1999) research also revealed that most large companies and multinational are making little use of the internet other than as a publishing medium. They link this low usage to risk avoidance practices in these companies. They observed low levels of transformation, with few companies rethinking their business models. They found that the focus of the internet was not on the 4p's, but on using the power of the internet to enhance customer relationships. Only half of their sample try to identify or track their customers and only one fifth offer to contact them through email, with only a small fraction endeavouring to develop customer communities. There were global similarities confirming that this was a worldwide phenomenon. Bauer et al., (1999) in their US based quantitative study found that the issues of trust, satisfaction and commitment were all connected to the use of the internet for relationship marketing and the influencing factors for these dimensions were constant availability of information and efficient information transfer facilities. They also noted that firms do not use interactivity, to find out about their customers. Reichheld and Schefer (2000) discuss the use of the internet in customer relationships, citing that much of internet strategy has actually had an indiscriminate focus on customer acquisition. They observe that customer loyalty is pivotal for returns in the internet world, and suggest that 3 years of loyalty will equal a return on investment.

In an Irish based study into the relational aspect of the internet, Geiger and Martin (1999) found that most firms did not exploit their internet presence and there was a lack of use of the internet for relational practices. They suggested that studies were needed into the lack of sophisticated or the supposed one-to-one ability of the internet. They comment on the social aspect as discussed by Hakansson and Snehota (1995) noting that many of the relationship constructs are difficult to maintain or create on the internet.

A recent commercial survey into internet access and usage for Irish business (see table 3.11), revealed that awareness and access to the internet has grow significantly and Irish businesses are better placed than all of the G7 countries in terms of internet access, though there is a very slow development of ecommerce ability.

Table 3.11 Internet Usage in Irish Businesses

Level of Familiarity with the Internet	%
Large companies	81%
Retail sector	26%
Financial sector	52%
Co. with locations outside of Ireland	52%
Co. based in Ireland only	34%
Internet Access for Employees	
Large companies (Japan (78%), Germany (62%) and UK (36%))	92%
All employees (USA 36%)	23%
Separate shared facilities	41%
Internet Usage	
Accessing information	84%
Research	72%
Sending information	72%
Communication with customers	60%
Communicating with suppliers	53%
Reasons for Having a Web Site	
Advertising/Marketing	74%
Informal distribution	28%
Competitor information	13%
On-line sales	16%
Business to Business communication	12%
Perceived Obstacles to Ecommerce	
Too expensive	15%
Staff knowledge/more training needed	10%
Security issues	9%
Market base not ready	9%
Poor telecommunications Infrastructure	7%
None	29%

Source: Compiled from the Information Society Commission Report, 2000

Intranets: Intranets can be used for IT based intra organisational interactions and the slow rate of their development is noted in recent research. A study into intranet aided inter-functional co-ordination, as part of market orientation, McNaughton et al., (1999) found that there was only a very weak link between the intranet and increased inter-functional communication. They did note the existence of a learning curve, with only companies where the intranet was in existence for over a year, actually benefiting from it. Andersen Worldwide, despite having the best of technology for their intranet Anet, had to stimulate a cultural shift to encourage information sharing over the intranet (Quinn et al., 1996).

Customer Relationship Management Software: The latest development in relationship marketing is CRM which has a strong IT component. Businesses and academics are struggling with this concept, which binds databases and interactions. The growth in CRM (customer relationship management) software is phenomena. CRM is the fastest growing segment of the IT systems industry, growing from almost nothing five years ago to over \$10billion, with predictions of \$11.5 billion by 2002 (Vaughan, 1999). CRM is a cross enterprise application, typically initiated and monitored at top management level, with CRM applications integrating existing tools and applications. CRM technology leverages emerging technologies in such areas as database management, networking, sales force automation and new customer interaction channels, which permits high levels of product and service customisation (Dunne, 1999).

Three main categories of IT tools are;

- Customer interaction channels, which include new channels such as the internet, call centres, traditional channels like retail points of sales and the sales force;
- Front office software with sales, marketing, after-sales and support function automation;
- Back office tools, consisting primarily of databases, decision-support marketing, data marts, datamining and query tools (Dunne, 1999).

A survey by IT and business consultancy CapGemini, in association with IDC, found that 65% of companies were aware of customer relationship management and 40%

were already at plans or operational stages. Large companies use a range of CRM techniques including call centres (73%), websites (69%) and front office solutions (61%). Interactive and more sophisticated tools and technologies such as interactive websites, data warehousing and CTI systems are at the planning stage, with companies still focusing on the support function. Marketing and sales managers initiated 44% of CRM programmes (unfortunately there is no marketing and sales divide), while general management initiated 45%. The IT department is the project champion in only 11% of the companies and chief information officers are usually in charge of the overall project management (Dunne, 1999). A SAS Institute report (1999), centred on the financial services industry, confirmed that there was a lack of tangible benefits and that though two thirds of their companies had a CRM strategy, there was a lack of customer information in order to be able to practice CRM successfully. They commented on the use of CRM to build a bridge between IT and marketing due to the cross functional dimension to CRM. A Harris Research Centre (1998) survey of 100 blue chip companies found that though 59% had a CRM strategy, 90% of their sample did not have integrated data and could not get a complete picture of their customer's behaviour and needs (Dempsey 2000).

A more recent survey confirmed that in over a quarter of companies, CRM practices had not reached expectations and in only 10% of companies had they exceeded expectations (Payne, 2001). All the respondents found that technology was a pivotal issue in relationship management with over 40% viewing the lack of an IT competency as a major barrier *'Technology has a vital role to play in supporting consistent customer experience across multiple channels that form 'touch points' between an organisation and its customers'* (Payne, 2001: 9). The issue of legacy systems, which companies are refusing to change, was a major barrier for 40% of respondents (see section 4.4.1).

3.4.7 Network Marketing

Halal (1982) predicted the development of the organic networked organisations, driven by competition and the power of IT to change the structure and strategies of business. The concept of a dynamic network was further discussed by Miles and Snow (1986) who suggested that the characteristics of the new organisation form is

vertical disaggregation, brokers, market mechanisms and highlighted the IT dimension, with the need for a full disclosure information systems. Viewing companies as networks of relationships and interactions called virtual organisations, is the suggested business model for today's business world, moving away from the hierarchical entities, with more organic integrative, network based and process orientated companies, with groups of separate enterprises linked through high-speed networks (Gummesson, 1998; Nolan et al, 1993; Byrne et al., 1993; Webster, 1992; Piercy and Cravens, 1995; Schlegelmilch and Sinkovics, 1998; Achrol and Kotler, 1999).

According to Achrol and Kotler (1999) networks will have a profound, radical and pervasive effect on marketing, though they are at an early stage of evolution. Network marketing focuses on the totality of relationships in a market (Gummesson, 1994; Coviello et al., 1997; Easton, 1995) and links to the extended view of relationship marketing as discussed in section 2.4.4. Interfirm collaborations, business networks and network theory is a very large literature outside the scope of this thesis (Anderson et al., 1994; see Achrol and Kotler, 1999). The network paradigm is a development of relationship marketing, which recognises that global competition occurs increasingly between networks of firms held together by norms of sharing and trust (Morgan and Hunt, 1994). *'Some what paradoxically, to be an effective competitor in today's global marketplace requires one to be an effective co-operator in some network of organisations'* (Morgan and Hunt, 1994: 34). The overriding feature of networks is a focus on relationships.

'All are characterised by flexibility, specialisation and an emphasis on relationship management instead of market transactions. They depend on administrative processes but they are not hierarchies (Thorelli, 1986); They engage in transactions within ongoing relationships and they depend on negotiation, rather than market-based processes as a principal basis for conducting business and determining prices, though market forces almost always influence and shape negotiation. The purpose of these new organisations forms is to respond quickly and

flexibly to accelerating changes in technology, competition and customer preferences' (Webster, 1992:4).

Mattsson (1997) provides a framework on the similarities and differences between relationship marketing and network studies and concludes that the basis attribute of 'embeddedness' is the pivotal difference between the two.

From an organisational structure viewpoint, networked organisations have multiple strategic alliances and are thus collaborative organisation forms with relations with a variety of groups, including corporate units, individual organisation and entrepreneurs, with whom they share functions, power and information, with a key characteristics of flexibility and adaptability to change (Webster, 1992; Piercy, 1995). In reality most companies whether large or small operate a network (Gummesson, 1994). Murray and O'Driscoll (1998; 13) confirm that,

'All organisations are networks. Indeed, firms might be considered as networks of markets, which are formally organised. Markets – whether formally organised within firms or connected by transactions governed by contract or social obligation – typically cluster in sets of interconnected relations, which purposefully produce products or services'.

Piercy and Cravens (1995) suggest that there will be four different types of networked companies; the hollow network; the flexible organisation; the value-added network and the virtual network. Easton (1995) noted the continuum of relationships from strong to weak within networks with differing levels of power, dependence and communication and the existence of extensive non-exchange relationships. Achrol and Kotler (1999) also suggest four categories, internal networks, vertical networks, intermarket networks and opportunity networks.

Implications for Marketing: Networks and the trend towards the virtual organisation have enormous implications for marketing (Hagel and Armstrong, 1997; Gummesson, 1991; Achrol and Kotler, 1999). *'Virtual communities are likely to change the way companies manage specific business functions, particularly those which operate at the customer interface, like marketing and sales'* (Hagel and

Armstrong, 1997:12). It can be viewed as the ultimate development of relationship marketing. *'Account management and learning organisations have become the fashionable concepts, networking and relationship marketing the components of the Final Solution, reality is the Virtual Corporation'* (Thomas, 1996:199).

Within this development marketing's tradition role could be compromised or changed. *'For marketing which has traditionally focused on managing the relationships between a single company and its customers and - to a lesser extent- to its suppliers, this situation radically alters its role definition'* (Schlegelmilch and Sinkovics, 1998:166). Webster, (1992) suggests that there will be a new information provision role for marketing departments charged with the task of customer and competitor information provision among partners. Marketing's role could be extended.

'Networks approaches seek to include all the kinds of relationships and actors there may be in and around markets and provide a unified framework for doing so, thus extending traditional notions of marketing' (Easton, 1995:S84).

Achrol and Kotler (1999) suggest that marketing is poised for revolutionary changes, due to the variety of networks forms that will exist in marketing as more and more marketing activities are characterised by the management of interorganisational relations. They suggest that;

'marketing increasingly will be responsible for creating and managing new marketing knowledge, education, real-time marketing information systems, intrafirm integrations, conflict resolution, technology forecasting, risk and investment analysis, transfer pricing of tangible and intangibles and the coordination of the networks' economic and social activities' (Achrol and Kotler, 1999:147).

Sheth and Sisodia, (1999) concur that marketers will need new skills to cope with the challenge of engagement, when competitors are also suppliers and customers.

There are dangers to network marketing which include lose of control, lose of proprietary information, the need to choose the right partner, management changes

and trust that your partner will supply (Venkatraman and Henderson, 1998; Butler et al, 1997; Sandqvist, 1999) and these are all areas that must be studied, but are outside of the scope of this thesis

3.4.8 The IT Dimension in Networks

The following section briefly reviews network developments from the IT infrastructure perspective. Rather than a detailed study, many of the ITs discussed in the two previous sections can and will be used for network marketing. Achrol and Kotler (1999:160) ascribe a dominant role to IT in the network era suggesting that

'for business products and to a lesser degree for custom consumer products, the core competency of the focal organisation is knowledge not just information but expert knowledge about product technology and the technology of use. The firm will have specialists on its staff who can grasp complex technical issues, possess an extensive understanding of worldwide suppliers and their technical peculiarities and capabilities, and are able to broker custom solutions for buyers'.

The network is also the common technical term for the IT links both internally and externally. The USA is leading the way towards a networked society.

'The giants of American communications are locked in a struggle to build and control a vast web of electronic networks. These so-called information highways will be of glass fibre and will deliver an abundance of services to offices and houses - video images, phone calls, helpful data in many guises. They promise to change the way people work and play ... The defining trend of the 1990's from corporate boardrooms to consumer playrooms is connecting everyone and everything to everyone and everything else. Interactive television, cellular phones, modems, faxes, personal digital assistants - if they connect they seem to be in demand' (Cronin, 1995:68/70).

Businesses are now recognising the need to be connected and are installing local and wide area networks to connect employees with suppliers, sellers and customers and are one of the fastest growing IT areas. Every day, there are millions of transactions among computers spread all over the world. In seconds, thousands of pages of

information can be transmitted. Traditionally you could have a network with a low level of technological linkages or none. The current concept of the network is that sophisticated technological links will exist and may play a dominant role. The developments in internet, intranet, extranet and ERP systems are fuelling this network link, both technologically and relationship wise. Most commentators feel that we are only beginning to understand the impact of networked communication on business and that the internet and other networks will totally redefine today's corporation, within a few decades (Cronin, 1995).

IT is a very important aspects and key enabler of networks. The move to more flexible high performance network companies demands major IT investment, use and corresponding skills in IT management (Webster, 1992; Byrne et al., 1993; Piercy, 1995; Van der Zee, 1997; Schlegelmilch and Sinkovics, 1998).

'The basic characteristic of a network organisation is a confederation, a loose and flexible collation guided from a hub, where the key functions include development and management of the alliances themselves, co-ordination of financial resources and technology, definition and management of core competence and strategy, developing relationships with customers and managing information resources that bind the network' (Webster, 1992; 8).

There is a demand for fusion of IT and telecommunication, more cooperative work, restructuring of industries, with a myriad of methods for communication, cooperating, and interaction between buyers, sellers and competitors (Nolan et al., 1993). Network companies become customer driven, flat organisations connected via highly sophisticated information and DSS (Piercy, 1995). Venkatraman and Henderson (1998; 34) suggest that the strategies for virtual organisations will be customer interactions; remote experiences; customerisation and customer communities; asset configuration. Within this view they state that *'IT lies at the heart of this business model for the next century'* (Venkatraman and Henderson, 1998: 47).

3.5 Conclusions

This chapter reviewed the literature on the development of a transactional to relational framework for contemporary marketing practice, in order to ascertain a suitable framework for this research. Marketing practices can be viewed at various levels of orientation from transactional to relational. This concept is widely discussed in the literature and supported by some empirical evidence. It was noted that much of the discussion and development lacks a definitive IT dimension. Many of the leading authors pay scant attention to the IT role, though more recently authors have developed this aspect of their study.

As the most highly developed and empirically tested framework the Coviello et al., (1997) framework was considered most applicable for this research. This framework permits the research of a range of transactional and relational marketing practices and allows for a cross-sectoral investigation, encompassing both consumer and industrial marketing situations and thus provides a holistic framework.

To augment the IT dimension of this framework the last section of this chapter was divided into two main areas, databases developments and IT based interactions, with a review of the discussion and empirical studies in these areas. The empirical research confirms that there is slow assimilation and major challenges in relation to these ITs. There was a dominant review of the applicability of IT in consumer markets in this section and throughout this chapter. The last part of this section briefly discussed network marketing and its potential impact on marketing practices.

The next challenge is to find an appropriate framework to study the IT dimension of this study and this will be pursued in Chapter 4. This chapter will also review the empirical studies on the current assimilation and the barriers to IT assimilation in marketing particularly focusing on the human and organisational barriers.

CHAPTER FOUR

THE ASSIMILATION OF IT – A STAGES THEORY APPROACH

‘Given what IT now allows an alert organisation to do, an organisation that merely works faster and harder will become uncompetitive in the global marketplace’

(Scott Morton, 1991:5).

4.1 Introduction and Outline of Chapter 4

Chapters two and three suggest that an IT dimension should be included in a study of the transactional to relational perspective of current marketing practice. This chapter develops the IT aspect discussed in these chapters and suggests a framework for the study of IT assimilation by marketers, thereby finalising and defining the research gap which this thesis will contribute towards narrowing.

This chapter commences with an overview of IT evaluation methods with a critique of the difficulties in IT evaluation and benefit realisation (section 4.1). Empirical studies into IT evaluation practices in firms are reviewed in section 4.2. Section 4.3 discusses the concept of a stages theory of IT assimilation and various adaptations of this theory by a range of authors. It is suggested that this theory could be a suitable framework for a study of marketing practice related to IT assimilation. Section 4.4 reviews existing research into marketing practices and traces the predominantly automational nature of much of IT assimilation and the challenges of the transition to the informational stage. The final section 4.5, reviews the barriers to IT assimilation in marketing.

4.2 IT Evaluation Frameworks, Challenges and Empirical Studies

Despite the high levels of dependence that companies have on IT, they are encountering major difficulties in evaluating IT’s effect and contribution (Willcocks, 1996; Willcocks and Lester, 1996; Galliers et al., 1999; Tate, 1999). This issue has consistently ranked as

one of the top ten concerns in major surveys of IT management (Sethi and King, 1994) and is a major research challenge of the 90s (Chan and Huff, 1994). This is a pivotal issue, as investment in IT represents over 45% of all business equipment investments (Margherio et al., 1998; King, 1998).

Though IT investments is predominantly assumed to be positive and '*a clear bet on IT's profitability and productivity-enhancing potential*' (King, 1998:64), many companies in actuality find IT baffling, and to some extent it appears that expectations are high and actual benefits are low (King, 1998; Hitt and Brynjolfsson, 1996; Earl and Feeney, 1997; Bird, 1994; Mooney et al., 1995; Barnes, 1995). This has been referred to as the 'IT black hole' or the 'IT investment paradox', that despite major investments in IT there have not been corresponding gains in productivity (Brynjolfsson, 1993; Van Grembergen and Van Bruggen, 1997; Peppard and Rowland, 1995; Walsham, 1993; Knutter, 1997; Margherio, 1998; Pinsonneault and Rivard, 1996; Parker and Benson, 1988).

There are difficulties in empirically confirming the benefits of IT to business (Hitt and Brynjolfsson, 1996; Davenport 1997). Research has endeavoured to correlate IT spend with a range of business success measures but with limited success. Quantitative studies into IT productivity and its contribution to business success factors (Ward, et al., 1996; Sethi and King, 1994; Farbey, et al., 1992; Hitt and Brynjolfsson, 1996) have been criticised for their focus on output and productivity, relegating IT to an automational device, ignoring the more salient benefits of IT - notably the ability to change practices and processes (Mooney et al., 1995).

There is a view that IT is a resource of the company and should be evaluated with the same rigour as other resources (Norris, 1996). Alternatively, it is suggested that IT does not conform to traditional economic assumptions due to the diversity of its potential applications (Hemingway, 1997) or that IT is simply a part of normal business practises and should not be evaluated (Van der Zee, 1997).

IT should be radically changing company processes and structures if companies are to reap the benefits in this new age (Day and Glazier, 1994; King, 1998; Hitt and Brynjolfsson, 1996). Radical changes in processes and structures are difficult to evaluate and to research, particularly for a causal link and includes many issues which are context-dependent and multidimensional in nature (Glazer, 1990; Leverick et al., 1998; Glazer, 1991). Table 4.1, documents a range of suggested difficulties with IT evaluations.

Table 4.1 - Difficulties in Evaluating IT

Factors	Authors
Organisational context; individuality of firms	Collis, 1994; Leverick et al., 1998; Hinton and Kaye, 1996.
Corporate culture	Kench and Evans, 1991.
Industries at different levels of technology diffusion	Porter and Millar 1985; Tidd et al., 1997; Leverick et al., 1998; Melody, 1997; Clarke et al., 1995; Naude and Holland, 1997.
Competitive and market situation	Leverick et al., 1998.
Countries at different stages of development	Melody, 1997; Preston, 1997.
Size of firm	Heikkila et al., 1991; Moriarty and Swartz, 1989.
Prior use and experience, legacy of previous systems, how IT is developed and used within the firm	Collis, 1994; Hemingway, 1997; Leverick et al., 1998; Van der Zee, 1997; Hemingway, 1997; Hinton and Kaye, 1996.
IT at different organisational levels	Bakos and Treacy, 1986; Sethi and King, 1994.
IT utilised for a range of activities	Leverick et al., 1998; Barney, 1996; Willcocks, 1996; Porter and Millar, 1985.
Responsibility for systems	Remenyi et al., 1997.
Factors vary in importance over time	Leverick et al., 1998.
Difficulties in isolating IT, norm of business practice and competitive requirement	Collis, 1994; Barney, 1991; Van Der Zee, 1997; Willcocks, 1996; Webber, 1993; Furness, 1996; Heene, 1997.
Cost and type of IT investment	Norris, 1996
User attitude and perception	Worral et al., 1998; Norris, 1996.
IT as a catalyst for change in management practice. Importance of knowledge and human input	Tidd et al., 1997; Mata et al., 1995; Hamel and Prahalad, 1994; Sanchez, 1997; Heracleous, 1997; Day and Glazier, 1994.

4.2.2 IT Evaluation Frameworks

Justifying investment in IT is problematic both conceptually and operationally (Parker and Benson, 1988; Demkes, 1997). There is no universally used, or commonly accepted, framework or indeed methodology for IT evaluation (Symons, 1994; Leverick et al., 1998; Orlikowski and Baroudi, 1991; Mooney et al., 1995). Chan and Huff (1994) comment that the lack of a strategic measurement instrument is due to the lack of clear

definitions of strategy and strategy fit, the time and cost difficulties in developing measurement instruments, and the need for a multidisciplinary approach.

It has been suggested that one all encompassing model for IT evaluation will never exist, as there are many context specific and multidimensional issues that need to be included, and the range of activities to which IT can be applied is so wide, that one framework could not cope (Glazer, 1991; Farbey et al., 1992; Cronk and Fitzgerald, 1997). At the same time, various models and frameworks have been suggested (see table 4.2). These can be divided into financial, self-reporting and end users evaluation, multi-objective and multi-criteria methods and the stages theories, which will be discussed in section 4.3.

Table 4.2 Information Technology Evaluation Methods

Financial Methods
ROI / NPV/ IRR/ PB
Cost Benefit Analysis
Cost Revenue Analysis
IT Spend as a Percentage of Turnover
IT Spend
Return on Management (ROM)
Self Reporting Studies and End User Evaluation
Enhanced Technology Acceptance Model
Experimental Models – Prototyping, Simulation and Game Playing
Technology Acceptance Models
Usage Surveys
Evaluation and the Responsive Approach
Task Technology Model
Multi-objective, Multi-criteria Methods (MOMC)
Information Economics
Portfolio Methods
The Balanced Scorecard Technique
IBM's IT Value Measurement Framework
McFarlen and McKenny IT Strategic Grid
Business –Led Approach
Active Benefit Realisation
Techniques Matrix
Strategic Technology Area Analysis
Benchmarking - Ratio Methods or Boundary Values
Competitive Parity/ Industry Averages
Critical Success Factors/Key Performance Indicators
Value Added, Value Acceleration, Value Restructuring and Value Linking
Stages Theory (See Section 4.8)

Source: Adapted from Dymoke-Bradshaw and Coc, (1997)

An individual analysis of each of these methods is beyond the scope of this thesis. The following section briefly discusses some of the more popular frameworks, and their

limitations for both academic study and practical use. Practitioners predominantly use financial measures and researchers use a variety of measures.

Financial Evaluations: In practice, financial methods of evaluation are the most popular (Bjorn Andersen and Krcmar, 1995; Hemingway, 1997; Willcocks and Lester, 1996; Willcocks et al., 1997; Farbey et al., 1992). Even though they fail to capture even a significant proportion of the value of most investments, concentrating mainly on cost reduction or revenue increases (Farbey, et al., 1992, 1993, 1994; Strassmann, 1990; Van Grembergen and Van Bruggen, 1997) rather than the contribution to business strategy (Mooney et al., 1995) or sustainable competitive advantage (Mata et al., 1995).

Financial evaluations are familiar for companies and allow for comparative analysis, though major difficulties exist in generating specific costs and benefits information (Parker and Benson, 1988; Melody 1997; Demkes, 1997; Willcocks, 1996; Farbey et al., 1992). By using quantifiable measures, there is no guarantee that they are correctly measuring what they are supposed to, though they do include company specific criteria (Demkes, 1997, Leverick et al., 1998). In addition, utilising solely financial criteria ignores the opportunity costs and the unanticipated opportunities from IT investments (Willcocks, 1996; Day, 1998). For example, many high return, non-automation based IT projects, would not satisfy strict financial criteria, and the costs and benefits difficulties are particularly challenging for strategic investments (Farbey et al., 1992). The difficulties in financially valuing IT can result in a reduction in IT spend (Burkan, 1991). This is also a limited focus on the ownership of physical hardware and software, which does not equate to beneficial use, which, needs a human and organisational dimension. A significant proportion of IT spend was forced on companies, prior to the year 2000, in the rush to solve the Y2K problem and to update their systems to cope with the introduction of the Euro (Tate, 1999).

Empirical studies using IT spend suffer from the difficulties in isolating IT costs and compiling and assessing data, with research participants confirming difficulties in

finding, and including, tangible financial information in their evaluations (Willcocks and Lester, 1996).

From a marketing perspective, a focus on financial measure can be detrimental because of the intangible nature of many of the gains from IT investments (Moriarty and Swartz, 1989) and the lack of financial orientation of marketing personnel (McHugh et al., 1999; Moriarty and Swartz, 1989).

Self-Reporting Studies and End User Evaluation: There are a variety of self-reporting and end user evaluation techniques. For example, Elkordy et al., (1997) developed the Enhanced Technology Acceptance Model to evaluate ITs, related to perceived usefulness directly determined by ease of use. These issues were related to external variables including: user computer experience, computer training, computer self efficacy and involvement. Davis, (1989) suggested the use of a Technology Acceptance Model linked to the theory of planned behaviour, the theory of reasoned action and the perceived ease of use.

Self-reporting studies, though popular, lack a common theoretical foundation and adequate measures of constructs, and generally provide mixed and inconclusive results (Weill and Olson, 1989; Demkes, 1997; Dos Santos, 1991). While computer monitoring does not reflect the context of the usage (Demkes, 1997).

Multi criteria and multi objective methods: The following sections reviews a range of frameworks that endeavour to overcome the limitations of financial evaluations and self-reporting studies.

Information Economics: In an effort to overcome the problems inherent in the financial methods and to resolve the difficulties in evaluating IT investment decisions, information economics was developed by Parker and Benson (1988, 1989). This unites the financial and the intangible elements of IT value, including various strategic, definitional and

technological elements. It jointly evaluates business and technical benefits and risks and is linked to Porter's value chain. There are three categories to the model value, as an expanded vision of benefits; costs, which include the explicit consideration of risk; and a decision making process for consistent investment decisions (see Figure 4.3).

Table 4.3 Information Economics Framework

Business Perspective		IT Perspective
+ Value	← Technology Services	- Costs
- Costs	Cost Of Services →	+ Recovery
_____		_____
Justification		Viability

Source: Parker and Benson (1988)

Information economics is a means of assessing the business value of new IT projects and usually uses adjusted ROI + Business Value + IT Value = Value (business contribution) (Parker and Benson, 1988; Demkes, 1997). It divides the benefits and risks into two domains - business and technical, and evaluates these jointly using scores. This model includes non-financial, quasi-tangible (improved efficiency) and intangible benefits (improved effectiveness). For example improved customer service or a higher level of competitiveness could be taken into account. It was also designed to measure IT benefits between departments and other companies. There are major difficulties in assigning scores for each section and the evaluation is very dependent on the evaluator's ability to use the framework (Farbey et al., 1992; Demkes, 1997).

Portfolio Methods: Portfolio methods review the range of IT options and use matrixes, where proposed projects are compared to each other simultaneously on two dimensions. These methods look for the potential effects and are usually visually attractive. Though useful for cross functional impacts, they are complex to use (Demkes, 1997).

Farbey et al. (1992, 1993, 1994) devised a techniques matrix, which included financial measures linked to direct and indirect and predictable and unpredictable outcomes (see figure 4.1). This matrix matches IT projects to the available techniques.

Figure 4.1 Techniques Matrix

	Direct Tactical, Quantifiable, Simple, Support, Follower	Indirect Strategic, Qualitative, Sophisticated, Core, Leader
<u>Predictable Specification</u> Numbers are Important, Specific, Stable	ROI, P, CR	CBA
<u>Unpredictable Requirement</u> Ad Hoc, Numbers not Important Infrastructure Changeable	MOMC, EM	ROM, BV, VA, IE

Source: Farbey et al., (1992).

Willcocks (1996) suggested an evaluation framework centred on four main issues:

- Strategic alignment of business, IS/IT and human/organisational;
- Prioritisation - of resource allocation;
- Feasibility - of each investment;
- Interlinked measures - financial, system, business process, innovation/learning, customer/user and technical.

This framework is a move away from technical efficiency and attempts to amalgamate many different aspects of technology evaluation, but appears to be difficult to use and dependent on the measures used, for success. The Business-Led Approach was also suggested by Willcocks et al., (1997) and includes an inside out approach, an evaluation for profit impact, and the importance of a new culture in the company.

Remenyi et al., (1997) suggest an Active Benefit Realisation framework based on contingency theory and continuous participative evaluation. It includes the following principles:

1. The success of an IS application is a function of management attitudes and processes, rather than the technology itself;
2. Information systems are not the property of the IS department;
3. IS requirements evolve over time;
4. IS actualisation often requires compromise from various stakeholders;
5. Phased deliveries are recommended;
6. Continuous and dynamic evaluations, debate and dialogue are recommended with an emphasis on shared visions and values.

The Balanced Scorecard Technique: A more popular portfolio matrix was introduced by Kaplan and Norton (1992, 1993, 1996) and uses both financial and operational measures, including customer satisfaction, internal processes and the ability to innovate, thereby endeavouring to assure future results are related to the strategic goals of the company. The balanced scorecard divides the measures into four domains, or perspectives, financial achievements; customer orientation; effectiveness and efficiency of internal processes; and innovation and learning. Relating to strategic management, the balanced scorecard allows for an internal and an external focus and recognises the links between current customers, internal processes, employees, system performance and long term financial success (Ling, 1999). A major justification for this method is that quantitative goals will drive organisations to perform better. However it is a difficult technique to implement and requires substantial means (Van Grembergen and Van Bruggen, 1997).

Achen and De Looff (1997) who used a variation of the BSC method to measure the relationship between business performance and IT performance, included customer, financial, innovation and internal measures, and people, process and technology dimensions. In their critique of the model they highlighted the following issues. The

measurement is intersubjective; is respondent biased; offers no IT strategy justifications; lacks reference values and suffers from the limitations of benchmarking. It overlooks the fact that ITs are constantly changing; that it takes vision for companies to invest in IT; that there is a time element to benefit realisation and that a combination of various factors will result in technology success and business performance enhancement; and the results are dependent on the person who assesses it. These observations indicate the limitations of many of these frameworks and show clearly the overall problems with IT evaluation methods.

In summary, these frameworks are difficult to use. They use many criteria, which can be laborious to work with, and the subjective assigning of scores can severely bias the results (Demkes 1997, Farbey et al., 1992; Achen and De Looff; 1997).

Competitive Advantage/Parity: Many companies invest in IT to create a competitive advantage, while other companies invest to try to match competitor activity. The internal focus on IT as a source of competitive advantage centres on the debate between the industrial organisation looking *outside* (Porter, 1980) and the resources based view looking *inside* (Wernerfelt, 1984). The latter proffers that internal organisational phenomena, and company capabilities, can be a competitive advantage and that the internal resources and skills are the crucial aspects in determining a strategy and achieving a high level of performance (Barlett and Goshal, 1991; Collis, 1991; Barney and Zajac, 1994; Prahalad and Hamel, 1990).

The importance of IT for competitive advantage has been widely discussed (Porter and Millar, 1985; Mata et al., 1995; Hemingway, 1997; Braun, 1998; Walsham, 1993; Moriarty and Swartz, 1989). In a seminal article, Porter and Millar (1985:151) suggested that the IT affects competition in three ways:

1. *‘Changing industry structure and therefore competition;*
2. *Giving companies competitive advantage through new methods to outperform competitors;*

3. *Creating new businesses within companies*'.

In a more recent article, focused on the competitive advantage of the internet, Porter (2001:70) comments that the internet makes it *'harder for companies to sustain operational advantages, but it opens new opportunities for achieving or strengthening a distinctive strategic positioning'*.

There are inherent difficulties in viewing a company's IT as a competitive advantage. The suggestion that one company resource or capability could provide a competitive advantage is erroneous, as a competitive advantage relies on a set of complementary resources and capabilities (Sanchez, 1997; Collis, 1994; Barney and Zajac, 1994).

'In both theory and practice, however, the imperfect information available to managers and the bounded rationality which they, like all humans are subject to, make it unlikely that anyone could identify a single set of resources and capabilities which would bring a 'sustainable competitive advantage' to an organisation in a dynamic and complex environment' (Sanchez, 1997:941).

Inimitability, is achieved where at least one of the following criteria are present; physical uniqueness, path dependence, causal ambiguity or capacity pre-emption (Collis, 1994). IT may achieve inimitability requirements due to path dependency and causal ambiguity, as IT is embedded in the organisation and the exact source is difficult to find and thus to replicate (Collis, 1994; Barney, 1991; Mata, 1995; MacKenzie and Wajcman, 1999).

The links to the inability to *'disembody'* IT from company practices, as it is embedded in their historical and idiosyncratic development (Collis, 1994, Hildebrandt and Kamlage, 1998). As Schendel (1994:2) states

'the assets that matter are not those elemental ones that are easily duplicated by all firms, but rather those that are built hierarchically out of elemental assets and might be labelled, compound assets'.

Each firm will have its own set of technological requirements. As Loveridge, (1997:276) states *'IT is often defined as an operational tool, the design of which is dictated by the demands of efficiency within given market conditions'*. IT usage directly contributes to the impact of IT. Within this context there is a realisation that this area is fraught with difficulties for companies. There are no standard technologies, though there is a general-purpose nature to IT nowadays (Brynjolfsson and Hitt, 2001).

It is impossible and unrealistic to measure one company's level of IT and then compare it to another. All firms are different and ultimately *'all firms are heterogeneous bundles of resources, they each pursue a (different) optimal investment strategy that is determined by their current relative resource endowments'* (Collis, 1994:149). Even if you could compare actual ITs, the uses they make of IT will differ.

'In terms of information systems evaluation, the sheer diversity of functions which the technologies can perform makes any anticipation of the effects of an IS related change even more uncertain' (Hemingway, 1997:191).

Suggesting that IT will offer a future competitive advantage is restricted by the complex and dynamic environment of business, where predictions of the future are futile (Sanchez, 1997; Collis, 1994).

Due to the widespread acceptance and use of IT, there is potential for a self-cancelling technological advantage syndrome (Webber, 1993), as technology becomes a competitive requirement (Heene, 1997), a strategic necessity (Clemons, 1991) and emerging as the norm of business operation (Willcocks, 1996). In many cases, IT as a source of competitive advantage will only prevail until the competition reacts to and imitates the IT (Mata et al, 1995). Hitt and Brynjolfsson's (1996) empirical research found that companies use the level of IT they consider optimal and invest for competitive parity, rather than competitive advantage. Empirical research (Willcocks, 1996) found that due to competitive factors, companies cannot afford not to invest in IT, but find it difficult to

justify the investment. This raised issues related to the subsequent evaluations of the investment decisions, which were either obscure or not available.

A major problem is that though IT can be a component of a company's competitive advantage, there is a lack of a suitable IT evaluation framework. In addition there are major difficulties in measuring competitive advantage in general but more specifically in relation to IT (Farbey et al., 1992, 1993, 1994). Sethi and King, (1994) proposed an outcome or a trait approach to measurement and developed a measuring device called the Competitive Advantage Provided by an Information Technology Application (CAPITA). They noted that rather than providing explicit measurement, the major benefits were to provide insights and highlight the interrelationship issues between areas. They encountered major difficulties in selecting the germane measures for inclusion in the scale.

Human Element of Competitive Advantage of IT: The important focus for IT is on a company's unique skills, which leads to firm specific IT knowledge and management skills, as the competitive advantage (Tidd, 1996; Mata, 1995; Prahalad and Hamel, 1994). Personal skills in IT become the competitive advantage. A company's knowledge can be inimitable (Collis, 1994; Teece and Pisano, 1994). Investing in IT may be a relatively easy task, but changing core company processes, procedures and even beliefs, may not. As Sanchez (1997: 943) notes; *'competence theory presumes that it is generally more difficult and time-consuming to change the ideas that organisations use than the things that organisations use'*.

As Thomas (2000:32) notes; *'technology is a social process of human creativity and innovations'*. This relates to the move from assets and resources to knowledge and creativity based companies (Ghoshal, 1997); brainpower based industries (Throuw, 1997); and intangible knowledge (Sanchez, 1997). IT requires the human dimensions of knowledge and ability, to align IT with the business to achieve real success (Mata et al., 1995; Sanchez, 1997; Heracleous, 1997; Schleglmilch and Sinkovics, 1998; Barnes,

1995). This replacing of physical and financial capital by knowledge and information as the major asset, and the new raw material of this age, is often difficult for companies to manage and to evaluate. Now the raw material is in the imagination and creative skills. It is not the IT, but the human ability to capitalise on the capabilities offered by IT that are important.

'Information technology does make greater communications possible, cross-wiring departments, functions, customers and suppliers, but ultimately it requires people taking responsibility, to convert technology into communication ... Knowledge only flows through technology; it actually resides in people ... (it) all depends on the quality of conversation that technologies support' (Webber 1993:28).

According to Lloyd (1996) there is a re-evaluation of internal knowledge and a focus on new skills, mindset, models and new thinking. As Joel Barket, Futurist Infinity Ltd stated *'corporate intellectual property will be more valuable than their physical assets in the 21st century'* (Lloyd, 1996:576). Similarly the learning organisation is viewed as the key to competitive advantage, though the difficulties in protecting and evaluating this asset have also been noted (Piercy, 1995; Collis, 1994).

The ultimate asset is knowledge and its management within a technological framework (Venkratraman and Henderson, 1998; Rumelt, 1996). Therefore there are demands for marketers who think *'like science fiction writers'* (Sterne, 1995: 295), and marketers *'who think out of the box'* (Schlegelmilch and Sinkovics, 1998:169) and managers

'will need to adopt a mental model very different from the one they now have in place. They'll need to rethink their notions of where value can be created and how they can capture that value' (Hagel and Armstrong 1997:12).

4.2.3 Empirical Research into Current IT Evaluation Practice

The following section reviews empirical research, predominantly in the marketing area, into IT valuation techniques used in practice. It is clear that companies experience major

difficulties in evaluating IT often resulting in a lack of evaluation. This is compounded by the lack of a suitable framework or technique utilised by all companies. The following section reviews empirical studies into IT evaluation practice and the timing of evaluations, within the marketing domain.

Kench and Evans (1991) in their research found that cost benefit analysis was the most popular framework, but that it was used as a blunt instrument, resulting in creative accounting, to justify the system, and/or as a purely monetary constraint on system investments. Farbey et al., (1992) found that only half of their sample required any quantification of benefits, with a focus on 'composite methods' or 'ad hoc' evaluations. They found that investment in technology was treated similarly to other investments, though there was a lack of consistency for cost justification and few examples of ex post evaluations.

Within the marketing domain, Qureshi (1993) found that the majority of respondents used tangible measures of IT efficiency, such as staff reductions or cost savings, and only a minority favoured intangibles like service quality or quality of marketing information (Leverick et al., 1998). Kearney (1990) in his study of IT in the insurance industry, found that little effort is made to measure the benefits from IT in marketing and sales. Only a quarter of respondents made any attempt at evaluation and the overriding commonality was to link IT to increased sales returns, despite the fact that IT is only one of many factors that will affect sales. Hewson and Hewson, (1994) found that companies used payback and NPV for benefit realisation and that companies were not under pressure to achieve quick payback from systems.

From their research, Leverick et al., (1998) found that multiple criteria methods were popular for evaluating IT effectiveness, including achieved original aims/expectations (95%), the satisfaction of staff using the application (72%), the extent of use by staff (65%), effect on customer satisfaction (44%). Interesting they noted that financial cost benefit analysis (35%), was the least utilised method.

Willcocks and Lester (1996), concentrating on investments in information systems, also noted the use of individualised methods of evaluation rather than standardised methodologies. They found that the main evaluation methods were direct comparison with feasibility study (83%), cost effectiveness (53%), quality of product (48%), systems availability (44%) and productivity and job satisfaction (22%). They noted the danger in accepting a project with one set of criteria and measuring its success on another set. In general, they found that companies were satisfied with their own evaluations, though they noted that they overestimated the efficiency of their evaluation procedures, while overlooking the limitations. They also found that the majority of IT investments were aimed at achieving internal efficiencies. This results in missed IT opportunities and increased risks, as narrow evaluation processes neither clarify nor assess less tangible benefits.

In conclusion the above studies highlight the range of IT evaluation methods used in marketing and the challenges of successful evaluation.

Stages of Evaluation: There are five main stages of IT evaluation, feasibility, development, implementation, post implementation and routine operations. There is a lack of evaluation in general and a specific lack of implementation, post implementation and routine operations evaluations (Willcocks and Lester, 1996; Farbey et al., 1992; Taylor and Norris, 1989). Hewson and Hewson (1994) found that post implementation reviews were undertaken in less than 10% of companies. Willcocks and Lester (1996) found that the majority of companies carried out evaluation at the feasibility stage, but that only two thirds evaluated, to some extent, at all stages, with a noticeable fall off in evaluations at later stages. These findings were similar to Ward et al., (1996) who observed little evidence of management processes to ensure proposed benefits from IT investment. Though there was some evidence of formal evaluation methodologies, existing methods were deemed unsatisfactory in identifying benefits, only a minority of companies had benefit realisation processes and where post implementation evaluation existed it focused on practical issues like cost/time and technical conformity.

Research shows that, in general, IT is introduced with only minimal evaluation and little attempt at an ongoing review once the IT is in operation. It is critical that IT is evaluated continuously as the benefits are noticeable overtime. Companies appear to lack a continuous development view of their IT investments. The main reasons for the lack of IT evaluation at post implementation stage is that companies find that evaluations procedures are too costly, not necessary, distract from other work, are too difficult and also that results could be used negatively (Willcocks and Lester, 1996; Norris, 1996). Willcocks (1996) further suggested that the lack of evaluation was due to the focus on competitive parity investments. In addition there were difficulties in separating IT from other assets and activities and a lack of understanding of IT as a capital asset, which, like any other asset requires evaluation.

Evaluation of the Totality of IT: The lack of evaluation is also linked to the fact that increasingly, IT is viewed as a normal part of business operation and there are incredible difficulties in isolating IT from company process (Collis, 1994; Barney, 1991; Van Der Zee, 1997; Willcocks, 1996; Webber, 1993; Furness, 1996; Heene, 1997). Due to the interrelatedness and connectivity of IT, companies have difficulties 'unbundling' IT (Heskett et al, 1990; Thomas et al., 1994; Capon and Glazer, 1987; Kench and Evans, 1991). IT should be viewed as a whole system rather than as separate technologies (Thomas et al., 1994; Capon and Glazer, 1987; Ford and Saren, 1996; MacKenzie and Wajcman, 1999; Willcocks, 1996; Galliers, 1995). Isolating an IT and attempting to measure its contribution to company level affects like growth rate, ROI and so on would be pointless, as these aggregate variables are insensitive to the effect of one IT (Sethi and King, 1994) and causal links are very difficult to confirm (Glazer, 1990; Leverick et al., 1997). IT is viewed by managers in 'clusters', and it should be researched in that format (Clarke et al., 1995). Willcocks and Lester, (1996:32) observed that in reality this does not happen and they classed the following as a major finding of their study '*only 20% of organisations surveyed, included the totality of systems availability and capability and the needs of the organisation and department in their assessment*'.

This is a pivotal issue for marketing, where, due to the multi operational nature of IT and the nature of marketing operations, a singular IT resource can be used for a variety of marketing operations and across various departments (Barnes, 1996). As King, (1998) observed it is the cumulative impact of a range of ITs which is important. There is a need to view and evaluate IT as a continuous investment stream (Hinton and Kaye, 1996).

4.3 The Stages Theory Frameworks

The following section reviews the stages theory framework, as the suggested framework for the study of the assimilation of IT in marketing. This framework can be used to trace the development of the full IT complement within the marketing operation, through various stages of development and offers a suitable and usable alternative to the frameworks and techniques discussed above. This study extends existing research and developments of the stages theory model to the marketing department's assimilation of IT.

The concept of a trajectory of IT assimilation showing developmental growth in IT usage which ultimately leads to enhanced IT usage over time, is well noted in the literature. This centres on the evolving nature of IT's role in organisations and is suggested as a framework for tracing various and quite clearly defined stages of IT growth and learning within companies. As IT evolves, successive IT generations have different IT applications, and resulting impacts, and require different management processes. Therefore, in order for marketing managers to effectively assimilate IT into their operations, they must understand both the diffusion process and organisational learning. These stages can be linked to the broad eras of technological developments (Freeman and Perez, 1988; Butler et al., 1997) and technological innovations models (Dosi, 1988; Durand, 1991).

Stages theory assumes that predictable patterns of growth exist and the stages are sequential in nature, occur as a hierarchical progression that is not easily reversed and involves a broad range of organisational activities.

Various authors have developed stages theory frameworks (see table 4.4), a range of which will be discussed in the following section.

Table 4.4 Stages Theory Frameworks

Stage Theory Frameworks	Authors
Initiation; contagion; control and integration; data administration; and maturity DP era; micro era; and networked era	Nolan, 1973, 1979, 1993; Gibson and Nolan, 1974; Nolan and Segar, 1993; Nolan and Croson, 1996.
Experimental; efficiency; effectiveness; and unthinkable	Haeckel, 1985
Technology identification and investment; experimentation, learning and adaptation; rationalisation and management control; widespread technology transfer	McFarlan and McKenney, 1984
Traditional data processing; and personal computing	Gogan, 1988
Delivery; reorientation; and reorganisation	Hirschheim et al., 1988
Automate; infomate; transformate	Zuboff, 1988; Remenyi et al., 1991; Mooney et al., 1995
Benefit/Beneficiary Matrix: Efficiency; effectiveness; and transformation linked to individual functional unit or organisational benefits	Gibson and Jackson, 1988
Process innovations – automational; informational; sequential; tracking; analytical; geographical; integrative: intellectual; and disintermediating;	Davenport; 1993
Automating; informing; embedding and communicating	Cash et al., 1994
Benefits Evaluation Ladder Mandatory changes; automation; direct value added systems; MIS and DSS; Infrastructure; inter-organisational systems; strategic systems; business transformation.	Farbey et al., 1999

The Nolan Stages Theory Approach: Writing nearly thirty years ago, Nolan (1973) noted the evolutionary stages of database development in ten case studies. In a subsequent article he developed the concept into a four stages theory (see table 4.5) for IT growth in companies, related to three eras of IT developments, from data processing to micro processing and the network era (Gibson and Nolan, 1974; Nolan, 1974, Nolan and Koot, 1992; Nolan et al., 1993; Nolan and Segar, 1993; Nolan and Croson, 1996).

Table 4.5 Four Stages of Growth

Stages	Developments
Stage 1 Initiation	Initiation through computer acquisition, resulting in disruptions and changes to practices which are accepted by management, who become committed to the system. The main focus is on the automation of low level administration tasks.
Stage 2 Contagion	Contagion relates to intense system development, where encouragement is given to staff to pursue applications and usage of the systems. This results in increasingly sophisticated systems and rapidly rising budgets.
Stage 3 Control	The IT spend is now a cause for concern and so controls are introduced. IT steering committees are used to review expenditure and to control the growing IT developments. IT is now viewed as a charge out service and there is a move to management of IT.
Stage 4 Integration	Heralds a more subtle change focusing on effective management and utilisation of the computer resources to match IT to the business strategy or goal achievement. The IT function becomes more unified with individual functions to achieve efficiencies.

Source: Nolan, 1973

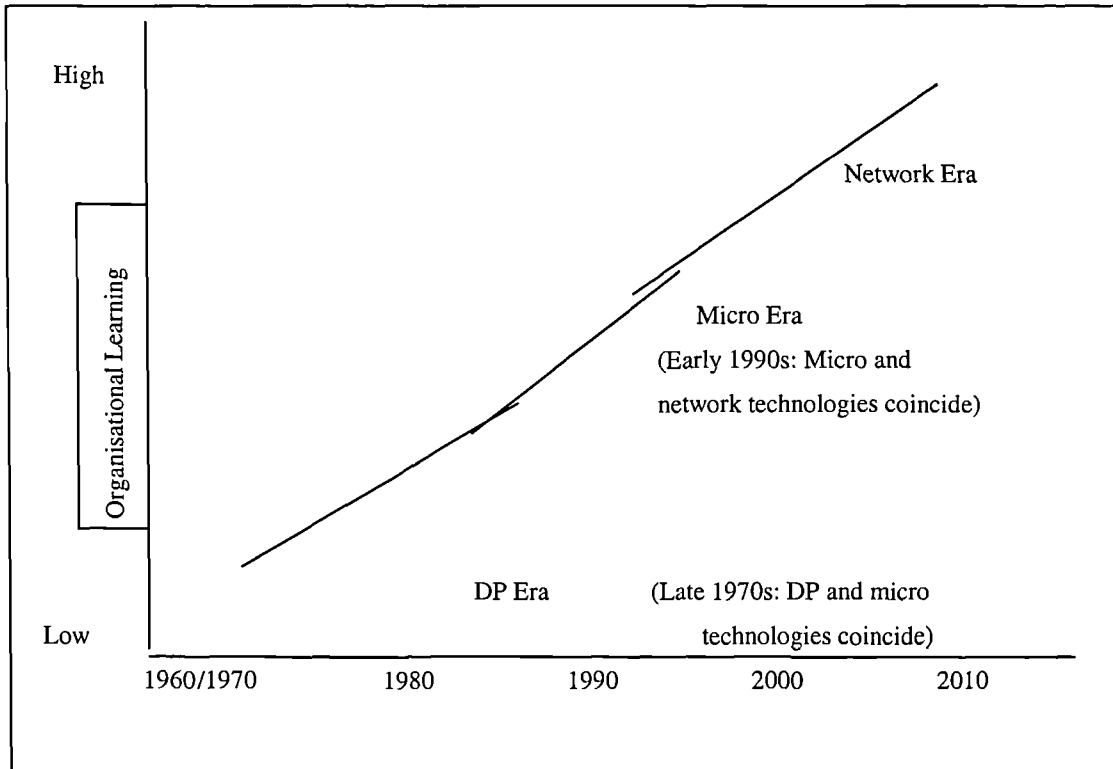
By 1979, Nolan had extended the stages to six to include data administration and maturity (see table 4.6) tracing the data processing growth in companies and highlighting the benchmarking aspects and the significance of the evolution at various levels of the organisation and for managers and users.

The stages theory is based on computer expenditure and follows the familiar s-shape of the learning and experience curve. The level of investment in IT, and the hardware and software that companies have, indicate the stage of development. This approach assesses the current situation in the areas of management practice; financial; applications; users; resources and suggests how the computer resource should be managed, related to the computer budget curve. The stages theory focuses on managing and controlling each stage of the process to lead to the networked era. A pivotal feature of this framework is the growth processes, which describe the computer activity and the dynamics of computer organisational learning, including application portfolio, resources, management and user awareness (Nolan et al., 1993).

'As an organisations 'learns' how to utilise IT they spend more and more money to develop this capability. Expenditure accelerates into a growth period, then decelerates, and matures into slow-paced steady growth. If organisational learning is explicitly managed through each stage in turn, optimal integration can be achieved' (Cash, 1994:259).

Eras of IT Development: Connected to the growth stage is the eras of IT development referred to as DP era, the Micro Era and the Network era, and within each stage there will be the four stages of the learning curve from contagion to integration (see figure 4.2). The DP era is a centralised stage, while the micro era decentralises, and the networked era allows for the integration of the two previous eras (Nolan et al., 1993).

Figure 4.2 The Stages of IT Developments from DP to Network Eras



Source: Nolan (1973)

The first two eras have been delayed waiting for the pull of technological developments and innovations, but for the network era most of the IT is available to be exploited (Nolan, et al., 1993). Most companies are in the middle of the micro era of IT assimilation (Nolan and Crosson, 1996).

4.3.1 Progression Through the Stages

Nolan (1979), provides benchmarks for each stage and notes that companies can be in various stages at the one time. He suggests five guidelines for action.

1. Recognise the fundamental organisational transition from computer management to data resource management;
2. Recognise the importance of the enabling technologies;

3. Identify the stages (using the stages theory) of the company's operating units to help keep data processing activities on track;
4. Develop a multilevel strategy and plan;
5. Make the steering committee work.

Through each of the stages there is a strong need for balance between control and slack and the management of the four growth processes of application portfolio, resources, management and user awareness. The growth processes can be viewed for the purpose of this thesis, from the user and applications perspective (see table 4.6).

Table 4.6 Six Stages of Data Processing Growth

Growth Process	Six Stages of Data Processing Growth					
Application Portfolio	Functional cost reduction	Functional proliferation	Upgrade	Retrofit applications with databases	Organisation integration of applications	Application integration "mirroring" information flow
User Awareness	Hands off	Superficially enthusiastic	Arbitrarily held accountable	Actively involved	Effectively accountable	Acceptance of joint user and data processing accountability
Years	1960		1970		1980	
Stages	Stage 1 Initiation	Stage 2 Contagion	Stage 3 Control	Stage 4 Integration	Stage 5 Data Administration	Stage 6 Maturity

Source: Adapted from Nolan (1973)

Each stage has implications for future stages. The importance of higher order value is pivotal as IT permeates through organisations, the potential for value increases with the highest value at the transformational stage (Mooney et al., 1995). The transition through the stages will be discussed in further detail in this section.

Nolan and Segar (1993) further developed this framework and provided a grid which assesses a firm's IT strategic position related to its operational dependence on IT and the strategic impact of new IT applications related to the competitive situation. This grid includes individual ITs, which could be viewed as factory, strategic, support or turnaround ITs. An understanding of an organisation's position on the strategic grid is critical for developing an appropriate IT management strategy for each stage. They also extended the stages theory to include the market for IT, whether physical or informational or external and internal (table 4.7). Therefore at the automational stage there will be an internal physical focus, while at the micro and network stages an external and information focus (Nolan and Segar, 1993).

Table 4.7 - Organisational IT Markets

		Focus of Market	
		Physical	Information
Location of markets	Internal	Automating	Informating
	External	Imbedded	Networking

Source: Nolan and Segar (1993)

4.3.2 Further Developments of the Stages Theory Framework

The following section reviews other authors' development of stages theory frameworks and contributes to our understanding of this framework and its use for the marketing department's assimilation of IT.

McFarlan and McKenney (1984), offered a four phases procedural model to enable an organisation to manage the diffusion of new technologies in business. Their stages included technology identification and investment; experimentation, learning and adaptation; rationalisation and management control; and widespread technology transfer. They relate their phases to Schein (1961) and Lewin's (1958) freezing and unfreezing stages of organisational change.

In a study of the assimilation of PCs, Raho, et al., (1987) examined the efficacy of using the McFarlan and McKenney model and offered support for the stages concept as a viable and a real phenomenon in business. They grouped organisations into categorizations and stages based on the concerns or problems they were encountering with PC integration. They highlight, that with an understanding of this process managers can cope better with technological assimilation, and can control the process, through effective planning of the phases and thereby increase effectiveness. They noted that certain levels of resource commitments were related to certain stages. They suggested that having only four stages was probably limiting, and it should be expanded for specific industries and organisations. They also observed that the process can slow down, or even stagnate, if managers do not manage the process of assimilation, and that educational resources are pivotal for progress, particularly at the higher levels of technology assimilation.

Haeckel (1988), suggested that the stages of IT assimilation were experimental, efficiency, effectiveness and unthinkable, using the axis of time and the surprise index. He described efficiency as the same situation, or problem, addressed in a new way, which costs less. He describes effectiveness, as the use of IT for an old problems addressed in new and improved manner and the last stage as the 'unthinkable', which would represent truly innovative techniques, not previously thought of. His explanation for these phases was that

'People do not solve new problems with unfamiliar technology. We start by solving familiar problems differently; and only when we have reached a threshold of familiarity with the capabilities of the technology do we apply our ingenuity to new areas' (Deighton, 1996:158).

Zuboff (1988) carried out major research in this area and coined the terms automate, infomate and transformate for the three stages. She defined the stages as, automate – the automation of manual practices, infomate – increased efficiency and, transformation – radically new practices and processes.

Gibson and Jackson (1988), utilising the efficiency, effectiveness and transformation stages devised a benefit/beneficiary matrix to monitor new technology developments and the changing use and impact of IT over time, divided by individual/functional and organisational impacts (see table 4.8). This development expands the framework to include both a broad and a narrow view of the stages theory.

Table 4.8 - Benefit/Beneficiary Matrix

	Efficiency	Effectiveness	Transformation
Individual			
Functional Unit			
Organisation			

Source: Gibson and Jackson (1988)

Nolan (1979) confirmed that different departments can be at different stages and that there are different levels of IT affects within companies.

From a similar perspective, Mooney et al., (1995) include both operational and managerial implications and potential benefits for a broad range of IT (see table 4.9). This embodies technologically driven developments as companies progress through the stages.

Table 4.9 Dimensions of IT Business Value

Business Process	Automational	Informational	Transformational
Operational	Labour Costs Reliability Throughput Inventory Costs Efficiency	Utilisation Wastage Operational Flexibility Responsiveness Quality	Product and Service Innovation Cycle Times Customer Relationship
Managerial	Administrative Expense Reporting Routinization	Effectiveness Decision Quality Resource Usage Empowerment Creativity	Competitive Flexibility Competitive Capability Organisational Form

Source: Mooney, et al., (1995).

A benefit of this framework is that it can also be used at various stages and at various levels of impact. *'It is a lowering of the microscope to bring about a closer linkage between the level at which the technologies are deployed, the level at which the impact occurs and the level at which it is measured'* (Mooney et al., 1995:23).

Davenport (1993) suggested nine stages as the process effects of IT. The stages are automational, informational, sequential, tracking, analytical, geographical, integrative, intellectual and disintermediating.

Farbey et al., (1999), designed the benefits evaluation ladder with eight steps (mandatory changes; automation; direct value added systems; MIS and DSS; infrastructure; inter-organisational systems; strategic systems; business transformation). They suggest that each rung represents a class of application and that the methods of evaluation and the impacts will be different as companies move up the ladder. Though they suggest that it is not a strict scale, they note that generally applications higher up the ladder are more complex and risky, and offer greater potential for reward.

4.3.3 Marketing Specific Stages Theory Frameworks

Marketing specific adaptations of the framework have been suggested (see table 4.10).

Table 4.10 Marketing Specific Stages Theory Frameworks

Marketing Specific Frameworks	Authors
Efficiency; effectiveness; and innovation coupled with time; space; and geography	Hammer and Mangurian, 1987
Displace labour; improve conventional services; enhance aspects of marketing to change their character and create new forms and services.	Little 1987
IT enhancing operating efficiency; IT changing methods; enhancing customer service; market innovation	Baker, 1994
Age of computation; age of computing; age of communication	Peattie and Peters, 1997

Hammer and Mangurian (1987) linked the value of efficiency, effectiveness and innovation (in product and service provision) to impacts on time, geography and relationships (see table 4.11).

Table 4.11 Impact/Value Framework

		Value		
		Efficiency	Effectiveness	Innovation
Impact	Time	Accelerate Business Process	Reduce Information Float	Create Service Excellence
	Geography	Recapture Scale	Ensure Global Management	Penetrate New Markets
	Relationships	Bypass Intermediaries	Replicate Scarce Knowledge	Build Umbilical Cords

Source: Hammer and Mangurian, (1987)

They suggested guidelines to maximise the potential of IT, to create a reliable and compatible IT infrastructure and to consolidate communication responsibility. These guidelines include the re-education of application staff, the development of combination systems that have high communication intensive opportunities and high business value. They suggest a need to change the organisation of information and introduce an IS

director to establish a co-ordinated approach to IT in the company. Of interest to this research they include relationships as a variable which will be impacted during the development of IT through the stages.

Baker (1994), concentrated on the internal and external focus of IT activity related to new and existing marketing activities. This framework (see table 4.12) can be viewed as a sequence which marketing follows to exploit the benefits from IT, though the categories are not separate.

Table 4.12 An IT Application Framework

		Marketing Activities	
		Existing	New
Focus of activity	Internal	1. Enhancing operating efficiency	2. Changed methods
	External	3. Enhancing customer service	4. Market innovation

Source: Baker, (1994)

Peattie and Peters (1997), discussed a marketing specific stages theory.

- The first age of Computation (1960 to early 1980), was dominated by main frames and data processing, predominantly for automating transaction processes and number crunching. This revolutionised the lives of accountants and production managers, but not marketing.
- The second age of Computers (mid 1980's), dominated by the PC, had a marketing implication, with the ability to analyse and track data. Though the potential for internal and external communication could be foreseen at this stage, computerisation still only had a supporting role in marketing and did not change the fundamentals of marketing.
- The third age of Communication is dominated by connectivity and communication and will radically affect marketing practices, particularly at the customer interface.

Tidd et al., (1997) suggest the following diagram to explain how technology operates in the marketing process and the different strategic and tactical decisions that need to be made, depending on the level of technology and complexity of the market. He contends that the technological and market maturity will determine the marketing processes that can be utilised (see table 4.13).

Table 4.13 Technological and Market Maturity

High	Novelty of Markets	
Novelty of Technology	<u>Technological</u> New solutions to existing problems	<u>Complex</u> Technology and markets co-evolve
	<u>Differentiated</u> Compete on quality and features	<u>Architectural</u> Novel combinations of existing technologies
Low		

Source: Tidd et al., (1997: 165)

Amalgamation of the Marketing Focused Stages Theory: Linking three of these authors together, we can see that there are suggested stages of development for marketing (see table 4.14). Though none of these have been empirically researched, they do offer guidelines for marketing assimilation at each stage.

Table 4.14 Amalgamation of Stages Theory Frameworks for Marketing

Authors	Stages		
	Stage 1	Stage 2	Stage 3
Peattie and Peters (1997)	No Real Impact. Dominant Financial and Production Focus of IT	Data Analysis and Tracking	Connectivity and Communication – Radically Affecting Marketing
Baker (1994)	Enhanced Operating Efficiencies (Internal)	Enhance Customer Service (External)	Changed Method in Operations And Market Innovations
Hammer and Mangurian (1987)	Accelerate Business Process, Recapture Scale and Bypass Intermediaries	Reduce Information Float, Ensure Global Management and Replicate Scarce Knowledge	Create Service Excellence, Penetrate New Markets and Build Umbilical Cord

4.3.4 Justifications and Limitations of the Stages Theory Framework

The Stages Theory is one of the most widely used frameworks and is heavily cited by IS researchers (Galliers and Sutherland, 1999). Nolan (1973), observed that during formative periods of development, a stages theory is a useful and a widely used aid in prescriptive theory formulation.

Frameworks should be parsimonious and simple (Demkes, 1997) and the stages theory framework is more parsimonious than most (Mooney et al., 1995). There have been much discussion (see section 4.3) suggesting the extension of the theory to six to eight stages to include more stage rather than strait jacketing companies or departments into one of three stages and to allow for the idiosyncratic developments of IT to be revealed within the stages theory. Walsham, (1993), is critical of the simplicity of the framework, but referring to Zuboff’s stages, does confirm that it is useful.

Bloomfield et al., (1994) commented that using a stages theory allows for the non-static highly iterative nature of IT developments to be monitored. Hammer and Mangurian,

(1987), observed that it is an aid for managers to identify their own opportunities for exploiting IT and shows how business changes can turn impact into value.

Greiner, (1972, 1998) advocates a stages theory of organisational growth, reflecting the different periods of evolution and revolution of firms. These articles provide rationale for the concept that companies progress through major stages of developments. Greiner (1998), suggests that IT is a tool which evolves in different forms to match each phase. His justification of phases of development can be applied to the use of this framework, in that the practical benefits for managers are as follows:

1. They should know where they are;
2. Recognise the limited range of responses;
3. Recognise that solutions breed problems.

There is agreement that the stages theory framework is useful but there is criticism of the lack of empirical support which to date has been weak and inclusive (King and Thompson, 1997; Galliers et al., 1999). Despite this criticism King and Thompson, (1997) utilised it for research into the stages of business planning and information system planning integration and confirmed its applicability. Further criticism of the stage theory centres on the overly narrow technological focus which is suggested stems from its grounding in the database technology of the 1970s, though much of this criticism has been overcome by further developments of the stages theory (Galliers et al., 1999) as discussed in 4.3.

Many of the limitations of the stages theory were discussed in section 4.3. It must be noted that no model or framework could offer a generic or complete set of rules under which IT evaluation could be governed and optimised (Leverick et al., 1998; Holtham, 1994; Galliers and Baets 1998). A benefit of this framework is that it includes the concept that IT will develop within the legacy of previous systems and also links to business management issues for each stage, centred on the learning processes associated with IT assimilation. This type of framework allows organisations to take advantage of the

evolving nature of IT assimilation, emerging practices and unanticipated outcomes from IT usage. This framework also has intuitive appeal to both IT and business executives.

The pertinent factor that dictated the choice of framework used for this study was that IT evaluation should centre on its contribution to business value – whether in efficiency, effectiveness or fundamental changes, and that the impact from IT occurs over time with each stage of development as critical. The stages theory offers prescriptive, benchmarking or best practice advice on how to move through the stages of IT assimilation. This is linked to technological discontinuity to develop from one stage to another. The higher order value of the framework is important. The research will indicate if the stages theory exists, and what stages or steps marketers need to go through in order to achieve both maximisation of their IT investment and increased business value.

The use of the term assimilation is central to this framework as the original stages described the four stages of assimilation of data processing. *'The notion of IT being assimilated in stages has been discussed since the mid 1970s'* (Cash et al.,1992;267). There are of course other views of IT as discussed through out this thesis.

4.3.5 The Stages Theory - Automational, Informational and Transformational

Though there are similarities among the range of authors there is a lack of consensus on the terminology for each stage and a lack of agreement on the number of stages (see table 4.5). For the purposes of this study, the three stages eras of DP, Micro and Networking (Nolan, 1973) linked to automation, information and transformation from Zuboff, (1988) will be utilised. The following section briefly discusses each stage and the concept of technological discontinuity which is needed to move through the stages. The last section reviews the empirical research into IT assimilation in marketing, from a stages theory perspective.

DP Era/Automational Stage/Efficiency: Automation is a focus on using IT as a substitute for labour and thus a focus on productivity and/or cost savings, with the major

gain being increased efficiency (Zuboff, 1988; Mooney et al., 1995; Nolan et al. 1993). This is a technology focus, with IT predominantly used to replace internal, previously manual tasks, and to reinforce existing routine practices, by substituting technology for human effort (Nolan and Segar, 1993). What Zuboff (1988:7) refers to as offering '*a stale reproduction of the past.*'

Through automation of tasks, this stage produces databases of information which are then connected to management information systems to aid in monitoring, but much of the information supplied is not what management wants or requires, for innovative use (Cash et. al., 1994). Though this stage is a pivotal step, it has limited benefits and IT developments need to move beyond this stage (Galliers and Sunderland, 1999; Bloomfield, 1994; Norris, 1996; Zuboff, 1988; Nolan et al., 1993). '*Given what IT now allows an alert organisation to do, an organisation that merely works faster and harder will become uncompetitive in the global marketplace*' (Scott Morton, 1991:5).

Micro Processing Era/Informational/Effectiveness: This stage centres on increased effectiveness rather than solely on efficiency, and results in the reconfiguration of work practices and, ultimately, social relationships. The informational stage offers unique challenges. There is obviously a greater human dimension in how the information is utilised and there needs to be retraining in the new IT enabled environment. This stage should challenge the assumptions of organisational design, with a focus on learning (Zuboff, 1988; Applegate, 1994).

The importance, use, and control of information as a major company asset has been well documented (Porter and Millar, 1985; Desphande, 1982; Hart and Diamantopoulos, 1992; Davenport, 1994, 1997). Zuboff (1988; 9/10), who coined the phrase infomate, described this stage as follows;

'Information technology, even when it is applied to automatically reproduce a finite activity, it is not mute. It not only imposes information (in the form of programmed instructions) but also produces information ... activities, events

and objects are translated into and made visible by information when a technology, infomates as well as automates'.

This requires personal intellectual skills, such as problem solving and symbolic reasoning to utilise the information received (Zuboff, 1988). What Nolan and Segar (1993:3) refer to as a move from '*computer-literate to information-literate*. The concentration is on increased effectiveness related to IT enhanced decision making capabilities, and on increased information utilisation and management effectiveness (Moriarty and Swartz, 1989; Mooney et al., 1995; Zuboff, 1988; Glazer, 1991; Scott Morton, 1991). The expanded capacity to store, process and transmit information, with the creation of new patterns of information should result in quantitative and qualitative changes (Glazer, 1991; Scott Morton; 1991).

The focus is on the impact on middle management and leveraging the work of professionals, with the help of word processors, individual spreadsheet applications and users customising off the shelf packages for their own use, with a move away from formal tools and methodologies (Nolan and Segar, 1993; Cash et al., 1994). PCs allow for sophisticated analytical tools which allow users time to concentrate on the interpretation and evaluation of data, rather than its compilation. Micro computing allows for the decentralisation of information and the use of IT for knowledge intensive tasks complementing rather than automating work practices (Nolan et al., 1993).

Network Era /Transformational Stage/New Practices: This stage integrates the previous stages and, in general, firms need to go through the previous two stages to arrive at this one (Zuboff, 1988; Scott Morton, 1991; Nolan and Segar, 1993; Applegate, 1994; Galliers and Sutherland, 1999). When the proliferation of personal computers, communication technologies and information sharing is reached, an era of convergence will arrive. This is referred to as the transformation stage, where there will be major changes resulting in new practices or processes (Zuboff, 1988; Cash et al., 1994). Technological change and the technological strategy of companies, should focus on

achieving real change by continually developing and exploiting technological change (Capon and Glaser, 1987).

The transformation stage of IT assimilation offers the opportunity to introduce new practices and processes for relationship developments, with suppliers, customers, distributors and business partners, and so links to the network perspective of relationship marketing. It is suggested that it is at this stage that marketing will experience the greatest impact from IT initiatives.

'The third age perhaps promises more in the way of real benefits and will make IT much more relevant to marketers because instead of issues of efficiency, technology and the provision of information, it emphasises creativity, relationships and applications of information. In the first two ages, marketers rather tagged along on a wave of innovation driven by computer technicians and the financial and technical functions of the business. By contrast it is often marketers who are pushing companies into third age technologies through the development of Web sites, CD-ROM electronic catalogues, remote sales force management or virtual reality promotional tools' (Peattie and Peters, 1997: 144).

Transformation of processes and operations is not a comfortable or easy option and will present major challenges for marketers. It necessitates corporate learning and understanding the mix between competencies, technologies and processes to effectively manage technologies and the new processes and skills required (Thomas et al., 1994).

'Managers who will use the technology to find new ways of conducting business, managers who will redefine the bases of competition in an industry and managers who will successfully appeal to the imagination of customers located in different parts of the globe, but united by a common interest or lifestyle, will be the successful ones. In short for marketing to survive and prosper in the information age marketing managers need to break with

established rules. Planning for business as usual would be a recipe for failure' (Schlegelmilch and Sinkovic, 1998:169).

4.3.6 Technological Discontinuity and Movement Through the Stages

This section focuses on the discontinuity and the factors which will influence movement through the stages. The stages theory framework traces IT assimilation towards transformation utilising the levels of IT development, integration, connectivity and learning. The 1st stage is technology focused. As assimilation moves to the 2nd and 3rd stage, the human element becomes central. Progression through the stages is of critical importance.

'It is safe to state that the management of IT must be considered to be of critical importance to the chances of survival of any company in the information age. Knowing that the use of IT evolves through a continuous learning process, which takes time, any current immaturity of the use of IT will, in our experience and opinion, inhibit organisations to keep up with the ongoing challenges of doing business during the decade to come' (Van der Zee, 1997:223).

Movement through the stages results from acceptance of the need to improve and manage the IT systems (Nolan, 1973). Companies move through the stages by encountering various pivotal stages. The concept of a period of discontinuity as companies move through the stages is an important feature of this trajectory (Nolan, 1979; Willcocks et al., 1997; Cash et al., 1994; Gogan, 1988). This is the concept of revolutionary periods of change followed by evolutionary, incremental change (Clarke et al., 1995) or convergent periods punctuated by strategic reorientation (Pettigrew, 1987; Walsham, 1993). It must be noted that these developments are not necessarily linear and IT developments can, and do, occur concurrently. Each stage is a critical step towards the final stage (Norris, 1996; Zuboff, 1988).

The important transition period is the move from a technology focus to management of data resources. Cash et al. (1994) discussed the move from independent personal

computers to interpersonal interdependent connected workstations, where due to demand for access to corporate information and electronic communication, there is a linking of mainframes, mini and micro computers. This will lead to a networked infrastructure with computers connected to email, printers, and a variety of peripherals, to corporate databases and to outside databases and information services. This networked era brings technological discontinuity and new IT architecture and management issues (Cash et al., 1994).

From Automation to Information: Movement from the automation (data processing) to the information (personal computing) stage will result in technological discontinuity in companies as depicted by Gogan (1988) (see table 4.15).

Table 4.15 Comparison of Traditional DP versus Personal Computing
(Technological Discontinuity at Work)

<u>Evidence</u>	<u>Automation</u> <u>Traditional DP</u>	<u>Information</u> <u>Personal Computing</u>
Applications	Large shared applications; used regularly; highly structured.	Small, individual applications; often ad hoc; often unstructured (e.g. quick and dirty spreadsheets)
Application Development	Slow, methodical system development by trained IS professionals.	User customize off the shelf packages to suit own needs; evolutionary, prototyping approach, little need for formal tools and methodologies.
Implementation Issues	Ensuring user cooperation and correct use; adding requested enhancements	Responding to requests for training and troubleshooting help.

Source: Adapted from Gogan (1988)

From Information to Network: At the network stage, Nolan et al., (1993) highlighted the utilisation of network technologies. This results in convergence and integration of information systems with firms linked internally and externally. There are major challenges for firms in moving to the network stage. Nolan and Croson (1996) refer to this as '*the process of creative destruction*'. This stage includes the incorporation of new

IT, building the IT-enabled network and adopting new management principles. The six stages of creative destruction include both internal and external changes. Internal changes relate to downsizing, dynamic balancing between the need for real time shared information systems and the legacy issues with the current systems (as a constraint that must be removed), market access and a move to group work. External changes are customer driven, market foreclosure, continuous learning and increased complexity, with real time information enabling IT based efficiencies and a global perspective.

Nolan (1973), noted that it was apparent that most companies could manage the automation nature of the extant computerisation, but that strategic use of IT and higher level decision making was creating major problems. This situation is compounded in the marketing department by the level of uncertainty as to the optimal technologies for marketing operations (McDonald, et al., 1993). Many IT investments lack a strategic dimension (Willcocks, 1996; Holtham, 1994), and focus on the rationale/engineering perspective (Feeney 1997). The more transformational the IT, the greater the difficulties there are in implementation and in the judgements of benefits (Moriarty and Swartz, 1989; Shaw, 1994). Transformation takes time (Melody, 1997) and before marketing's successful use of IT, there needs to be a large and dramatic shift in organisational culture (Bruce et al., 1996).

Nolan and Croson (1996) suggest that the development towards the network era has been slower than was expected. They suggest that the majority of companies are half way through the stages theory at the informational stage. Though it is suggested that each company will uniquely progress towards transformation, these developments must operate in tandem with maintaining business performance.

4.3.7 Empirical Research: Automational Stage of IT Assimilation in Marketing

The following section reviews the stage of IT assimilation in marketing. The limited available empirical research and discursive commentary points to automational usage of IT by marketing and a predominantly database perspective.

Over the last decade, IT implementations in general, have had a dominant automational focus on internal productivity in the manufacturing and finance functions. This has seen their efficiencies increase (Sheth and Sisodia, 1995; Peattie and Peters, 1997; Palihawadana and Delfino, 1994). The lack of IT in marketing has resulted in the marketing department as the department with the least IT, the least automation and control (Moriarty and Swartz, 1989). As Mitchell, (1994: 185) notes '*marketing is the last bastion of management to embrace IT.*' As the benefits of automation in other departments are realised and information becomes pivotal to organisational operations, increased use of IT by marketing should occur.

'Most companies have experience installing computers in areas such as finance and production, where their ability to speed up production and eliminate waste can be measured accurately. But now as the focus shifts towards the recognition that information is the most precious of modern corporate resources and its exploitation the key to competitive survival, the spotlight falls on marketing; what it is and what it should be doing' (Mazur, 1994: vii).

Empirical studies correlate with the above and reveal that there are low levels of use of IT by marketers, and that marketing is slower than other departments to adopt IT. IT use in marketing is predominantly for productivity or automational purposes and is focused on routine or tactical activities (Palihawadana and Delfino, 1994; Domegan and Donaldson, 1994; Leverick et al., 1998; Bruce et al., 1996; Peattie and Peters, 1997; Ranchhod and Hackney, 1996; Watkins, 1990; Hewson and Hewson, 1994; Fletcher and Wright, 1997).

Leverick et al., (1997: 91), suggest that '*far from the radical transformation of marketing promised by IT, the use of IT for marketing has thus far focused primarily on the routine and tactical activities*'. In view of their research findings, they contend that IT exists, but that it has not been exploited within marketing. Willcocks and Lester's (1996) study also confirmed that the majority of IT investments were aimed at achieving internal efficiencies. Kench and Evans (1991:21), noted that many companies overlook the

differences between tactical and strategic systems and from their case based research, found that marketers were predominantly using IT for '*readily understood and easily addressed*' tactical operations. The challenge for marketing is to move from the discrete approach (parallel tasks) viewing IT as an administration tool, to a strategic marketing approach with a clear understanding of IT and the way it should be exploited (Holtham, 1994).

Empirical research highlights that the automational stage of IT assimilation in marketing is not reaping benefits for marketing practitioners. It has been suggested that it is at the informational or transformational stage that real benefits will ensue. The following section reviews current studies and the restricted nature of IT practice in marketing. Research highlights that marketing's experience with IT has been mixed and that there are high levels of dissatisfaction with IT systems in marketing (Li et al., 1993; Li, 1995; Higby and Farah, 1990, Jiang et al., 1997). A study by Kearney (1990), of 400 Irish and British companies found that only 11% of respondents considered their IT applications to be successful. This pan industry study found that successful firms were better at managing their IT systems, then less profitable ones. Watkin's (1990) study of IT use in marketing by insurance companies found low IT usage and low relative projected growth rates. Hewson and Hewson (1994), utilising case based research of 41 UK companies found that the majority of the companies use sales and marketing software packages as supports for sales management productivity and direct mail. There was a high level of achievement of benefits, but the general consensus was that utilisation of IT could improve and there were demands for systems changes and extensive upgrades thus highlighting discontentment with current IT systems. They also found that IT was viewed as a strategic investment, but that the systems were often constrained by having to cope with specific tactical problems. User groups and teams were emerging as the best method for IT implementation. The dominant orientation was for competitive advantage from systems, as in increased market share and a leaner sales and marketing operation.

Finlay and Griffiths, (1994) found that only a tiny minority of respondents considered their IT applications to be 'successful' based on criteria of scope of applications, perceived benefits, project completion on time and return on investment. Palihawadana and Delfino's (1994) study found that all respondents agreed that the use of technologies 'contributed' to the achievement of their organisation's marketing goals, though the majority of respondents did not use IT for carrying out marketing operations. Li (1995) confirmed low satisfaction from the American perspective, noting that only a third of US companies were satisfied with their marketing IT systems. Bruce et al., (1996) observed that marketing departments were using IT and that 83% felt IT had impacted in the areas of information, activity and organisationally. They found that a large majority of respondents confirmed a 'substantive' impact from IT on their marketing practices.

Jiang et al., (1997), in their research noted a positive attitude towards IT from marketers, who, though aware of new levels of control through IT, were unconcerned about their loss of freedom. They also observed increased productivity in marketing from IT usage. A study by Leverick et al., (1998) noted marketing changes due to IT, but highlighted major problems in the effective use of IT in marketing. They found that the factors that distinguish between effective and ineffective IT applications in marketing were: ease of use, user commitment and involvement pre-purchase, flexibility, senior management support, data sharing and non marketing support, an IT champion, support from IT and support from application providers. These factors, for effective adoption of IT applications, can be grouped as pre-purchase, product factors, organisational factors and post purchase factors. This research covered a range of ITs and was based on the respondent's subjective choice of IT and interpretation of the term effective.

There could be a tendency for respondents in studies to have an aspirational view of IT's contribution to marketing, rather than an actual reflection of the reality of their IT usage. The terms 'substantive', 'effective' and 'contributed' were not explained, in the above mentioned research. This leads to research interpretation difficulties.

Moriarty and Swartz (1989), noted major sales increases from the utilisation of advanced marketing and sales IT, ranging from 10% to more than 30%, and investment returns which exceeded 100%. Despite these findings, they contend that there is a clear lack of understanding of the strategic benefits of IT in marketing and sales, with a focus on competitive parity, rather than competitive advantage. Their research observed two main productivity gains from IT, automation based efficiency gains and effectiveness through increased decision making support. Saaksjarvi and Talvinen (1992), found benefits relating to marketing programme cost savings, improved marketing planning and reporting time saving, improved customer service and satisfaction and improved sensitivity. Palihawadana and Delfino, (1994) in their exploratory research, found that the benefits from IT in marketing were increased productivity, reduced costs, improved customer service and better human resources, but with little evidence of increased sales.

The following studies reported more informational gains. Shaw's (1994b) research into the main benefits achieved by participants from sales and marketing ITs, reports that the major benefits were in improved customer service, meeting customer needs better, increased sales and better informed decisions. Hewson and Hewson (1994), had similar finding noting increased sales and market share, cross selling and retention of key customer, better decision making and better use of existing resources and reduction in costs. Both of these studies were exploratory quantitative studies. Hinton and Kaye (1996), utilising both quantitative (ROI) and qualitative measures observed benefits from IT related to increased user job satisfaction, gains in customer service, improved management communications and better decision making.

A major issue is the lack of suitable IT applications for the marketing department and complaints from marketing that the ITs available are not developed enough for their beneficial use. Most of the studies comment that IT advantages will occur through future developments of IT, specifically for the marketing area.

A focused study of IT and customer service carried out by Domegan and Donaldson (1994), found that large companies (particularly financial service companies) observed a

lack of flexibility in the company's application of IT in the marketing domain and a dominance of accounting related IT systems. In a further analysis, Domegan (1995) observed a lack of IT sophistication in customer service applications, which were used predominantly for clerical efficiencies. They noted that where sophisticated software packages existed marketers were happier with the systems and had developed their customer service offering. This contrasted with the findings from Shaw's (1994) study, which found that respondents were dissatisfied with their systems and particularly dissatisfied with the more sophisticated systems. Though noting increased IT spend in marketing and heralding IT's continuing development, Shaw (1994) found that half of the sales and marketing managers believe too little was being invested in IT in marketing. Berry (1995) researching in a similar area found that marketing directors were critical of the available IT at the customer interface. Respondents wanted IT improvements in central customer management systems, customer information at POS, understanding of individual customer profitability, and better customer targeting.

The lack of suitable ITs in marketing could relate to the conflict between IT as a linear discipline and marketing as a creative discipline. IT by nature suits linear repetitive tasks (Strassman, 1985) but this limits IT assimilation by marketing. Many marketing tasks are craft tasks corresponding to an average level of task variety and low level of task analysability (Brannick, 1998). Unlike other departments, which have very predefined and rigid operations (for example finance and production), marketing personnel appear to struggle with the introduction of IT and IT systems appear to have difficulties with marketing type applications. How decisions are made in marketing and how marketing is practised rests on the debate between Aristotle's 'phronesis' and 'techne', practical or technical, subjective or objective, modernism and post modernism (Brannick, 1998, Bannister, 1998). The ability of IT to infiltrate marketing can be classed as the rational meets the creative or what McKenna, (1991) refers to as '*high tech meets high touch*'.

IT systems have focused on rational and static applications rather than open systems which allow meaning, understanding and flexible developments to emerge (Tenkasi and

Boland, 1996). IT systems present challenges to the marketing mindset, the complexity and qualitative nature of marketing decisions and restrict and constrain marketing thought, by forcing it into a rational systematic process (Piercy, 1981). IT introduces information in a structured form rather than in what Piercy (1981:4) refers to as the '*messy non-uniform semi-processed form*' in which marketers require information. IT usage could damage marketing by stifling critical aspects of marketing, including creativity, intuition and judgement (Piercy, 1981; Leverick et al., 1998; Peattie and Peters, 1997).

The technical requirements of marketing are for IT systems that can cope with non-routine tasks, without losing the creative aspects of these tasks. As Strassman (1985:21) notes '*the principal challenge of IT is how to deal with unstructured and unpredictable office work*'. Developments of MIS, EIS and DSS are attempts to transform the transactional information system into aids in decision-making, though they are in their infancy and have mixed research outcomes (Saaksjarvi and Talvinen, 1995). IT in marketing has not progressed to assisting in the semi structured task and is '*biased towards either purely numerical or purely textual work*' (Hewson and Wilson, 1994:372).

4.4 Barriers to IT Assimilation in Marketing

The literature suggests that there will be technical, human and organisational barriers to IT assimilation. This section reviews the main studies in this area, though there has been only limited research with a specific marketing and IT focus (Fletcher and Wright, 1995). This review centres on a range of human and organisational barriers to IT assimilation in marketing with a particular emphasis on the critical issue of the intra functional control and conflict between the marketing and IT departments.

The predominantly automational use of IT by marketers as discussed in the section above suggests that barriers exist to the transformational use of IT in marketing. The literature suggests that the slow adoption of IT by marketing practitioners and the low levels of satisfaction from IT systems when they are adopted, highlights challenges and barriers to

IT usage in marketing. As discussed in section 4.3, progression through the stages is of pivotal importance and barriers to this procession must be considered and efforts to overcome them pursued.

In the general IT literature a range of barriers are suggested (see table 4.16) which highlights the complexity of the issue.

Table 4.16 - Range of Suggested Barriers to IT Use - General Studies

Suggested Barriers	Authors
Lack of evaluation measurements for IT.	Mooney et al., 1995; Kench and Evans, 1991
Failure to evaluate IT.	Willcocks and Lester, 1996; Norris 1996
Uncertainty about the costs and benefits of IT.	See Leverick et al., 1998; Brynjolfsson, 1993
Legacy of previous IT successes or failures.	Kench and Evans, 1991; Drummond, 1998; Thomas et al., 1994
Mismanagement by users of IT.	Brynjolfsson, 1993; Willcocks, 1994
Information scarcity, communication infrastructure, trust and confidence and economic incentives.	Schmitz and Rovner, 1992
Application driven rather than forward-looking development - tactical rather than strategic IT vision.	Thomas et al., 1994; Holtham 1994; Kench and Evans, 1991
Lack of a technological vision.	Ford and Saren, 1995
Deferring participation, picking the wrong technology, unwillingness to fully commit and lack of persistence.	Day, 1998
Belief in IT as a magic bullet.	Markus and Benjamin, 1997

From a marketing perspective the generally exploratory empirical studies which exist suggest that there are a wide range of marketing specific barriers and challenges (see table 4.17) which must be overcome before the full potential of IT in marketing will be realised (Bruce et al., 1996, Jiang et al., 1997).

Table 4.17 Empirical Studies of Barriers to IT Assimilation in Marketing

Authors	Barriers to IT Assimilation in Marketing	Study Details
Kench and Evans, (1991)	Viewed as an expense rather than a source of competitive advantage; legacy of previous system's success or failure; lack of evaluation measurements for IT; application driven rather than forward looking development; tactical rather than strategic IT vision.	Case study research of five companies.
Palihawandana and Delfino, (1994)	Educating users; resistance to change; defining management needs; obtaining reliable information; lack of skilled staff; inflexibility and computer related problems.	UK quantitative postal questionnaire of 300 companies mainly marketing directors and managers.
Bruce et al., (1996)	Technical, personal and organisational issues. Software and hardware limitations; conflict between the IT and marketing departments; marketing as a low priority for IT; resistance to change; lack of IT skills; lack of IT champion; resistance to information sharing.	2 Stages. Broad sample of 100 UK companies using unstructured questionnaires followed by a quasi delphi survey of 300 companies.
Leverick et al., (1998)	Identifying managers' IT needs; overcoming resistance to change (IT and general change); obtaining reliable information to input into IT systems; education of users; persuading marketing and sales managers to share information; budget constraints; lack of IT skills of marketing staff; lack of conformity of systems.	500 UK companies from Kompass. Quantitative postal survey - 17.4% (87) response rate.
Barriers to Databases Use in Marketing		
Fletcher and Wright (1995)	High cost of development; fragmented systems; data quality; account-based customer records; no clear DBM strategy; lack of company wide marketing orientation; lack of direct marketing specialists; fragmented sales and marketing organisation; agency relations; poor relations between marketing and IT.	UK quantitative study of database use in UK financial services sector. Surveyed both marketing and IT personnel.

The empirical research, cited in table 4.17, confirms that there are a variety of barriers to IT assimilation within marketing. There has been a tendency to group barriers under the headings of technological, personal, organisational/cultural/structural and general barriers (see Fletcher and Wright, 1995; Bruce et al., 1996; Leverick et al., 1998). Though these terms are broad, in general and for the purpose of this study, technical barriers relate to hardware and software issues and the efficiency of the IT infrastructure. Human barriers centre on individuals and their use or non use of IT encompassing psychological problems during periods of change, avoidance of uncertainty and resistance issues. Organisational barriers relate to the current processes and procedures in companies that may not be compatible with IT systems and the orientation of the company towards technology and change in general. They include relations between departments (particularly the IT and the marketing department), the lack of acceptance of senior managers of the strategic benefits of IT and the lack of a clear strategy for IT implementation (Fletcher and Wright, 1995).

From a marketing perspective there appears to be a tendency to overestimate technical barriers and underestimate organisation and personal barriers (Fletcher and Wright 1995; Leverick et al., 1998; Dutta and Segev, 1999; Desai et al., 1998). One explanation is that the human and organisational difficulties are solved at the decision stage. The lack of emphasis on organisational issues may also be due to the automational aspect (low level of sophistication) of IT's current use in marketing which means that these systems do not impact on the company (Fletcher and Wright, 1995). Alternatively IT can be used as a scapegoat, with IT criticisms camouflaging criticisms of the changes and the perceived threat from this change (Markus and Benjamin, 1997).

The reverse applies to IT personnel with IT management research revealing that they consider organisational issues to be more important than technical issues (Doherty and King, 1998). They noted that this relates to firm size but they confirm that the different perspectives did not correlate with any differences in approach to organisational issues. However they note that this could be due to research methodological difficulties. For the

purpose of this study technical and human barriers will be discussed in brief while organisational barriers will be reviewed in greater detail with reference to a range of empirical research in this area.

4.4.1 Technical Barriers to the Assimilation of IT into Marketing Practices

There are a wide range of technical barriers which are outside the scope of this thesis. In many ways due to technological developments technological problems are receding. The main technological infrastructure issue for this study is the legacy of previous systems.

Legacy Systems: Due to the embedded nature of IT, its success or failure depends on the legacy of past decisions in IT acquisition (Hemingway, 1997, MacKenzie and Wajcman, 1999; Leverick et al., 1998; Davenport, 1997; Walsham, 1993; Kench and Evans, 1991; Burkan, 1991). Companies are struggling to fundamentally redesign often inflexible and fragmented legacy IT infrastructures, which are embedded in the organisations structures and systems (Cash et al., 1994). A major, and common, organisational phenomena is resistance to changing legacy IT systems, which staff are comfortable with (Nolan et al., 1993). New IT is often introduced incrementally and a company's caution depends on the importance of the process to that company (Thomas et al., 1994).

IT is often judged against previous IT, rather than on its own merits, so there is close dependence in the minds of managers between their traditional activities and processes and the current IT they are replacing, focusing on incremental rather than radical changes (Thomas et al., 1994).

'Frequently 'traditional' companies are hostages to their own success. Management in these organisations have risen to the top on the basis of these successes and it is very difficult for them to detach themselves from historical success and venture into new territory legacy systems' (Dutta and Segev, 1999:474).

4.4.2 Human Barriers to the Assimilation of IT into Marketing Practices

The human element as a pivotal dimension in the successful assimilation of IT has been discussed through out this thesis. IT succeeds where it is augmenting good, human based, decision making skills and information sharing in companies (Davenport, 1997; Willcocks, 1996; Bruce, et al., 1996). Davenport (1997), comments that IT has been glorified and ignores the basic human element of how employees acquire, share and make use of information. Human intervention can damage the best-laid IT plans.

'New technologies no matter how advanced won't change behaviour without human intervention. Technology, after all is neither the saviour nor the archdemon of the information age. At its worst it distracts and misleads us. But at its best, new systems can support the kind of information use that results in real business change' (Davenport 1994:120).

From an information processing prospective, it is people who use the information to make better decisions that add value to business (Applegate, 1994). *'In the end systems have no value. Their only worth is in the information they generate and information is an intangible product that only its recipient can value'* (Norris, 1996:221). What is important is how the marketers use the increased information from IT. *'It was not the system or the dominant culture of the organisation that determined the 'impact', but the choice made by the individual manager about how to use the information from the system'* (Kimble and McLoughlin, 1994). Using the GEMCO ecommerce project to show how people rather than the technology, limited the application, Haeckel, (1998), concurs that the impact of IT will depend on the way IT affects how people work.

Dopson and Stewart (1993), observe from a variety of studies, that IT usage has led to a reshaping of marketing managers role. Pinsonneault and Kraemer (1993), similarly analysed studies into the impact of IT on middle managers and found that, paradoxically it both increased and decreased the number of middle management. There is a lack of consensus on whether IT is beneficial to middle managers, with some studies showing that it allows for better decision making, increased effectiveness, greater flexibility and more participation in strategic implementation and more freedom to concentrate on

unstructured tasks. Pinsonneault and Rivard, (1996), in a further study showed that for middle managers, IT reduced the level of decision making, limited initiative and judgement, introduced standardization and regulation of middle management work and higher expectations and more pressures. They observed that the pattern of the relationship between IT usage and managerial work depended on the kind of strategic reorientation implemented by the company and the fact that managers will develop a specialisation trajectory, focused on a few distinctive competencies and winning strategies (Bonama, 1985) and this can lead to their own demise.

Natural Resistance to IT: People resist IT for a variety of reasons and they can be related to theories of resistance classed as people based, system based and interaction theory (Markus, 1983). The importance of a study of resistance is that *'however informal; or implicit, they guide the behaviour and influence the actions taken by managers and system analysts concerned with implementing computer based applications* (Markus, 1983: 430). There is often natural resistance to IT assimilation and organisation wide systems can result in major conflicts by interfering with individual career goals and financial incentives and threaten personal and unit autonomy (Markus and Benjamin, 1997). They suggest that IT should not be viewed as a change agent, and that successful change requires company-wide understanding and acceptance of the change and then excellent implementation, planning, execution and improvisation to deal with resistance and unforeseen events.

From an information sharing perspective, Davenport (1994), observes that if information is power, people will not want to share it easily. Capturing knowledge in IT systems can aid companies, but professionals, in general, do not share information easily and cultural changes are need to ensure success, regardless of the sophistication of the IT (Quinn et al., 1996). Negative reactions to information sharing can result in the sabotaging of information resources, which threaten informational domains (Piercy, 1981). This is what has been referred to as 'information territorialism' (Leverick et al., 1998).

Investment in IT is accepted by companies due to the amount of internal information that can be analysed. The lack of use of marketing research by managers has been well documented (see Myers et al., 1980). McKinnon and Burns (1991), confirm that a lot of information is never used or has no input into decision making. Davenport (1994), points to research that shows that most managers do not rely on computer based information to make decisions. They get two thirds of their information from face to face or telephone conversations and the remaining third from documents mainly outside the company and not on the computer system. Drucker (1995), also agrees that the most important sources of information for competitive advantage and strategic decision-making, do not come from internal data, but come from the outside world. Birgelen et al., (1998), found that it is unclear to what extent market research intelligence is used in marketing decision making.

4.4.3 Organisational Barriers to the Assimilation of IT into Marketing Practices

Beatty and Gordon (1988) refer to structural barriers as the organisational structures and systems which are not compatible with technology, a failure to view the strategic issues of IT, a lack of co-ordination and co-operation and viewing IT as high risk. Fletcher and Wright (1995), refer to organisational barriers as structural issues including fragmentation and poor intra functional relationships and a lack of a strategic plan for implementation. For the purpose of this thesis the dominant focus will be on change issues and the intrafunctional relationship between the IT and the marketing department.

Organisational issues can be more critical than technological issues (Sankar, 1997; Fletcher and Wright, 1995), but organisations and IT interact over time and each affect the other (McKenzie and Wojmack, 1999; Kimble and McLoughlin, 1994).

'The business value of IT is a joint technology-organisation phenomenon. Therefore meaningful investigation of this phenomenon requires theoretical perspectives of both technology and organisations and their interactions'
(Mooney et al., 1995:19).

Organisational Change and IT: Change theory is a large literature outside the scope of this thesis, which confirms that there are varying levels of resistance to change, particularly noticeable in relation to IT (Walsham, 1993). The following studies show that IT has no inherent ability to change organisations and that change must occur first. Then IT can enable that change.

Clarke, et al., (1995), note that strategic change per se is researched in depth but there is a lack of a specific technological dimension. They note that firms often fail to change to encompass new or emerging technologies and that this is particularly true when the technology threatens organisational 'routines'. This relates to the perceptions managers have of technology and change. They often miss paradigm shifts, or major important technology developments, and rather than a global view of technology, they often have a narrow perspective and mismatched evaluation techniques. From their case based research Thomas et al., (1994) concur that IT assimilation relates to the nature of the system and how managers perceive it, and that attitudes towards technology shape interaction with technology. Their study showed variations in the levels of flexibility and adaptability in coping with technological change, which they contend is due to manager's view of what the firm's operations are, and should be, and also due to the range of technologies available.

Davies and Mitchell (1994) in their ethnographic study utilising Foucault's power and politics framework, found that there is a dual nature of IT impact connected to the status quo. Their findings show that IT had no singular control on organisation transformation; rather it has a duality that is controlled by the discursive practices, which dominate and determine its role. It can reinforce existing practices and can disable change. IT was not an object of change. Its ability to aid change was tied to the current situation in the company, but that as IT was utilised it could lead to change, albeit slowly and indirectly. An overall finding of their study was that IT was not necessary for organisation transformation. They comment on the limitation of the narrow focus of the power politics dimension, but add that a broad study would include many factors which may be only

poorly related. Following a two year study of the implementation of network based IT, Douzou and Legare (1994) also argued that network technologies can reinforce existing practices rather than change them and that IT on its own will not change practices. Kimble and McLoughlin (1994), in their qualitative case based research of changes in managers following the introduction of IS, found that new systems shape changes in existing culture and practice, and that existing culture and practice also shape IT changes, with a pivotal role of interaction in shaping outcomes. Applegate, (1994), found that the introduction of IT can destabilise companies, create new work practices and roles, increase confrontation and information overload. Each company has their own unique method for coping with change and technological developments. Technological change in particular, was evolutionary change with many struggles and difficulties encountered by groups, as they attempted to redesign systems. She found that change was enabled by the 'informating' power of IT to capture, store and deliver information company wide. She noted a consistent pattern of change - changes in organisation and authority structures first and then changes in corporate culture, emphasising that organisational change must occur first and only then can IT enabled change occur.

Bjorn-Andersen and Turner (1998), in their case study of Oticon, found that successful transformations were people focused rather than IT driven, but that changes would not have been possible without advanced IT, because IT enabled physical mobility, sharing of information, and enhanced personal productivity. So IT was a key enabler of change rather than a driver. Oticon took a people rather than a process focus, due to the perception that the process focus might preserve the old ways of doing business. Blumenthal and Hasperslagh (1994), also found that when General Motors focused on technology as the driver of change they encountered strong cultural resistance, highlighting the need for change to come first, and to be people related, and then IT can aid the change. They suggested three approaches to change, improving operations, strategic transformation and corporate self-renewal. Routine habits and reflexes are inextricably tied to the old formula and take time to change. They point out that not all

transformations are the same and that time and top management involvement are crucial elements

4.4.4 Intrafunctional Issues

A major organisational barrier of interest to this study is the role of the IT department in IT assimilation in marketing and the progress through the stages. The following section reviews the intrafunctional difficulties between the IT and the marketing department and the issue of the centralisation of IT control as barriers to IT assimilation in marketing.

Centralisation of Control of IT: A critical barrier to the assimilation of IT by marketing is the centralised control of IT which is a major issue in the move from the automational to the informational stage. Evidence of a move to more decentralised IT usage should be apparent at the informational stage.

The stages theory of IT assimilation creates major demands on the IT infrastructure and the IT department. There is a transition required of the IT department, which can be resisted, thus blocking the progress towards higher order stages. The various stages of development will result in levels of conflict between the IT department and other departments. This is particularly noticeable with the move from the automation stage of predictable, structured and repetitive tasks, to the informational stage where there is dissemination of the control of IT and users can take an idiosyncratic, experimental approach and design applications which meet their needs (Cash et al., 1994). As demands for access to information from centralised systems increase and at the technological discontinuity stage, the IT department could be in conflict with other departments, as they continue with an automational view of the situation, while other departments who now have PCs are rapidly developing their own applications (Cash et al., 1994). Thomas et al., (1994) in their research confirmed that issues of control, minimization (essential defensive strategies, or automational within the stages theory) and adaptation (more positive approach) exist across firms.

The informational stage should lead to increased decentralisation and changes in hierarchies. At this stage it would be expected that there is an integrated and coordinated management of a variety of IT's, including office support, data and voice communication and data processing. It is also expected that there would be new structures in the IT department to control costs and to eliminate inefficiencies; the downsizing of mainframes; and outsourcing of many standard IT services, so that companies can concentrate on core applications (Cash et al., 1994).

The stages theory has been empirically tested from the perspective of the IT department's evolution through various stages, as a critical component of IT assimilation. Galliers and Sunderland (1999) tested six stages connected to the 7S framework and focusing on the changes to the IT department as a company proceeds through the stages (see table 4.18).

Table 4.18 Stages of IT Department's Development in Organisations

<u>Stage</u>	<u>Description</u>
One	'Ad Hoccracy
Two	Starting The Foundations
Three	Centralised Dictatorship
Four	Democratic Dialectic And Cooperation
Five	Entrepreneurial Opportunity
Six	Integrated Harmonious Relationships

Source: Galliers and Sunderland (1999)

Earl and Sampler, (1998) studied the transformation of the IT department in BP Exploration and noted that there were four stages of development. They were recognising disequilibrium, emphasizing supply management, emphasizing demand management and maintaining equilibrium.

There is criticism of the traditional management logic of organising the IT department as the central custodian of IT and as a cost centre (Venkatraman and Loh, 1994). They suggest a framework which encompasses a move away from centralised technological

control to an integrated IT organisation, through outsourcing and insourcing in order to exploit IT for business advantage. In their quantitative study, Venkatraman and Loh, (1994) found that the majority of their sample of 159 CIO were classed as traditional as they focused on managing the IS department as a set of systems and applications with a technology focus; while only 30% of the companies had attempted some level of distribution of decision rights to users. Venkatraman (1996) suggests managing IT as a value centre, due to changes in technology, business expectations from IT, and the external market for IT products and services. Rockart et al., (1996) from a study of IT management practices, note that IT departments need to rethink their role in the company and suggest a federal IT operation, which captures the benefits of both centralisation and decentralisation, of the IT resource. In a later study Remenyi et al., (1997) observed a noticeable trend to take IT from the sole responsibility of the IT department and to spread it around the company. Where managers have decentralised authority for IT investments the emphasis is on whether they *'have the decision making authority to enter into IT based business relationships without referring to a central coordinating body?* (Venkatraman and Loh, 1994;7). This issue is critical because if technological decisions are too decentralised, there is a risk of incompatibility of systems within companies.

Conflict between the IT and the Marketing Departments: There is a large body of academic work into intra functional relationships, and marketing has experience of inter function difficulties, particularly noted between marketing and the finance department and marketing and production (see Bradley, 1998; McHugh et al., 1998; Gummesson, 1998). Obviously individual characteristics will play a role in the relationship between departments in individual companies. The following section provides some generalised inferences and reviews the limited empirical studies related to the nature of the relationship between the marketing department and the IT department. There is a lack of research into IT and intra organisational relationships (Beansaou and Venkatraman, 1996) and specifically between the IT and marketing departments.

An important aspect of IT assimilation is the power and control of the dominant authority on the level and use of IT within companies. *'Changes in the allocation of IT resources and responsibility have profound implications for the firms' power structure, culture, systems and organisation'* (Kovacevic and Majluf, 1993:78). As Davies and Mitchell, 1994: 248) observed; *'those who have control over IT, both what it is and what it does, have significant power in any organisational context which values IT'* .

As marketing departments assimilate IT they need the support of the IT department, but much of marketing's requirements may be outside of the understanding of the IT department (Clarke, 1995).

'Your company's information technology department may be too swamped – or not sufficiently developed - to handle all the tasks that one-to-one marketing demands. Maintaining a customer database, having one system communicate seamlessly with another, tracking each customer's contacts with the company – all of those activities require IT development, direction, and support (Peppers et al., 1999:156)

Many of the issues involved in the movement to an informational stage of IT usage, including embedding IT into products or services and proliferations of personal computers, can be outside the expertise of IT professionals (Cash et al., 1994).

Chan and Huff (1993) found that companies who were satisfied with the support the IT department had provided in connecting the company to its markets, customers and suppliers, performed better than others. They note that it is critical that a company's IT resources are deployed so as to best support the organisation's strategic orientation. Li et al., (1993) in a study of MIS systems found that there was conflict between the IT and the marketing department and a lack of alignment between the two departments. This was related to the growing importance of the IT department and the impact was the lack of use or development of the MIS in marketing. McDonagh and Harbison (2000), in a more recent quantitative study of Irish IT senior managers found a lack of alignment or understanding between the IT department and other departments had existed as a major

issue in the past, but that IT managers no longer considered this a major issue. This may refer to departments, with whom IT has more experience rather than to marketing, which is a relatively new function for IT developments.

Nolan (1973), observed that two cultures would exist, a group committed to computers and a group alienated by computers. Davenport (1997) confirms that IT can have a polarising affect either, bemused or frightening employees. Introducing and utilising IT can change the balance of power, the structures and the status quo in companies. Piercy (1981) refers to these as '*quicksand*' between the marketing and IT departments and included resistance to change and interdepartmental conflicts as effects of technological introductions. A quantitative study of conflict and success in IS development (Robey et al., 1993) supported the contention that constructive conflict, and conflict resolution, explains a significant portion of the variation in IS project success. They noted that conflict resolution contributed to project success. Therefore though conflicts exists how these conflicts are managed can influence the success or failure of IS development. This was confirmed in general organisational studies which showed that organisations, which encourage constructive conflicts, are better able to cope with transformation and change (Kets de Vries and Balazs, 1998)

Fletcher et al., (1994), from a marketing perspective observed interdepartmental conflicts between the marketing and IT departments. Some of the conflicts centre on the legacy of IT systems, particularly in relation to databases and are noticeable in large companies. An area of contention was that the database was developed for non marketing applications and does not support or suit marketing usage. In a further study of database use in the financial services sector, Fletcher and Wright (1995) surveyed both marketing and IT personnel. They observed differences in the perceived barriers to implementation of IT, significantly significant in three areas. The highly fragmented nature of systems, the lack of a clear DM strategy and the lack of direct marketing specialists were deemed more important for IT personnel but less so for marketing personnel. They note that;

'the development of successful DBM systems requires that these two functional areas work closely together. Thus conflicts must be resolved or managed and the views of both will be instrumental in decisions on implementation and development' (Fletcher and Wright, 1995:122).

In a study by Jiang et al., (1997) attempting to ascertain why marketing managers are dissatisfied with IT, two areas, attitude (positive) and issues of importance (different), were measured. This also showed that marketing professionals differ in their views of the important IT issues from those of CEO's, IT managers, and other general corporate personal. The main differences were in the importance of technical issues, security, up-to-datedness of the architecture and budgets, though interestingly the IT mangers agreed with marketing on this issue. Marketing managers placed low emphasis on policy development and user involvement. Berthon et al., (1999) in their research also found various differences between marketing and IT personnel. Marketing personnel have a distinct paradigm, which deals with soft issues like emotions, persuasions, and the non-quantifiable, while IS has a more logical and quantifiable perspective, resulting in culture clashes and personality types difficulties. Marketing personnel also had a strategic orientation, while IT had an operational focus, with marketing opting for a fluid rather than a structured approach to problems and situations. They observed that marketing, due to its boundary spanning focus, was currently experiencing major technological changes.

Scarborough (1998) in his case based research into power, user control and the symbolic role of IT in structured conflicts, found that variations in project successes were hard to explain and that internal, rather than external factors, were dominant. He suggested that strategic use of IT owes much to internal politics and the process of learning rather than the needs of organisations.

'IS expertise is not particularly amenable to functional manipulation ... it is generally deeply embedded in the structure and politics of the organisation and often brings with it a distinctive world-view which many not be easily

assimilated within the culture and outlook of senior managers' (Scarborough, 1998; 20).

Citing examples of major marketing changes that were not initiated or controlled by marketing, for example ATMs, he revealed that these IT decisions were made by IT personnel, related to their knowledge and expertise, rather than to marketing's requirements. He observed that IT specialists were very aware of power, self image and identity issues, when making IT investment decisions.

There appears to be a progression towards marketing control of marketing IT applications. In recent research, 28 per cent of marketing executives in the US were responsible for their company's ecommerce strategy up from 15 per cent in the first quarter. The number of IT executives with responsibility for ecommerce had dropped from 59 per cent to 46 per cent, which the authors suggest reflects a business maturing attitude (Zona Research, 1999). Clarke et al., (1995) found that the subjective view of IT managers by other functional managers, was that they were subservient to them. This is interesting from the point of view that if they are subservient then functional managers need to be very IT knowledgeable to advise the IT department of what they require. This would not appear to be the situation from a marketing perspective. A core issue is whether IT introduction and use by marketing is the responsibility of the marketing department or the IT department or both. Current research, as already discussed, indicates low levels of IT expertise in marketing. Marketing personnel have traditionally had low levels of IT orientation and knowledge and IT staff have limited knowledge of marketing (Clarke et al., 1995; Shaw, 1994a), resulting in difficulties for marketing when challenging IT recommendations or explanations (Bird, 1994). Successful marketing managers of the future must have a sound understanding of IT in order to converse with IT personnel and to understand the implications of IT advances for their marketing operations in this IT enabled world. (Schlegelmilch and Sinkovics, 1998; Leverick et al., 1997; McKenna, 1995). This has enormous implications for marketing and its use of IT as Gronroos (1996:9) states; '*computerised systems and IT ... have to be designed from a*

customer-service perspective and not only or mainly from internal production and productivity-oriented viewpoints’.

The debate now centres on whether marketing should become more IT literate and challenge IT personnel and systems or if IT personnel should become more marketing literate or is a mixture of both the optimum? For example, Bensaou and Venkatraman, (1996) state that a major question among IS professionals is how to leverage IT to restructure business relationships with external partners to obtain firm-level strategic advantage, but is this not a marketing question?

In a review of studies in this area it is clear that barriers and challenges exist. In a time line review of all the empirical research cited, it is clear that there is a development of IT expertise, and demands for increased and more relevant IT for marketing applications from marketing personnel, which is indicative of the move from stage 1 to stage 2.

4.5 Conclusion

This chapter reviewed the major challenges in IT evaluation for companies. A variety of frameworks for IT evaluation, with varying levels of usability, applicability and relevance were discussed. The inherent weakness of these frameworks centre on the difficulties in assigning costs, benefits and scores to IT, which these frameworks require. Empirical research into IT evaluation methods confirms that where they exist there are a range of multidimensional evaluation criteria used, predominantly at feasibility or pre implementation stage.

The stages theory framework, which traces the growth processes of IT over time, was discussed in detail. This concept has been developed for marketing by various authors and the applicability of its use to marketing and the challenges for marketing’s progression along the stages as discussed.

In a review of empirical research in this area marketing appears to be predominantly at the automational stage of IT assimilation. More recent research indicated a demand for increased and more relevant IT from marketing, which could be indicative of a move to a more informational perspective.

Barriers to IT assimilation in marketing exist and these can be classed as technical, human and organisational. This section focused on human and organisational barriers particularly the organisational barriers from an intrafunctional and change perspective.

This chapter developed the IT aspect of the study and suggested the use of an adapted form of the stages theory framework as a suitable method to study the assimilation of IT in marketing. The following chapter will discuss the research design and methodology for this study.

CHAPTER FIVE

RESEARCH METHODOLOGY

'Research is never solitary. Even when you seem to work alone, you walk in the footsteps of others, profiting from their work, their principles and practices'

(Booth et al., 1995: 71).

5.1 Introduction

Chapters 2, 3 and 4 synthesised the literature in relation to the assimilation of IT in marketing practice. This chapter introduces the research objective and propositions, which were derived from the literature review, and also details the research methodology, design, management and analysis. The structure of this chapter appears in table 5.1.

Section 5.2 expands on the research objective and propositions introduced in chapter 1. A discussion of four research paradigms, ultimately suggesting that the realism paradigm is the most appropriate design for this research, is presented in section 5.3. The theory testing focus of much of research in this area is discussed in section 5.4. A case based research methodology is justified in section 5.5. Following this choice the research design for multiple case study research and the techniques which will produce an exemplary case study, are discussed in section 5.6. Data collection techniques utilised in this study are detailed in section 5.7. Section 5.8 focuses on data analysis, management and presentation techniques, centring on the use of the NUD*IST software package. The limitations of case based research and the means of overcoming them for this study are presented in section 5.9. Finally, section 5.10 summarises the main points presented in this chapter and discusses how they relate to the remaining data analysis and conclusion chapters.

Table 5.1 Structure of Chapter 5

Structure of Chapter 5		
	Introduction - section 5.1	
	↓	
	Key Research Objective and Propositions - section 5.2	
	↓	
	Research Philosophy and Methodology - section 5.3	
	↓	
	Theory building or Theory Testing - section 5.4	
	↓	
	Research Methodology - Case Based Research - section 5.5	
	↓	
	The Research Design – Multiple Case Study Research - section 5.6	
	↓	
	Data Collection Techniques - section 5.7	
	↓	
	Data Analysis and Management - section 5.8	
	↓	
	Limitations of Case Study Research - section 5.9	
	↓	
	Conclusions - section 5.10	

5.2 Key Research Objective and Propositions

Well-formulated research objectives are of paramount importance as they guide and lead the research design. They develop from the research problem, the starting point of all research, and a study is then designed to achieve the stated objectives (Frigstad, 1995; Brannick, et al., 1997; Janesick, 1998).

Following on from the literature review, the aim of this research was to explore the gap in our knowledge in relation to marketing’s assimilation of IT, focusing on the transactional to relational continuum and the IT stages theory. It was argued in the literature review that there is a lack of knowledge and a need for further research in this area. This study

therefore aims to contribute to marketing's continuing development in this technological era by conducting research in this area. This research should expand and build our knowledge of both marketing and IT theory and practice along the transactional to relational trajectory, by adding an IT perspective to this framework and within the stage theory by adding a marketing dimension to this theory.

The study of the assimilation of IT by marketers is an important though broad and challenging research agenda. Therefore this study focused on the key tenets, which this research deemed as critical in this area (Parkhe, 1993). Within this perspective this research focuses on the two main issues developed in the literature review. This focus resulted in the following research objective.

IT assimilation in marketing practice occurs in stages and there is an IT dimension to the transactional to relational continuum.

This research objective explores the assimilation of IT within marketing practice. Its main focus is on the IT dimension to marketing practice and to build on our understanding of this issue. The inclusion of the transactional to relational continuum focuses this research on a broad range of marketing practices. The IT dimension is suggested to occur along the stages theory development as discussed in the literature.

This key research objective led to the development of four propositions.

Proposition One – There is a major relationship marketing perspective to contemporary marketing practices.

This proposition centres on the discussion in the literature of the transactional to relational marketing perspective to contemporary marketing practice. It explores whether contemporary marketing practice is now more orientated towards a relational rather than a transactional approach to marketing.

Proposition Two - There is a major IT component in contemporary marketing practice and the assimilation of IT in marketing is at the informational stage of development.

This proposition explores how and to what extent IT is assimilated into contemporary marketing practice. It utilises the stages theory framework (discussed in chapter 4), as an indicator of how IT assimilation is progressing within the marketing department.

Proposition Three - There is a dominant IT dimension to relationship marketing, which is evidenced through database and IT based interactions in marketing.

This proposition develops the IT dimension further by focusing on the assimilation of IT in marketing along the transactional to relational continuum. It focuses on how IT assimilation is evidenced in relationship marketing practice.

Proposition Four - There are barriers to IT assimilation in marketing.

This proposition explores the barriers to IT assimilation and how they impact on marketing's assimilation. This is a focus on why IT assimilation is not occurring and how marketers overcome the barriers and proceed with IT assimilation.

As Miles and Huberman (1994:42) comment, '*Knowing what you want to find out leads inexorably to the question of how you will get that information*'. The following sections develop the design of a research strategy to answer the above research objective and propositions.

5.3 Research Philosophy and Methodology

The following section discusses the research paradigm, which guided this research.

Research Philosophy: There are a range of research philosophies which have been developed in management and social science research (Denzin and Lincoln, 2000;

Lincoln and Guba, 2000; Easterby-Smith et al., 1994). The first issue is to choose the appropriate one for this study. This section discusses the four paradigms of positivism, realism, critical theory and constructivism. Realism is suggested as the most appropriate paradigm for this research approach and the reasons for this decision are explained.

A research paradigm is a comprehensive and interrelated framework that establishes the ontology, epistemology and methodologies that represent a set of values or worldviews underlying a research approach and guiding the researcher. The different approaches are different ways of observing, measuring and understanding social reality and each approach is associated with different traditions in social theory and diverse research techniques (Neuman, 1997; Lincoln and Guba, 2000). A discussion of the four paradigms of social research, supported by the philosophical assumptions relating to ontology, epistemology and methodology appear in table 5.2, which also provides a framework for the discussion in this section.

Table 5.2 Basic Beliefs (Metaphysics) of Alternative Inquiry Paradigms

Basic Beliefs (Metaphysics) of Alternative Inquiry Paradigms				
	Objective	Subjective	Interpretative	Phenomenology
Item	Positivism	Realism	Critical Theory	Constructivism
Ontology	Naïve realism –“real” reality but apprehendable	Critical realism: ‘Real’ reality but only imperfectly and probabilistically apprehendable because of human mental limitations and the complexity of the world	Historical realism – virtual reality shaped by social, political, cultural, economic, ethnic and gender values; crystallized over time	Relativism – multiple, local and specific “constructed” realities
Epistemology	Dualist/ Objectivist; findings true	Modified objectivist: Observer with some level of participation as dualism is not possible to maintain but some objectivity is sought. Findings are probably true	Transactional/ subjectivist; value mediated findings	Transactional/ Subjectivist/created findings
Methodology	Experimental manipulative; verification of hypotheses; chiefly quantitative methods	Cases studies and structured interviews, interpretation of research issues, mainly qualitative methods.	Dialogic/dialectical Researcher is a “transformative intellectual” who changes the social world within which participants live.	Hermeneutical/ Dialectical Researcher is a “passionate participant” within the world being investigated.
Note: Essentially ontology is ‘reality’, epistemology is the relationship between that reality and the researcher and methodology is the technique used by the researcher to discover that reality.				

Source: Based on Lincoln and Guba (2000) and Perry et al., (1998).

The three terms ontology, epistemology and methodology are the interconnected generic activities, which define the research process, and all research is guided by the collections of these terms, which constitutes the researcher's paradigm.

'Behind these terms stands the personal biography of the researcher ... the researcher approaches the world with a set of ideas, a framework (theory, ontology) that specifies a set of questions (epistemology) that he or she then examines in specific ways (methodology, analysis) (Denzin and Lincoln, 2000:18).

Ontology is the fundamental assumptions which are made about the elements of reality, of what exists (Parkhe, 1993). It refers to the form and nature of reality and what we can know about. As Lincoln and Guba (2000:176) comments *'whether or not the world has a 'real' existence outside of human experience of that world is an open question'*. Epistemology refers to the process of knowing, the nature of the relationship between the reality and the researcher. The study of knowledge and what we accept as valid knowledge (Tashakkori and Teddlie, 1998). *'It is the philosophical basis for claiming to know what we know, the substantive basis for our knowledge claims'* (Easton, 1998: 370). Methodology describes the research process in relation to the systematic way of inquiring into the world, the nature of ways to study phenomena (Easterby-Smith et al., 1991). The choice of paradigm influences the choice of methods.

The ontology, epistemology and methodologies of the four paradigms and the deductive/ inductive nature of the approach will now be addressed.

Positivism: Coined by the French philosopher Auguste Comte (1798-1857) positivism is the oldest and most widely used research approach of the four discussed here (Neuman, 1997). The key to the positivist's view is that the social world exists externally and that facts about this social world can be discovered through a set of specific methods (Easterby Smith, et al., 1994). Positivists prefer precise quantitative data and often use experiments, surveys and statistics that seek rigorous, exact meaning

and objective research, and that tests hypotheses by analysing numbers from measures (Neuman, 1997). Positivism sees social science

'as an organised method for combining deductive logic with precise empirical observations of individual behaviour, in order to discover and confirm a set of probabilistic causal laws that can be used to predict general patterns of human activity' (Neuman, 1997:63).

Positivists argue that social scientists should *'adopt the role of an independent and pre-existing reality; they should remain distant when conducting their research and not allow values and bias to distort their objective views'* (Hussey and Hussey, 1997:52). This positions the researcher as independent of what is being researched, and positivists contend that researcher's values and biases will not influence research outcomes. The researcher does not intervene in the phenomenon of interest and so the research is hopefully value free resulting in value free generalizations (Perry et al., 1998). What Guba and Lincoln (1994:110) refer to as *'the one way mirror'*.

Positivist research focuses on the causes or facts rather than the subjective meaning. This suggests that the world exhibits objective cause and effect relationships which can be discovered at least partially by structured observation.

Donnellan (1995:81) observes that,

'Positivist science is premised on axioms consisting of discrete elements; the division of discrete elements into causes and effects; independence between researcher and phenomenon; the possibility and desirability of developing statements of truth that are both generalisable across time and context, and predictive in nature; and the possibility and desirability of value-free objective knowledge discovery'

Positivists can also be described as having a deductive rather than inductive view of the world, which relates to the way different paradigm approach theory (see table 5.3).

Table 5.3 Deductive and Inductive Approaches to Research

Logic of theory	Deductive	Inductive
Direction of Theory Building	Begins from theory	Begins from reality
Verification	Takes place after theory building is completed	Data generation, analysis and theory verification take place concurrently
Concepts	Firmly defined before research begins	Begins with orienting, sensitising or flexible concepts
Generalisation	Inductive sample to the populations generalisation	Analytic or exemplar generalisations.

Source: Stantakos, (1998:15).

The deductive approach begins with theory and takes arguments from general principles to general conclusions so that they are capable of being deduced from premises. That is that hypotheses are deduced from already accepted principles before being empirically tested. Then through the use of objective measures statistical generalization can be achieved and the replicable findings will be true. The inductive approach representing the phenomenological paradigm *'attempts to infer general patterns of order or structure from particular sets of empirical data'* and makes empirical generalisations by observing particular instances (Parkhe, 1993:236). Inductive analyses, means that categories, themes and patterns come from the data rather than being imposed prior to data collection, the framework emerges from the data and judgement must be used to decide on relationships between and among variables (Janesick, 1998).

Positivism separates the researcher from the real world, while in general, with the other three paradigms, the researcher participates in the real world. This participation in managerial research allows the researcher to understand and describe, to revise meanings, structures and issues from managerial experiences and the perceived views of managers (Orlikowski and Baroudi, 1991). As this research focuses on the assimilation of IT by marketers, which is a social sciences study, involving the opinions of people and real-life experiences, positivism can be considered inappropriate (Perry et al., 1998).

In addition, as this is research of a contemporary nature deduction could be difficult because theory and constructs in this area are not yet well established (see section 5.4).

Critical Theory: Multiple critical theories exist in social research (Denzin and Lincoln, 2000) including Marxist, feminists and action research (Perry et al., 1998). Critical theory assumes apprehensive social realities. In general critical theory relates to the critique and transformation of social, political, cultural, economic, ethnic and gender values over an extended period of time. The research inquiry in this paradigm is often long-term consisting of ethnographic and historical studies of organizational processes, structures and changes. Assumptions in this paradigm are subjective and their knowledge is grounded in social and historical routines and is therefore not value free, but value dependent (Perry et al., 1998). *'Knowers are not portrayed as separate from some objective reality'* (Lincoln and Guba, 2000:117).

This research design was not considered appropriate as this study does not have a long term perspective intending to seek to liberate people from their historical and social structures (Perry et al., 1998; Lincoln and Guba, 2000).

Social Constructivism: Social constructivists have a critical relativist ontology and perceive truth as a construction related to a particular type of belief systems held in a particular context (Perry et al., 1998). They believe that the knowledge of the world is created socially (Easton, 1998). Therefore, they believe that there are multiple realities that are socially and experimentally based rather than objectively determined. They have a subjectivist epistemology (researcher and respondent co create understanding) (Perry et al., 1998; Denzin and Lincoln, 2000). The knowledge created from the research is created through and with the interaction between the researcher and the informant. They tend towards 'antifoundational' by a refusal to adopt any permanent, unvarying standards by which truth can be known (Lincoln and Guba, 2000). Findings are based on the intangible mental constructions of the researcher. The constructivist paradigm has

similarities to critical theory in that they search for the ideologies and values that lie behind the findings (Perry et al., 1998).

The methodological procedures are usually naturalistic and the findings are usually presented in terms of grounded theory approaches or pattern theories, using terms such as credibility, transferability, dependability and confirmability. The constructivism paradigm is rarely suitable for business research because of the exclusion of the real economic or technological dimensions of business (Perry et al., 1998; Hunt, 1991).

The three paradigms as discussed above were not considered appropriate for this research. The realism paradigm will be discussed in the next section.

Realism: The central principle of realism is its conception of reality. The realist approach *'has a high degree of plausibility to social scientists who theorize the world in terms of the impact of (objective) social structures upon (subjective) dispositions'* (Silverman, 2000:124). Realists believe that there is a 'real' world out there and are interested in the structures and mechanics of reality, even if these structures and mechanisms are imperfectly and probabilistically apprehensible (Guba and Lincoln, 2000; Easton, 1998; Perry et al., 1998; Denzin and Lincoln, 2000).

'This type of research is searching, albeit necessarily imperfectly, towards an understanding of the common reality of an economic system in which many people operate independently' (Perry et al., 1998:5).

Realists are searching for a *'window on to'* reality (Perry et al., 1998:5). They consider that there is one reality although there are several perceptions of this reality which need to be triangulated to get a better view. This is unlike critical theorists and constructivists who consider there are several realities (Perry et al., 1998).

There are three domain of relevance to realists (see table 5.4), reality that is real, actual and empirical.

Table 5.4 Ontological Assumptions of Realism

	Real Domain	Actual Domain	Empirical Domain
Mechanism	✓		
Events	✓	✓	
Experiences	✓	✓	✓

Source: Perry et al., (1998) and Eason (1998) from Bhaskar's Classification (1978)

The real domain consists of the processes that generate events and contains the independent- - from - the observer mechanism (Easton, 1998; Perry et al., 1998). The actual domain is where patterns occur, even when these events have not been detected or observed. The empirical domain is where patterns or events may be experienced by direct observation (Perry et al., 1998; Easton, 1998). The goal of realism is to discover observable and non-observable structures and mechanisms independently of the events they generate. Due to the human mental limitations and the complexity of the world, realists acknowledge the difference between the world and their particular perception of the world. Knowledge is gained through the researcher's perceptual processes and as such some of their perceptions may be true and others false (Hunt, 1992).

A critical aspect of realism research is that the research should discover what causal powers are in operation. This is not the causality between discrete events but a more general view of the mechanisms resulting in causality (Easton, 1998). Realists believe that there is contingency, that causal powers depend upon certain conditions to exist (Easton, 1998). This relates to the search for explanatory knowledge in realism research.

'Thus valid explanatory knowledge in this realist epistemology requires the researcher to identify the contingent causal powers that are operating in the particular situation under research and the ways in which they combine and interact in order to create the particular events observed in the empirical domain' (Easton, 1998:377).

Realism research can led to research findings that are needed and are of practical use (Silverman, 2000). Realism is suggested as a most suitable paradigm for business research especially marketing (Perry, 2000; Perry et al., 1998). The application of the realism paradigm for marketing management research has been argued and discussed suggesting it applicability but criticising many of it tenets (see Hunt, 1992; Peter, 1992; Kinkhan and Hirschheim, 1992).

This researcher, like all researchers, must decide on their individual perspective in relation to the assumptions discussed in this section. Figure 5.1 highlights this researcher's perspective on each issue.

Figure 5.1 The Research Paradigm of the Researcher

<ul style="list-style-type: none">• Ontology - what is real? What exists? Does one believe that the world is objective or subjective? <p>This researcher is of the view that the world is subjective</p> <p>Epistemology - the study of knowledge and what we accept as valid knowledge - the relationship between the researcher and the research.</p> <p>For this research the researcher interacts with that being researched, placing the researcher within the social setting.</p> <ul style="list-style-type: none">• Axiological – whether the research is value free or value laden. <p>For this research it is value laden.</p> <ul style="list-style-type: none">• Methodology – the nature of ways to study phenomena. The choice of paradigms influences choice of methods. <p>The paradigm underpinning the research is the realism paradigm</p>

As was suggested by Perry et al., (1998) this research focused on the discovery, identification, description and analysis of the structure and generative mechanism related to a complex and imperfectly apprehensible reality. The objective of this research is to develop knowledge based upon social experience to enable understanding of the deeper structure and meaning and then to use the knowledge to inform other settings. Within

this broad review of realism and mindful of the research objective (section 5.2) the realism mode of inquiry was considered the most appropriate paradigm for this research.

In conclusion this research is centred within the realism perspective and so the beliefs, values and interests of the researcher are present. Therefore the research will be value laden and the personal views of the researcher will be included though supported empirically where possible.

5.4 Theory Building and Theory Testing

The following section reviews the orientation of research in the marketing field, the IT field and then in the related fields of IT and marketing. It is suggested that though theory testing research is prevalent, there is a need for theory generation research in this area.

The role of theory in research is a critical issue. *'Theory is both a way of seeing and a way of not seeing since the use of a particular theory excludes other ways of viewing the same events'* (Walsham, 1993:70). Theory and research are closely interrelated. *'Theory can direct research by providing guidelines and basic assumptions or used to provide a method of establishing, formulating, strengthening and revising a theory'* (Stantakos, 1998:8).

Theory Development in Marketing: Theory building research utilising more qualitative techniques is suggested for research into areas that lack concrete theories (Hunt, 1994, Saren, 2000). As marketing, to some extent, and marketing's use of IT to a greater extent, lacks concrete theories, the qualitative option would appear more optimum.

The marketing discipline has created relatively little knowledge, which can be described as genuinely new (Palmer and Ponsonby, 2001; Saren, 2000). Theory in marketing is not as yet developed and well formulated and therefore it is premature to test theories in this field (Donnellan, 1995; Brown, 1995).

'The nature of 'good practice' in marketing management and the coordination of marketing activities with other business functions are currently nonquantifiable phenomena; they are so complex it is impossible at this early stage of theory development to know what to count ... Premature application of theory-testing 'normal science' methods in situations where context-preserving theory-building methods might have been more appropriate has been a source of concern across the social sciences' (Bonoma, 1985:202).

Donnellan, (1995: 82) concurs that *'within the constraints of traditional research methods, one of the biggest problems has been the tendency to theories well in advance of the facts, thus allowing for the possibility that the facts that emerge from research studies are distorted to fit a given theory'*.

Parkhe, (1993: 232) suggests that premature theory testing amounts to *'being precise about vagueness'*. Management theory is at an early stage of development compared to other sciences and needs *'messy'* research, as it has many *'ill-defined core concepts and unknown relationships'* (Parkhe, 1993: 240). We need to *'put the conceptual horse before the quantitative methodological cart'* (Parkhe, 1993: 243). Following Bonama's (1985) hierarchy of study type, description, classification and comparison studies would appear to be needed, before measurement and association studies can commence, as the subject of enquiry of this thesis is a relatively recent development. Similar Parkhe, (1993) suggests that for new areas of interest exploratory, then descriptive and finally explanatory studies are needed. Exploratory studies enable the study of phenomenon and develop suggestive ideas. Descriptive studies are where descriptions of patterns from the exploratory stage are developed and explanatory studies attempt to explain these generalisations through theory generation, theory testing and theory reformulation.

The quantitative paradigm dominates management research (Parkhe, 1993) and research in marketing has predominantly had a quantitative focus. *'Market researchers have spent many years measuring, quantifying and testing variables'* (Donnellan, 1995:81). There is

much discussion of this dominant focus with calls for a rethinking of this dominance (Hunt, 1994, Brownlie and Saren, 1997; Donnellan, 1995). Hunt (1994) contends that there is a lack of new knowledge in marketing and the focus on the dominant paradigm holds much responsibility for this.

Quantitative research provides the marketing researcher with the comfort of statistics, while there has been *'little systematic in-depth study of the processes of marketing management'* (Brownlie and Saren, 1995:1083). Gummesson, (1991:65) confirms that

'there is a lack of empirical inductive research geared specifically towards marketing and sales organisations' and is of the opinion that *'most academic researchers prefer the intellectual play with decision models and statistical techniques and duck the tricky issues of turning analysis into action'*.

From a relationship marketing perspective, theory is still in its infancy (Gummesson, 1996) *'The issue is to let reality flow towards us in a truly inductive way, allowing ourselves to generate new information, new concepts and new categories'* (Gummesson, 1996: 15). There are also major difficulties with relationship marketing, which makes positivist research and measurement difficult (Easton, 1995). *'Networks of organisation with their multiple interdependencies are even less likely to provide a happy hunting ground for statisticians bent on predictive modelling'* (Easton, 1995:S84). Qualitative research, for aspects of relationship marketing studies, is supported by Wensley (1995) who calls for more prescriptive rather than descriptive research into marketing networks. Easton (1995) criticises this focus as too problematic and calls for an understanding of how marketing systems work and why they make decisions, before prescribing.

Operationalisation of Marketing Practices: There has been a call for more in-depth contextual and qualitative research into marketing practice, into what marketers actually do, the implementation of marketing (Bonama, 1985; Webster, 1992; Brownlie et al., 1994; Brownlie and Saren, 1997; Brownlie et al., 1999; Hunt, 1994; Saren, 1999; Gummesson, 1991). What is needed is research focused on real and relevant problems

and *'what is going on out there'* (Brownlie and Saren, 1997; Laurent and Pras, 1999) as marketing research to date has had little impact on the practice of marketing.

'By solving immediate operating problems, the latter would permit marketing academics to concentrate on the more fundamental problems underlying them. This would also liberate marketing practitioners from 'fire fighting' activities in order to concentrate on anticipating and avoiding marketing problems in an increasingly complex business world' (Saren, 2000: 22).

In reality, there is a gulf between academic theory and marketing practice, which needs to be researched (Hooley, and Hussey, 1994). What Brownlie and Saren (1995:1077) refer to as *'the high-mindedness of marketing theory and the low deeds of marketing practice'*.

What we need is explanation not definition (Hooley and Hussey, 1994). As Saren and Brownlie (1995:1085) state *'there is a wealth of material telling us what to do and how it should be done, but rarely how it is done'*. Baker (2000:305) concurs and notes that the research in marketing should confirm to us that the theory works in practice.

'Unlike many of the core disciplines, such as economics, psychology and sociology, on which it draws, marketing cannot afford to become enmeshed in a scientific rigour that requires one to control or assume away the complexity which is the real world of practice. As with architecture, engineering and medicine the acid test should be 'does it work?'

We need to know more about how marketing is practiced before we can *'presume to prescribe'* (Easton, 1995:S85).

Marketing, researchers must be cognisant of the environment in which the changes are taking place (Brownlie et al., 1994; Bonoma, 1985). As Webster (1992:14) notes *'marketers need to get inside companies and examine the multiples new forms marketing is taking.'* Brownlie et al., (1999) call for more practice based research to allow the context and the participants to discourse with the researcher. There is a need for the social aspects to appear.

'Most studies of marketing management focus on the supposed technical or decision-making content of the job, neglecting the broader social processes and practices that are constitutive of organizing activity' (Brownlie and Saren, 1995:1080).

It must be noted that there is criticism of the managerial perspective of much of marketing research and calls for academic research as knowledge for knowledge sake, rather than to aid marketing managers (Hirschman, 1987).

Theory Development in IT Research: Following a review of information systems research in the US, Orlikowski and Baroudi (1991) observed that the dominant research methodology was quantitative with only 3% of studies in their survey utilising case based interpretative research methodologies. There are difficulties with quantitative research in IT

'IT value is muddled by confusion over what question is being asked and what the appropriate null hypothesis should be. In some cases, seemingly contradictory results are not contradictory at all because different questions are being addressed' (Hitt and Brynjolfsson, 1996:121).

IT is at the formative stage of theory development in both theory construction and practice. Within the field of IT research and due to the developmental state of IT, it is understandable that there have been calls for theory building research (Chan and Huff, 1994; Holtham, 1994; Galliers and Baets, 1998). Venkatraman and Henderson, (1994) in reference to the fields of strategic management and IT, refer to this as a new area of study, at the early stages of theory construction and argue that with a new stream of research there are more questions than answers. Galliers and Baets, (1998) suggest that we need theory development and a deep understanding of the core concepts that need to be studied in future research. They comment that much of the research to date, in the area of IT and transformation has been prescriptive in tone, with a focus on key success factors and reasons for past failures (Galliers and Baets, 1998). They contend that what is

needed is a focus on what happens in practice, what can be done and how companies use and benefit from IT (Galliers, 1995; Galliers and Baets, 1998). Benbasat and Zmud (1999) contend that a lot of research is following rather than leading theory and that there is a need for more research which has relevance to practice. Davies and Mitchell (1994) suggest the need for situational context of IT study and the in-depth examination of IT issues. Walsham, (1995) calls for more interpretive research, since the human interaction with IT are of central importance to the practice of IT.

Theory Development in Marketing and IT: There has been a lack of research into marketing and IT collectively and as a research agenda research of this nature is of critical importance (Webster 1992; Glazer, 1991).

'Surprisingly, however, despite the wealth of evidence that 'information' and information technology are rapidly transforming almost all phases of economic and business activity, relatively little formal attention has been paid to the effects of the transformation on marketing theory and practice' (Glazer, 1991:2).

Despite the importance of this research focus, there are major difficulties in researching in these two areas. Holtham, (1994: 19) observes that,

'the state of development of theory and of practice of IT and marketing does not yet permit - if it ever will - the application of close ended finite approaches. However much the technology suggests that universally valid solutions are emerging, this is an over-optimistic suggestion'.

Research into the impact of IT within marketing practice is complex due to the inherent difficulties in defying constructs, measurement difficulties, and the unavailability of data. Research is also constrained due to the rapid pace of IT developments which make it hard to trace the causal link, to explain and to theorise (Glazer, 1991). Despite the difficulties there are calls for research that will contribute to the current and swift developments occurring in marketing practice due to the assimilation of IT. Researchers need to

embrace the unusual and really contribute to developments in the business landscape, despite the fact that these research studies are challenging.

'We believe that the current tumult in marketing's external environment offers an exciting opportunity for academics to offer new insights, explanatory frameworks and paradigms. In the pursuit of these objectives, we urge our colleagues to embrace an ambitious agenda; not only to understand what has already worked in practice but also to point practitioners in new directions. Marketing executives are anxious for new insights that can provide clarity as they struggle with their constantly changing business challenges. We, the marketing academic community, play a leading role in shaping the nature of the marketing function for years to come, as it undergoes fundamental changes' (Sheth and Sisodia, 1999:86).

Coviello et al., (2001c) following their quantitative study in this area call for case based studies focusing on the IT dimension to relationship marketing to ascertain why companies use IT in marketing, the role of IT and the impact of IT citing this field as *'an important research area (which) involves identifying the inhibitors and facilitators of eMarketing (IT) adoption and penetration'* (Coviello et al., 2001c:26).

In summation the field of study is in need of theory building research of a qualitative nature. The following section discusses the choice of the case based research as the most appropriate method of answering the research question within the realism paradigm.

5.5 Research Methodology - Case Based Research

The following section broadly discusses both qualitative and quantitative methods and suggests that qualitative research within the realism paradigm of the researcher is more suited.

There are separate and detailed literatures on the many methods and approaches that fall under the category of qualitative research such as case study, politics and ethics,

participatory inquiry, interviewing, participant observations, visual methods and interpretive analysis (Denzin and Lincoln, 2000). Ven de Ven and Huber (1990) comments that different methods can be used for different aspects of research questions and Silverman (2000) noted that most research methods can be used in either qualitative or quantitative studies.

Proponents of quantitative research abound as discussed in section 5.4. Quantitative research dictates that the variables and outcomes are specified in advance, measured using operational quantities and where possible subjected to experimental manipulation (Patton, 1990). Quantitative research according to Creswell (1994:2) is

'an inquiry into a social or human problem, based on testing a theory composed of variables, measured with numbers, and analysed with statistical procedures, in order to determine whether the predictive generalizations of the theory hold true'.

There are advantages and disadvantages to quantitative research. Clearly quantitative data offers the opportunity of 'scientific' data and statistical inference, but it is only suitable for unambiguous and tightly defined variables with high reliability (Marshall and Rossman, 1999). Wensley (1995) contends that there are major difficulties in survey research and operationalising constructs, developing appropriate models and data particularly for a complex, interactive and dynamic phenomena as marketing.

As Easterby-Smith et al., (1991:32) note

'The main strengths are that; they can provide wide coverage of the range of situations; they can be fast and economical; and particularly when statistics are aggregated from large samples, they may be of considerable relevance to policy decisions. On the debit side, these methods tend to be rather inflexible and artificial; they are not very effective in understanding processes or the significance that people attach to actions; they are not very helpful in generating theories and because they focus on what is, or what

has been recently, they make it hard for the policy-maker to infer what changes and actions should take place in the future'

Qualitative design is holistic, looking at relationships within a system or culture, referring to the personal, face-to-face, and immediate (Janesick, 1998:42). Qualitative research has been called 'messy' research (Mintzberg, 1979). Qualitative research

'refers to a number of methodological approaches, based on diverse theoretical principles, (phenomenology, hermeneutics and social interactions) employing methods of data collection and analysis that are non-quantitative, and aiming towards exploration of social relations, and describes reality as experienced by the respondents' (Saratakos, 1998: 6).

Qualitative research allows for the exploration of association of phenomena and studies the how and why aspects of the situation which is not available to quantitative researchers (Miles and Huberman, 1994). It can be very useful in new areas of research interest which need the how and why answers (Parkhe, 1993; Mintzberg, 1979).

As with quantitative research there are advantages and disadvantages to this method.

'The strength is their ability to look at change processes over time, to understand people's meanings, to adjust to new issues and ideas as they emerge and to contribute to the evolution of new theories. They also provide a way of gathering data, which is seen as natural rather than artificial. There are, of course, weaknesses. Data collection can take up a great deal of time and resources, and the analysis and interpretation of data may be very difficult. Qualitative studies often feel very untidy because it is hard to control their pace, progress and end-points. There is also the problem that many people, especially policy-makers, may give low credibility to studies based on the phenomenological approach' (Easterby-Smith et al., 1991:32).

There are major challenges both in the collection of data and in the analysis and presentation of data which does not occur with quantitative research. As Walsham (1993:77) notes

'interpretative researchers are attempting the difficult task of accessing other people's interpretation, filtering them through their own conceptual apparatus, and feeding a version of events back to others their interpretations of other people's interpretation'.

Conclusions from qualitative research are impressionistic rather than definite, developing explanations rather than predictions (Donnellan, 1995).

The scientific credibility of qualitative research has been questioned (Silverman, 2000). The quantitative school in attempting to describe and explain, predict and understand marketing activities and processes is a focus on the scientific (Hunt, 1976), placing marketing within the physical sciences boundary (Donnellan, 1995). Qualitative studies on the other hand, require the integration of the researcher with the research. This school of research places marketing and marketing research in the social sciences (Donnellan, 1995). To many qualitative research has less academic appeal and is viewed as 'unscientific', while quantitative research is viewed as the one true research and relates to the question of the scientific credentials of marketing (Fitzpatrick, 1998; Donnellan, 1995). Qualitative research can violate scientific research criteria by not including the actual data and using analysis and inferences drawn from the data (Van de Ven and Huber, 1991). Qualitative studies can also suffer through comparisons with quantitative methods of research and the lack of established, commonly accepted procedures (Miles and Huberman, 1994; Denzin and Lincoln, 1998). Though Parkhe, (1993:259) argues that,

'the use of multiple data sources, coupled with data analytic strategies of pattern matching, explanation building and time series analysis in multiple cases using replication logic can be as scientifically compelling as surveys using sophisticated multivariate techniques'.

This debate will range on though Hunt (1994) referring to what he calls the '*ritual bashing*' of quantitative methods by qualitative researchers suggested it should cease as '*anti-reason, anti-evidence, anti-civility and anti-science*' (Hunt, 1994:23).

It is in the use of the technique that the difference is obvious. There are situations where all the research techniques could be used (exploratory) and also situations where two opposing techniques could be attractive, ultimately the various strategies are not mutually exclusive (Yin, 1994). The emphasis should be on the '*substantive focus and intent*' rather than the method (Janesick, 1998:44). '*Simply observing and interviewing does not ensure that the research is qualitative, for the qualitative researcher must also interpret the beliefs and behaviours of participants*' (Janesick, 1998:43).

Quantitative and qualitative research address different research questions and for the purpose of this study the research centres on how and why issues and so qualitative research is optimal, (see table 5.5).

5.5.1 Justification of Case Based Research

From the range of qualitative research techniques the case study was considered the most suitable. This section justifies and reviews case based research and discusses the techniques used to create an exemplary case based research design for use in this study.

The most traditional method of qualitative research is the single case study (Huberman and Miles, 1998). Though there is support for case based research there have been difficulties with the recognition of it as a formal and comprehensive research strategy (Bonama, 1985, Leavy, 1994; Yin, 1994). It is argued that this is due to case study research which is merely descriptive rather than cases using rigorous analytical method (Perry et al., 1998). It is further argued that case based research within the realism paradigm has properties which match the characteristics of case based research and can provide a justification for the findings (Easton, 1998).

Various definitions of case studies exist. Yin (1994:3) widely cited definition suggests that

'A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident ... The case study allows the investigation to retain the holistic and meaningful characteristics of real-life events.'

Another perspective suggests that the researcher and the case are united. 'A case can be viewed as a process of inquiry about the case and the product of that inquiry' (Stake, 2000:436). Stake (1998:86) views case studies as the choice of object to be studied rather than a methodological choice.

'As a form of research, case study is defined by interest in individual cases, not by methods of inquiry used ... the case is specific. Even more the case is a functioning specific. In the words of Louis Smith (1978) the case is a 'bounded system' ... The parts do not have to be working well, the purposes may be irrational, but it is a system. Its behaviour is patterned. Consistency and sequentialness are prominent. It is common to recognise that certain features are within the system, within the boundaries of the case and other features outside. Some are significant as context'.

Yin, (1994) is critical of this functioning specific aspect, citing that this is too broad and would entail every study as a case study. His view is that a case study is not a data collection tactic or a design feature of the research, but is a comprehensive research strategy.

A case study can be used to explain, describe, illustrate, explore or for meta-evaluation. How and why questions (explanatory) are answered by case studies (see table 5.5), where there is a lack of control over behavioural events and the focus is on contemporary, reality based events (Yin (1994)).

Table 5.5 Relevant Situations for Survey or Case Based Strategies

Strategy	Form of research question	Requires control over behavioural events	Focuses on contemporary events
Survey	Who, what, where, how many and how much	No	Yes
Case Study	How and why	No	Yes

Adapted from Yin (1994)

Easton (1998) discusses the case based research within a realism paradigm and confirms that the case is looking for causation, the why answers.

'Case studies which would wish to lay claim to a realist epistemology must be carried out in a different way; to be inquisitive, to look for the roots of things, to disentangle complexities and to conceptualise and reconceptualise, test and retest to be both rigorous and creative and above all to seek for the underlying reality through the thick veil which hides it.'
(Easton, 1998:380).

In summary case study design was chosen as the best technique for this study for the following reasons.

Firstly, the case study will allow the how and why questions to be studied and these are research questions, which do not lend themselves readily to quantification methods. This research will aim to hear and see what is done in practice, analysis how the current assimilation of IT in marketing is processing and the development of relationship marketing, by interviewing a number of different people. This leads to an in-depth study of a small number of cases rather than a global view of organisations.

Secondly, the research is directed at theory building in the sense that it tries to establish how and why marketing is proceeding through the stages of IT assimilation and arrive at a tentative model of this process.

The third reason that case method is used is that only a close relationship between the researchers and the respondent will elicit the confidential, detailed and actual usage information in relation to their IT systems and processes that is required for this study. There is a need to really understand the phenomenon.

Fourthly, there is a need for multiple perspectives and an analysis at multiple levels of the organisation to study such a complex phenomenon. This use of multiple data sources for data-collection aids in triangulation and offers more comprehensive insight into the subject matter than the use of a single source of data (Miles and Huberman, 1994).

Finally in addition to theory building the research focus is on providing practitioners with a detailed insight into the assimilation of IT in contemporary marketing practice along a transactional to relational perspective. In order to study a 'real life' situation a flexible methods of research is needed and the case study offers such flexibility (Yin, 1994).

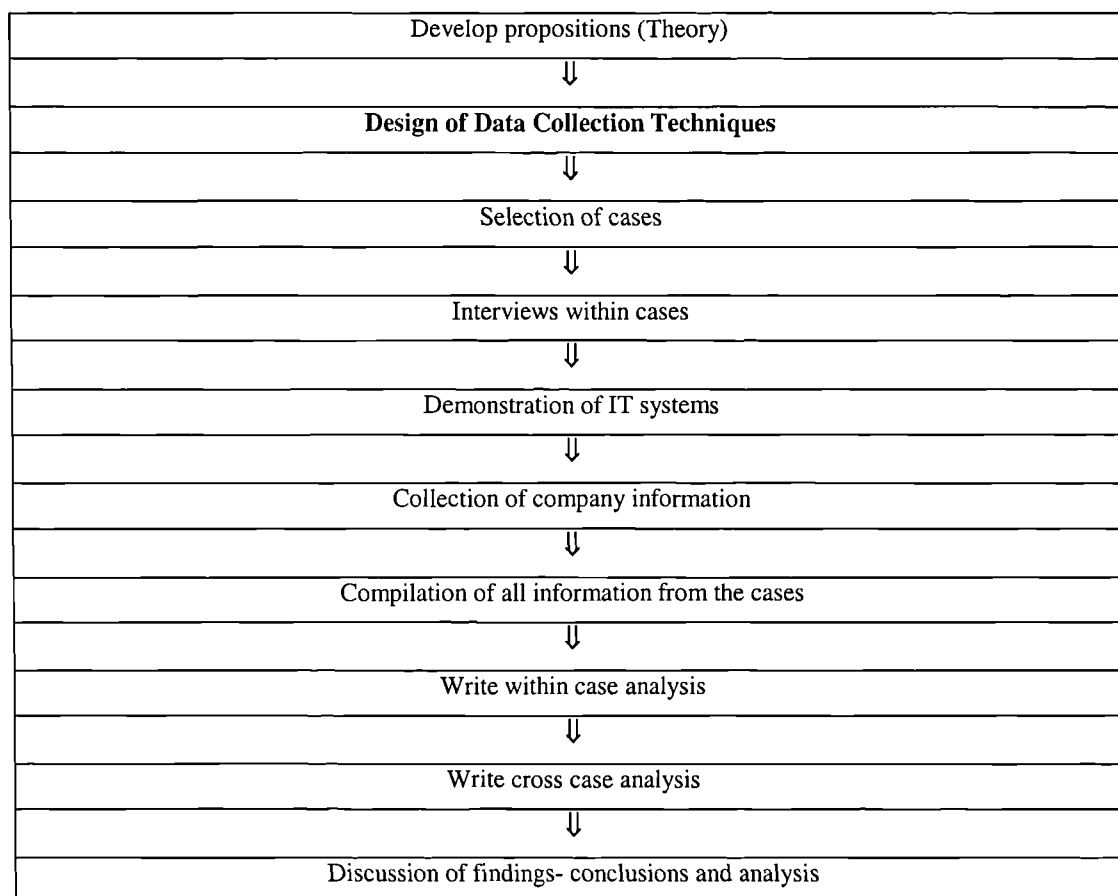
Bonoma, (1985) suggests that choosing the research techniques most suitable for a study centres on the research objectives, the state of theory development, the complex nature of the subject area and the need to study the area in a natural context. Yin (1994) adds that the extent of control over events and the contemporary or historical nature of the research will also determine the choice of research method.

In conclusion this section justified case based research centring on the need for theory development (see section 5.4), the researcher's paradigm (section 5.3) the nature of the research question (section 5.2) and the need to understand a dynamic and contemporary situation over which the researcher has little or no control.

5.6 The Research Design – Multiple Case Study Research

The following section discusses the research design used in this study (see table 5.6).

Table 5.6 Research Design- Data Collection and Analysis



Three main research design issues are discussed in this section.

1. Unit of analysis (including main informant discussion);
2. Single or multiple case study;
3. Case selection – theoretical and literal replication.

5.6.1 Unit of Analysis

The unit of analysis is *'the kind of case to which the variables or phenomena under study and the research problem refer to, and about which data is collected and analysed'* (Hussey and Hussey, 1997:123). A unit of analysis could be an individual, an entity or an event and *'is related to the fundamental problem of defining what the 'case' is'* (Yin, 1994:21). For this research the unit of analysis is the marketing department and how

assimilation of IT usage by the marketing department is progressing, with the confines of its organisational situation. This study is similar to the Thomas et al., (1994) case based research into the methods use to the relate technology to existing activities and the managerial issues raised by the process of assimilation of IT, though their unit of analysis was the technology.

Main Informants: The informants, within the context of this study, were a small group within the marketing department (marketing manager and marketing executive) and within the IT department (the IT manager), with the case lasting for a maximum of one week. Cross functional informants in case based research is normal, but this particular focus is lacking in empirical studies. The choice of informants is similar to those chosen by Fletcher and Wright (1995) and Desai et al., (1998) in their quantitative study of barriers to IT in marketing and barriers to database use respectively. This perspective allowed for a total focus on the marketing department as the core focus of this thesis. It also permitted the in-depth study of issues surrounding marketing rather than including a range of other departments. Though further research is called for in this area (see section 8.8) which would include other departments. If other informants had been choose it would be expected that the stages theory exists within other departments (King and Thompson, 1997) but the major area of interest is the marketing specific difficulties both in IT assimilation and intrafunctional difficulties as discussed in section 4.4. and this choice of informants allows to these issues to be researched.

Multiple informants provide a more extensive and dependable view as relying on a single respondent for anything other than factual objective information is probably unreliable (Bowman and Ambrosini, 1997). Walsham (1993) in his call for more research into IS and change emphasised the need for multiple perspectives to gain a fuller picture of the change process. Individuals view events differently and an analysis of multiple perspectives would give a fuller picture. Multiple perspectives do not overcome the informant's perceptual and cognitive limitations or that key informants may not be aware of major events or even have the ability of understand and answer the research questions.

In the majority of the cases the main informant (marketing director or manager) selected the second marketing person to be interviewed and also arranged the meeting with the IT personnel. This was an interesting aspect of the study, as in most cases the marketing director was very anxious that the IT director be interviewed. They appeared to believe that this interview process could aid in the difficulties that the IT and marketing departments were experiencing.

5.6.2 Single or Multiple Case Studies

There are three types of case studies intrinsic, instrumental, and collective (Stake, 1998). An intrinsic case is where one particular case is chosen and the case itself is of interest. Instrumental cases exist where the case is a secondary issue, facilitating our understanding of something else. Collective cases are similar to instrumental cases, but extended to several cases. There is a zone of combined purpose between intrinsic and instrumental cases and cases are analysed for their specific and generic properties (Stake, 1998).

Eisenhardt (1989) suggests the use of multiple case studies. *'Ultimately we may be more interested in a phenomenon or a population of cases than an individual case. We cannot understand this case without knowing other cases'* (Stake, 1998:88). Pettigrew (1987: 481) also favours multiple cases studies and notes that *'one swallow doesn't make a summer and certainly one even comprehensive case study; cannot on its own prove a point'*. Citing the ICL case study, he contends that using the collective case studies enables corroboration of various findings by using comparative analysis across different strategic change incidents. If researchers are relying on one case study there is a view that theory generation, without comparative analysis is difficult and would require depth in the single case study.

Dyer and Wilkins (1991) are critical of this multiple approach citing the classic single case as providing the most value rich context specific findings and theory development.

Easton (1998) is also critical of this contention and notes that care is needed in the exchange of depth for breadth.

Yin (1994) contends that single or multiple case based research is simply a research design within the same case based research, though suggesting that multiple case based research is considered more robust. Multiple case studies are the less risky approach, especially for the novice researcher (Leavy, 1994). Parkhe (1993) suggests single and then multiple cases to get repeated observations of the propositions so that the one case study is followed by systematic replication to complement the findings. Parkhe (1993:229) suggests the use of multiple case studies to address theory generation studies that *'iteratively link data to theory in an inductive process moving toward the generation of an empirically valid theory that is subject to testing and refinement through replication logic'*. Miles and Huberman (1994) state that multiple cases add confidence to the how, where and why questions, and aids the replication strategy. It allows for one case to be matched to another as a match to the theory generalisability and shows how effects vary under different conditions.

Using multiple case studies has the inherent danger of aggregating or averaging results across cases and that results will be generalised and not apply to any single case (Denzin and Lincoln, 1998, Huberman and Miles, 1998).

A single case study would provide only one view of the impact on marketing (though it would be an in-depth view) but due to the context specific nature of the phenomena, multiple views should provide a broader range of data, and a better reflection of the research interest and the propositions. A multiple embedded case study design will be utilised to build up evidence for the propositions. Therefore this research design follows the Eisenhardt (1989) framework with the cases described from a comparative perspective and evaluated in the light of the theory discussed in the literature review (see table 5.7).

Table 5.7 Replication Approach To Multiple Case Studies

<u>Define and Design</u>		<u>Prepare, Collect and Analyse</u>		<u>Analyse and Conclude</u>
		Conduct 1st case study	Write individual case report	Draw cross-case conclusions
		↓	↓	↓
	Select cases			Modify theory
	↓			↓
Develop theory		Conduct 2nd case study	Write individual case report	Develop policy implications
	Design data collection protocol	↓	↓	↓
		Conduct remaining case studies	Write individual case reports	Write cross case report

Source: Yin, (1994:49)

The number and method of selecting cases for this multiple case based design is discussed in the following section.

5.6.3 Case Selection Decisions

The selection of each case should serve a purpose within the overall research (Yin, 1994) and cases should be selected from what Perry and Coote (1994:13) refer to as '*an ordinal role of possibilities*'. This section discusses case selection decisions including selection choice, the initial survey, number of cases, cross sectoral design, company size and the pilot cases.

Sampling or Selection Choices: There are a variety of sampling or selection choices and Miles and Huberman (1994) provide a typology of sampling strategies for qualitative inquiry. This study utilised maximum variety sampling, where the cases selected are heterogeneous and have similarities in their experiences and also extreme or deviant case sampling. Data is enriched by the purposeful selection of confirming and disconfirming (negative) cases (Morse, 1998). Pettigrew (1988) suggests that due to the restricted number of cases that one can research, that extreme situations and polar types are a

suitable choice. Perry and Coote (1994) suggest that '*maximum variation*' is the most appropriate which would therefore include extreme cases, especially where the '*process of concern is translucently observable*'. Janesick (1998) concurred that a strategy of diverse sampling can enhance the findings and improve any generalisations from the findings. The other types of purposive sampling such as typical case, critical case or homogeneous are more appropriate for evaluating one particular programme or for research that is more inductive, or where the central theme is not known.

The cases were also selected using the principle of theoretical sampling (Eisenhardt, 1989) rather than random sampling. A replication logic was used for choosing the cases both for literal replication, where the case will predict similar results and for theoretical replication, which produces contrasting results, but for predictable reasons (Yin, 1994; Chad and Coote, 1994). Yin (1989) suggests that multiple cases are multiple experiments and not multiple respondents in a survey and therefore replication is the focus, that each case should either predict similar results or produce contrary results. For multiple case studies replication logic is essential (Yin, 1994).

Utilising theoretical replication for case selection aids in the data analysis stage, as the cases can be analysed around the core constructs identified in the literature review (Perry and Coote, 1994). This is the preferred strategy for much research (Yin, 1994) and so the purpose of each case is to confirm or disconfirm the proposition derived from the literature.

For this study replication logic was central. In order to increase variation across the case sites, one set of sites were recognised as exemplary assimilators of IT (Cases F, G, H, I and J) and the other group were expected to be laggards (Cases A, B, C, D and E), in their assimilation of IT. Literal replication of the same results were provided by the two groups of cases and for theoretical replication, contrary results were predictable from the between group differences. Utilising these options hastens theory development, because important differences can be noted (Parkhe, 1993).

The Initial Survey: An initial survey contributed to the research in a number of ways and was used as a first stage of research to provide a broad overview and to guide the study. The findings from this study though exploratory were expanded and developed in the case based research. The major contribution of the survey to the research was to aid in case selection.

The choice of cases must relate to the needs of the study. A major feature of case selection should be that the case is information rich (Morse, 1998; Perry and Coote, 1994). The final choice of cases relied on the existence of the situation of interest and the availability of informants to be researched.

Case selection for this study was supported by previous quantitative research carried out by the researcher prior this study (Brady et al., 1999) (see appendix A) into the assimilation of IT by marketing practitioners. Cases were selected from the analysis of the level of assimilation of IT in the marketing department as this was considered the critical focal point for the study selection. Companies in this study were grouped using mean and t tests (see table 2 – appendix A) into companies who had transformational impact from IT (group 2) and companies which had automational impact from IT in marketing (group 1). The cases were chosen from these two groups. Fifty companies from each selection were analysed for their suitability for inclusion in the study. This method of selection of the case studies was very helpful as this provided the research with a current and relevant selection of cases related to the research propositions for this study.

Prior to final selection case studies informants were researched in telephone interviews to ascertain their suitability for case based research, that they had the experience of interest, and to explore whether they had the knowledge to complete the case requirements (Morse, 1998).

Access issues, as in the willingness of companies to participate, did influence the case selection. The financial services sector were not included as they are the most researched and confidentiality aware sector in Ireland, which would have resulted in access difficulties, they were also low respondents to the initial survey. As the Marketing Institute of Ireland supported this initial research, all companies were members of the Institute. Access was facilitated by the institute, who supplied a cover letter (see appendix D), which encouraged the companies to support the research. Each letter was personalised by the chairman of the Institute. A letter on the Dublin Institute of Technology headed paper (appendix D) was also included and as most respondents had attended college there, this encouraged support for the research.

Anonymity is often considered necessary in case studies. Though *'anonymity is not to be considered a desirable outcome ... not only does it eliminate some important background information about the case but it also makes the mechanics of composing the case difficult'* (Yin, 1994: 144). Access to the companies and the freedom with which they participated in the research was central to their understanding that their identities would remain confidential.

Number of Cases: Augmenting the discussion of the choice of multiple case study design (see section 5.6.2) this section reviews the choice of the number of cases. This choice can be viewed as the researcher's decision or designed for theoretical saturation (Perry and Coote, 1994). Eisenhardt (1989) observes that the number of cases does not have to be chosen prior to the study and that the objective is saturation, which will dictate when no new cases need to be added.

Yin (1994) suggests that the higher the number of cases the greater the certainty and that choice should rest on the level of replication required. For literal replication it depends on the level of replication needed related to the differences in rival theories. This is similar to theoretical replications, which depends on the complexity of the external validity. If

there is less of an external influence on the phenomenon than a lesser number of cases could be chosen.

When using a multiple case study strategy various authors offer suggestions on the number of cases. A number between 4 and 10 has been suggested (Eisenhardt, 1989) with an upper limit of 12 (Hedges, 1985). Eisenhardt (1989) suggests that 10 cases may be difficult to manage, while Miles and Huberman (1994) suggest that 15 could challenge the researcher's ability to understand the data. Perry and Cootes (1994) contend that the discussion rests with 2-4 as the minimum and 10, 12 or 15 as the upper limits. They suggest that for cross analysis 4 is too few and over 12 too many and that 45 interviews suffice at PhD level.

Fourteen cases were selected for the study due to the desire for a cross sectional study which would include both transactional and relational focused companies and companies at a various stages of IT assimilation (see table 5.8). The selection decision and particularly the data analysis decision was based on saturation and monitored throughout the data collection stage. Therefore data was gathered from 48 in-depth interviews, all of which were transcribed and broadly analysed. Seven of the case studies had a dominant automational focus (group 1) to their IT assimilation and seven had an transformational focus (group 2) usage of IT. This allowed the researcher to research cases where there were different levels of assimilation in order to check that the presumed differences did exist. Due to the considerable bulk of material, 30 interviews in ten organisations were selected for detailed analysis. A review of the cases not included showed that no modifications to the findings would be needed and the cases omitted had major similarities to the cases included but were not as information rich.

Cross Sectoral Design: Utilising the companies from the initial survey, the cases are divided into four industry sectors. There has been a call for cross sectoral research related to the transactional to relational marketing perspective (Brodie et al., 1997; Coviello et al., 1997, 2001b and c; Lindgreen et al., 2000), which would lead to

research of an *'integrative and holistic rather than paradigm or sector specific'* study (Coviello et al., 2001a: 3).

A cross section design was preferred to a single sector or limited sector sample as this would allow for more widespread experience of IT assimilation and would avoid findings that are sector dependent. This design would also provide some indication of differences between sectors. Industry specific research can be viewed as superior as it offers partial control of external effects that might affect individual sectors and the results can be immediately directed to one particular sector (Bennett, 1999), providing more meaningful and reliable findings (Talvinen and Saarinen, 1995).

Cases were therefore selected to include manufactures of fast moving consumer goods, consumer services, business to business services and manufacturing companies. Table 5.8 reviews the choice of case (see table 6.1 for an expanded discussion of the cases).

Table 5.8 Case Selection – Cross Sectional Design

Sectors	Transformational Usage of IT	Automational Usage of IT
Consumer goods manufacturing	Case *D and *E	Cases A, B and C
Manufacturing business to business	Case J	Case L**
Services	Case G and N***	Case F* and K**
Professional services (b to b)	Case I and H	Case M***

Please see separate sheet for the identity of the cases.

* Reclassified during the study

** Not included in detailed analysis

*** Used for pilot studies.

Company Size: Predominantly large companies were chosen because they have marketing departments and also because they are assumed to be at the leading edge of IT assimilation and would have encountered many of the issues of interest to this study. This is similar to other studies, which also suggested that large companies usually have more

experience of these issues (King and Teo, 1997). Small companies have been very slow to implement IT changes in the Irish marketplace (Amarach, 1999).

Due to the fact that there few indigenous large Irish owned companies, government services were used as examples of large Irish companies, with the obvious proviso that these companies have unique cultural situations and would equate with large traditional companies in need of modernisation. Due to the dominance of multinational companies based in Ireland (Amarach, 1999) a range of multinationals were chosen. The selection also included previously Irish owned companies, which had been taken over by multinationals (see table 6.1).

Irish Study: The case study research was based in Ireland due to the researchers ability to access a range of information rich cases. This dimension of the research methodology could limit the applicability of the findings. To overcome this and for the reason stated above the study included a majority of multinational companies. It is the opinion of the researcher that this study is relevant to the wider community and theory in marketing and that the choice of Irish companies, though obviously a limitation should not greatly affect the results.

Pilot Studies: Two cases were selected as pilot studies and twelve cases were selected for the study. The two cases, which were used for the pilot study, were chosen due to convenience, access, and geographic proximity (Yin, 1994). One case had automational usage while the other case had transformational usage, and was familiar to the researcher. Following the pilot studies changes were made to the field procedure for the other cases (Yin, 1994).

5.7 Data Collection Techniques

There are six sources of information which can be used for case studies, documents, archival records, interviews, direct observation, participant-observation, and physical artefacts all of which are highly complementary and a good case study will use as many

as possible (Yin, 1994). Multiple sources of evidence were used for this study including interviews, direct observation and documentation.

Interviewing: Interviewing techniques include structured and semi structured interviews, group interviews (focus groups, brainstorming, nominal/delphi, field) and unstructured interviews (Fontana and Frey, 1998).

A semi-structured interview following an interview protocol (see appendix B) was utilised. The interview protocol is an essential part of multiple case study research (Yin, 1994). It usually contains the instruments, the procedures and the general rules that need to be followed and increases the reliability of the case study (Yin, 1994). An interview protocol can aid in data analysis particularly for multiple case studies (Yin, 1994, Perry and Cootes, 1994). In this study it was used simply as a guide for the research

The questions in the interview protocol should reflect the constructs of the research and answer the research question (Yin, 1994). The interview protocol for this research was designed around the four research propositions It contained specific questions in each area and served directly as the basis for the final case study report (Yin, 1994; Perry and Coote, 1994).

'If this question and answer format has been used for multiple-case studies the advantages are potentially enormous: a reader need only examine the answers to the same question or questions within each case study to begin making cross-case comparisons ... each answer can contain all the relevant evidence and can even be augmented with tabular presentations (Yin, 1994:135).

This framework did not allow for completely inductive findings and was used in order to be selective of what information should be collected and analysed (Miles and Huberman, 1994).

Each interview lasted from between two and three hours. Interviews are verbal reports and so suffer from bias, poor recall and poor or inaccurate articulation and therefore corroborating information is needed (Yin, 1994). All interviews were taped and transcribed to aid in the collection and recall of the content of the interviews and also to allow for immediate insights of the researcher to be recorded after the interview.

Observational Techniques - IT Systems Review: As Adler and Adler (1998) note observation techniques are one of the earliest forms of research and are often used in conjunction with other techniques including interviewing. There is criticism of observational techniques as lacking validity and reliability, but when used in conjunction with interview information they can be considered as hard data and useful for cross checking or triangulation, '*as a powerful source of validation*' (Adler and Adler, 1998:105). As Quinn, (1999) observes that '*there are limitations to how much can be learnt from what people say. To understand fully the complexity of many situations, direct ... observation of the phenomenon of interest maybe the best research method*'. Yin (1994) suggests that direct observations are time consuming, selective, and costly.

Direct observations can be a formal, actual measurement of certain events or less formal and viewed during the interview (Yin, 1994). The less formal option was used in this study. The personal interviews were complemented by direct observation during the site visits, which included a view of the major IT's in operation in marketing and their use of these systems and to discuss specific aspects of these systems. This provided invaluable information related to the IT assimilation in the case companies.

Documentation: The most important use of documentation is to corroborate and augment evidence from other sources and can aid recall. Additional documentary evidence from each case was collected including annual reports, brochures, product or services information, and the company web sites provided additional information, all of which was utilised in the analysis.

5.8 Data Analysis and Management

Data analysis centres on quantifying the case studies and using various analytical techniques. *'The ultimate goal is to treat the evidence fairly, to produce compelling analytical conclusions and to rule out alternative interpretations'* (Yin, 1994:103). A data analysis strategy should be chosen before data analysis commences. Various data analysis techniques, which were utilised in this study, will be discussed during the rest of this chapter.

There has been a lack of direction for data analysis and a lack of clarity around building theories from case based research and the challenges of data analysis for qualitative studies have been well documented (Eisenhardt, 1989; Bryman and Burgess, 1994; Huberman and Miles, 1998). *'Despite the proliferation of qualitative methodology, texts detailing techniques for conducting a qualitative project, the actual process of data analysis remains poorly described'* (Morse, 1994: 23). As Robson (1993: 370) adds *'there is no clear and accepted set of conventions for analysis, corresponding to those observed with quantitative data'*. The challenge centres on interpreting,

'brief conversations, snippets from unstructured interviews or examples of a particular activity which are used to provide evidence for a particular contention. There are grounds for disquiet in that the representativeness or generality of these fragments is rarely addressed' (Bryman, 1998: 77).

The framework for data analysis is very important. *'The framework needs to state the conditions under which a particular phenomenon is likely to be found (a literal replication) as well as the conditions when it is not likely to be found (a theoretical replication)'* (Yin, 1994:46).

The analysis must produce findings that are significant, complete, considered alternative perspectives and displays sufficient evidence, which is narrated in a composed and engaging manner (Yin, 1994). The distinction between the phenomenon being studied and its contexts must be given explicit attention. Data analysis must show clearly that

very little information remained untouched by the researcher and that critical information was given complete attention (Yin, 1994). There must be a display of sufficient evidence so that the reader can reach an independent judgement regarding the merits of the analysis.

Various authors offer general analytical procedures, which overcome the main challenges of data analysis for qualitative studies. Data analysis can include explanation building, pattern matching and time series analysis (Yin, 1994). Kolb's (1986) suggested four stages of concrete experience, reflective observation, abstract conceptualisation and active experimentation as data analysis methods (Easterby-Smith, et al., 1991). Morse (1994) suggests comprehending, synthesising (drawing together different themes from the research and forming them into new integrated patterns) and theorising, which is confronting the data with alternative explanations. While Miles and Huberman (1994) suggest that to analyse data the process should include data reduction, data display and conclusion drawing/verification. Researchers must summarise the data and then use the summaries to construct generalisations to confront existing theories or to construct a new theory, until they are robust enough to stand analysis.

All of these techniques centre on data reduction which usually involves coding and organising the data into a manageable and condensed form (the NUD*IST software package was used for this); structuring data (which was achieved through the interview protocol as it related to the framework of the research) and detextualising the text, which necessitated arranging the dialogue into diagrams and illustrations for analysis.

Theory Generation: The major challenge in data analysis centres on theorising, as in building theories and recontextualising or returning to existing theories, placing results in context and establishing any new linkages and models. Eisenhardt (1989) suggests a procedural process utilising steps towards a case analysis, by searching for cross case pattern, which should lead to shaping the hypothesis through the development of themes,

concepts, verifying relationships, linking the theory back to literature and ultimately reaching closure or saturation.

Cases can be analysed by relying on theoretical propositions or developing a case description. The first of these was utilised in this study. The propositions developed from the literature review were converted into research propositions (section 5.2). These guided the data collection and helped to focus attention on the critical data for the analysis (Yin, 1994). The research questions were used as section headings for the data analysis and the concluding chapters of the thesis and links back to the theory (Yin, 1994; Perry and Coote, 1994).

Theoretical replication across cases is where you view two different systems and literal is where you view the same systems in different settings. Multiple case study design can provide stronger support for replication.

'If this identical result were obtained over multiple cases, literal replication of the single cases would have been accomplished, and even the cross-case results might be stated even more assertively. Then if this same result also failed to occur in a second group of cases, due to predictably different circumstances, theoretical replication would have been accomplished and the initial result would stand yet more robustly' (Yin, 1994:108/109).

Rival theoretical propositions are where the important characteristic of the rival theoretical proposition involves a pattern of independent variables that is mutually exclusive.

'If one explanation is valid than another cannot be valid ... the presence of certain independent variables (predicted by one explanation) precludes the presence of other independent variables (predicted by a rival explanation) ... the concern of the case study analysis, however is with the overall pattern of results and the degree to which a pattern matches the predicted one (Yin, 1994:108).

Within data analysis a predicted outcome is expected covering the variables of interest. If the results are as predicted you can draw a solid conclusion. If they are not and the entire pattern is not as predicted then the initial proposition would have to be questioned and modification must be made to the theory (Yin, 1994).

The research design utilised five cases for literal replication i.e. the same results and five cases for contrasting results, theoretical replication. For example in relation to the stage of assimilation of IT and the orientation towards the transactional or relational perspective a list of similarities and differences between cases was included.

Data Analysis for this Study: For this study the evidence for each proposition was linked to the cases through a qualitative and subjective assessment using data consistency and triangulation. The following steps were taken during the data analysis:

- A review of the consistency of the data from different interviewees;
- The substantiation of the informant's perceptions with the information from the case (see source of bias section 7.7)
- Corroboration from the observations of the situation by the interviewer;
- This was linked to the theoretical fit of the data to the proposition, to the presence of a plausible explanation and to the fit of a known rival explanation for the data (Huberman and Miles, 1998; Yin, 1994).

Any mismatch of the data to the proposition caused a review of the proposition. Throughout the data analysis stage the propositions changed slightly and then the new proposition had to be checked with the rest of the cases. For example the original objective had included the transformational stage as the stage of development for the second group of cases. This was changed to the informational (stage 2) stage of development during the analysis of the cases, as no case had reached the transformational stage of IT assimilation from the evidence in the cases.

Each case was analysed utilising the iterative four stage process – data collection, data display, data reduction and conclusions (Miles and Huberman, 1994, 1998). This process involves coding, which was completed using the NUD*IST programme (see section 5.8). In the within case analysis the conclusions must be supported by observance that the researcher has evolved or tested a theory, that all the relevant data was included and that there was consistent dialogue between the ideas and the evidence (Huberman and Miles, 1998).

Following the collection of the evidence and its analysis, the evidence was summarised for each proposition and each case. A summary report was prepared for each case (see appendix C) confirming how and why a particular proposition was demonstrated (or not demonstrated). The case summaries are between 10 and 15 pages in length. Their inclusion in the appendix lends transparency and support to the findings in the data analysis chapters. The summaries are not designed to reveal all the data analysed but are designed to provide a brief and interesting insight into each case concentrating on the most salient issues for that case. They are also designed to focus on different issues for different cases and so to provide a broader review of the area.

There are a range of strategies for cross case analysis and Huberman and Miles (1998) discuss two main methods, case oriented strategies or variable orientated strategies. The case oriented strategy utilises a replication strategy from the first case and then the successive cases are examined to see if they match the main case. The cases are then grouped into clusters or family of cases and also along a scale. The variable oriented method groups the cases by findings, themes or pattern clarifications. Both methods were used in this study with the cases ultimately grouped in the case oriented approach.

With multiple case studies the use of the cross case analysis is the only analysis, so similarly to survey reports, only the aggregate information is supplied (Yin, 1994). One of the tactics of cross case analysis is the search for between case differences in pivotal dimensions. The across case analysis should include the extent of the replication logic

and why certain cases had certain results whereas other cases had contrasting results (Yin, 1994).

In summary a process for building theory from case based research was developed by Eisenhardt, (1989) which included steps from getting started to reaching closure and the activities and reasons associated with each step. Table 5.9 provides a brief overview of the case study research design utilised in this study.

Table 5.9 Steps in Developing Theory from Case Research Data

Steps	Issues
Getting Started	For research focus to guide the research and the theory building, research questions and potentially important aspects of the study with reference to the literature, are specified (section 5.2).
Selecting the Cases	Cases were chosen for theoretical reasons and to include a range of industries and levels of IT assimilation (section 5.6).
Crafting instruments and protocols	The main instrument for obtaining data was in-depth personal interviews guided by an interview protocol augmented by observation and documentation (section 5.7).
Entering the field	Following the case selection (section 5.6) respondents were interviewed in multiple hour sessions. All interviews were taped and transcribed (section 5.7).
Analysing the data	The NUD*IST software package aided the data analysis (section 5.8). There were two stage of data analysis – within case analysis which involved the writing up of each case and cross case analysis involving searches for cross case patterns.
Shaping hypotheses	By analysing constructs and verifying relationships, hypotheses were shaped, definitions of constructs were refined and evidence, which measured those constructs, were built.
Enfolding literature	The emergent theories, concepts and hypotheses were compared with the extant literature to enhance the internal validity, generalisability and theoretical level of theory building.
Reaching Closure	The iteration between data and theory ceases when the contribution to theory is minimal, but time and costs also dictated the number of cases, which were studied.

Source: Adapted from Eisenhardt (1989) and Lindgreen (1999)

5.8.1 The NUD*IST Software Package - Database and Data Analysis

The following section discusses the data management and data analysis stages of the research. Analysing text from interviews includes word analysis as in content analysis and cognitive maps and methods for analysing blocks of text such as pattern matching. The data management and analysis was aided by the use of the NUD*IST software package.

The popularity of using software packages to aid in data analysis has increased over the years and those who do not use them will be at a disadvantage to those who do (Miles and Huberman, 1994; Seale, 2000; Fielding and Raymond, 1998). Though (Perry et al., 1998:6) comment that for realism research a NUD*IST package is not necessary because there is no requirement to '*map all the parts*' but just to '*look through*' some parts of the reality and thus manual coding can suffice. This study utilised the nudist, (nonnumerical unstructured data by indexing, searching and theorising) software. This software package can be used as both a method of analysis and a database record of all the interviews and the observations during the research.

The nudist package is designed for storage, coding, retrieval and analysis of text. Conceptually this is one of the best packages on the market and has the most extensive and powerful sets of code based operations of all the software packages, with 18 different search options (Weitzman and Miles, 1995). The NUD*IST package is one of the best packages to aid in code based theory building. It helps to make connections between codes, to develop higher order classes and categories, and to formulate propositions (Weitzman and Miles, 1995). Though the NUD*IST package can be more difficult to use than other packages, it is now the leading software in this area (Seale, 2000).

Data Management: Data management in qualitative studies is critical and needs to have the features outlined in the following quote.

‘The recognition of categories in the data, generation of ideas about them and exploration of meaning in the data. Because the categories and meanings are found in the text or data records this process demands data management methods that support insight and discovery, encourages recognition and development of categories and store them with their links to the data. Ease of access to data is important to support recognition of the surprising and unexpected, construction of coherent stories and exploration of sought patterns as well as construction and testing of hypotheses’
(Richards and Richards, 1998:214).

Large amounts of data were collected for this study from over 14 different sites. Data management and data analysis in qualitative studies are firmly interrelated. Software packages can assist in the complex management of data and they can help to discover ideas and concepts and the construction and explanations for links between data and emergent ideas and to aid understanding around ideas (Miles and Huberman, 1994; Richards and Richards, 1998). There is also a document database, which allows for easy exploration of the data. This document system keeps track of all of documents, the questions asked about the coding and also allows for memos and the editing of the data files.

A case study database was designed to maintain all the evidence; the links between the questions asked, the data collected and the conclusions drawn (Yin, 1994). All cases were transcribed and then the transcriptions were loaded into the NUD*IST software package. Each interview was then read through and each sentence or group of sentences (text units) were ascribed to the 5 main node areas and the related trees under each node. For example there were 17 variables under the node for barriers to IT assimilation. There were also 23 super nodes for issues that did not appear to have a node and which aided

with the theory development aspect of the research. The elucidating structure works with the hierarchically structured tree of codes or nodes and forces the researcher to think about the relationships among the nodes. The structure does suggest a higher order and second level system of codes, though you can keep them all at the first level to avoid the hierarchical structure. This researcher used six first level codes and a range of second level with relatively fewer third level codes.

Coding of Data/Pattern Matching: The first step in the use of this software is coding which is naming and classifying the data. The database is structured according to a hierarchical tree design and utilising codes for the material to be placed in the tree design. These codes are called nodes and they can be manipulated to suit the data. The second level of coding tries '*to understand the patterns, the reoccurrences, the plausible whys*' (Miles and Huberman, 1994:69). Coding can range from organising the data and concepts around each other to quantifying different variables (Bryman and Burgess, 1994).

The initial coding for this research focused on the main propositions and the pattern coding developed the main themes and issues from the research. Pattern matching is matching an empirical based pattern with a predicted one and assessing rival hypothesis for 'closeness of fit' (Yin, 1994). There are weaknesses in pattern matching in terms of rigour (Yin, 1994). The allocation of patterns as in the summary displays are still in essence summaries of qualitative data, and the interpretation is judgmental or subjective rather than actual (Miles and Huberman, 1994). Looking for repetitive or patterned behaviour for themes, patterns and categories is challenging as the study must decide if this is a normal event or a rare occurrence so the frequency of the event can be compared across the cases.

Pattern coding occurred which grouped the main coding into a smaller number of themes and the cases were clusters according to the similarities in patterns which commenced the process of cross case analysis.

Code and Retrieve/Content Analysis: Code and retrieval has been a dominant form of qualitative analysis though Richards and Richards (1998) observe that despite its popularity there is a lack of debate or discussion over the method of data handling and how it contributes to analysis and has become the 'taken for granted' method of data analysis. They add that the generation of coding is a process of theory building, as decisions on what text will be included at a code is based on theoretical considerations and the linking of text from a variety of sources to the one code allows for a new way of seeing the data.

In the NUD*IST system there is an index system in the program, which organises the codes and is the core of the program. Each code has a list of references to the text it indexes and so coding is referred to as '*indexing text at a node*' (Weitzman and Miles, 1995:241). Different types of codes are available and codes can be divided into acts, activities, meanings, participation, relationships and settings. The system is flexible and the nodes can represent categories, concepts, individuals and relationships among codes and so on (Richards and Richards, 1998). Miles and Huberman (1994) distinguish between descriptive, interpretive, explanatory and astringent codes. Codes are '*threads that tie together bits of data*' (Miles and Huberman, 1994: 69). The main benefit is that you can find and display all instances of the codes (Miles and Huberman, 1994).

The use of the NUD*IST package is similar to the manual use of cutting and pasting. This method is also labour intensive during the inputting of the data and the coding aspect but provides speed and comprehensiveness for data searching once the inputting is complete. This software program also allows for multiple and overlapping codes and the search for more than one codeword simultaneously.

Content Analysis: This is a linguistically orientated quantifying method for qualitative research where the frequencies of use of key phrases or words are counted (Easterby Smith et al., 1991). This '*is not a simple count of arbitrary items, but is based on analysis and theoretical understanding of the substance of the text*' (Hussey and Hussey, 1997:

250). Though commenting that reliability and validity issues are aided by the use of this technique Hussey and Hussey, (1997) note criticism by Silverman, (1993:59) '*its theoretical basis is unclear and its conclusions can often be trite*'. Content analysis was used to some extent in this study but the researcher was very aware of the above criticism and the difficulties of analysing text in general (Silverman, 2000).

Theory Building with NUD*IST: Theory construction in qualitative research centres on capturing concepts, by exploring links and ideas which are documented and systematically reworked and then elaborating on the specification, explication, exploration and development of these ideas, all of which can be supported by software (Richards and Richards, 1998). However though '*no program builds the theory for you nor would you want it to*' (Weitzman and Miles, 1995:18), the NUD*IST software supports theory building in three ways. Through memoing, elucidating structure through building and modifying the index system and system closure. The theory building aspects allows you to make connections between codes, to develop higher order classifications and categories, to formulate propositions or assertions, imply a conceptual structure that fits the data and/or to test such propositions to determine whether they apply (Miles and Huberman, 1994; Richards and Richards, 1998). As theories develop the software allows for the altering of the index system, which means that the textual information is maintained and a memo can be added, explaining the changes made.

Memoing: Memoing is a very important part of the data analysis. They '*are primarily conceptual in intent. They don't just report data; they tie together different pieces of data into a recognisable cluster, often to show that those data are instances of a general concept*' (Miles and Huberman, 1994:72). Memoing allows the researcher to add their own reflections to the database, which provides a certain amount of system closure because the results of your analyse becomes part of the data (Weitzman and Miles, 1995). Linking the codes to memos which are reminders of how codes were decided on, what they represents and ideas you had about the codes, can be very helpful.

System Closure: System closure means that all the nodes and the concepts and ideas can be kept with the original data and become part of it. This is facilitated by the search facility and the fact that the searches are all saved. So throughout the development of patterns in the data connected to the codes, this information is saved and so results obtained become part of the system. The NUD*IST package has a more advanced version of system closure than other packages (Seale, 2000).

A Review of Software Based Analysis: There is much discussion of the advantages and disadvantages of the use of computers in qualitative analysis. The major advantages are the time saving element (though the initial coding is very time consuming), they can reduce analysis time, remove some of the drudgery, make the procedures more systematic and explicit, ensure completeness and refinement and allow for flexibility and revision ability during the analysis (Miles and Huberman, 1994). There are also validity and reliability gains by the simply counting allowed for in the programmes (Seale, 2000).

There is a danger that coding becomes the analysis, that data is taken out of context and that the package imposes a single linear order to the analysis (Coffey et al., 1996). The software package can distance the researcher from the data (Weitzman and Miles, 1995). As Richards and Richards (1998: 211) note *'the computer method can have dramatic implications for the research process and outcomes, from unacceptable restrictions on analysis to unexpected opening out of possibilities'*. It is important that the data management techniques do not damage the thick descriptions or force the researcher into routines that destroy insights. There is also the danger of the index system strait jacketing the researcher and can seem to design data analysis that is never ending (Richards and Richards, 1998).

A major criticism of this package and the use of computers to analysis data is that they are promoting a standard format for the analysis and representation of data. What Coffey et al., (1996: 7) refers to as a *'trend towards homogeneity'*. As Seale (2000:171) observes *'a technical fantasy seems to have emerged, uncomfortably close to quantitative*

work, with a language of counting, hypothesis testing and causal analysis that is alien to the interpretive freedom supported by qualitative research. There is also a need, within the analysis, to recognise the complexity of social inter-relatedness, which this package can damage (Coffey et al., 1996) and there is a danger that you become too attached to the index system and forget the contextual situation (Weitzman and Miles, 1995). It is important to avoid the danger that *'the style of the software one uses can coerce a project along a particular direction'* (Richards and Richards, 1998:242).

5.8.2 Data Displays Techniques

The data in this research was summarised by using data display techniques. Data displays allow the researcher to reduce the data into manageable, meaningful and coherent displays. This allows for understandings to be developed that permits conclusions to be drawn from the research.

Table displays were used extensively to focus and organise a large body of analysis. These tables aided in the examining of complex issues and relationships between issues and groups of cases. They allowed for the clear study of the patterns in the data and to highlight the how and why issues in this research.

Matrix Displays: Displays of qualitative data can be either networks or matrix displays. Displaying the data in a systematic way has major benefits for the data analysis and the interpretation of the data and allows a reader to recreate the intellectual journey of the researcher. This is the crossing of two or more main dimensions to see how they interact and there are various options on how to partition the data (Miles and Huberman, 1994). They include descriptive versus explanatory intent, partially ordered versus well-ordered, time ordered or non time ordered, categories or variables, two way, three way and n way, cell entry and single case versus multiple case data (Miles and Huberman, 1994).

Cross case analysis is particularly suited to displays or matrixes as they *'allow the researcher to analyse, in a condensed form, the full data set, in order to see literally what*

is there' (Huberman and Miles, 1998:197). The technique of including matrixes should allow the reader to reconstruct, in some way, how the analysis was developed and for logical validity of some of the conclusions. Care must be taken with matrixes that the matrix only displays a small part of the available data. There is also the availability of using quotes, numbers or interpretation in the matrixes. All three types were used in the matrix compilation for this study. Matrix display were utilised for this research as can be seen in chapters, 5, 6 and 7.

Network: A network is a series of nodes connected to links and can show the complex interaction of variables and show patterns and a logical chain of evidence. Networks can include context charts, event-state networks, causal networks, composite sequence analysis, causal models and cross cases causal networks (Miles and Huberman, 1994). The development of good causal maps can aid the analysis and display the most important independent and dependent variables in the field and the relationship among them. They help to move towards an explanation rather than just a description (Miles and Huberman, 1994). There are two methods to causal network building, inductive from the data or deductive from prior constructs and propositions. This research utilised the deductive approach predominantly, though there was refinement of the propositions during the analysis.

5.9 Limitations of Case Studies Research

In this section the most important limitations of the case study method are examined. The areas of validity, reliability and generalisability are discussed along with the techniques used to minimise their effects.

The main focus or trinity of methodology is usually validity, reliability and generalisability, though this is seen as a quantitative focus (Janesick, 1998). Yin (1994) suggests that tests such as conformability, credibility and trustworthiness (transferability) and dependability. Denzin and Lincoln, (1998: 27) from the phenomenology perspective

suggest that those terms can replace the positivist's criteria of internal and external validity, reliability and objectivity.

Despite the positivist orientation and conscious of the realism paradigm of this research a discussion of the methods use to increase reliability, validity and generalisability appears in the following section more to highlight the issues and to show relevance to this study. Various questions must be asked of the data to minimise the effects of these constructs (Miles and Huberman, 1994; Patton, 1990). Easterby- Smith et al., (1991) suggest the questions in Table 5.10

Table 5.10 Questions of Reliability, Validity, and Generalisability

	Phenomenological Viewpoint
Validity	Has the researcher gained full access to the knowledge and meanings of informants?
Reliability	Will different researchers make similar observations on different occasions?
Generalisability	How likely is it that ideas and theories generated in one setting will also apply in other settings?

Source: Adapted from Easterby-Smith et al., (1991: 41).

Validity: Validity is how much the measurement is free from systematic error. Validity in qualitative research relates to *'description and explanation and whether or not a given explanation fits a given description. In other words is the explanation credible?'* (Janesick, 1998:50). The trade off is that for qualitative research validity is high and reliability is low (Hussey and Hussey, 1997).

Construct Validity: Constructs are often referred to as subjectively operationalised with the results of the case research dependent on the subjective interpretation of the researcher, which can introduce errors and bias. Construct validity establishes the correct operational measures for the concepts being studied (Miles and Huberman, 1994).

Yin (1994) points out that to meet the test of construct validity two steps must be followed to provide justification for the measures selected.

1. Select the specific types of changes that are to be studied (in relation to the original objectives of the study);
2. Demonstrate that the selected measures of these changes do indeed reflect the specific types of change that have been selected.

The chain of evidence is a specific link between the questions asked, the data collected and the conclusions drawn. This increases the reliability, overall construct validity, and increases the overall quality of the study. Reviewing case study reports by participants to the study can aid collaborating of the essential facts and evidence in the report and reducing the likelihood of false reporting (Yin, 1994). It was not practical to have respondents review drafts. A clear chain of evidence in deriving conclusions from the data material was documented, ensuring that the operationalisation of constructs is as explicit as possible and by highlighting the close links with the theory. Researchers have to rely on tables and summaries to justify the evidence underlying the construct and verifying that relationships between constructs fit the evidence from each case. Multiple sources of evidence were also utilised for this study in order to overcome this difficulty. Replication logic through multiple case studies is also a method to aid in validity difficulties (Eisenhardt, 1989) and this was utilised in this study.

Internal Validity: Internal validity or what Miles and Huberman (1994) refer to as the 'truth value' or the authentic, the credible, is a major limitation of the case method. Internal validity, for explanatory or causal studies only, refers to establishing a causal relationship, whereby certain conditions are shown to lead to other conditions, as distinguished from spurious relationships. Internal validity can be related to inferring and the absolute certainty that the inference made is the correct inference. It is extremely hard to derive correct causal relationships from observed facts, which are collected on a small scale (Miles and Huberman, 1994).

Internal validity is increased if proposed patterns are matched to the empirical findings. To aid in internal validity the 'why' of what is happening is crucial and so the researcher

must show the underlying theoretical reasons for why the relationship exists and that emergent theories are linked to existing literature (Eisenhardt, 1989). Controlling for extraneous variables is not easy in case based research. Controlling for rival hypotheses is an imperfect art rather than a science. As Miles and Huberman (1994:274) observe.

'...in most social settings, we cannot easily construct the series of carefully controlled elegantly scaffolded critical experiments that theoretically – but seldom practically – do away with equivocal findings from competing studies ... Still, we think the search for rival hypotheses is often more thorough in qualitative research than in survey research or in most laboratory studies and that it's relatively easy to do. The competent field researcher looks for the most plausible empirically grounded explanation of local events from among several competing for attention in the course of fieldwork'.

Multiple sources of evidence were used to investigate alleged causal relationships in the interpretation of the case results. Due to the complexity of the theories and the area of interest all the variables that could be associated with the issues could not be included in the study.

Generalisability - External Validity: External validity refers to establishing the domain to which a study's findings can be generalised (Miles and Huberman, 1994). Generalisability of findings is often cited as the most important limitation of case studies, focusing on the lack of statistical generalisation. Yin (1994:10) states that

'Case studies are generalisable to theoretical propositions and not to populations or universes ... case studies do not represent a 'sample' and the investigator's goal is to expand and generalise theories (analytic generalisation) and not to enumerate frequencies (statistical generalisation)'.

Analytical generalisation *'previously developed theory is used as a template with which to compare the empirical results of the case study'* (Yin, 1994:31). For generalisation of

interpretative studies the focus is on '*tendencies rather than predictions*' (Walsham, 1995:80).

If two or more case studies support the theory than replication has occurred, especially if they do not support an equally plausible rival theory. Using multiple cases, as per this research design, ensures that the theoretical perspective can be found in diverse practical situations and so the multiple case research design is an important tactic to use to overcome the external validity issues (Yin, 1994, Huberman and Miles, 1998). In addition, the use of theoretical or purposeful sampling as previously discussed (choosing cases which will best advance the theory) can also make efficient use of a limited number of cases.

Rather than the use of statistical generalisation to a population, realism seeks analytical or theoretical generalisations about theories concerning the phenomenon in case study research by applying literal and theoretical replications (Eisenhardt, 1989; Parkhe, 1993; Yin, 1994; Perry and Coote, 1994).

Reliability: Another limitation of case based research concerns reliability. Reliability is the extent to which measurement is free of variable errors, which refers to an imaginary later researcher who should be able to replicate the exact steps of the research process and arrive at similar findings. Reliability demonstrates that the operations of a study, such as the data collection procedures can be repeated, with the same results (Miles and Huberman, 1994).

To facilitate this imaginary researcher the procedures used throughout the analysis are clear. Therefore tables have been composed containing all the factual background data that was gathered for each case and the evaluation process for each proposition appears in appendix C. The interview protocol is also an aid in this area (see appendix B) and the use of the research propositions to guide the research lends transparency.

A range of approaches were used to reduce the impact of these limitations on this research study (see table 5.11)

Table 5.11 Case Study Tactics for Validity and Reliability Issues

Tests	Case study tactic	Phase of research in which tactic occurs	Utilised in this research
Construct Validity	Use multiple sources of evidence	Data collection	Yes
	Establish chain of evidence	Data collection	Yes
	Have key informants review draft case study report	Composition	No – (Time constraints issues for informants)
Content Validity	Asking informants to define issues to avoid definitional confusion and measurement issues	Data collection	Yes – definitions were provided and elicited from the informants
Internal validity	Do pattern-matching	Data analysis	Yes
	Do explanation-building	Data analysis	Yes
	Do time series analysis	Data analysis	Not applicable
External Validity	Use replication logic in multiple-case studies	Research design	Yes
Reliability	Use case study protocol	Data collection	Yes
	Develop case study database	Data collection	Yes
	Use of pilot tests	Research design	Yes
Contextual Validity	Tape recording of interview	Data collection	Yes

Source: Adapted from Yin (1994) and Lindgreen (1999).

It must be noted that,

'no single approach to theory development, including case studies, is self-sufficient and capable of producing a well-rounded theory that simultaneously maximizes the research quality criteria of construct validity, internal validity, external validity, and reliability' (Parkhe, 1993:255)

Triangulation: Triangulation is the use of different research approaches, methods and techniques in the same study. Triangulation can overcome the potential bias and sterility of a single method approach (Hussey and Hussey, 1997, Denzin 1997; Miles and Huberman, 1994). Easterby-Smith et al., (1991:134) cite four categories of triangulation, triangulation of theories, triangulation of data, triangulation by investigator and methodological triangulation. For this research triangulation of theories, using models from one discipline to explain situations in another. For example theory from the IT literature was used in the marketing field to explain the assimilation of IT. Data triangulation was also utilised which is collection of data from different sources. Multiple sources of evidence will aid triangulation in developing a converging line of inquiry and so the conclusions are more robust because they are based on several sources of information. In this research multiple personal interviews, direct observation and documentation were utilised and all contributed to the convergence of the findings (Yin, 1994; Miles and Huberman, 1994).

5.10 Conclusions

The aim of this research is to identify, illustrate and analyse a range of issues surrounding the assimilation of IT by marketers to answer the how and why questions from the research propositions, particularly focusing on the transactional to relational trajectory and the stages theory of IT assimilation.

This chapter outlined and justified the appropriateness of case based research within the realism paradigm as a suitable means to examine the assimilation of IT into marketing practice. Following the introduction to this chapter the research objective and propositions that form the basis for this research were documented. This chapter then argued that case based research was the most suitable design for this study. This was justified by reference to the research objective and propositions, the researcher's paradigm and despite the quantitative theory testing orientation of much research in this area, the need for theory building research of a qualitative nature. This method allows the

researcher to collect detailed information from various sources within companies to provide a detailed insight and exploration of a particular management situation.

Various techniques in case based research, in order to produce an exemplary case study, were reviewed and the techniques used in this study were highlighted. The choice of a multiple case based research design was justified and the case selection techniques for collecting data from two groups of cases, for comparative analysis, were documented. Data collection, management, analysis and display methods were also discussed along with the detailed procedures that were followed, particularly focusing on the use of the NUD*IST software package. The final focus was on the important limitations of case based research and the methods used to minimise these.

In conclusion, methodologically this research provides an example of research within the realism paradigm using a multiple case study method. This chapter justified this choice as the most appropriate paradigm and method to answer the research objective of this study.

The remainder of the thesis is organised as follows. Chapter 6 and 7 is devoted to the analysis and interpretation of the two groups of cases. The last chapter, chapter 8, focuses on the conclusions that can be drawn from this research, the managerial and theoretical implications and suggestions for further research.

CHAPTER SIX

DATA ANALYSIS INFORMATIONAL CASES

6.1 Introduction

Chapter five justified the use of multiple case based research for this study. This chapter discusses the findings from the case study research for the five informational cases analysed in depth. Section 6.2 outlines the structure of the analysis used in each case. Section 6.3 discusses contextual situations and the general organisational characteristics for all the cases. As these cases are described, analysed and interpreted with reference to the four research propositions (section 5.2), sections 6.4 to 6.7 presents the findings from propositions one to four. Section 6.5 summaries the main findings for these informational cases.

6.2 Structure of Data Analysis

The structure for the analysis of each case is based on a summary of the evidence for each proposition. The case selection (see section 5.6) and the research propositions (section 5.2) were described in the research methodology chapter. The data analysis (section 5.8) was designed to focus on the identification and description of the activities, patterns and processes of the assimilation of IT in marketing practice in each case with a focus on the stages theory and the transactional to relational marketing approaches to marketing practice.

Each case was analysed separately, see Appendix C for individual case summaries. Theses case summaries were designed to illustrate the level of agreement or disagreement with each of the propositions. Suitable extracts from the interviews are included to lend transparency to the findings and to indicate the level of support for each of the propositions. The descriptions are brief and do not explore other possible interpretations for the data and nor do they present all the data relating to a particular point. The case

summaries are designed to show the contextual situation of the case, to summarise the major issues for each case and to introduce in a more discursive manner the major areas on which the cases provided evidence.

Within this chapter the same format is followed. The cross case analysis is presented through the research propositions and summarisations of each proposition, along with interpretations of the research findings, appear at the end of each section. For the sake of comprehensibility and to avoid tedious repetition, the results of each single case study are often summarized and analysed in a 'mega-case' format, with suitable quotes and illustrative examples, added to the discussion, where applicable.

As discussed in section 5.6, the background information for each case was collected using personal interviews, documentation and observation of the IT systems in operation. The information is presented in tables for ease of comprehension (see section 5.8). Each case has already been analysed in depth and so the focus of this chapter is to discuss the cross case analysis for the informational cases.

The central theme is that contemporary marketing practices have an inherent IT dimension, which itself is progressing through stages of development from automational to informational and transformational assimilation which is linked for this study to the transactional to relationship perspective of the marketing department. The emphasis of this analysis is to identify the 'how' and 'why' issues to lead to theory generation in this area. Why is marketing practice in some companies assimilating IT, while others are encountering major difficulties with IT assimilation?

6.3 Case Features - General Review of All Cases

All of the cases are long established companies, with well-defined sets of customers. The relative stability of these cases could account for many of the findings. They are all ranked in the top 500 companies in Ireland. They have all been in business for more than 20 years, and have enduring traditional structures developed over years of trading.

Changing tried and tested, seemingly successful company strategies, to be ready for a future that has not yet arrived, is a formidable task. All cases are now encountering competition and turbulence in the marketplace.

Seven of the ten cases (Cases A, B, D, E, H, I and J) have all recently merged with large multinationals, to become leading players in their industries worldwide. Cases F and G are semi state government controlled companies and Case C is partly government funded, due to its commitment to hire disabled people.

As discussed in chapter 5, the cases were selected from an initial study (see section 5.6.3), which evaluated the impact of IT on the marketing department, utilising the stages theory framework (see appendix A). Two groups were selected. One group was classed at automational IT usage and the second group was classed at transformational IT usage. Two issues arose during the case studies and particularly during the in-depth analysis of the cases. Firstly it was clear that none of the cases were at the stage of transformational use of IT. They are more correctly classed at the informational stage of IT assimilation and so they are referred to as informational cases throughout the rest of this thesis. The second issue was that two of the cases (D and E) were originally classed as transformational cases, but it was clear from the analysis that they were not at that stage of development and they were reclassified as automational cases.

6.3.1 Industry Orientation of the Cases

Figure 6.1 depicts the industry orientation of all ten cases. As this is a cross sectional study, five of the cases are consumer goods companies (Cases A, B, C, D and E), one case provides a consumer service (Case G), three are business to business service companies (Cases F, H and I) and one is an industrial goods company (Case J).

Figure 6.1 – Dominant Industry Orientation for All Cases

Dominant Industry Orientation				
Cases A, B, D and E	Case C	Case G	Case J	Case F, H and I
Consumer goods ⇒ ⇐ Consumer durables ⇒ ⇐ Consumer service ⇒ ⇐ Industrial goods ⇒ ⇐ Services				

Source: Adapted from Gronroos, (1991)

6.3.2 General Situational Issues for All Cases

There are a range of situational issues that were pivotal to all cases and the most important ones are described below.

Irish Cases: This research focuses on marketing practice in Ireland and expands the limited research in this area (see Domegan and Doyle, 2000). Despite the Irish focus and due to the dominance of multinational companies in Ireland, this study has a global perspective as all of the cases had some level of internationalisation and six of the cases are multinationals. Many IT developments and marketing practices are dictated from the head office of the organisation (outside of Ireland).

The Celtic Tiger: As this research was completed in 1999, the timing of the research coincided with a period of turmoil in the Irish marketplace. There was major growth within the Irish economy and Ireland. Ireland became known as the Celtic Tiger or the Digital Island, due to both business success rates and the major IT dimension to much of the foreign direct investments. There was widespread agreement that there were major changes in the business landscape for Irish businesses.

'The new image of Ireland is that of the digital island or even of the intelligent island. Ireland- combines high technology manufacturing and services industry with a vibrant cultural renaissance' (Wickham, 1997:277).

The Dot.com/Internet Boom: The case studies were carried out during what has been referred to as the internet or dot.com boom. There was extensive interest and investments in internet start-ups and there was a major focus on the internet as the new business model of our age. There was much comment in the popular press on this development and the competitive threat to traditional companies (all these cases) from the new internet era.

The Millennium Bug: The research was completed in the months prior to the rush to update IT in time for the millennium year 2000 (Y2K) problem. This was a major driver of system updates and resulted in the IT department having a very central role in companies during this year. It also meant that IT personnel were particularly focused on this issue above all others. Due to the company wide nature of the Y2K problem many of the solutions were based on centralised systems. Cases A, B and F introduced new systems and the other cases had completed major reviews and updates of their IT systems. At the time of the research all the IT personnel felt that they had the situation under control and that they were now concentrating on other projects.

General Outline of the Five Informational Cases: The following section is a brief overview of the five informational cases. Cases F and G are semi state organisations providing telecommunication and tourism services, respectively. Cases H and I are professional services organisations and Case J is a manufacturer of industrial refrigeration products. Table 6.1 portrays the general organisational characteristics of the cases.

Table 6.1 Organisational Characteristics of the Informational Cases

	Case F	Case G	Case H	Case I	Case J
Original classification	Transformation	Transformation	Transformation	Transformation	Transformation
Company Type	Business to business and consumer services	Consumer service	Business to business professional service	Business to business professional service	Business to business product
Product/Service	Telecommunications	Information Service	Accountancy and management consultancy	Accountancy and management consultancy	Industrial refrigeration equipment
Organisation Structure	Functional	Functional	Hybrid	Hybrid	Hybrid
Number of Employees	11,000	250	500	1,200	400
Ownership	Semi State	Semi State	Privately owned multinational	Privately owned multinational	Publically quoted multinational
Turnover (£)	£1.3 billion	Not Applicable (Government service)	£30 million	£64 million	£100 million
Markets	Predominantly Ireland	Worldwide	Predominantly Ireland	Predominantly Ireland	Worldwide

Table 6.2, provides details of the main informants within the individual cases.

Table 6.2 Main Informant for the Five Informational Cases

	Main Informants
Case F	Telecommunications - Business to business
	Head of Marketing and Business Development Portfolio Product Support Manager IT Support Manager
Case G	Tourism Information Service – Business to consumer
	Marketing Manager Marketing Operations Manager IT Manager
Case H	Accountancy and Management Consultancy – Business to business
	Marketing Manager Marketing Assistant IT Manager
Case I	Management Consultancy and Accountants – Business to business
	Head of Marketing and Business Development Portfolio Product Support Manager IT Support Manager
Case J	Refrigeration Equipment – Business to business
	Director of Customer Services Marketing Communications Manager IT Project Manager

6.4 Proposition One: There is a Major Relationship Marketing Perspective to Contemporary Marketing Practice.

This section presents the findings on the relationship orientation of the marketing department. These cases support the contention in the literature that marketing practices are changing and the main focus is now on a more relationship marketing perspective, within the marketing department.

Main Responsibilities: These cases had responsibility for the marketing operations of the marketing mix and a strong focus on promotional issues, but they also had a dominant responsibility to support the sales department and they were very involved in various relationship marketing practices particularly between the company, the sales force and the customer (see table 6.3).

Table 6.3 Main Areas of Responsibility for Informational Cases

Main Responsibilities of the Marketing Department	All Cases
Promotional and brand activities	✓
Collection of customer information	✓
Sales support and an ongoing working relationship with the sales force	✓
Part of the senior management team	✓
Involved in major IT developments (internets, intranets, and database developments)	✓
Development of centralised view of the customer	✓

There was an increased visibility of marketing practices and processes for all the cases. The marketing departments are being challenged by senior managers to show signs of success and to develop marketing initiatives to cope with changes in the market.

Changes in Marketing Practice: Each case can be placed on a continuum from no changes to major changes (see table 6.4).

Table 6.4 Changes to Marketing Practices for the Informational Cases

Evidence of Changes to Marketing Practices	Few Changes	Some Changes	A Range of Changes	Major Changes
Cases Supporting			Case F, G and H	Case I and J

Based on content analysis of the replies and evidence from the cases there are four major changes to marketing practices (see table 6.5) and the dominant change is a move to a more relational focus in the marketing department.

Table 6.5 Main Changes in Marketing Practices for the Informational Cases

Changes in Marketing Practices	All Cases
Increased focus on relationships (market and non market)	✓
Increased use of IT for marketing operations (changes to marketing practices)	✓
Increased focus on marketing and increased visibility of marketing operations company wide	✓
Marketing and sales working together in the management of relationships	✓

There is a noticeable move away from a sole concentration on the marketing mix variables. The trend in marketing practice is towards developing an enhanced role for marketing practitioners in the management of customer relationships. There is also evidence that marketing operations are now more important, visible and supported by top management. There is a change in managerial thinking, which is more focused on customers and customer satisfaction and a long-term view of the customer, than the traditional focus on market share and sales figures.

Relationships Marketing Focus: There is evidence that all these cases are endeavouring to focus on their relationships with their final customer. There is a general appreciation and understanding of the importance of the development and maintenance of relationships with their customers.

“I suppose it is serving clients. Instead of the customer is king, it’s kind of the existing customer is king ... it’s the bigger package if you like. Obviously there’s always room for improvement, but I would say that is the main area that we focus on” (Case I, Portfolio Product Support Manager).

The main evidence for this proposition was collected by reviewing the marketing perspective of the marketing department using the Webster (1992) framework and then the Coviello et al., (1997), Brodie et al., (1997) framework as discussed in chapter 3, and through the collection of other evidence. All cases were asked about, and elaborated on, the level of relationship they had, with the majority of their customers.

The cases were found to have a predominantly relationship marketing focus. To develop this aspect of the study, their dominant marketing practices were analysed along the relational exchange and managerial dimensions of the framework below. Tables 6.6 and 6.7 shows that the dominant focus of their marketing approaches, though there is evidence of a pluralism of approach.

Table 6.6 Marketing Classified By Relational Exchange Dimensions

	Transactional perspective			Relationship perspective
	<u>Transaction Marketing</u>	<u>Database Marketing*</u>	<u>Interaction Marketing *</u>	<u>Network Marketing</u>
<u>Relational exchange dimensions</u>				
Focus	Economic-transaction	Information and economic transaction	Interactive relationship between a buyer and seller	Connected relationship between firms
Parties involved	A firm and buyer in the general market	A firm and buyer in a specific target market	Individual sellers and buyers	Sellers, buyers and other firms
Communication Patterns	Firm to market	Firm to individual	Individuals with individuals	Firms with firms
Type of contact	Arms-length, impersonal	Personalised	Face to face, interpersonal	Impersonal – interpersonal
Duration	Discrete	Discrete over time	Continuous	Continuous
Formality	Formal	Formal (personalised through IT)	Formal and informal	Formal and informal
Balance of Power	Active Seller – Passive buyer	Active seller less passive buyer	Seller and buyer mutually active and adaptive	All firms active and adaptive

Table 6.7 Marketing Classified By Managerial Dimension of Marketing

Managerial Dimension				
Managerial Intent	Consumer attraction (to satisfy the customer at a profit)	Customer retention (to satisfy the customer, increase profits, and obtain other objectives such as increased loyalty, decreased customer risk, etc)	Interactions (to establish, develop, and facilitate a co-operative relationship for mutual benefit)	Co-ordination (interaction between sellers, and buyers, and other parties across multiple firms for mutual benefit, resource exchange, market access, etc)
Decision Focus	Product or a brand	Product - brand and customers	Relationships between individuals	Connected relationships between firms (in a network)
Managerial Investment	Internal marketing assets (focusing on product - service, price, distribution, promotion capabilities)	External market assets (emphasising communication, information, and technology capabilities)	External market assets (focusing on establishing and developing a relationship with another individual)	External market assets (focusing on developing the firm's position in a network of firms)
Managerial Level	Functional marketers (e.g. sales manager, product development manager)	Specialist marketers (e.g. customer service manager loyalty manager)	Managers from across functions and levels in the offer	General manager
Time Frame	Short term	Longer term Short or long term	Short or long term	Short or long-term
Cases		Case G	Cases F, H, I and J	

Source: Coviello et al., (1997)

* Dominant marketing perspective. For case G they have a predominantly database focus and for the other four cases they have an interaction marketing dominant focus.

For each case, there was evidence to show a pluralism of approach, with groups of customers at the database and the interaction stage, though only the dominant focus was included in table 6.7. There was only limited evidence of transaction and network marketing practices in marketing.

For the sake of brevity and because that is the role they carry out, the use of the term sales force in this analysis refers to the sales force in case F, the personnel in the service offices for case G, the partners for cases H and I and the dealers for case J.

For cases F, H, I and J, they have long term, personal and on-going communications with their customers. These relationships have developed over years of trading. A pivotal feature of these cases is that traditionally the sales force was the controller of these relationships. The marketing departments are now beginning to play a more dominant role in this area. Case G markets to a mass group of customers with whom they communicate predominantly at an impersonal level. They have a relationship focus and are intent on developing stronger relationships with these customers. For example they have developed a mailing list from information requests and they mail these customer information on a regular bases.

“I suppose to give you an example, prior to technology we would have treated every customer coming to Ireland as a first time visitor even if they’d been here 20 times in the last year because our messages were the same, we never knew that you were here 20 times, so we’re still pumping out the same message over the TV or the radio. Now if you’ve been here 20 times we should really know that and we should be able to say we really know this is what you like and here’s an offer from us (Case G, Marketing Manager).

Increasingly Competitive Marketplace: There is a new concentration on the relationship as the main source of competitive advantage in a competitive market.

“I think so many things now affect our competitive advantage but now the other companies have them too, we all have good products we all have a lot of

people we all have the technology that can build our product on time, to a spec, and within budget. So now where is the discerning difference? Get out and know your customer and it has to be that” (Case J, Director of Customer Services).

The increased emphasis on marketing and its role in the company was linked to the fact that their customers have become increasingly demanding within an increasingly competitive marketplace.

The context for this new relationship marketing focus is that they are all successful companies and have a solid customer base. In recent years there has been a realisation that their customer relationships are very important and that rather than just continue in the same operational mode, they must develop closer links with their major customers. In the majority of the cases there was a high customer dependency due to a variety of reasons, but now due to competitive forces this is changing. For example cases H and I have noticed that in the last few years their customers have begun to rethink their relationships and have demanded accountability and increased service. In the past customers simply renewed their annual service contracts without much discussion, but in recent years there has been a tendency for customers to question this decision and to put their contracts out to tender. The customer was to a certain extent taken for granted.

“Companies out there are changing. It is literally, responding to changes in clients. Years ago, whoever was your auditor, they were your auditor, and they stayed your auditor forever. We are auditors to yyy1. We were appointed to them in 1927. The first time it was questioned, that somebody else might become their auditors, was in 1996” (Case I, Head of Marketing and Business Development).

Another example is Case F, which was a monopoly supplier. The relationships that developed were based on complete customer dependency. It is only in recent time that the company has started to listen to and react to customer demands, as the market has moved to a duopoly. Previously customers had no choice but to accept the products and services

¹ A leading company in the Irish market

offered, now they are demanding increased service and there is evidence of the company working with their customers and building relationships. This is particularly noticeable with their major customers. For example, they have joint initiatives for service provision and they have provided an on-site staff member to aid in the maximisation of their service. They have also set up a special helpline and continuously monitor and research these customers' requirements.

The relationships between these cases and their customers have become more professional and particularly for cases F, H, I and J, there is a progression away from "*personal loyalties*" and "*old cronyism,*" to a more competitive business environment based on value and commitment.

Evidence of Relationship Marketing Practices: The evidence for the inclusion of the cases at various stages of relationship development was collected from a review of their current marketing operations. The main evidence is that the marketing department is focused on a range of initiatives to increase their relationship marketing abilities. These are highlighted in the table 6.8 and discussed in detail in this section.

Table 6.8 Evidence of Relationship Marketing Practices in the Marketing

Department

Evidence of Relationship Marketing Practices	Cases Supporting
Developments of a centralised view of customers	All cases
Segmentation of their customer base	All cases
Collection of qualitative and quantitative market information	All cases
Cooperation with the sales force for increased customer service and relationship building initiatives	All cases
Increased focus on marketing and increased company-wide marketing operations	All cases
IT enabled relationship marketing practices (see proposition three)	All cases

As a relationship marketing focus is a relatively new development for the marketing department, there are major challenges to the implementation of relationship marketing practices and much of the discussions were of a futurist nature, what they will do, and what they have to do from a marketing perspective.

“We have to be much more customer-focused in order to retain customers. We need to establish a much better relationship with them ... because I feel that if the relationship is established, retention doesn’t automatically follow but there’s a certain amount of loyalty there with the customer” (Case F, Portfolio Product Support Manager).

These cases are experiencing major difficulties as they progress towards a more relational focus. Their main demand is for customer information.

“It’s a balance between living in your customers pocket and the cost of doing the same. Ideally we should be marketing one-to-one, we should know everything there is to know about our individual customer, wants, needs and aspirations” (Cases F, Head of Marketing).

The main problem is that the marketing department lacks information on their customers. The challenges they must overcome to gather customer information will be further discussed in proposition three.

Development of a Centralised View of the Customer: These cases are experiencing difficulties in gaining a centralised view of their customers. The sales force is very protective of their customer base and the retention of customer information.

“The notion of what a client is, is moving away from this deeply personal ‘you cannot talk to my client without my permission’ to ‘I am the main client contact, the account manager, the account owner, but the client belongs to the firm ... and if the firm says that these things have to happen with clients, then I am the person who makes sure that does happen. So there's a massive shift there, but is that a marketing shift, or is that a business shift? It's woolly as to which it is” (Case H, Marketing Manager).

There is a widespread demand for changes to the management of relationships. There is senior management support for the development of a centralised customer database based in and utilised by the marketing department. A variety of techniques are being utilised, mostly IT related, to wrestle control of the customer (customer information) from the sales force and to maintain it in the marketing department for manipulation and strategic planning. The main focus of their new database development (see proposition three) is to have a centralised view of their customer and to have the ability to segment their customers, along a variety of variables.

There is also a lack of market information in relation to competitors and general developments in the market. For example case J found out recently that a major restaurant opened in France using their competitor's equipment because the owner of the restaurant and the dealer in that area had a disagreement. This type of development is very damaging for the company but the marketing department was unaware of either development until they recently started to monitor their markets more closely. This type of operation was considered the domain of the sales force.

Segmentation of their Customer Base: All the cases have some level of segmentation of their customer base through the use of a very standard database. Currently all the marketing departments lack the information to segment their market in any detail and to a

certain extent still view the customers collectively. Where customers are segmented it is along the spend variable. There is criticism of much of the information in these databases and the information they use for segmentation purposes is of a poor quality due to difficulties which will be discussed in greater detail in proposition three. For example case H and I have standard customer information databases and they use these to invite customers and potential customers to corporate events and for the direct mailing of suitable reports (like budget day analysis). They know that a lot of the information they are using is out of date and incorrect but they have great difficulties in persuading the sales force to supply them with the correct information.

Collection of Marketing Information: The major evidence for the transition to a relationship perspective is the level of customer, competitor and market information that the marketing department are currently collecting. They are conscious that there is lack of marketing specific information. For customer information collection their strategy is two fold. They are pursuing the information maintained by the sales force (see proposition two), and they are also commissioning independent research of both a qualitative and quantitative nature. For example, Case J has labelled this project the voice of the customer and competitor intelligence:

“We are looking in to some quite exciting programmes ... which we are just putting into place right now. We're doing a major survey in Europe of customer's perceptions etc. We are starting a competitor intelligence programme next week; we are using an outside consultancy to help us develop that. That is being kicked off on Tuesday next” (Case J, Director of Customer Services).

For case F this is the dominant feature of their marketing effort and they have extensive market research collection procedures. The difficulty is the lack of completion of the questionnaires by customers. They are all experiencing difficulties in this area. For cases F, H, I and J, they are all targeting large companies and they find that these companies are over researched and loathe to participate in surveys. For case G they are often targeting a transient visitor, who is hard to track down and research.

Cooperation with the Sales Force: For all these cases, though the marketing and sales are separate departments, marketing has a major role in the daily support of, and communication with, the sales force and there is a focus on team work and cross functional dependency. The marketing departments are very supportive of the sales force and are an ongoing source of information with good communication flows between the two. In general, the sales force had tended to focus on the next sale and to have a transactional perspective, with marketing focusing on reacting to sales force requests for customer management support. Recent developments suggest that the marketing department is driving the change to a more company wide relationship focus. The marketing department had in many ways abdicated responsibility for their customers to the sales force and have only recently realised that they need to become more involved with the customer relations. Their main demand is for increased customer information in order to analyse the market and provide strategic advice. This issue will be developed in greater depth in proposition two.

Increased Focus on Marketing and a Marketing Orientation: There was acceptance by the company's senior management of the need to develop an increased marketing orientation and a commitment to increasing the marketing skills of the company. Marketing is now viewed as a core management issue and a provider of the strategic direction for the company. *"So increasingly it's moving from being a bunch of lovelies who put adverts in the paper to being the director of the business"* (Case F, Head of Marketing).

There was evidence of marketing permeating throughout the organisation and new company-wide marketing tactics and strategies, particularly noted in the professional service companies. *"We are now very centre stage here, marketing is the most important department, we are the interface with the customer"* (Case G, Marketing Manager). There was no indication of the demise of the marketing department and no staff reductions. Actually as these companies realise the importance of marketing and a marketing focus, their marketing staff numbers have actually increased.

IT Enabled Relationship Marketing Practices: The use of IT in marketing had introduced changes in marketing operations. There was evidence of the development of new practices and techniques for relationship marketing, mainly related to increased usage of internet based applications and databases.

“Our interaction capability with our customers is much more sophisticated now than it was because we’ve used technology to enable us to be more efficient with our customers ... The more we know the more we can tailor”(Case G, Marketing Manager).

These issues will be developed further in proposition two and three.

6.4.1 Summary for Proposition One

There was support for this proposition with evidence of a range of marketing practices that confirm the development of a relationship marketing focus. This is a relatively new development for all the cases driven by an increasingly competitive marketplace. Marketing are now viewed as a critical department within the company and as the driver of many new initiatives, needed to react to changing market conditions.

A central feature of this development was that though the sales force predominantly controlled the relationships the marketing department had a role in the relationship. The major difficulty between the marketing and the sales force was the lack of marketing information about the final customer, which was retained by the sales force. For marketing practitioners to practice relationship marketing there is a need for access to this information. Various techniques are being utilised by marketing to gather this information which will be discussed during the rest of this chapter.

6.5 Proposition Two: There is a Major IT Component in Contemporary Marketing Practice and the Assimilation of IT in Marketing is at the Informational Stage

The assimilation of IT should be at the informational stage of the stages theory, according to the literature. There was evidence in these cases of a level of IT assimilation that

indicates that they are at the informational stage of IT development and are leveraging IT for specific marketing applications. The following section reviews the stage of IT assimilation in the cases.

The suggested framework, from the literature review, for a more in-depth analysis of the impact of IT on marketing was the stages theory framework as discussed in chapter 4 and this was adapted for marketing use in this study. The three stages used for this study are:

1. Automation – (efficiency) replacing manual tasks with IT, mainly IT controlled centralised systems with the use of Microsoft packages for productivity purposes;
2. Information – (effectiveness) leverage of human knowledge, a move to decentralisation of control of IT and the development of marketing specific IT applications; and
3. Transformation – new opportunities and new practices resulting from the use of a wide range of ITs in marketing.

Evidence of an Informational Stage of Development: Table 6.9 provides a review of the main evidence for the informational stage of IT assimilation in marketing and the following section reviews these areas.

Table 6.9 Evidence of an Informational Stage of IT Assimilation in Marketing

Evidence of Informational Stage	Cases Supporting
Major criticism of the centralised information system	All Cases
Decentralisation of control of marketing related ITs	All Cases
A dominant focus on new marketing specific IT	All Cases
Company-wide open access to IT	All Cases
Informational rather than technology focus	All Cases
Internal and external focus of IT developments	All Cases
Appreciation of the learning curve of IT assimilation	All Cases
Increased IT skills in marketing	All Cases
Marketing department as drivers of IT developments	All Cases

Centralised Standardised Company-wide Information System: The in house developed information system is a central part of the IT infrastructure. These systems are financially orientated and do not cater for marketing's information needs. These bespoke systems can take years to design, develop and implement and there is a reticence to change these systems. They are also very useful for a range of departments, particularly finance and production, but they lack applicability for marketing who are very critical of them. They provide standardised centrally controlled finance orientated information.

“They are primarily for generating bills. They are designed to enable us to send out invoices so they're not really designed for us to gain a better understanding of our customers” (Case F, Head of Marketing and Business Development).

The marketing departments have developed systems to suit their own needs and have ceased to battle with the IT department in relation to the centralised finance based IT controlled systems. They are involved in a range of IT projects and are introducing IT systems that conform to their requirements. This is an indication of the move from the automation to the informational stage of IT developments.

Decentralisation of Control of Marketing Related ITs: There is evidence that the control of marketing specific ITs has moved to the marketing department, particularly noted for internet based developments (see table 6.10).

Table 6.10 Internet Site Development and Control

Internet Development and Control	Cases supporting
Marketing department designed and controlled	Cases F and G
Head office designed and marketing now controlled (previously with the IT Department). Global directive to change control.	Cases H, I and J

As the internet is an open standard system, it allows for decentralised control, which has been embraced by the marketing department. IT personnel do not resist this development,

as they view the internet as a marketing application. *“Because the internet is more a marketing than a technology IT. It is not the technology so much, the technology is very basic, it is an advertising selling thing”* (Case G, IT Manager).

The internet and related developments are now controlled in the marketing department and this platform allows for their use for individual marketing projects outside of the control of the IT department. There is also evidence of the development of marketing specific databases controlled by marketing, but with a level of open access for staff. These developments will be discussed in greater detail in propositions three and four.

Open Access to Systems: All cases have open access to the internet for all staff and the marketing staff are particularly conversant with internet technology. Internet technology is a decentralised technology and is indicative of a progression from centralised control by the IT department to departmental and individual control.

Informational Focus: These cases have moved beyond the technological issues and are now rapidly pursuing IT developments for various aspects of their business and marketing operations. The focus is now on the information the IT applications can provide to increase efficiency and effectiveness. Marketing personnel are challenging the IT systems to automate marketing tasks which have an informational impact on marketing practices.

They predominantly use the intranet platform to automate marketing tasks, as this is a company wide decentralised system, which places control into the hands of the user. This type of system use indicates a move to the informational stage of IT developments in marketing. For example in case I, they have an innovative IT process which is used to automate the promotional gifts distributed to partners, which was a time consuming and conflict orientated process. They also use the intranet to automate the design requests from the partners who now complete most of the design work on screen themselves and then pass it to marketing for final approval. The intranet is also currently being used by

cases H, I and J to automate standard requests for marketing information. These IT applications allow marketers the time to concentrate on more strategic and developmental aspects of marketing.

“It freed us up to do the strategic marketing planning, because we're so busy doing the day to day stuff that we don't have time to step back and look at the bigger picture, with the planners, with the guys who are designing the business plans. We work with them and say ‘okay, we did this, now what can we do better?’ Doing things like getting a database up on-line, for everybody to use ... again giving us time to do the marketing, as opposed to doing stuff”
(Case I, Portfolio Product Support Manager).

Rather than simply using IT to automate practices these cases were endeavouring to develop databases of information, which could be used for relationship marketing practices including segmenting and targeting their customers (see proposition three).

Internal and External Focus: These cases have both an internal and external focus to their IT developments. They concentrate on developing their systems internally so that they can then use IT externally.

“IT is basically providing a service. It is automating and informing that is the main service internally ... IT is just a tool to get what you want to make things easy, to keep yourself informed, and to keep your colleagues informed and then IT externally to your customers” (Case G, Marketing Manager).

For instance in case F they have an intranet for marketing specific information and they are developing an extranet for customer requests (see proposition three).

Marketing IT Skills: In relation to marketing skills these cases show evidence that IT knowledge and skills are an important requisite for marketing personnel. The senior marketing person had a vision for the future direction of marketing developments with both a relational and IT perspective (see table 6.11).

Table 6.11 IT Skills in Marketing, Vision, Orientation and Drivers for the Informational Cases

	Case F	Case G	Case H	Case I	Case J
Senior marketing informant's IT knowledge	High - Visionary	High - Visionary	High - Visionary	High - Visionary	High - Visionary
2nd marketing informant's IT knowledge	Medium	High	Medium	High	High
Drivers of IT Developments	Marketing and the steering committee	Marketing	Marketing	Marketing	Marketing
Orientation of the IT systems in marketing	Automating of internal marketing procedures, collection of information and external links				

Appreciation of the Learning Curve of IT Developments: Though these marketing personnel are still struggling to implement their IT strategies, they have a clear vision of where they are going and what they are doing. They have forward-looking development plans and realise that the current impacts are minimal compared to the profound effects, which they envisage will occur over time. They talked in the future tense about their IT developments and the range of ITs they needed to develop before they can achieve their goals.

During the case study thirty five ITs were reviewed (see interview protocol, Appendix B) and each case had a range of ITs in various stages of development. There was on average 20 of the 35 applications in use in marketing. Having IT and actually using and benefiting from IT are two different things. Within the review of these ITs, the level of development was analysed along the stage theory continuum and further analysis appears in table 6.12. As can be clearly seen the majority of the ITs are maintained at the informational level of usage.

Table 6.12 Range and Level of Development of ITs in Marketing

Range of ITs in Marketing	General Levels Across All Informational Cases
Hardware	Good quality IT infrastructure
Software	IT as productivity tool and for informational purposes
Database – segmentation and targeting	Major database initiative at the development stage
Decision support systems	None
Communications – internal	High level of IT based communications
Communications – external	Medium (IT in the development stage)
Research	Usage of IT for research purposes

All the cases had a range of IT applications, at various stages of development, to extend the IT capabilities within marketing, as evident in table 6.13.

**Table 6.13 Dominant IT Development in Marketing and the Departments
Driving These Developments**

Cases	Dominant IT Developments in Marketing	Driven By
Case E		
	Intranet between the sales and marketing department	Marketing Department
	CRM	IT Steering Committee
	Sap	IT Steering Committee
	OMS	Joint IT and Marketing Department
	Extranet with their suppliers	Joint IT and Marketing Department
Case G		
	Centralised database	Marketing Department
	On going Intranet developments	Marketing Department
	Development of on line tracking	Marketing Department
	Marketing planning software	Marketing Department
	Extranet development	Marketing Department
	In house publicity tracking software	Joint IT and Marketing Department
	Management Schedule Package	Joint IT and Marketing Department
Case H		
	Intranet – internal communications	Marketing Department
	Extranet links with strategic alliance partners	IT Department
	Consolidation of databases – centralised view	Marketing Department
Case I		
	Centralised marketing database	Marketing Department
	Intranet developments	Marketing Department
	Extranet (planning)	Marketing and IT Department
	Review of current CRM software	Marketing Department
Case J		
	Competitor database	Marketing Department
	Centralised customer database	Marketing Department
	Lotus Notes with the dealers	Marketing Department
	Intranets development with the dealers	Marketing Department

Table 6.13 also indicates the dominant IT focus to much of marketing practice and the level of IT expertise in the marketing department. A major feature of their informational stage of development is that the marketing rather than the IT department is driving these developments. This issue, which will be discussed in proposition four.

These cases are all involved in continuous developments of their IT capabilities. There is a realisation that the IT developments need to be consistently updated and improved.

6.5.1 Summary of Proposition Two

There was strong support for the proposition that IT had changed marketing practices. The major changes centred on the dominant IT focus to marketing's daily operations and the development of a range of IT applications to improve their marketing ability, internally and externally.

Utilising the framework from Gibson (1988) we can clearly position these cases at the informational stage of development (table 6.14).

Table 6.14 Evidence of the Stage of IT Assimilation

<u>Issues</u>	<u>Automation</u> <u>Traditional DP</u>	<u>Information*</u> <u>Personal Computing</u>
Applications	Large shared applications; used regularly; highly structured	Small, individual applications; often ad hoc; often unstructured
Application Development	Slow, methodical system development by trained IS professionals.	User customize off the shelf packages to suit own needs; evolutionary, prototyping approach, little need for formal tools and methodologies
Implementation Issues	Ensuring user cooperation and correct use; adding requested enhancements	Responding to requests for training and troubleshooting help

Adapted from Gibson (1988)

*Stage of development for these cases.

These marketing departments are challenging the IT systems to improve their efficiency, to allow them to concentrate on more important strategic marketing developments (effectiveness). They have an information resource view of IT and are aware of its potential to improve to their effectiveness. They are in process of continuous developments evidenced by the designing and developing of a variety of IT applications, which will increase their information and knowledge. They are all at the informational stage of development.

These cases lend support to the applicability of the stage theory framework of IT assimilation. They have all challenged the dominant automational focus of the IT infrastructure and have developed a strategy to move their IT usage to a more decentralised informational stage of development.

6.6 Proposition Three - There is a Dominant IT Dimension to Relationship Marketing which will be Evidenced Through Database and IT based Interaction in Marketing

The following section reviews the ITs in marketing which had a relationship marketing focus. These cases all had a dominant focus on IT as an enabler and an aid to relationship marketing activities. As the marketing manager in Case G explained:

“IT in itself cannot be the interface, in other words you’ve got to decide the message. It’s an enabler to make you communicate and to store information about the customer and to build a better relationship as a result of the information you’ve stored in front of you.”

6.6.1 Marketing Specific Database Developments

Databases, for the purpose of this study, refer to a technology based information system which records customer information, but which is used and useful to marketing for various marketing applications, including segmentation and targeting programmes. The information on the systems is marketing applicable and is up to date and reliable. These terms were tested and adapted during the pilot interviews. Similarly to the Fletcher and

Wright (1995) research the sophistication of the systems was studied. This was judged on an adapted version of the Nolan (1973) stages of development (table 6.16) and linked to a discussion of the usage of databases by marketing personnel.

These cases were at various stages of development of major marketing specific database initiatives, which would have extensive manipulation ability. The main focus is on the centralisation of the customer information which is dispersed throughout the company. These databases are designed to contain qualitative and quantitative information, which is updated regularly. Table 6.15 highlights the major issues that these cases are encountering as they develop centralised marketing specific databases. The dominant feature is the lack of acceptance of the IT department's centralised information system (as discussed in proposition two) and the development of their own system.

Table 6.15 Database Developments

Databases	Cases Supporting
Non use of central information system which is finance orientated and product based information (as discussed in proposition two)	All cases
Current marketing specific database but lacks major features required by marketing	All cases
Developing a new marketing specific database	All cases
Using a variety of sources and methods to collect marketing specific database information	All cases

Development of a Marketing Specific Database: The marketing department is involved in a major overhaul of the entire process of database information collection. Marketing personnel are persistent in their efforts to have database information that is complete, accurate and up to date. Due to discontent with the current system there was a major battle by marketing to gain direct access to the financial database, initiate changes to the system and/or to have a database designed for marketing's requirements. Direct access to the database is not possible due the centralised legacy system. Efforts to introduce changes to the system have failed so these cases are all pursuing the third option and are

developing separate new databases for their own use, but which will have the ability to link to the main system and to source information from that system.

Centralised View of the Customer: All the cases are developing a database which will provide them with centralised customer information. They are aware of the benefits and advantages to marketing which will accrue. They all have endeavoured to develop these databases in the past and have failed.

“Everybody's looking for it. So that's why we want to get it up and running, but it's just ... again, given the baggage and the background to ... and the fact that it's never worked in the past. These are all the things that are wrong with it” (Case H, Marketing Assistant).

All cases have multiple databases which they are planning to centralise.

“Yeah, all of the information is being collected but it's not being pulled out in reports in the way we want it right now ... We need one central data warehouse and that has been apparent to me for well over 12 to 18 months ... I think we'll be one of the market leaders when we do it” (Case G, Marketing Manager).

The Challenges of Database Information Collection: A restrictor of their database developments and the main source of delay is the lack of usable and useful information for these systems. The main source of information is predominantly held by the sales force (Case F); their partners (Cases H and I); their dealers (Case J); and, their serviced offices (Case G).

The major challenge is to ensure that the sales force populate the fields in the new database. In regards, to their current or previous marketing specific database all the cases have experienced some level of inconsistency in both the collection and inputting of database information.

“It is a major job, a major, major job ... It continuously needs to be updated and it's probably not. It's being updated by some people and not being updated by other people so, and then because people feel it's not up to date, they don't use it. So it's kind of like a vicious circle”(Case H, Marketing Assistant).

A central issue in all the cases was resistance to information sharing by the sales staff.

“And we've a major problem with our dealers as well, they don't want to participate. They're paying lip service to it. Some of them have refused, some of them have begrudgingly come along after much cajoling but there is resistance from the dealers to give us information and some times they don't have the information” (Case J, Director of Customer Services).

The sales staff maintain customer information in their heads or in their own mini databases and protect this information from the company. These cases are aware that the information that they require, in order to improve their relationship marketing ability, resides with the sales representatives.

There is a historical reluctance by the relevant staff, usually sales, to input information into a database. *“They are kinda protecting their information, if you want to call it that”* (Case H, Marketing Manager). A database system will only work if the data is of consistent quality across the company and if there is a corporate culture which encourages the collection and use of this data. The major incentive to ensure database information completion by the sales force is senior management support for information sharing; the promotion of the benefits of the database through training schemes; and the persistence of marketing's demands.

Marketing are persisting through various means to ensure the gathering of the information. *“Lobbying, begging, cajoling, bullying (laughs) anything I can possibly think of”* (Case F, Head of Marketing and Business Development). As Case I's Head of Marketing and Business Development states, *“It's a battle ... oh, the database will win.”*

Case J are planning to punish the dealers for non-provision. If the information is not completed to marketing's satisfaction they can refuse to supply the product to the dealer. *"No information, no sale"* (Case J, Marketing Communications Manager). Case F are reviewing the option of paying the sales force to input the data. *"Maybe we will just have to pay them to do it, and that's that. If that's what it takes that's what we will do. We need it so badly"* (Case F, Head of Marketing and Business Development).

With respect to the difficulties that marketing are encountering in database development there are a variety of solutions in existence in these cases. Case J has the most developed and sophisticated method of database information collection, utilising a CD Rom between themselves and their dealers, though they too are experiencing difficulties. *"They don't like us collecting data for the database either, we've had a lot of problems with that"* (Case J, Director of Customer Services). For case I, the current system is the manual collection of database information, while cases H and G operate both a manual and an IT based system. Case F operates their database with only half of the fields populated.

Table 6.16 Evolutionary Stage of New Database Development

Evolutionary Stage	Case F	Case G	Case H	Case I	Case J
Database concept	Manipulation of customer information for segmentation and targeting purposes	Manipulation of customer information for segmentation and targeting purposes	Manipulation of customer information for segmentation and targeting purposes	Manipulation of customer information for segmentation and targeting purposes	Fully integrated on-line real time information
Database Structure	Multiple sources of information	Consumer information	Multiple sources of information	Multiple sources of information	Multiple sources of information
Degree of integration	High	High	High	High	High
Decision maker for database contents and designs	Marketing	Marketing	Marketing	Marketing	Marketing
Personnel with direct database access	Marketing and sales	Marketing and customer service staff	All partners and marketing	All partners and marketing	Marketing and sales

Adapted from Nolan (1973)

6.6.2 IT Based Interactions

A main feature of these cases is the difficulties they have in pursuing a relationship marketing focus in the marketing department, due to the lack of information and contact with the final consumer. The level of IT development in marketing is related to the need for marketing to have more control and knowledge of the customer base in order to practise more sophisticated levels of relationship marketing. Therefore, these cases support the contention that relationship marketing practices require an IT dimension but they show clearly that these IT based applications are only slowly developing.

These cases use a variety of internet based applications with a dominant internet approach to much of their relationship marketing practice. There is evidence of the use of intranets, internet based systems and to a lesser extent, extranets. A range of individual marketing specific developments are in various stages of design, development and actual usage across all cases. The utilisation of the internet is viewed as a pivotal organisational development.

Internet Developments: Company internet sites are primarily used to supply global general information, particularly for analysts and the stock markets for cases F, H, I and J. They also have marketing information and services for their customers. For example, for Case H, their clients can download reports and request further information on screen. Case G has the most progressive internet developments and it is the cornerstone of their marketing operations. *“It is all internet, internet, internet. In terms of the new deliverables, everything is a logical extension of the internet”* (Case G, Marketing Manager). They have high levels of interactivity on their site and also tracking software.

All the cases were reviewing options for the increased use of the internet, including personalisation of site, increased interactivity and on-line sales. For example, case I are planning to accept on-line bookings for their next seminar.

Marketing Department’s Control of the Internet: The control of the internet and its developments are predominantly based in the marketing department and the IT department has very little or no input in this area. This is evidence of the decentralisation of IT control and the view of the internet as a marketing tool (see propositions two and four). Controls over internet content and strict guidelines in relation to the information and the functionality that can appear on the web site exist for cases H and I. These are global sites and the marketing departments in both cases are trying to insist on changes to make them more dynamic and creative.

Intranet Developments: The internal communications in these cases are heavily influenced by IT, centring on the email and the intranet. There is general acceptance across all the cases that internal communications include a variety of IT applications, with IT replacing much of the previous mail or face-to-face meetings. It is an issue that they now accept as normal and there was some difficulty in recalling any other way of operating. They all have issues in encouraging staff to use these systems. *“We’re trying to just stop them phoning us for everything. This will take time, they just don’t like having to do it themselves”* (Case I, Head of Marketing and Business Development).

The intranet is predominantly an internal communications device, but its usage would indicate the IT orientation of a company and the level of IT skills company-wide. It is also a device for automating previous manual and time-consuming tasks. Cases F and J have only recently introduced a company wide intranet. Case F is also in the process of launching a marketing specific section to the intranet, which will automate many of the requests for information from their sales force. Case I have a very developed intranet strategy and they use it for all internal communications and they also use it to automate marketing specific tasks (see proposition two). Case H is in the process of launching a global intranet, which is in the control of the IT department.

Extranet Developments: Extranet applications are progressing relatively slower. Cases I and H are considering utilising an extranet facility to permit major clients direct access to their information sources, though developments on this initiative are only at the discussion stage. Case J is in the process of introducing an extranet with their dealers, automating the reordering of stock and spares. This development will have a major impact on the amount of work and the level of paper based information they have to hold, as they have 30,000 products and spare parts in their inventory.

“My vision is to out load all the order entry and stuff out to our dealers, that they will be online entering orders. Right now they send e-mails, lotus notes, faxes, into my people. We put orders into the system, we then mail them out

acknowledgements, this will all be done through an IT link” (Case J, Director of Customer Services).

Case E are developing a similar extranet with their major customers to automate the process of reordering standard products.

All of the cases were aware that extranets can alter their relationships, as the process of purchase or information supply would be automated and lacking a personal dimension. Their view is that the benefits of immediate access to current information and the speed of the operation will outweigh any negatives. They perceive IT based applications at the customer interface as augmenting rather than replacing the relationship. They consider that IT applications can alleviate many of the mundane and time-consuming aspects of the relationships. They also consider that it is an innovative development from the marketing department to aid in relationship management.

As none of the cases were using either the intranet or the extranet sufficiently or for any prolonged periods of time, there was a lack of information to monitor any impact on the relationship from its use.

6.6.3 Summary of Proposition Three

These cases support the proposition. These cases have a dominant relationship focus and IT has a central role in their operations, though the impact at the customer interface has been minimal. As discussed in proposition two they have progressed from the automational stage, from use of the company wide information systems and static internet sites, to IT developments having a central role in the marketing department. Marketing department innovations are closely associated with IT initiatives.

They have two main IT focuses: the database and the internet. The main driver of the new database development is the awareness that for marketing to practise relationship marketing, they need a centralised source of customer information, which is reliable, extensive and regularly updated. They are all concentrating on the development of a

marketing specific database of their customers. There are major challenges experienced by these cases as they endeavour to develop their database expertise. These difficulties are not technological but relate to the informational content perspective. They are driving the developments in the compilation of database information despite the reticence of the personnel who hold this information. This database development is separate from the current centralised finance orientated information system and will, when completed, provide a centralised view of the customer for manipulation by the marketing department. These cases have a vision for their database developments and the marketing applications of the information.

Internet developments are also a central part of the marketing operations, though except for case G, they are in the early stages of development. Their major concentration is on the intranet and to a lesser extranet for the automation of internal and external operations.

6.7 Proposition Four: There are Barriers to IT Assimilation in Marketing

Analysis of the main barriers to IT assimilation indicates that the pivotal barrier relates to developmental issues in the move from an automational to an informational assimilation of IT. All of the cases are experiencing delays in the development of their more innovative ITs with some of the developments taking up to two years from conception to implementation. A major similarity in all these cases is the solutions they have utilised to overcome the barriers to IT assimilation in marketing.

Company specific barriers to IT assimilation exist across all the cases, as would be expected, as the stage of IT assimilation is not uniform in respect to time, speed, implementation and utilisation of IT and so on. For Case J the main barriers are technical, human and market with the main focus on the latter barrier. For Cases I and H, the barriers are human and centre on the lack of time to concentrate on IT developments in a challenging market place. For Case G, the major barriers are the legacy systems, which are delaying their more innovative IT developments. The main barriers in case F centre on organisational issues and change management, as this case is struggling to embrace

major changes, many of which are being resisted by staff members. They also have issues with their legacy systems. All of the cases have database specific barriers, which were discussed in propositions two and three.

The main barriers to IT assimilation in marketing are presented in table 6.17.

Table 6.17 Barriers to IT Assimilation In Marketing

Main Barriers	Case F	Case G	Case H	Case I	Case J
Technical Barriers					
Problems with the technical infrastructure	✓	✓			✓
Legacy system: The available IT systems are not suitable for marketing's needs / lack of marketing dimension to the current IT systems.	✓	✓	✓	✓	✓
Human Barriers					
Delays due to the multitude of IT developments and the time it takes to develop and implement them	✓	✓	✓	✓	✓
Organisational Barriers					
Staff resistance to changes or demands of new IT systems	✓	✓	✓	✓	✓
Lack of cooperation and conflict between the IT and marketing department	✓	✓	✓	✓	✓
Market Barriers					
Sectoral developments of IT expertise and knowledge	✓	✓	✓	✓	✓
Stages of IT Developments					
Automational focus of IT infrastructure and department	✓	✓	✓	✓	✓

Technical Barriers: Technical barriers have predominantly receded as the IT infrastructure has improved across all cases, though technical failures still exist in cases F, G and J. The main technical barrier is the lack of applicability of the in-house information system for marketing usage. All cases were in the process of developing new databases to overcome this barrier as discussed in proposition three.

Human Barriers: The major human barrier relates to staff resistance to using or contributing information to the IT systems and the slow rate of IT developments. They are all introducing a multitude of IT developments, which is very time consuming. They are all pressurised by the number of IT applications they have to develop. These developments are occurring during a very challenging and competitive time for all these cases. So an already busy marketing department is now very busy. This is indicative of the fact that IT is a new development, particularly in the marketing department and that these IT developments are challenging and expensive projects for these companies.

There is frustration at the slow speed of IT developments. This is due to the range of IT at the development stage and also to the lack of internal IT support. All of the cases have experienced long delays between their demand for an IT application and the development and ultimate implementation of that IT application, ranging from one to three years. *“We need the database now and we know that it will take more time. We have been working on this for over two years now. These things take time”* (Case J, Director of Customer Services).

Organisational Barriers: The importance of IT applications as a critical enabler of the changes that are occurring in their organisations is uniformly supported in these cases. In a content analysis, all cases used the wording *“IT enabled”* or *“IT enabled change”* to explain their view of IT’s role in marketing and the company.

Resistance to Change: They are all experiencing major difficulties in gaining staff support for increased usage of the IT applications, especially where it threatens organisational norms. As discussed in propositions two and three there are also issues in relation to the supply of marketing information for systems. These resistance issues can, and do, delay the development of IT applications in marketing.

There is a major role for marketing in the development of a range of IT initiatives. They are encountering resistance to change and they have to overcome this barrier in a variety

of ways as discussed in proposition three. Senior management is supportive of their IT developments and these cases are orientated towards marketing and IT related change.

“The IT is fine. People are not actively resisting IT. They're all open to IT. They just don't have the time ... If the organisation sets it as a mandate, everyone will use it. It's not active resistance, just someone hasn't forced it through. Is it the IT department's function, is it the education department's function, is it the marketing department's function?”(Case I, Head of Marketing and Business Development).

Market Barriers: A barrier highlighted by all the cases was the non-uniform adoption, or diffusion, of IT across their markets and companies. This creates a barrier, which results in the need to parallel processes for different markets and internal operations, which is very time consuming.

“I think [it will be fine] once its properly structured and everybody is properly networked and they have the same generation of technology. I think where it poses internal problems is where there's different layers of technology and therefore sometimes they send me items that I can't open ... I can make sure that this entire department is highly sophisticated. We have the latest gismos but that's no good when I send out a document to all staff world wide and 2/3 of them come back and say we can't open it, so it has to be on that basis”
(Case G, Marketing Manager).

6.7.1 The Automational Stage of IT Assimilation

A major barrier to IT assimilation in marketing was the automational focus of their IT applications as discussed in proposition two. The major contribution of these cases is to not only highlight this issue, but also to reveal the solutions they have used, to bring about the movement to an informational stage of IT assimilation.

The importance of marketing within these cases, and the importance of IT to the marketing operation, means that marketing specific IT applications were developed,

despite resistance from the IT department. The automational focus of IT developments and especially the centralised information system, had delayed these developments and so solutions to this situation had to be utilised, which will be discussed below.

Support Versus Strategic Development: The IT departments have a major support role and only a minimal strategic role and do not provide guidance and strategic direction for the marketing department in relation to IT issues.

“So it is not a problem as in I want to do something with the customer, [they don’t get involved] because that would be the creative side and I don’t think I am being cynical I think I’m being realistic. An awful lot of their time is spent fire fighting” (Case J, Director of Customer Service).

All the cases were having major difficulties with the support issues, mainly due to lack of staff and resources.

“They have a very difficult job. They have a lot of issues to do with staff retention. When do you contact the IT department? When you’ve got a problem. It happened recently that there was no-one on the helpdesk who had worked in the firm any longer than 10 months ... they’re trying to hold the thing together coherently. They do an okay job in a very difficult situation” (Case I, Head of Marketing and Business Development).

Automational Focus of IT Department: Evidence from the cases suggests that there is a need for the marketing department to circumvent the IT department due to the level of centralised control and the standardisation issue.

The standardisation issue refers to the situation where the IT department decide which IT applications the company can pursue. This is very beneficial from an IT perspective but it leads to centralised control of the IT infrastructure and constitutes a barrier to IT development in marketing. The IT departments have great difficulties in supporting a

range of different systems, due to time and resources constraints. With respect to the cases reviewed the salient issues are as follows:

- Marketing request can be refused because the software requested is not on the IT list (Cases G and J);
- The ITs on the list may not be the systems that marketing requires (All Cases);
- IT department is reluctant to support a system that is specific to one department rather than globally supplied. Hence it does not accept or consider the request. (All cases).
- Marketing personnel must be technologically proficient to request ITs from the IT department because the IT personnel in these cases do not have marketing knowledge. The IT personnel are more knowledgeable about financial and production requirements than marketing requirements (All cases).

Lack of Priority for Marketing Requests: Marketing personnel have experienced major difficulties in convincing the IT department of the importance of their IT needs and an IT request from marketing can be ignored or refused (Cases G, J and H) or not supplied quickly enough for marketing purposes (All cases). The IT department is a very busy department and handle a wide range of requests. *“I may well have been involved at the time if we weren’t so busy quite honestly, but we would have had so many other things to contend with”* (Case I, IT Support Manager).

Conflict Situation: The major personality clashes between the IT department and the marketing department and the battle for power and control of the IT systems has created a tense situation between the two departments. The following section discusses the major issues encountered by the marketing department in relation to their interactions with the IT department and vice versa. It also delineates the solutions used in these cases to decentralise the control from the IT department and to move their IT usage to an informational level. These conflicts would be expected with the move from the automational to the informational stage of IT assimilation.

Personality Clash: There is evidence of a personality clash between IT staff and marketing staff. One informant compared IT personnel, to doctors with poor bedside manners. *“They are experts in their area and probably nice people, but they find it difficult to talk, explain or have a vision for IT”* (Case F, Head of Marketing and Business Development).

The IT personnel view their marketing colleagues as creative dynamic types and find them difficult to work with. The quote below highlights this issue and also reveals the control orientation of IT personnel.

“I think it’s also that there’s a tendency by, I suppose marketing people to, I suppose look down on IT you know? They see marketing as being a creative skill rather than a mechanical because it’s not so much that they don’t like IT ... it’s like they don’t like rules and postings by finance and controlling the budgets and things like that. They don’t like rules and the security thing and anything else like that. They see that as almost being prohibitive you know rather than being an aid you know” (Case G, IT Manager).

Solution to Overcome the Restrictions of the Automational Stage of IT Assimilation:

They have developed a range of solutions to overcome the automational focus of the IT department and the IT infrastructure and to move the IT assimilation in marketing to the informational stage. The general solutions utilised by these cases appear in table 6.18.

Table 6.18 Solutions to the Automational Stage of IT Assimilation

Solutions	Cases Support
Continuous development of IT solutions	All Cases
Development of IT skills in marketing personnel and the hiring of staff with IT experience for marketing	All Cases
Separation of IT department's support and advisory role with a separate IT advisory person based in marketing	All Cases
Managing the relationship between the IT and the marketing department	All Cases
Outsourcing of IT requirements	All Cases
Circumventing the IT department with the dominant control of marketing specific ITs in the marketing department	All Cases
IT steering committee (separate from the IT department)	All Cases
Large marketing controlled budget for IT expenditure	All Cases

Continuous Development of IT Solutions: The main feature of these cases is that despite the difficulties they are encountering they are continuously pioneering IT developments. They work through their IT related difficulties and continue to drive their IT developments forward. When IT based systems and solutions fail they just continue trying and redoubling their efforts to achieve their objectives. A dominant feature of these cases is their ability to comprehend that though there are benefits to IT developments, they often take time to materialise and IT implementation can cause major difficulties. They are continuously challenging the IT systems. Once they have one development implemented they are already designing or implementing their next development (see table 6.14).

Development of IT Skills in Marketing: Due to the level of assimilation and exploitation of IT within marketing, these departments have developed their IT skills. The marketing managers/directors could be viewed as super visionaries as they have a central focus on IT developments and a vision of where and how IT can enable many of the changes that are occurring in marketing (see proposition two).

The marketing personnel in all these cases have good IT knowledge. They have developed the ability to manage their IT needs either with or without the support of the IT department. Conversely, the focus of the IT department is on the internal, finance orientated operations. Hence marketing have driven their own IT developments, particularly when they have an external focus. For example Cases G and J have driven IT developments in marketing without the support or agreement of, the IT department.

They are very aware of the need to have an IT orientation for marketing in this era. They are convinced that many IT development are so central to marketing that it is vital to be very IT literate and to keep up with all emerging methods.

“That is happening in a lot of companies where technology departments have taken over a little bit and started to drive marketing ...when there’s a technology subject what they did was refer it to the IT department ... I think most organisations see IT as central to their activity and a growing number are seeing that it can’t just be left to the IT department” (Case G, IT Manager).

All cases have up skilled their marketing personnel and always include IT expertise as one of their requirements when hiring new marketing staff.

Separation of the Roles of Support and Development: There is evidence in cases F, H, I and J of the reorganisation of their IT departments, separating the support and the business solutions roles. This is evidenced through the allocation of an IT staff member solely in charge of IT developments within marketing (Cases F, H, I and J) and these personnel are based in the marketing department. *“Now this is why they got a help desk, to try and get these things handled separately and to let the Deirdre’s of this world get on with the more progressive stuff”* (Case J, Marketing Communications Manager). Case G have hired in IT personnel to the marketing department as there was no suitable person in the IT department.

Managing the Relationship: It is clear that these cases have to, and do, manage the relationship with the IT department very carefully. They are very aware that the IT department can delay the development of their IT plans. They find that the IT department is not as challenging or as focused on marketing IT initiatives as they would wish them to be. This has strained the relationship between the two departments.

The control and management of the internet and the related intranet and extranet developments, have been passed from the IT department to the marketing department and so they have the ability to demand services from the IT department. Critically, they also have the funding and staffing to manage these applications. Many IT developments in marketing are considered of critical importance to the overall strategy of the company and so any support that is needed is provided internally or externally.

The dominant evidence from these cases highlights an interlinking of the IT and marketing departments and the development of joint IT and marketing projects, with the marketing department as a major instigator and controller of IT developments (see table 6.16).

Out Sourcing of IT Requirements: Marketing has traditionally outsourced many of their core activities. The latest practice is to outsource IT requirements. This is particularly prevalent in case G and to a lesser extent in the other cases. Case G have an ongoing dispute with the IT department and their solution has been to bypass the IT department completely for all their IT needs. They have outsourced all their IT requirements and work with six different companies. The benefits are that this provides the necessary IT expertise and also contributes innovative and knowledgeable suggestions for further IT developments. Case J also outsource a range of their IT needs which is due to the lack of support from the IT department.

“I would say the marketing people would say that there isn’t enough response from the MIS people, now I think they would also say that they’ve made a major effort this year, but I think up to this year we would all say we weren’t

happy customers but they've got the funding now to go outside and get other companies in to help us" (Case J, IT Project Manager).

Circumventing the IT Department: Where the IT department has either blocked IT developments for marketing, or refused marketing requests for particular software, the marketing department has developed this requirement independently. For example, for case J, when the IT department refused to allow them to put a design package on the IT network, they bought the software themselves and secretly told the various staff members to upload it to their systems. They then utilised the package.

IT Steering Committee: The use of a separate cross-functional team to oversee the IT requirements of the whole company, is evident in all cases. These committees are designed to prioritise the IT requests across the organisations and to separate major projects from the focus on the bespoke centralised IT system. These committees prioritise the IT requests, so that the IT department is not making the decisions on which IT applications to pursue.

Marketing Budgets: A critical feature of these cases is that the marketing departments have large marketing budgets, with which they can purchase IT and develop IT initiatives, independently. *"People in marketing actually go out and buy, I'm just using this as an example. They could buy anything that they liked, you know with no form of hindering, no form of quotations, no orders"* (Case G, IT Manager). For example case G utilise their own budget for development of an automation package for their print requirements and do not have to even discuss this development with the IT department.

6.7.2 Summary of Proposition Four

In conclusion, there are a variety of solutions (see table 6.18) utilised by these cases to overcome the barriers to IT assimilation within the marketing department. The major barriers to IT assimilation in marketing are the automational focus of the IT department and the conflict that exists between the IT and the marketing departments. The pivotal

feature is the IT knowledge and a clear vision for IT developments, within the marketing department these case parallel with the ability to recognise barriers and then to overcome them. Table 6.19 documents the main stages of development as the marketing department moves from non acceptance of the automational focus of IT developments to autonomous control of their IT applications and then to a continuous development perspective.

Table 6.19 Overview of IT Assimilation in Marketing Within the Stages Theory

<u>Perspective</u>		
Acceptance	Non Acceptance	Continuous Development
Automational Stage	Automational Stage	Automational Stage
1 st wave of company wide automation did not really impact on marketing – financial/production orientation		
Minimum use of systems – self design of usable but basic applications		
↓	↓	↓
Informational Stage	Informational Stage	Informational Stage
Did not lead to informational stage	Challenges the current systems to perform by outsourcing IT requirements, changing the systems or developing new marketing specific IT applications Major technological and operational difficulties	IT dimension in marketing focused on the automation of marketing practices. Dominant use of the internet platform Continue to develop marketing specific IT systems for both internal and external use despite the barriers.
Transformational Stage	Transformational Stage	Transformational Stage
Did not lead to transformation	Did not lead to transformation	Potential development but lack of evidence for movement to this stage in the cases

These cases are utilising IT, driving IT developments forward, and creatively developing IT applications in marketing. Marketing personnel have a vision for the IT future of their business. Though they are predominantly at the aspirational stage for many of their

developments, they are mindful of the limitations of their current practices, and are focused on the continuous challenges they face. The dominant feature is a clear IT strategy in marketing in conjunction with finding solutions for the difficulties they are encountering. They have a determination to pursue, battle and challenge for their IT requirements. This is a critical feature of informational assimilation of IT.

6.8 Summary of all Propositions

Table 6.20 reviews the level of support for the propositions. The propositions were analysed in this chapter and also in detail in the individual case analysis (see appendix C).

Table 6.20 Support for the Propositions for the Informational Cases

Propositions		Level of Support
Proposition 1	There is a major relationship marketing perspective to contemporary marketing practices	Support for this proposition across all the cases
Proposition 2	There is a major IT component in contemporary marketing practice and that assimilation is at the informational stage of development.	Support for this proposition across all the cases
Proposition 3	There is a dominant IT dimension to relationship marketing which will be evidenced through database and IT based interactions in marketing	Support for this proposition across all the cases
Proposition 4	There are barriers to IT assimilation in marketing	Support for this proposition across all the cases

On the basis of the description and analysis of the five informational cases the following conclusions can be drawn.

Firstly, there is a dominant relationship marketing perspective to their marketing practices. The marketing department had delegated the responsibility for customer relationships to the sales force but are now determined to focus on their customer relationships and relationship marketing practices themselves. Within this new perspective, the marketing department uses IT as an enabler of these changes. As further evidence of this trend there are major developments towards a centralised customer

database in marketing. All of the cases have a range of major and minor ITs, either implemented or at the development stage, which have a relationship marketing focus.

Secondly, utilising the stages theory framework they are at the informational stage of IT development and they have overcome many of the automational stage issues.

Thirdly there is a major IT dimension to their relationship marketing practices. The following table 6.21 links the transactional to the relational approach to marketing practices and provides an IT dimension to the continuum of transactional to relational marketing.

**Table 6.21 IT Dimension to the Continuum of Transactional to Relational
Marketing for the Informational Stage of IT Assimilation**

	Relational Perspective	
<u>IT Developments</u>	<u>Database Marketing</u>	<u>Interaction Marketing</u>
Databases	Development of a marketing specific database with both qualitative and quantitative information and a centralised view of the customer linked to but separate from the main information system	Development of a marketing specific database with both qualitative and quantitative information and a centralised view of the customer linked to but separate from the main information system
IT based interactions	Intranet use and development of extranets	Intranet use and development of extranets
Internet Site	Internet site for general information and also marketing specific use particularly at the consumer interface with relationship marketing features as critical	Internet site for general information and also marketing specific use
Intranet	Automation of internal marketing procedures	Automation of internal marketing procedures
Dominant IT Focus	Internal/external focus – marketing control of various IT applications	Internal/external focus – marketing control of various IT applications

The diagram amalgamates the findings related to the IT developments that have a relationship marketing focus.

Table 6.22 further expands the table above and links to the stages theory of IT assimilation. This diagram reveals the movement through the stages of IT assimilation from automational to informational and lends support to the applicability of the stages theory of IT assimilation for marketing. These cases show clearly that they have progressed from the automational stage and are now developing their IT capacity to increase their effectiveness.

Table 6.22 The Assimilation of IT: The Stages Theory and Marketing Approaches Classified by Relational Exchange Dimension

		Relationship Perspective	
		<u>Database Marketing</u>	<u>Interaction Marketing</u>
Assimilation of IT – The Stages Theory	Automation Efficiency	Company-wide finance focused centralised information systems; Limited automation of marketing practices for increased efficiency; Minimal impact from IT on marketing practices. ↓	Company-wide finance focused centralised information systems; Limited automation of marketing practices for increased efficiency; Minimal impact from IT on marketing practices. ↓
	Information Effectiveness	Creation of new marketing specific databases Development of IT based interactions internally and externally Marketing specific IT applications to automate internal marketing operations for increased efficiency and effectiveness ↓	Creation of new marketing specific databases Development of IT based interactions internally and externally Marketing specific IT applications to automate internal marketing operations for increased efficiency and effectiveness ↓
	Transformation	Lack of evidence from cases	Lack of evidence from cases

As suggested in chapter 1, one of the contributions of this study is the inclusion of an IT dimension to contemporary marketing practice and table 6.23 provides an overview of the findings from these cases and the inclusion of an IT relational exchange and a managerial dimension from the analysis of these cases. This framework is a critical theory development contribution of this study.

Table 6.23 Addition of an IT Dimension to the Marketing Approaches Classified by Relational Exchange and Managerial Dimension for Informational Assimilation

	Transactional Perspective		Relationship Perspective	
	<u>Transaction Marketing</u>	<u>Database Marketing</u>	<u>Interaction Marketing</u>	<u>Network Marketing</u>
Relational exchange dimensions				
IT Orientation		Database orientation Internet, intranet and extranet usage with dominant external focus Automation of internal operations for increased efficiency	IT to facilitate internal and external interactions and to automate marketing practices for increased efficiency; Database orientation	
Managerial Dimension				
Managerial investment – IT Specific		Open access interactive technologies, internal and external focus Marketing specific database developments	Open access interactive technologies, internal and external focus Marketing specific database developments	

Fourthly, in relation to the barriers to IT assimilation in marketing the most significant barrier is the automational focus of the IT infrastructure. There were similar difficulties encountered, and solutions pursued, to overcome this barriers and the dominant feature is that the marketing personnel have taken control of their IT needs and are pursuing IT developments as a central aspect of marketing practice. There is also sales staff resistance to changing practices, particularly in relation to the supply of information to the IT systems.

These cases support the research propositions as discussed in chapter 5, and reveal the major difficulties that marketers are encountering as they try to develop a more

relationship marketing focus and to pursue IT assimilation in marketing. They lend support for the use of the stages theory of IT assimilation in marketing and the inclusion of an IT dimension to the marketing approaches classified by relational exchange and managerial dimension framework.

The issues of validity and reliability as discussed in section 5.9 and the practical operationalisation of methods to overcome these issues as highlighted in table 5.11 were utilised throughout the analysis of the data from all the cases.

This concludes the description, and analysis and interpretation of the five informational cases. In the next chapter the findings from the five automational cases are described and analysed.

CHAPTER SEVEN

DATA ANALYSIS – AUTOMATIONAL CASES

7.1 Introduction

This chapter presents the results from the five automational cases. The focus of this research is on the ‘how’, ‘why’ questions and for these cases the ‘why not’ questions. Why do some marketing departments strive ahead with IT assimilation, while others remain tied to traditional practices? These cases have limited assimilation of IT within marketing and their major contribution to the study is the insights into why their IT assimilation is still at the automational stage of assimilation. They are not utilising IT to consciously leverage information and to enhance their marketing practices. They are maintaining their traditional, though successful, practices with some limited use of IT for productivity purposes.

7.2 Structure of Data Analysis

The structure of this chapter is the same as the structure used in chapter six. A general outline of each of the five automational cases is presented in section 7.2. Sections 7.3 to 7.7 presents the findings and level of support for each proposition. A summary of the support for all the propositions and the contribution of these cases to theory generations is presented in section 7.8.

7.3 General Outline of the Five Automational Cases

The following section is a brief introduction to the five automational cases. These cases are all consumer product companies. Two of the cases (A and D) are in the food sector and two cases (B and E) are in the pharmaceutical sector, while case G is in the clothing and food sector. All of the cases distribute their goods through distributors and intermediaries and all have products that are well known consumer brands in the Irish marketplace. The following table portrays the general organisational characteristics of the automational cases.

Table 7.1 Organisational Characteristics of the Automational Cases

Cases	Case A	Case B	Case C	Case D	Case E
Original classification	Automational	Automational	Automational	Transformational	Transformational
Company Type	Manufacturer	*Marketing operation of a manufacturing company	Manufacturer	Manufacturer	Manufacturer
Product/Service	Consumer Foods	Consumer Pharmaceutical Products	Clothing Products	Consumer Foods	Consumer Pharmaceutical Products
Organisation Structure	Functional	Functional	Functional	Functional	Functional
Number of Employees	400	*45	250	220	400
Ownership	Publically quoted Irish company	Publically quoted multi national	Private company with state support	Publically quoted multinational	Publically quoted multinational
Turnover (£)	£50 million	£12 million	£22 million	£45 million	£60 million
Markets	Ireland	Ireland	Ireland and US	Ireland and US	Ireland

* - Administration office only

It must be noted and it is discussed in proposition one that due to the consumer focus of these marketing departments and their lack of participation in channel management and relationship marketing issues the data analysis in this chapter centred on the investigation of the relationship with the end consumer.

Table 7.2 Main Informants for the Five Automational Cases

	Main Informants
Case A	Food Manufacturer
	Marketing Manager Marketing Executive Information Systems Manager
Case B	Pharmaceutical Manufacturer
	Marketing Manager Business Development Manager IS/IT Manager
Case C	Clothing Manufacturer
	Head of Marketing Sales and Marketing Executive IT Manager
Case D	Food Manufacturer
	Retail Marketing Director Marketing Manager Management Information Systems Manager
Case E	Pharmaceutical Manufacturer
	Group Product Manager Product Manager IT Manager (AS400 Applications)

7.4 Proposition One: There is a Major Relationship Marketing Perspective to Contemporary Marketing Practices

This section presents the finding on the orientation towards relationship marketing practiced in these cases. The major finding was that marketing practices have remained unchanged with marketing's role continuing to concentrate on branding, promotional activities and a minimal levels of sales support. There is evidence of some minor attempts to change marketing practices. *"Some new techniques alright, but still the same job"* (Case E, Group Product Manager).

Changes in Marketing Practice: Each case was placed on a continuum with the level of changes cited (responsibilities and activities of the marketing manager) significantly different at one end and insignificantly different at the other end (see table 7.3).

Table 7.3 Changes to Marketing Practices for the Automational Cases

Evidence of Changes to Marketing Practices	Few Changes	Minor Changes	Medium Changes	Major Changes
Cases Supporting	Cases A and B	Cases C, D and E		

The literature suggests that there are major changes to marketing practices but this was not evident. The evidence shows, through an analysis of the activities and practices of marketing, that there was no tangible evidence of major changes in marketing. Though there was agreement on major changes in business, there was much less acceptance of changes in marketing. *“Basics are still the same”* (Case C, Head of Marketing).

These cases rely on the techniques and practices that were successful in the past. It is difficult for companies to move away from successful strategies and these cases are united in their belief that their traditional strategies will continue to bring them success. These cases highlight marketing practitioners who steadfastly cling to their traditional and conservative view of the world. There was a lack of any urgency to their marketing practices. Their observations either centred on general changes in the market or were quite aspirational. On an aggregate basis the most dominant trend is the continued traditional transaction focus to marketing practices. The surprising aspects of the finding, is the lack of a relationship focus and the lack of impact on marketing practices as a result of IT.

The nature of their industry, and more particularly their consumer base, were cited as reasons for their lack of change. They had decided to maintain their current practices until their consumers asked for or demanded changes. Though these cases are leading players in their industries, there was no evidence of these cases as leading players in

marketing, innovatively challenging current practices and processes. Their innovations were linked to creative promotional campaigns.

Transactional Focus: They all practice transactional marketing. Each case had a marketing manager/director who was responsible for the maintenance of the elements of the marketing mix. The dominant marketing activities have a clear transactional focus on the marketing mix and marketing management model of marketing.

“We still have reps on the road, samples, give aways, music videos, television. We still have conferences abroad, still have mail shots, we still have advertising” (Case B, Marketing Manager).

The marketing departments maintain control over a very narrow range of activities and there was a lack of control of the sales force or management of the relationship with suppliers, retailers or distributors. Rather than building one to one relationships with consumers, these cases are focused on the product, the brand and promotional activities (see table 7.4).

Table 7. 4 Main Areas of Responsibility of the Marketing Departments

Main Area of Responsibility of the Marketing Department	All Cases
Transactional focus - distant from the final consumer	✓
Dominant focus on promotional activities and mass communications	✓
Brand management issues	✓
Monitoring product research information	✓
Minimal sales support	✓
Mass marketing or limited market segmentation	✓
Focus on market share and sales figures	✓
Areas Where Marketing Has Limited or No Responsibility	
IT developments in the company and in marketing	✓
Low involvement in relationship management with markets (retailers, wholesales, dealers, suppliers and so on).	✓

As these are consumer goods companies, this could be expected, but contrary to the discussion in the literature, there is no trend towards developing consumer databases and real targeting of consumer groups. There is a traditional focus on sales figures and market share, rather than lifetime value. *“Show me the results, show me the sales ... this is a numbers driven industry”* (Case B, Marketing Manager). For example though they commission and use large amounts of research, the focus is on the product perspective rather than on consumer information. In addition, where relationships exist, particularly with their intermediaries, this is the domain of the sales force (see proposition 2).

There is no evidence from these cases that their marketing practices have a relationship marketing focus. The dominant evidence for this proposition was collected by reviewing the marketing perspective of the marketing department using the Coviello et al., (1997), framework as discussed in chapter 3, and through the collection of other evidence. All cases were asked and elaborated on the level of relationships in marketing practice. They had two main focuses, the final consumer (which marketing control) and the intermediaries (controlled by sales for cases A, B, D and E while case C had minimal involvement).

Pluralism of Approach: In relation to the operations of the marketing department there is no evidence of pluralism of approach. The dominant marketing focus is on transactions and the relationship with the retailers is controlled through the sales department, with little input from marketing. For these cases the marketing department focuses on the consumer, but has little involvement in the business-to-business relationships, which are in the domain of sales and distinctly separated from marketing.

Cases A, C and D are consumer focused. Cases B and E could have a focus on doctors as their final customers, which is a well defined group of customers, but the marketing department is very much focused on the end consumer and creating the right atmosphere so that the representatives can promote their products. The relationship with the doctors is controlled by the sales force with very little input from the marketing department. They

do design sales promotions for the sales force but the recommendations come from the sales force and are then approved by marketing.

The exception to this situation was in the case of C who had a periodic sales management role and some level of personal contacts with their distributors, though the dominant focus of the marketing department was on a transactional focus with their consumers. They were the only case with an internet site that is designed to increase communication and information flows with their distributors. However, this is only at the development stage, (see proposition two).

Relationship with the Consumer: These cases have a dominant transactional focus to their marketing practices (see tables 7.5 and 7.6)

Table 7.5 Marketing Classified By Relational Exchange Dimensions

	Transactional perspective *			Relationship perspective
	<u>Transaction Marketing *</u>	<u>Database Marketing</u>	<u>Interaction Marketing</u>	<u>Network Marketing</u>
<u>Relational exchange dimensions</u>				
Focus	Economic-transaction	Information and economic transaction	Interactive relationship between a buyer and seller	Connected relationship between firms
Parties involved	A firm and buyer in the general market	A firm and buyer in a specific target market	Individual sellers and buyers	Sellers, buyers and other firms
Communication Patterns	Firm to market	Firm to individual	Individuals with individuals	Firms with firms
Type of contact*	Arms-length, impersonal	Personalised	Face to face, interpersonal	Impersonal – interpersonal
Duration	Discrete	Discrete over time	Continuous	Continuous
Formality	Formal	Formal (personalised through IT)	Formal and informal	Formal and informal
Balance of Power	Active Seller Passive buyer	Active seller less passive buyer	Seller and buyer mutually active and adaptive	All firms active and adaptive

Table 7.6 Marketing Classified By Managerial Dimension of Marketing

Managerial Dimension				
Managerial Intent	Consumer attraction and retention (to satisfy the customer at a profit)	Customer retention (to satisfy the customer, increase profits, and obtain other objectives such as increased loyalty, decreased customer risk, etc)	Interactions (to establish, develop, and facilitate a co-operative relationship for mutual benefit)	Co-ordination (interaction between sellers, and buyers, and other parties across multiple firms for mutual benefit, resource exchange, market access, etc)
Decision Focus	Product/ brand	Product - brand and customers	Relationships between individuals	Connected relationships between firms (in a network)
Managerial Investment	Internal marketing assets (focusing on product, price, distribution, promotion capabilities)	External market assets (emphasising communication, information, and technology capabilities)	External market assets (focusing on establishing and developing a relationship with another individual)	External market assets (focusing on developing the firm's position in a network of firms)
Managerial Level	Functional marketer (e.g. sales manager, product development manager)	Specialist marketers (e.g. customer service manager loyalty manager)	Managers from across functions and levels in the offer	General manager
Time Frame	Short term	Longer term	Short or long term	Short or long-term
Orientation of Marketing Department	Cases A, B, C, D and E			

Source: Adapted from Coviello et al., (1997)

* Dominant marketing perspective appears in the shaded area.

Lack of Relationship Marketing Focus: There was no noticeable change in perspective from the marketing techniques used over the last five to ten years. None of the cases could articulate a relationship marketing strategy. Nor had they the ability to discuss the core concepts of relationship marketing. They were unable to identify activities where marketing had a role, which could be evidence of substantive practice of relationship marketing. There was no evidence of plans for further development of consumer relationships.

They view their consumers as a board segment, rather than having a detailed understanding of the consumer and their requirements. There is no evidence of a paradigm shift to relationship marketing, but rather a reliance on transactional marketing (see table 7.7).

Table 7.7 Lack of Relationship Marketing Focus

Evidence for the Lack of Relationship Marketing Focus	Cases Supporting
Lack of understanding of relationship marketing concept	All cases
Transactional focus	All cases
Sales force control of the business to business relationships	Cases A, B, D and E
Lack of contact between the sales force and the marketing department	Case A, B, D and E
Lack of developments of databases or IT based interactions (see proposition two and three)	Case A, B, D and E
Lack of marketing orientation in the company	All cases

Relationship Marketing Focus: Where relationship marketing actually exists, for example between the retailers and the sales department, marketing has no real understanding or practical involvement in the operational aspects of this relationship.

There was a lack of an understanding of the term relationship marketing and even after an introduction of a definition of relationship marketing (Gronroos, 1994), they were unfamiliar with the concept or the relevance for marketing. Those who felt that they understood it discussed customer relationships as getting closer to the customer but with little understanding of the long term and mutually beneficial aspects of relationships. The general reply tended towards customer care or customer focus rather than the lifetime value. As Case B's marketing manager commented, "Of course we practice relationship marketing, we love our customers around here." Case E related their relationship to the consumer through the brand. "I believe its some sort of relationship marketing if the objective is to bring closer the relationship between the group and the brand" (Group Product Manager). The Head of Marketing from Case C said that "It is one of those

buzzwords, I'd refer to customer care in the way I would operate, it is the same thing really."

Establishing relationships requires a dialogue with the consumer and the findings show that this does not occur in these cases. However, there is some level of contact between the company and their consumer none of these interactions are tracked or analysed for marketing purposes (see proposition three).

It is assumed in the relationship marketing literature that marketing would have a focus on maintaining and enhancing a wide range of relationships and alliances, though it was noted that many of these could be considered to be outside the domain of marketing. This was the situation for these cases.

Sales Control of Relationship with the Intermediaries: Marketing personnel were unable to answer questions on the relationship with intermediaries. The sales department in each of these cases controls the relationship. There is evidence of relationship marketing tactics but initiated and managed by the sales force. For example the sales force do request sales promotional and sponsorship support from marketing but marketing has no input into either the choice of promotion or the recipient of the promotion. *"They tell us that we are sponsoring the local GAA team in Thurles and then we organise that for them"* (Case B, Marketing Manager).

There was no indication that this situation was going to change in the near future and there was no major criticism of this situation from the marketing personnel. So managing and developing network expertise, negotiating with partners and monitoring the ongoing costs and benefits of a network of relationships are all tasks that are not marketing, but sales tasks.

The relationship between these cases and the retailers is coercive and hierarchy and is built on the power of the strongest partner, in this case the buyer. It is adversarial in

nature with the retailer dictating the level of services, supplies and technology they require in the relationship. The sole responsibility for the relationship lies with the sales team (except for case C) and the IT link is handled between the two IT departments (see proposition three).

Lack of Coordination between Marketing and Sales: Analysing the relationship between the two departments, there is a distinct separation between the sales and marketing department, which negates any role for marketing in relationship building and development. There was some evidence of involvement with the sales department, but mainly for sales support, with very low levels of interactions.

All exchanges of information to the intermediaries is through the sales department and they protect this situation. *“We are not allowed to talk to the retailers – those guys won’t let us”* (Case D, Retail Marketing Manager). As the marketing personnel do not communicate directly with the intermediaries, it would be expected that the information from the relationship would be transferred to the marketing department. The information flows between the two departments are poor. Marketing is provided with limited general knowledge of the relationship. For case D, they are receiving online information from the sales force for the first time this week! The sales force have the information, it is just not being passed to marketing.

Where relationships are important (as in the case of the retailers) they are the sole responsibility of the sales force. There was an individual sales representative onus on customer satisfaction for their own customers, rather than a company-wide initiative, directed by marketing. There was little evidence of marketing control or influence on the sales department and a lack of knowledge of the activities of the sales force. Case C was the only case that had more extensive links, though these were only periodically utilised. These issues are discussed in more detail in proposition two.

7.4.1 Summary for Proposition One

There is no support for the proposition that relationship marketing is a dominant feature of marketing practices in these cases. There are all focused on transactional traditional marketing tactics and there was no evidence that there would be a change in focus to relationship marketing. There is no attempt to build relationships with their consumers, who they view as a mass group of anonymous shoppers. Where they have relationships, these are outside the domain of marketing and the marketing department has little or no information on how the relationship is developed or managed.

7.5 Proposition Two: There is a major IT component in contemporary marketing practice and that assimilation is at the informational stage

The following section reveals evidence for an automational stage of IT assimilation in marketing and also provides a general view of the IT assimilation (see table 7.8).

Table 7.8 Evidence for the Automational Stage of IT Assimilation in Marketing

<u>Evidence</u>	<u>Automation</u>
Automational Stage of Development	All Cases
Centralised system – control by the IT department	✓
Finance orientation of the IT systems	✓
Technology focus rather than informational focus	✓
Standardised system company-wide	✓
Lack of general company-wide access to email (see proposition three)	✓
Lack of open access to the internet (see proposition three)	✓
Lack of development of decentralised marketing specific ITs	✓
Lack of demand for decentralised access to systems	✓
Acceptance of automational focus by marketing personnel	✓
Lack of IT skills, vision or IT orientation of marketing personnel	✓

Marketing had limited use of IT. IT applications are only tentatively utilized though minimum use of Microsoft based productivity tools, the developments of a static internet site and the use of the centralised information system. (Sighs) *“I once did a one day course...dragged kicking and screaming into the IT age...I am a gifted amateur”* (Case

B, Marketing Manager). There was no unaided mention of IT as a major change and development for marketing. The marketing department were not a major player in the technological loop and any IT developments, which were minimal, were mainly initiated and developed by other departments or due to external pressures (see proposition 3).

Centralised Standardised Company-wide Information System: The in-house developed information system is a central part of the IT infrastructure. This is the standardised finance and/or production focused system. This provides information to the whole company and is controlled by the IT department.

Though marketing personnel used a limited amount of information from the system, they have no direct access to it. Marketing personnel can view and download the standard information, but must request special reports through the IT department. There is no opportunity to manipulate or leverage the information and the information supplied is at the basic level with no qualitative information.

“No, it’s not at all flexible. The information is there, you just look at it, you can’t manipulate it. You can’t put it into excel or anything like that, that I am aware of.” (Case A, Marketing Assistant).

This situation continues to exist despite the knowledge that more marketing specific information is needed. Cases A and E do request special reports from the IT department but they takes days or weeks to arrive. This results in frustration. There is also a lack of applicability of the information when it arrives, as it is not timely information. *“It can take us up to 8 to 10 days to get back to marketing with that information and all that time they just keep shouting for it”* (Case A, Marketing Manager).

The IT departments are very control conscious and all access to the system is through them.

“Basically a large part of my role in the systems side is to just decipher what people want from the system, break it down to specific tasks, and ask the

software people to write it. Prioritise them in the way they need to be done”

(Case A, Information Systems Manager).

There was minimal evidence of some basic informational use of IT. Though microcomputers are available and visible in the form of PCs on each desk, control is centralised in the IT department and information must be accessed through them. This is a major indication of the automational stage of IT assimilation.

Marketing personnel were inclined to simply download the information that they had always requested and where possible input this into excel spreadsheets and continue their normal operations. There was criticism of this independent download from the IT personnel who contend that they should just utilise the information supplied. In case E the marketing executive developed a simple self controlled excel application which is evidence of more informational use of IT, but it was replaced by the centralised IT controlled package, which the staff do not like.

“We used to have a nice little system on excel where we forecasted where you just key in the numbers, and we all preferred that one, but this is a company wide mandate, it's a very high tech good system and it can forecast sales for 2 years and it is supposed to tie in with financial forecasting and everything but its just caused problems since it was introduced” (Case E, Product Manager).

It was interesting that marketing personnel had not demanded changes, offered suggestions for improvements or made any real attempts to work around the system. They accepted that this was the reality of the situation and that there was nothing they could do about it.

Financial Orientation of IT Systems: These centralised systems are designed to conform to the requirements of the finance and/or production department's automational needs. The major difficulty is that there is a lack of utility for the marketing department,

who have to utilise the information as supplied by this system (see proposition four). The finance department is the dominant user of IT and has extensive automation of their practices and they are also the controllers of the IT department (Cases A, C and D).

Legacy of Technology Orientated Systems: The centralised systems are poorly designed or more accurately designed during a period when technological development were not as sophisticated. The systems are not user friendly and are dos based green screens, with very basic displays features. There is no ability to manipulate the data in the system.

“It’s not necessarily the best way though for presenting data, its doesn’t have a nice graphically user interface, its not the prettiest, its great for foundation information, but not great for the higher level presentation of data” (Case E, IT Manager).

Interestingly, many of these cases were pioneers in IT developments in the late 80’s and early 90s, through their introduction of these systems. These were innovative information systems which were technologically revolutionary in their day, and to which the staff maintain a high level of loyalty. The IT departments have invested resources, time and knowledge in these systems and are very loath to change them. Most of the daily work in the IT department is a focus on the maintenance of the antiquated IT system. This is an area of power and control for them, as they are the acknowledged experts for these systems.

As an example of the revolutionary nature of previous developments and the technology focus of IT, the situation in case A is a good example. When Case A developed their centralised information system in the 1980s, which links to a hand held device used by their delivery staff to monitor their products in stores, it was considered revolutionary. There have been no further developments of the system over the years and the concentration is on the maintenance of this system, which was developed on, what is now, a very antiquated software platform.

There is a technology rather than a data resource or information focus to the IT assimilation. The IT personnel talk in technical terms about the specifications of the systems and comment that marketing and other staff just do not understand the issues.

“When you try to explain to them why the system is the way it is, it is just too complicated for them. This is an AS400 system, which though not leading technology now, is what we have to work with. It is a difficult system and the maintenance of the system takes a lot of our time” (Case E, IT Manager).

The restrictions and difficulties with the IT systems, all centred on the technological capabilities of the systems.

There was no evidence of information gathering from a relational perspective or of challenging the information system to deliver more marketing specific information. There was no evidence of executive support systems or any level of sophisticated systems to store information with common access. There was a lack of understanding of the power of information in this information age. There was evidence of information being supplied from syndicated sources on their product categories, which will be discussed in proposition three.

Lack of Marketing Specific ITs: There was a lack of marketing specific information systems (see proposition three). There was little evidence of marketing personnel leveraging IT for their own use to increase their effectiveness.

The marketing department is the department with the least IT and there is no marketing specific software provided by the IT department to the marketing department.

“They are the least important department from our perspective, they don’t really use IT. Now you should see the finance department they have a range of systems” (Case B, IS/IT Manager).

The main concentration of IT is in the finance or the production departments. The marketing department is not seen as the drivers of IT or as leading users of IT.

Lack of Demand from Marketing: Marketing is quietly critical of the IT systems, contending that they do not match their marketing requirements. Marketing either do not use or under use these systems. This is very frustrating for the IT department and results in their non-receptiveness to marketing requests for new systems.

The lack of marketing specific information systems was blamed on the IT department. They all had, at some stage, requested information or a resource from the IT department, which would have changed their marketing tasks, but as this was not forthcoming they continued as they were and accepted the system that the IT department provided. Marketing was not demanding open access to the systems or changes to the systems. They were not demanding or justifying increased expenditure in IT, which would match their requirements. The only area where they challenged the IT department was in relation to the internet (see proposition three) and when that was not supported by the IT department they outsourced this development and went ahead with it on their own (Case A, C, D and E).

Increased Efficiency: There was no view of the opportunities that could be gained from increased IT usage. IT was seen as method for increasing their personal productivity at a very basic level, rather than leveraging the IT for knowledge creating and improved effectiveness. For example, if you discount the IT supplied information system (which is not designed for marketing) and if Microsoft standard packages are not included then there are no real attempts to independently automate many of the marketing tasks or to develop marketing specific IT applications. They are users of the PowerPoint package and consider this their core IT.

IT skills, Vision and Orientation of the Marketing Personnel: The dominant feature in this area is the lack of any major development of IT skills within the marketing department. Minimal IT training is provided and usually only prior to the introduction of a new system or package. The majority of marketing staff were self-taught, maintaining their skills at a low level of development. If marketing personnel demanded increased

training it would be given, but this was not the case, with time issues cited as the major reason for the lack of demand.

There was no view of marketing as a discipline, which was in control of their IT usage. They had no view of a learning curve of IT usage. There was a lack of awareness of the developmental focus of IT and no concept of the management of IT developments. There was acceptance of IT systems as static and rigid and a view that this would continue. The marketing department were aware that they were not at the leading edge of IT usage and assimilation. They referred to the benefits of IT in very general terms and in the future tense. Cases A, B, C and D had real difficulties in envisaging how IT could really impact on or change marketing practices.

Table 7.9 depicts the main findings in this area and highlights marketing departments that are not driving or developing their IT skills.

Table 7.9 IT Skills, Vision, and Orientation in Marketing

	Case A	Case B	Case C	Case D	Case E
Senior marketing person's IT knowledge	Low No vision	Low No vision	Low No vision	Medium Vision *	Medium Vision
2 nd marketing person's IT knowledge	Medium	High	Medium	Low	Medium

*New role as Retail Marketing Director

Range of ITs in the Development Stage: A range of new IT developments would be an indication of movement through the stages. There are only a few ITs in development and these are predominantly controlled by the IT department, from an automational perspective (see table 7.10)

Table 7.10 IT Developments and the Departments Driving These Developments

Cases	Dominant IT Developments	Driven By
Case A		
	Review of In-house IS System	IT Department
Case B		
	ETMS Sales force automation system	Sales Department
	New Product Sales Database	Worldwide Directive
Case C		
	Internet Site for their distributor abroad	Marketing Department
Case D		
	New production IS system	IT Department
Case E		
	Forecasting System	IT Department
	Sales Tracking System	IT Department

The internet site developments in cases D and E, maybe an early indication of the move towards informational use of IT, but there is no other evidence to support this.

There was a lack of marketing specific ITs that directly impacted on how marketing is practised. Of the thirty five ITs researched (see appendix B) the average number of ITs were eleven. Having IT and actually using and benefiting from IT are two different things. Within the review of these ITs, the level of development of these ITs was analysed using the stages theory and further analyse appears in table 7.11. As can be seen clearly the majority of the ITs are maintained at the automational level of usage.

Table 7.11 Range and level of development of ITs in Marketing

Range of ITs in Marketing	General Levels Across All Automational Cases
Hardware	Antiquated IT infrastructure
Software	Personal productivity tools
Database – segmentation and targeting	None
Decision support systems	None
Communications – internal and external	Slow development of a company wide email or internet infrastructure
Research	Low usage

The main focus of their current ITs were basic Microsoft packages directed towards increased efficiency.

7.5.1 Summary for Proposition Two

There was a lack of support for this proposition. There was no major impact from IT on contemporary marketing practice. The evidence in these cases highlights an automational stage of IT assimilation with a lack of movement towards the informational stage of development. The systems available are not designed or applicable to marketing and there is no desire on the part of the marketing department to improve or change this situation.

Utilising the framework from Gibson (1988) we can clearly position these cases at the automational stage of development (see table 7.12).

Table 7.12 Evidence of the Automational Stages of Development

<u>Issues</u>	<u>Automation*</u> <u>Traditional DP</u>	<u>Information</u> <u>Personal Computing</u>
Applications	Large shared applications; used regularly; highly structured	Small, individual applications; often ad hoc; often unstructured
Application Development	Slow, methodical system development by trained IS professionals.	User customize off the shelf packages to suit own needs; evolutionary, prototyping approach, little need for formal tools and methodologies
Implementation Issues	Ensuring user cooperation and correct use; adding requested enhancements	Responding to requests for training and troubleshooting help

Adapted from Gibson (1988)

*Stage of Development for these cases.

There are very low levels of IT assimilation in the marketing departments and a lack of an IT orientation. There is no evidence of a major impact from IT on marketing practices and the IT, where it exists, is used to automate previous practices for increased efficiencies. None of these cases had a vision for the role of IT in marketing and there was a lack of enthusiasm for IT developments.

These cases were all restricted in their IT developments by the power of the IT department, and their dominant financial automation focus (see proposition four).

7.6 Proposition Three: There is a Dominant IT Dimension to Relationship Marketing which will be Evidenced through Database and IT Based Interactions in Marketing

There was no evidence of the utilisation of IT to develop different levels of relationships with different consumer groups. As discussed in proposition one, all of these cases have a dominant transactional focus to their marketing practices and view their consumers as an anonymous market. There is a lack of an IT dimension to their transactional practices.

Lack of Consumer Focus to IT Developments: None of these cases could describe any IT that they used in relation to any group of consumers. There was no effort to improve their communication with the final consumer or to make it more convenient for consumers to interact with the company. It was expected that there would be programmes to regularly collect consumer information, which would include needs, attitudes and opinions, rather than simply accounts based product information. There was no evidence of this.

7.6.1 Marketing Specific Database Developments

As databases are considered a core requirement of marketing and particularly relationship marketing strategy, the level of database development is very disappointing. Databases are a pivotal feature of marketing's use of IT and are suggested as a necessary component for relationship marketing in consumer markets. If the corner stone of relationship marketing to consumers is creating a database, sending differentiated messages and tracking consumer to monitor their lifetime value, there is no evidence of this. There was a lack of a database strategy or any tactics for gathering information on their final consumer. Despite various techniques and technologies available to create and manage databases, the general discussion of the database centred on the impossibility of gathering consumer information and tracking consumer purchases, due to the lack of interaction with the consumer. The only use of consumer databases is for limited mailing and product testing in Cases D and E (see table 7.13).

Table 7.13 Database Developments

databases	Cases Supporting
entralised information system –product based information	All cases
licated product data	All cases
lack of a marketing specific database	Cases A, B and C
limited consumer database used for mailings and product testing	Case D and E
evidence of segmenting and targeting of database information	All cases

Financial Orientation of Databases: As discussed in proposition 2, the databases developed through the collection of invoices and the requirements of the finance department and are product focused finance orientated information systems. They were designed in-house by the IT department for financial purposes and have limited application for marketing. These systems focus on market share information and product sales, rather than consumer information. The marketing practitioners have extensive experience in the use of these systems and have designed their marketing information around the information from these systems. This information has become the normal information they use to analysis the market. They have product information at the sales levels from this system and they all access syndicated research in their product areas to augment this information.

Lack of Demand for a Database: In general the marketing personnel are content and comfortable with their current databases as discussed above. This is despite the fact that they have limited functionality in terms of manipulation of the data and in many cases the data either is not up to date, correct or in a useful format, for marketing. This could relate to familiarisation and attachment to systems resulting in the lack of demand for changes.

These cases were also unsure of what they would use a database for. They are used to dealing with their consumers as a mass anonymous group and have not developed any need to target them directly. In case B and E where the customers (doctors) are a defined group, the targeting of them is in the control of the sales department (see proposition 1).

Lack of Consumer Information: There was no evidence of a process or plan to capture different sources of consumer information of a quantitative or qualitative nature. They relied heavily on sales figures and forecasts of sales figures at the retail outlet level. They have no interactions with the final consumer to collect data and they have very little access to the sales force information, which is still at a basic level and supplied in aggregate form.

All the cases access syndicated information. External suppliers can be drivers of IT assimilation. For example the syndicated research companies are quite IT orientated and have recently developed online real time information. There is only minimal use of this information by the marketing department, who commented that it was now easier to do up the graphs! There was no further evidence of new ways to use this information.

7.6.2 IT Based Interactions

It would be expected that there would be extensive information sharing aligned to an IT system. As email is only in its infancy and as neither the internet or an intranet is widely used, there is no real system for dissemination of marketing information. Many of the interactions between these cases and their various external entities are outside the domain of marketing.

Internet Developments: These cases lack evidence of an internet strategy (see case C and D below). Though internet sites existed in all the cases, they were used as static web sites similar to their corporate brochure, designed to provide “*information for the analysts and the stock market*” (Case D, Marketing Manager). Case A, C and D developed their own internet site in marketing. These developments were driven by one person in the marketing department, as a reaction to the competitive situation (Case C) and because the marketing person was anxious to experiment with the internet (Cases A and D). Cases B and E rely on the global corporate web site. There was no ecommerce facilities, no interactivity or customisation/personalisation on the site, no collection or tracking of consumer data or any other features which could be viewed as innovative relationship marketing orientated use of IT. There was an email feature on the sites but there was limited use of it by consumers. The few contacts they received were from aboard mainly looking for recipes for their products.

Case C had a limited internet strategy. They were designing a site, predominantly as a source of information rather than for ecommerce ability, which they considered could interfere with their relationships with their distributors. Case E had plans to develop more

interactive sites for some of their products and they had plans to link the internet to some of their promotional offerings particularly in the children's markets.

Lack of Access to the Internet: Access to the internet is not available to all marketing staff in cases D and C.

“I am the only one in marketing allowed access to the internet and that is through the computer on the secretary's desk ... the company policy on internet access is very short-sighted” (Case D, Marketing Manager).

For case A there was a major struggle for the junior marketing person to receive internet access and in cases B and E the internet connections are very slow. These situations indicate the low priority of the internet in marketing and internet access is seen as a luxury item, rather than a necessary part of the marketing toolkit.

Intranets: Cases B, D and E had recently introduced intranets but these all were initiated, designed and implemented from the head office abroad. None of these cases had developed Irish specific information and they were not sure if this would be the marketing department's responsibility. They all utilised them solely as an information source. The level of use of the intranet must be related to the lack of internet access within the marketing department.

EDI and the Growing Power of the Retailers: Within the retail sector in Ireland there are three major dominant players who control access to the consumer market. The five automational cases all sell through retailers and the increasing power concentration and the shift of market power towards retailers is evident. This is impacting on the relationships among the players in the chain. This comment from the Group Product Manager from case E is indicative of the threat the manufacturers feel they are under from the large retailers and the lack of control they have of the situation.

“The customers (retailers) importance is getting greater and greater and the threats from people like xxx¹, the power of people like xxx²...the whole customer thing is a massive, massive change and is a big factor in marketing thinking now, much and all as we don't want it to be ... the power of xxx and xxx are screwing us all to the floor”.

Development of IT links with Intermediaries: All of the major retailers in Ireland are in the process of introducing IT systems between themselves and their suppliers and of changing to centralised distribution. Of the three main players, the IT developments in one operation are relatively high, while the other two are struggling to embrace the technology. As the dominant partner in the relationship the retailer is dictating the type of IT system that must be used and it is designed to suit them. As case D's Management Information Systems Manager observed, *“I feel that our customers (the retailers) drag us by the nose basically.”*

The supplier companies must conform to the retailer's specifications and this situation could result in manufactures having separate systems for each retailer. This situation could cancel out all the investment they have in their internal systems. For example though case D had major difficulties with the EDI system required by the retailer, they had to introduce it because the retailer is the powerful partner. The development of IT linkages has also caused compatibility issues. For example case A found that their own in-house developed system was not compatible with the retailers system and they had to implement the new system designed by the retailer. Currently they operate the two systems in tandem. As case D and E have had similar experiences, they are delaying the introduction of any further IT links with their retailers until the retailers decide what systems they require.

¹ One of the major retailers in the Irish market

² Another major retailer in the Irish market

Lack of Marketing Knowledge of IT Linkages: The development of IT linkages are controlled by the sales force and/or between the two IT departments. The marketing personnel were unaware of many of the IT linkages, which existed. *“I have no idea you will have to ask the IT guy”* (Case D, Retail Marketing Director). Where marketing personnel provided information in relation to the IT infrastructure between the two, it was often incorrect and they generally underestimated the level of IT between the retailers and the company. For example in case B there is a sophisticated IT network between the distributors and the pharmacies, but these are outside the domain of marketing and they have no access to nor do they receive any information from these systems.

Only minimal information was collected in relation to the IT orientation of the sales department, but it was observed and confirmed by the IT informant that the sales departments had higher levels of IT orientation than the marketing department. For example case B was introducing an ETMS for the sales force, though marketing was only vaguely aware of this.

The IT Dimension to the Transactional to Relational Perspective

The following table (7.14) links the stages of relational development to the level and use of IT in marketing for the automational cases. As discussed in proposition 1 these cases have a transactional perspective to their marketing practices.

**Table 7.14 IT Dimension to the Marketing Transactional to Relational
Continuum from an Automational Perspective**

IT Developments	Transaction Marketing
Databases	Utilisation of the centralised finance orientated product based information system
IT Based Interactions	Lack of use of IT based interactions
Internet Site	Basic site with static information
Intranet	No evidence
Dominant IT Focus	Internal and controlled by the IT department
Cases	A, B, C, D and E

The following table 7.15 commences the development of an IT dimension to the transactional to relational trajectory. It is clear from the evidence in the case that there are current low levels of IT assimilation for the transactional/automational cases.

Table 7.15 Addition of an IT Dimension to the Marketing Classified by Relational Exchange and Managerial Dimension From an Automational Perspective

<u>Transaction Marketing</u>	
<u>Relational exchange dimensions</u>	
IT Dimension Level, orientation, practical usage of IT	Minimal focus on IT, use of IT for internal efficiencies and IT based information with a transactional focus Interactive IT along the value chain outside the control of marketing.
<u>Managerial Dimension</u>	
Managerial investment – IT Specific	Limited investment in marketing specific IT systems Use of centralised IT systems supplied by the IT department.

7.6.3 Summary of Proposition Three

The evidence highlights the transactional nature of the marketing approaches of these cases. There was no evidence of database developments and a lack of demand or perceived need for a marketing specific database.

All of these cases had minimal development of their internet sites and could not articulate any internet strategy. All their current web sites were static sites predominantly providing financial and general information to analyst and the stock market. There was only minimal use of an intranet in three of the case and no evidence or plans for extranets usage. The lack of company wide and particularly marketing personnel’s access to the internet was an indication of the lack of a focus on internet developments and IT in general.

7.7 Proposition Four: There are Barriers to IT Assimilation in Marketing

The main source of evidence for this proposition was derived from the informants and from the level of assimilation of IT applications observed in each case. Therefore the findings from propositions two and three were used extensively in this section.

Analysis of the main barriers to IT assimilation indicates that the pivotal barriers relates to the automational focus of the IT infrastructure. This is a major barrier to marketing's assimilation of IT and restricts developments, particularly as this is coupled with a lack of a perceived need for increased IT assimilation in marketing.

All the case experienced a range of barriers. The automational stage of IT development (as discussed in the previous propositions) was also a barrier related to the level of control of IT by the IT department and the lack of informational IT developments in the cases in general. Another barrier was the lack of perceived need for IT applications linked to the conservative nature of these cases. This was compounded by the lack of knowledge of marketing personnel of IT implications and usage.

Therefore the main barriers centre on,

- The limitation of the IT systems due to the automational focus of IT in the company;
- The limitation of the marketing personnel's knowledge and vision for IT.

Table 7.16 documents a range of barriers to IT assimilation in marketing. The range of barriers were divided under the technical, human, organisational, market and stages headings. It is clear in the literature that there is no definitive description for each headings and the allocation for this study was made under the heading which influenced the barrier the most.

Table 7.16 Barriers to IT Assimilation In Marketing

Main Barriers	Cases				
	A	B	C	D	E
Technical Barriers					
Technological faults and breakdowns/low standard of IT infrastructure/incompatibility issues	✓	✓	✓	✓	✓
Legacy issues in poorly designed bespoke IT, which is not user friendly and its financial orientation	✓	✓	✓	✓	✓
Human Barriers					
IT in marketing is not a priority/Under utilisation of IT/negative attitude to IT	✓	✓	✓	✓	✓
Lack of knowledge, lack of appreciation of IT, ignorance of IT, lack of proficiency in IT skills of marketing personnel	✓	✓	✓	✓	✓
Organisational Barriers					
Lack of cooperation and conflict between the IT and marketing department	✓	✓	✓	✓	✓
Lack of investment in IT	✓	✓	✓	✓	✓
Corporate culture - change adverse and conservative	✓	✓	✓	✓	✓
Market Barriers					
Lack of demand for IT from consumers	✓	✓	✓	✓	✓
Developments at the same level as their industry partners	✓	✓	✓	✓	✓
Stages of IT Assimilation as a Barrier					
Automational focus of IT infrastructure	✓	✓	✓	✓	✓

Technological Barriers: Technical failures and difficulties will influence the perception users have of IT and can determine their future use of IT. There was evidence of problems with the IT infrastructure and ample evidence of system failures. The technological problems are captured very well, in the following quote from the Product Manager in case E, which mirrors the reality of the situation in many of these cases. *“It is a good day if the system does not break down.”* Technological problems, which had arisen at some previous stage, were still influencing the perception and use of IT by marketing. There was a predominantly negative attitude to the reliability of IT. *“You*

cannot trust it to send email – once it took 6 days to get there”(Case B, Marketing Manager). This is despite the fact that there have been technological developments since many of these original incidents occurred. For example cases A, B, C and D had problems, some time ago, with their email. They continue to mistrust email and either do not use it or parallel with a paper version or use couriers for information exchange.

In general the IT infrastructure is antiquated and slow and there is a lack of investment in leading edge IT. The IT department concentrates on maintaining the current IT infrastructure, which has been a long term and expensive investment for the company. All of the cases had developed in-house systems and then forced the use of these systems on all parties. A situation exists in all cases where the in-house developed IT system(s) that marketing use are:

- Not designed for marketing use;
- Are not consistent with marketing’s needs;
- Are championed by the IT department who insists on usage;
- Damages the use of IT by marketers, due to the poor image of these applications.

The marketing people blame the system and the IT people blame staff for not using the system to its full potential. From my observations of the systems, they are not marketing orientated, they are not user friendly and they were developed during a different age for a different marketplace and with a technology focus. Much of the justification for the system’s development has now either been lost or forgotten, but due to the time and financial outlay, usage of the system is enforced. This issue is particularly prevalent in cases A and E.

A substantial barrier, which was observed, was the high level of acceptance of these poor sub standard IT applications by all the cases. There was an apparent genuine attachment, to antiquated software systems and this is particularly noticeable where the application was developed in house.

“At the moment we have excellent systems. A lot of money is invested in IS/IT. In terms of reporting, we can actually report within two days of month’s end, and that is fantastic.” (Case B, IS/IT Manager)

Human Barriers: The dominant human barrier for these cases centres on the lack of IT knowledge in marketing, linked to the lack of relevance of IT developments to marketing practitioners.

There is a lack of IT knowledge, a lack of appreciation of IT, ignorance of IT and a lack of proficiency in IT skills of the marketing personnel. There is a major educational and training gap for many of the marketing personnel. Most of the marketing personnel are self-taught, with some attendance at workshops for new packages. The level of knowledge of IT in marketing depends on the IT orientation of the individual.

(Sighs) “I once did a one day course...dragged kicking and screaming into the IT age...I am a gifted amateur.” (Case B, Marketing Manager)

There is a contention that marketing is not demanding IT systems, while marketing’s views is that IT should be suggesting and developing the IT systems for marketing. There is a virtual stalemate situation with neither side progressing the issue to any great extent. There is a lack of vision in the marketing department for IT usage and exploitation. This relates to the lack of IT orientation of the previous or current marketing manager/director. The current marketing manager is an IT novice in cases A, B and C, while for case D the previous marketing director was not IT friendly.

Marketing personnel have a very limited view of the contribution of IT to their marketing operations and there was no participation of the IT department in the development of their marketing plans. IT developments are ad hoc and not a part of either the strategic or tactical planning process. *“It (the internet) is not in the plan, we developed that this year. We can write it into the plan next year”* (Case A, Marketing Manager)

The major contribution of IT was the use of the Microsoft packages to write the plans! All the cases saw IT simply as the means of automating the process of writing and communicating (powerpoint presentation) of the marketing plan. For example when asked '*How important is IT in your marketing plan?*' they provided the following answers.

Case A - Marketing Manager – *"IT would be important from the point of view of putting together pie charts and spreadsheets."*

Case B - Marketing Manager: *"It's all done in Word and using Excel and Powerpoint, so that's the contribution that IT has."*

Case C, Head of Marketing: *"Apart from just putting it in on Word it doesn't appear."*

Case D, Retail Marketing Director, *"Not important ...just on word or PowerPoint or whatever."*

Case E, Group Product Manager, *"I use it for the presentation of the plans, we are great users of Powerpoint, all the bells and whistles."*

So despite the fact that marketing theory dictates that marketing must have an external focus, and the major developments in the Irish market at the time of the research is the need to become more IT and ecommerce proficient, there is a complete lack of an IT dimension to any of the marketing plans. There is no concept of the importance of IT or of marketing driving forward innovations and developments.

Organisational Barriers: The major organisational barriers related to the lack of IT orientation in general in these cases and the resistance to changing successful marketing practices.

These companies are all change adverse and conservative. These are very successful companies using techniques and practices developed over years of trading. They are not orientated towards change and have a tendency to continue with the strategies, which have made them successful. *"I wouldn't say that we are change adverse it is just that*

things do not and will not change very quickly around her." (Case A, Marketing Manager). They are comfortable with the practices they use and can see no major benefits to introducing IT into these practices.

There is a lack of IT investment for marketing. Funding issues are pivotal, as marketing has to request an increased budget or fund IT development out of their budget and forego a current marketing tactic. All the marketing informants contend that if they had more time and more money they would have improved their IT systems. This must be linked to the fact that there are low levels of IT knowledge in the marketing department and they are unsure of what they would use the IT for.

Market Barriers: Following the analysis a fourth barrier was included which highlighted the fact that a barrier to IT assimilation was their perceived market conditions.

The lack of consumer demand for IT was viewed as a justification for the lack of IT developments. There was a perception that their consumers lacked an IT orientation and so there was no need for them to develop one.

"The way it is with us is that we must wait for our consumers and match their demands, our consumers are not ready for it, well they are not asking for anything anyway". (Case D, Marketing Manager)

This links to the previous comments on the lack of an IT orientation in marketing and the lack of a perceived need for increased IT use in marketing.

All the cases invested for perceived competitive parity and were comfortable that they are investing at the same speed as their competitors.

"A lot of stuff is peer driven as well, you look to see what's happening in other companies ... or service providers approach you and say look we have x, y and z are you interested?... So-and-so is taking it, you know and they

find it great so you ... say yeah we must get that.” (Case D, Marketing Manager)

They only invest if there is a trend in their industry towards an IT investment.

7.7.1 The Automational Stage of IT Assimilation

The previous section discussed various barriers to IT assimilation. The following section amalgamates all the major barriers and the evidence reveals that the major barrier relates to the automational stage of IT assimilation. The critically important point is that the move from automational to informational assimilation of IT is a very difficult and challenging process for marketing practitioners. Despite some rhetoric to the contrary, and attempts by each side to appear reasonable, there was a lack of awareness by IT personnel of the marketing consequences of the current IT applications and systems. There was equally a lack of understanding from the marketing department of IT issues. There was ample evidence of conflict between the two departments.

The IT Department and the Marketing Department – Conflict Situation: The following section discusses some of the major difficulties between the marketing department and the IT department, which have resulted in a conflict situation, and the limited solutions from the cases are reviewed.

Support versus Strategic Developments: The IT department is attempting to provide support (systems problems) and to a limited extent strategic development of IT initiatives. These two roles are not compatible and have resulted in a negative image of IT from a marketing perspective and vice versa. The operation of the IT department as a support function is very frustrating and time consuming to many IT personnel who feel that this is demeaning to their position. The resultant negative support encounters negates marketing asking for help from the IT department or even viewing them as a helpful supportive department.

“Yeah I mean one time we had questions about transferring emails to somebody else, it was more hassle than it was worth, so that’s why we

tended to keep it separate from the IT department” (Case D, Marketing Manager)

It is obvious that the IT department is a very busy department and that the maintenance of their systems and basic support issues are very time consuming. Rather than train staff in IT usage and decentralise the control they maintain the knowledge themselves. An example portrays this situation very well. In case D, when they are doing PowerPoint presentations in marketing their files are so large that they must use a zip file. The IT department complains that they are called to marketing for ‘silly’ support issues and mentioned the zip file incident. The IT department refuse to allow marketing to have open access to the zip file and keeps the cable in the IT department (not the machine just the cable!) so that marketing have no choice but to call them.

Internet Site Development as a Catalyst for Conflict: The independent development of their internet site has irritated the IT departments and has created a conflict situation. When departments start to develop their own IT skills and to leverage the information from systems for their own use, this can result in conflict and is a predicted stage of movement through the stages. Table 7.17 documents the control issues for the internet sites.

Table 7.17 Internet Site Development and Control

Internet Development and Control	Cases supporting
Marketing department designed and controlled	Case C and D
Global head office designed and controlled	Cases B and E
Marketing have taken over control from IT who supplied a basic site	Cases A and C
Outsourced their internet development due to lack of support from IT	Case A, C and D

The IT department was very annoyed at the lack of consultation in relation to the internet site development in cases A, C and D, as described by the IT manager from Case D.

“What can I tell you about it, I don’t really know a hell of a lot about it, I mean the first I knew about it we had it ... I think Ireland just got on the

band wagon and decided to set up their own and it will be very useful and I couldn't tell you what it looks like at this point and time."

They are aware that they did not have the time to offer assistance. *"We didn't know what they were doing but to be fair even if we did we would not have had the time to assist them"* (Case C, IT Manager) They also contend that they lack knowledge in this area. *"I don't know how we could have helped, it is the design and layout that is needed and that is marketing's role"* (Case D, IT Manager)

Negative Attitude toward Marketing Requests: When marketing requested a new system or non-standard information from the current system, there was annoyance from the IT personnel that a current system could not suffice for marketing needs. They also find the fact that marketing requests are always different an annoyance.

"That is something that is unique to marketing, it changes a lot quicker. Their requests seem to change more frequently than other departments. I don't know why it happens, a lot of it is innovation, they are trying out something and they want to see if it reacts" (Case A, IT Manager).

Even where a major customer (Case E, A and D) requested an IT, there was a negative attitude to the change and no IT appreciation of the benefits of this change to the company and marketing. The IT department have a very narrow view of IT and do not like being dictated to or to have to change their current centrally controlled IT applications. As discussed in proposition two, these cases are at the automational stage, and control of the information systems rests with the IT department and every request has to be channelled through them. The IT department resists any development, which could threaten this power based.

It was evident from all the automational cases that marketing department requests are not a high priority for the IT department. The finance department is the heavy user of IT and to some extent sales (cases B and D). The reasons for the IT department's reticence to develop IT's for marketing are as follows.

- Lack of demand from marketing;

- Lack of comprehension of marketing's requirement;
- The ever changing nature of marketing requests;
- The urgency of marketing requests;
- The fact that many marketing requests are not catered for by the generic system
- The lack of use of the generic systems means that the IT department is loath to develop or supply new systems to them, which they fear they will not utilise.

Both overt and covert conflict situations exist in these cases. None of the marketing managers have really challenged the IT department to supply different IT or improve access to current IT systems. It must be noted that these cases cannot envisage a major use for IT. What they really want is more marketing specific information and the ability to manipulate the information to their own requirements, but only to a limited extent. There is no real urgency to this request.

Conflict Resolution - Efforts to Overcome the Automational Focus of IT: The main research finding in this area came from an analysis of how the cases coped with the barriers discussed above. The tentative solutions, which are not widespread and are very recent, could be indications of the start of the move from an automational orientation to an informational orientation. The major contribution of these cases is their lack of progress towards informational assimilation of IT.

These cases predominantly accept what IT offers or ask for changes from the IT department. If the changes are not forthcoming they simply accept the situation (see table 7.18).

Table 7.18 Solutions to the Conflict and Automational Focus of IT

Solutions to the Conflict and Automational Focus of IT	Cases Supporting
Accept the IT departments solutions but are discontented	Case A, B and E
Outsource a minimal amount of their IT requirement (internet development) and accept the rest of the limitations of the IT provided	Case C and D
IT steering committee	Case A, B, C, D and E
Avoidance of IT department (superuser concept)	Case A, C and E

Outsourcing of IT Requirements: In the last six months, the marketing department in cases C and D, have availed of outside assistance to develop their internet site. This could be an early indication of a movement towards the informational stage of assimilation.

IT Steering Committee: There is limited evidence of a special cross-functional IT implementation and development committee. For these cases these committees have either limited powers (Cases B and D), are controlled by the IT department (Case D) or are only recently set up (Cases A and E). These committees are designed to prioritise the IT requests across the organisation and to separate major projects from the in-house IT department.

Avoidance of the IT Department: For cases A, C and E there was a level of avoidance of the IT department by the marketing personnel. Their encounters were not amiable and so they tried to avoid all contact with the IT department. Rather than ask for assistance from the IT department the super user concept exists in three of the cases. This is a person(s) in the company who is a good user of IT and who will give support and assistance to any user. This person is not based in the IT department. For example as the marketing assistant in case A explains,

“It depends, one of the guys who works in accounts is good at excel, I would ask him. If somebody has a query with power point, I would go to the girl in sales support; they are good at that. If someone has a query about the Internet, they would come to me because I am the only one with access.”

7.7.2 Sources of Bias

The researcher was very aware of sources of bias in the study and used methods to overcome them. It was discovered that for the IT personnel, as the relationship with the marketing department was tense, this interview was used to defend their position and to support their side of the argument. It was noticeable within this context that informants had great difficulty in describing the reality of the IT situation and there was a tendency for the IT manager to answer the questions aspirationally, related to potential IT developments and their (pivotal) role in these developments. The conversation below highlights the difficulties experienced during the research.

Interviewer: *“How do you view the role of IT in this company?”*

Case B – IT manager: *“To lend support, provide information and also to give the best quality information and to be innovative. Like, I think IS/IT can actually provide solutions.”*

Interviewer: *“So is that your role now?”*

Case B – IT Manager: *“Em, to be honest, at this present moment in time I don't because I've just been, my focus, my aim at the moment is to get everybody up and running on the system and at the moment we're running in tandem. We're still running two systems and now I'm trying to get one system so that is my focus.”*

Tactics were used during the interviews to counteract this bias. During the introduction to the interviews confidentiality was guaranteed and the fact that this was university research, which had a very specific focus on the reality of the situation. Perceptual statements were related back to historical events where possible.

Interviewer: *“How do you view the role of IT in this company?”*

Case C: *“The IT department is a central part of the management structure and feeds into all business plans”*

Interviewee: *“Really, can you give me an example of how this occurs”?*

Case C: *“Well it doesn’t actually happen yet but that is what we should be doing rather than this focus on support issues – we are really too busy to be involved in everything”.*

7.8 Summary of Proposition Four

The major barriers to IT assimilation is the lack of demand from marketing for IT applications and the automational focus of their IT systems. Table 7.19 depicts the process of IT assimilation in marketing. All cases have acceptance of the IT system and have an automational focus. There is only minimal evidence of any tentative steps towards non-acceptance and a move to an informational orientation.

Table 7.19 Overview of IT Assimilation in Marketing Within the Stages

<u>Theory Perspective</u>	
Acceptance	
Automational Stage	
1 st wave of company wide automation did not really impact on marketing – financial/production orientation.	
Minimum use of systems – self design of usable but basic applications	
↓	
Informational Stage	
Did not lead to informational stage	
Transformational Stage	
Did not lead to transformation	

There are technical issues which continue to negate against further IT developments. A major finding of this study is that there are dual marketing and IT departmental issues, which are central to the assimilation of IT by marketing. There are only tentative efforts to overcome the centralised control of the IT department and the lack of applicability of the centralised system for marketing use.

7.8 Summary of all Propositions

From the description and analysis of the cases the following conclusions can be drawn.

Firstly there is a lack of change within the companies in general and the marketing department, specifically. The emphasis is on their tried and tested successful strategies and tactics. In general these companies are risk adverse and conservative. They are market leaders in mature markets and are very successful marketers with traditional market bases.

There is a lack of a relationship marketing focus relying on traditional marketing practices connected to the marketing mix and marketing management model. With respect to relationship marketing we can see clearly that marketing does not play a leading role in this area, with the sales force having full responsibility for the relationships that exist. There are IT initiatives with intermediaries, but these are outside of the domain of the marketing department. Table 7.20 highlights the limited IT dimension to marketing.

Table 7.20 IT Dimension to the Continuum of Transactional to Relational Marketing for the Automational Stage of IT Assimilation

	Transactional Perspective
IT Developments	Transaction Marketing
Databases	Utilisation of the centralised finance orientated product based information system
IT based Interactions	Lack of use of IT based interactions
Internet Site	Basic site with static information
Intranet	No evidence
Dominant IT Focus	Internal and controlled by the IT department

The dominant stage of IT assimilation is automational and table 7.21 reveals the lack of movement towards informational assimilation for these cases.

Table 7.21 The Assimilation of IT: The Stages Theory and Marketing Approaches Classified by Relational Exchange and Managerial Dimension

		Transactional Perspective		Relational Perspective	
		Transaction marketing	Database Marketing	Interaction Marketing	
Assimilation of IT – The Stages Theory	Automation Efficiency	Use of company-wide finance focused centralised information systems; Limited use of IT to automate marketing practices for increased efficiency; Low impact from IT on marketing practices.	Lack of evidence from cases	Lack of evidence from cases	
	Information Effectiveness	Lack of evidence from cases	Lack of evidence from cases		
	Transformation	Lack of evidence from cases	Lack of evidence from cases	Lack of evidence from cases	

The major barriers are the automational nature of the IT infrastructure and the lack of an IT orientation in marketing. For the above reasons there is a reticence, to assimilate IT into their practices. In general they accept the systems provided by the IT department and have only tentatively embraced the outsourcing of their IT requirement, where there is a necessity to have an IT initiative. There is a lack of investment in IT as they doubt the benefits or have no vision of the benefits, which they could receive from IT.

Table 7.22 provides a brief outline of the level of support for the propositions from these cases.

Table 7.22 Support for the Propositions for the Automational Cases

Proposition		Level of Support
Proposition 1	There is a major relationship marketing perspective to contemporary marketing practices	Lack of support for this proposition
Proposition 2	There is a major IT component in contemporary marketing practice and that assimilation is at the informational stage of development.	Lack of support for this proposition
Proposition 3	There is a dominant IT dimension to relationship marketing which will be evidenced through database and IT based interactions in marketing	Lack of support for this proposition
Proposition 4	There are barriers to IT assimilation in marketing	Support for this proposition

The propositions have been discussed in greater detail in the individual case analysis (appendix C).

This chapter presented the findings from the data analysis for the four propositions with a summary of the findings in light of the research objective, for the automational cases. In general these cases lack a dominant focus on either IT or relationship marketing. The contribution of these cases to this study is to show how their marketing practices maintained a transactional focus and their IT assimilation was at the automational stage. Therefore there is no support for the two contemporary issues, which are viewed in the literature, as critical developments for marketing practice.

This chapter concludes the data analysis for this thesis. The following chapter presents the conclusions from this study, the implications of this study for theory, practitioners and educators and recommendations for further research.

CHAPTER EIGHT

CONCLUSIONS AND RECOMMENDATIONS

8.1 Introduction

In Chapter 1, the research objective and propositions which this thesis set out to answer were stated. The purpose of this thesis is to describe and explain how and why IT assimilation is occurring in marketing practice. Utilising the marketing classification of the relational exchange and managerial dimension framework (Coviello et al., 1997) and the stages theory framework (Nolan, 1973, 1993, 1996), the assimilation of IT in marketing was examined through empirical research. This chapter reports the main conclusions from the multiple case based research, in light of the research objective. It discusses the implications of this study for theory, for professional practice, and for educators. It also recommends avenues for further research. Within the evaluation of the contribution of this research to theory, the purpose is to discuss whether the relational exchange and managerial dimensions of the marketing classification framework should include an IT dimension and whether the stages theory is applicable to marketing.

8.2 Structure of Chapter 8

This chapter is structured in the following way. Section 8.3 introduces the purpose and nature of this study. Section 8.4 discusses the significant findings and the suggested development of the marketing classification framework, using the four propositions developed from the research objective. Section 8.5 reviews the research findings in light of existing research studies, discussed in the literature review. Section 8.6 discusses the implications of this study for theory, for professional practice, of both marketing and IT personnel, and for educators. The limitations of case based research were discussed in chapter 5, and section 8.7 focuses on the broad limitations of this study. Section 8.8 recommends areas for further research. The concluding section 8.9, provides an overview of the conclusions and recommendations of this thesis.

8.3 Overview of Study

The primary purpose of this study was to explain how IT assimilation is occurring within marketing practice and secondly though no less significantly, why IT assimilation is occurring. This research is designed to offer a focused analysis of the assimilation of IT within marketing, to lead to theory generation and to produce insights into contemporary marketing management practice.

This is an interdisciplinary study. The challenge of this research is to amalgamate theories from two different disciplines, marketing and IT, contributing to developments in both fields. This research expands the domain of marketing beyond the traditional marketing management model and encompasses the transactional to relational aspects of marketing management practice. It suggests the addition of an IT dimension to the relational exchange and managerial dimensions of the Coviello et al., (1997) framework of the classifications of marketing approaches. Within the IT discipline, this research develops the stages theory of IT assimilation (Nolan, 1973,1993, 1996) and suggests its applicability for marketing department's assimilation of IT.

This research was undertaken within the realism paradigm, with the intention of understanding the deeper structure of a phenomenon, which can then be used to inform other settings. The research design was multiple case studies selected for comparative analysis. Case selection for this research is discussed in section 5.6.3. In brief, cases were selected, using theoretical and literal replication logic, in relation to their level of IT in marketing. Two groups of cases, one group with automational (Cases A, B, C, D and E) and one group with informational (Cases F, G, H, I and J) assimilation of IT, were researched. Tentative conclusions are drawn, concerning various aspects of the assimilation of IT by marketers, though it must be noted that there is a need for further detailed research in this area.

The literature review highlighted the fact that IT assimilation is a complex and multidimensional phenomenon and this study seeks to place boundaries around the

analysis in order to focus on particular issues, as they relate to the marketing department of large firms in the Irish marketplace.

8.4 Significant Findings of the Study

This research explored contemporary marketing practice along the transactional to relational continuum and utilizing the stages theory of IT assimilation. The main findings are as follows.

Though relationship marketing practices exist, there is a lack of support for the dominance of relationship marketing practice over transactional marketing practice. Relationship marketing practices in this study were industry specific to business to business and service organizations. Cases with a relational perspective are experiencing implementation difficulties as they endeavoured to develop the more relational aspect of their marketing practice.

Where the marketing department is orientated towards relationship marketing approaches, there is a dominant IT dimension and IT is viewed as a critical component of marketer's ability to practice relationship marketing.

On the basis of the case study analysis there is support for the stages theory of IT assimilation in general and specifically for its use in regard to the marketing department's assimilation of IT. This framework can be used as a general framework for describing the stages of IT assimilation for the cases that participated in this research. This implies that there are certain descriptive values, which can be developed into a framework of stages of IT assimilation in marketing. This framework could convey both theoretical insights and practical experience of the assimilation of IT in marketing, to guide and advise companies and for further research studies.

Marketing specific barriers to IT assimilation exist. The major barrier is the automational stage of IT developments within companies. There are a range of

challenges for marketers in developing and implementing marketing specific IT and a variety of solutions are utilised which demand that marketers increase their IT knowledge and expertise.

The following section reviews the findings in greater detail with reference to the research propositions developed from the literature review (section 5.2).

The research objective of this study was that:

IT assimilation in marketing practice occurs in stages and there is an IT dimension to the transactional to relational continuum.

This research objective explores the assimilation of IT within marketing practice. Its main focus is on the IT dimension to build on our understanding of this issue. The inclusion of the transactional to relational continuum focuses this research on a broad range of marketing practices.

Proposition One: There is a Major Relationship Marketing Perspective to Contemporary Marketing Practices

This proposition relates to the continuum of transactional to relational (database, interactions and network) marketing and researched the development of relationship marketing approaches within contemporary marketing practice.

A major finding was that there is some support for the industry specific continuum of transactional to relational marketing practice, see Figure 8.1.

Figure 8.1 The Marketing Strategy Continuum

Approaches to Marketing Practice				
Transaction Marketing			Relationship Marketing	
Cases A, B and D	Cases C and E	Case G	Case J	Cases F, H and I
Consumer goods ⇒ ⇐ Consumer durables ⇒ ⇐ Consumer service ⇒ ⇐ Industrial goods ⇒ ⇐ Services				

Source: Adapted from Gronroos, (1991)

There was evidence that relationship marketing practices are developing within the marketing departments in business-to-business and service cases. There was a lack of evidence of relationship marketing in consumer product cases which continue to focus on transactional marketing approaches.

For business to business and service cases, the move to a more relationship marketing orientation is a recent development. There are encountering major difficulties as they endeavour to take control of relationship marketing practices, and particularly customer knowledge, from the sales force. For cases with a dominant transactional marketing approach, they concentrate on their traditional successful strategies and tactics and they can perceive no immediate or apparent benefit to implementing relationship marketing practices.

There was also evidence of a pluralism of approach with the business to business and services cases, who practices both database and interaction marketing.

Proposition Two: There is a Major IT Component in Contemporary Marketing Practice and the Assimilation of IT in Marketing is at the Informational Stage

This proposition explored the IT component in contemporary marketing practice and utilised the stages theory framework as an indication of the assimilation of IT within the marketing department, as discussed in section 4.3.

The data analysis revealed that, for cases that were focused on relationship marketing

approaches, IT is a major component of marketing practice. Utilising the stages theory of automational to informational to transformational IT assimilation, these cases are at the informational stage. For cases that were focused on transactional approaches to marketing, there is a lack of an IT component to marketing practices, with IT assimilation remaining at the automational stage. Table 8.1 presents the findings of the evidence for the automational and informational stage of IT assimilation for both sets of cases.

Table 8.1 Evidence of the Stages Theory of IT Assimilation for the Marketing Department

<u>Evidence</u>	<u>Automational Stage</u>	<u>Informational Stage</u>
Evidence of Automational Stage of Development	Cases A, B, C, D and E	Cases F, G, H, I and J
Centralised IT	✓	
Standardised company-wide systems	✓	
Finance orientation of the IT systems	✓	
Technology focused rather than informational focused	✓	
Lack of open access to IT	✓	
Evidence of Informational Stage of Development		
Major criticism of the centralised information system		✓
Decentralisation of control of marketing related ITs		✓
A dominant focus on new marketing specific IT		✓
Company-wide open access to IT		✓
Informational rather than technology focus		✓
Internal and external focus of IT developments		✓
Appreciation of the learning curve of IT assimilation		✓
Increased IT skills in marketing		✓
Marketing department as drivers of IT developments		✓

Table 8.1 confirms the clear differences between the two case groups and provides descriptions of the features of automational and informational IT assimilation in marketing. Cases with an automational focus rely on the IT department for the majority

of their IT needs, they are not IT orientated with a lack of development of marketing specific ITs. In contrast, the cases with an informational stage of IT assimilation have moved beyond the automational stage and are now focused on the use of IT to increase their efficiency and effectiveness. They are designing, developing and implementing a range of IT applications with a particular focus on ITs which will enhance their relationship marketing practices. The stages theory suggests that there is movement through the stages and this research offers support for a stages theory of IT assimilation in marketing.

A major contribution from the cases with informational assimilation of IT, was to provide insights into the range of issues and difficulties they encountered in progressing from the automational to the informational stage of IT assimilation. Table 8.2 traces the stages from acceptance of the automational stage to non-acceptance of the automational stage and through to a focus on continuous development of IT, for the informational relational focused cases only.

Table 8.2 Overview of IT Assimilation in Marketing

Acceptance	Non Acceptance	Continuous Development
Automational Stage	Automational Stage	Automational Stage
1 st wave of company wide automation did not really impact on marketing – financial/production orientation. Minimum use of IT mainly for efficiency		
↓	↓	↓
Informational Stage	Informational Stage	Informational Stage
Did not lead to informational stage	Challenges the current systems to perform by outsourcing IT requirements, changing the systems or developing new marketing specific IT applications Major technological and operational difficulties	IT dimension in marketing focused on the automation of marketing practices. Dominant use of the internet platform Continue to develop marketing specific IT systems for both internal and external use despite the barriers.
↓	↓	
Transformational Stage	Transformational Stage	Transformational Stage
Did not lead to transformation	Did not lead to transformation	Potential development but lack of evidence for movement to this stage in the cases
All Cases	Informational Cases Only	

Proposition Three: There is a Dominant IT Dimension to Relationship Marketing Which will be Evidenced Through Database and IT Based Interactions in Marketing

This proposition develops the IT dimension further by focusing on the assimilation of IT in marketing along the transactional to relational continuum and suggests that for relationship marketing practices, there is an IT dimension. This proposition links to propositions one and two and continues to explore the development of relationship marketing within the study firms and the role of IT in supporting (or inhibiting) this perspective.

The following tables utilizes the Coviello et al., (1997) framework and presents an overview of the major findings of this study. Table 8.3 reveals that there is an IT dimension to relationship marketing practice, which is evidenced by databases and IT based interactions.

Table 8.3 IT Applications within the Marketing Classified By Relational Exchange and Managerial Dimension Framework

IT Developments	Transactional Perspective		Relational Perspective	
	Transaction Marketing	Database Marketing	Interaction Marketing	Network Marketing
Databases	Utilisation of the centralised finance orientated product based information system	Development of a marketing specific database with a centralised view of the customer linked to but separate from the main information system	Development of a marketing specific database with a centralised view of the customer linked to but separate from the main information system	Lack of evidence
IT based Interactions	Lack of use of IT based interactions	Internet and intranet use and development of extranets	Internet and intranet use and development of extranets	Lack of evidence
Internet Site	Basic site with static information	Internet site for general information and also marketing specific use particularly at the consumer interface with relationship marketing features viewed as important	Internet site for general information and also marketing specific use	Lack of evidence
Intranet	Non usage	Automation of internal marketing procedures	Automation of internal marketing procedures	Lack of evidence
Dominant IT Focus	Internal – IT department controlled	Internal/external focus – marketing control of various IT applications	Internal/external focus – marketing control of various IT applications	Lack of evidence

Table 8.4 outlines the suggested amendments to the relational exchange and managerial dimensions of the framework.

Table 8.4 Developments of an IT Dimension to the Marketing Classification Framework

	Transactional Perspective		Relationship Perspective	
	<u>Transaction Marketing</u>	<u>Database Marketing</u>	<u>Interaction Marketing</u>	<u>Network Marketing</u>
Relational exchange dimensions				
IT Orientation	Internal IT focus and IT based information with a transactional focus	Database orientation Internet, intranet and extranet usage with dominant external focus Automation of internal operations for increased efficiency	IT to facilitate internal and external interactions and to automate marketing practices for increased efficiency; Database orientation	Lack of evidence from cases
Managerial Dimension				
Managerial investment – IT Specific	Limited internal focus on internal	Open access interactive technologies, internal and external focus Marketing specific database developments	Open access interactive technologies, internal and external focus Marketing specific database developments	Lack of evidence from cases

The IT dimension is included vertically rather than horizontally which supports the suggested continuous development of IT across all of the marketing perspectives.

Linked to the analysis of proposition two, these findings support the inclusion of an IT dimension to the transactional to relational marketing framework. The use of this framework along the transactional to relational perspective suggests that for transactional marketing there is only a limited focus on IT and these marketing

departments are at the automational stage of IT assimilation, while for relational focused marketing departments, there is a greater IT focus and they are at the informational stage of IT assimilation. Table 8.5 is a summary diagram of the main findings of this study and is a further development of the two previous tables. As you can see it develops the IT dimension to the marketing classification framework with a focus on the movement through the stages of IT assimilation.

Table 8.5 The Assimilation of IT: The Stages Theory and Marketing Approaches Classified by Relational Exchange Dimension

		Transactional Perspective		Relationship Perspective
		<u>Transaction Marketing</u>	<u>Database Marketing</u>	<u>Interaction Marketing</u>
Assimilation of IT – The Stages Theory	Automation Efficiency	Company-wide finance focused centralised information systems; Limited automation of marketing practices for increased efficiency; Minimal impact from IT on marketing practices.	Company-wide finance focused centralised information systems; Limited automation of marketing practices for increased efficiency; Minimal impact from IT on marketing practices. ↓	Company-wide finance focused centralised information systems; Limited automation of marketing practices for increased efficiency; Minimal impact from IT on marketing practices. ↓
	Information Effectiveness	Lack of evidence from cases	Creation of new marketing specific databases Development of IT based interactions internally and externally Marketing specific IT applications to automate internal marketing operations for increased efficiency and effectiveness ↓	Creation of new marketing specific databases Development of IT based interactions internally and externally Marketing specific IT applications to automate internal marketing operations for increased efficiency and effectiveness ↓
	Transformation	Lack of evidence	Lack of evidence	Lack of evidence

This method of including the IT dimension in the framework provides more information and support for marketers and academics as it traces the movement through the stages of IT assimilation. All cases had experienced the automational stage of IT assimilation. The major contribution of this table is to highlight the developments which indicate

movement to a more informational assimilation of IT. This perspective centres on the 'continuous development aspect of IT assimilation as a critical component.

The motivation for the informational stage of IT assimilation centred on the recent orientation to a relationship marketing perspective. For the relational focused cases they were developing IT in order to gain knowledge and to increase their effectiveness, which would allow them to enhance their relationship marketing practices. In contrast the transactional focused cases had a lack of a driver for IT assimilation as they were content with and intended to continue to pursue their successful traditional tactics and strategies.

Proposition Four: There are Barriers to IT Assimilation in Marketing

This proposition explores the barriers to IT assimilation in the marketing department with a particular focus on the solutions utilised to overcome the barriers.

For cases with a relational perspective to marketing practices and informational IT assimilation, marketing's constrained assimilation was predominantly due to the legacy of the finance orientated, centralised automational based information system, coupled with the lack of marketing specific information. IT is viewed as key enabler of their endeavours to become more relationship marketing focused, but they are experiencing a range of major barriers.

A central finding is that a pattern, composed of the following elements, exists in response to the barriers to IT assimilation. Development of IT expertise in marketing; outsourcing of marketing's IT requirements: the introduction of an IT steering committee to drive through decentralised IT, senior management support for marketing specific IT developments, large marketing budget, circumvention of the IT department's restrictions and the determination of marketing personnel to pursue IT developments regardless of the barriers.

For the transactionally focused cases, the main barrier was again the automational focus of the IT infrastructure. A secondary barrier was the perceived lack of a need to change their current successful marketing strategies and tactics. These cases were inherently conservative and could not foresee how IT would improve or benefit their marketing operations.

8.5 Consideration of the Findings in Light of Existing Research Studies

The following discussion links this research to the limited but growing body of empirical research in this area discussed in the literature review.

In general the findings reveal support for the Coviello et al., (1997) framework, through its successful use in this study. It was possible to classify cases along the relational exchange and the managerial dimension of the framework. Similar to a range of studies (Brodie et al., 1997; Lindgreen et al., 2000, Coviello et al., 2001) this study lends tentative support to the Gronroos, (1991) strategy continuum (see section 3.3.2). Consumer product cases were more transactional marketing focused while the business to business and services cases were more relationship marketing focused. The findings suggest there is little evidence of relationship marketing practices within the marketing departments of consumer product companies and so this research does not fully support the Brodie et al., (1997) or Coviello et al., (2001) finding of pluralism of approach. Though for business to business and services cases there was evidence of both database and interaction marketing approaches. This research confirms, as discussed in chapter 2, that marketers are experiencing difficulties in implementing relationship marketing practices within the marketing department (Lindgreen et al, 1999, 2000; Lindgreen and Crawford, 1999; Freedman and Sudoyo 1999; Reichheld and Schefter, 2000).

The study also confirms that there is an IT dimension to relationship marketing approaches and supports the Coviello et al., (2001 a, b, c) research into the IT (e-Marketing) dimension of this framework; though suggesting a horizontal rather than a vertical dimension to expand the framework (as discussed in proposition two).

In relation to IT applications in marketing it supports the empirical findings discussed in section 3.4, that IT applications are only slowly diffusing into marketing practices and that there are major challenges to their successful use (Reekers and Smithson, 1995; Naude and Holland, 1997; Chan and Sweetman 2000; Bensaou and Venkatraman 1995; Li, 1995; Sahay et al., 1998; Bauer et al., 1999; Dutta and Segev, 1999; Geiger and Martin, 1999; Dempsey, 2000; Payne, 2001). It also confirms as discussed in section 4.3.7, the predominantly automational focus of much of IT assimilation (Palihawadana and Delfino, 1994; Domegan and Donaldson, 1994; Leverick et al., 1998; Bruce et al., 1996; Hewson and Hewson, 1994; Fletcher and Wright, 1997).

From an IT perspective, it provides tentative support for the stages theory framework (Nolan, 1973, 1979, 1993) for IT assimilation within companies (see section 4.3). This study developed the framework from a marketing perspective, which is similar to studies of the stages theory within the IT department (Galliers and Baets, 1998; King and Thompson, 1997).

This study supports research in the marketing field that there are a range of barriers to IT assimilation (see section 4.4). It confirms that there are multidimensional, complex and context specific barriers to IT assimilation.

It also affirms the findings from the general IT literature that IT is an enabler rather than a driver of change (Davies and Mitchell, 1994; Applegate, 1994; Douzou and Legare, 1994; Kimble and McLoughlin, 1994; Bjorn-Andersen and Turner, 1998; Blumenthal and Hasperslagh, 1994), (see section 4.4.3). It was clear from these case studies that where marketers were orientated towards change, then IT enabled that change. Both groups of cases showed that IT has no inherent ability to drive changes, that change must occur first and then IT can enable that change.

It does not support the findings that the intrafunctional difficulties between the IT department and other departments have receded (McDonagh and Harbison, 2000). It

supports the findings that marketing departments are dissatisfied with the IT department (Jiang et al., 1997), that there are personal differences between marketing and IT personnel (Berthon et al., 1999) and critically for marketing it shows that IT developments are designed to match IT personnel's expertise and knowledge rather than for marketing's requirements (Scarborough, 1994; Li et al., 1993).

The data analysis provides empirical support for much of the discussion in the literature particularly in relation to the stages theory. From a transactional to relational perspective the findings do not fully support the discussion in the literature and are particularly critical of the lack of an IT dimension to much of the discussion. The major and more unexpected finding was the conflict situation between the IT and the Marketing departments and the methods used to both justify and overcome this situation.

As the central themes in this study, relationship marketing and IT, are both at the early stage of theory development, the implications for this study in light of current theory is to offer tentative support to previous research findings and to provide direction for further research.

8.6 Implications of the Study for Theory, Professional Practice and Educators

The theoretical implications apply both to chapters 3 and 4 and were explored in section 8.4. In brief, there are two main areas of theoretical implications related to the stages theory and the transactional to relational continuum. The primary contribution of this study is to suggest and confirm the inclusion of a dominant IT dimension along the transactional to relational continuum. A further contribution is the tentative design of this dimension (see tables 8.3, 8.4 and 8.5). From an IT perspective the research shows applicability for use of the stages theory in marketing and suggests that the IT component in marketing practice is assimilated in stages and should be researched in this manner. Again a further contribution is the tentative design of this dimension, see table 8.5.

The theory generation aspect of this study has highlighted various aspects of marketing practice that need further study (see section 8.8).

8.6.1 Managerial Implications

In chapter 1, it was argued that an important consideration for undertaking this study was to provide organisations with detailed knowledge and practical assistance in relation to two contemporary marketing issues; transactional to relational marketing practices and IT assimilation in marketing. Given the importance of IT in business generally, and marketing specifically, the question of how marketers assimilate IT and why they are experiencing difficulties in IT assimilation is of contemporary interest to both academics and managers alike.

This research has several implications for management. The first managerial implication of this study, from the IT perspective relates to the development of the stages theory of IT assimilation for the marketing department, which shows that IT will develop through stages in marketing and offers practitioners insight into the process of IT assimilation. This framework can be used practically by marketers to track their own IT assimilation. This research also provides tentative guidelines for suggested methods of movement from an automational to an informational stage of IT assimilation for marketing practices, (see table 8.5). It also highlights the continuous nature of IT developments. Marketers, particularly within companies with a dominant automational focus to their IT infrastructure need to be aware of the stages theory concept and the effects of an automational focus. Movement from automational, centralised control of the IT infrastructure demands that marketing managers have the knowledge, vision and orientation towards IT to capitalise on this development. The acceptance of a stages theory of IT assimilation can assist marketing's IT developments and highlight the challenges that they will encounter.

A second implication from the marketing manager perspective relates to the absence of sophisticated use of IT in many marketing departments and the challenges which

marketing personnel are encountering as they endeavour to assimilate IT into their practices. A critical finding is the need for marketers to develop skills in IT exploitation for marketing purposes, and particularly for relationship marketing practices, which this study confirms has a IT dimension. For IT assimilation to proceed, marketing managers need to have an IT orientation and to be able to discuss and challenge IT systems. Generally IT infrastructures in companies are finance or production focused. Therefore IT expertise and knowledge in the marketing department would now appear to be a critical criteria as marketing practitioners need to be knowledgeable about IT developments and their applicability to marketing purposes.

A further implication for marketing managers is the lack of control in marketing of relationship marketing operations. It is of critical importance that marketing managers are particularly cognisant of the need for access to and control of customer information.

The barriers to IT assimilation in marketing can be company specific, complex, and continuously changing. The contribution of this study is to highlight for managers, the range of barriers and importantly the practical solutions that marketers are using to overcome these barriers.

For IT managers the major implication of this study is that they must be aware of the automational focus of their IT developments and the barriers to marketing's assimilation of IT. IT managers in this study were knowledgeable in the finance and production areas but lacked marketing knowledge. This mirrors the call for marketing managers to become more IT proficient, as this study suggests that IT managers need to become more marketing proficient and understand the strategic significance of IT for marketing.

8.6.2 Implications of the Study for Educators

For educators, this research confirms the trends toward more relationship marketing practices in the marketing departments of service and business to business firms. It documents a range of difficulties that marketers are encountering as they endeavour to

practice relationship marketing. It suggests that students need to be more aware of relationship marketing theory and understand the implementation issues of relational approaches to marketing.

A major finding of this study is that there are dual marketing and IT departmental issues, which are central to the assimilation of IT by marketing. This study suggests the need for an increased focus on IT as an integral part of the curriculum for marketing students. Marketing operates in an IT enabled world and marketing students need to understand the implications of IT use for marketing practices. This by no means suggests that marketing should subsume elements of the IT field, which IT practitioners legitimately consider to be their domain, but the broad findings are that marketing practitioners need to understand and exploit IT within marketing. There is also a need for education in the solutions available to overcome the barriers to IT assimilation.

This study also suggests that IT students need to have an extended view of the IT infrastructure to include marketing perspectives, as the dominant focus of IT has centred on the internal applications within the finance or production departments. There has been a lack of focus on marketing ITs that suit marketer's requirements. This study confirmed that IT managers have marketing specific difficulties and the education of both parties, could be part of the solution to these difficulties.

8.7 Limitations of the Study

Part of the strength of a research project lies in the recognition of its limitations. These limitations may serve as a starting point for a future research agenda. The major limitations of case study research were discussed in detail in section 5.9. This section presents a broad overview of the limitations, which could affect the application of the findings from this study.

The rapid pace of new developments in IT could mean that the application of the findings from this study, which was completed over a year and a half ago, may now be

dated. This limitation appears to be receding as the pace of technological change slows in the market and this research itself confirms that changes are not occurring as rapidly as was generally assumed.

This study centered on two very complex and broad areas within two disciplines. Therefore, the boundaries of this study had to be very clear in order to avoid detouring into a range of complex issues that were of interest, but were outside the domain of the study. For example, issues of organizational change and change management issues; intrafunctional rivalry; political activities; system rationalism, diffusion theory; sales force practices and so on were only broadly included or alluded to in this study.

A potential weakness of this study is the lack of generalisability of findings due to the study design and its exploratory nature (see section 5.9). The findings are generalisable to theory rather than to the population. The multiple case based research and cross-sectoral nature of the study improves the applicability of the findings (Yin, 1994; Huberman and Miles, 1998). In addition, the use of theoretical or purposeful sampling can also increase the efficient use of a limited number of cases.

A major limitation of the study relates to the research design. This is an explanatory study with a small sample size of large organisations and so the issues raised in this research could be specific to large, traditional, and mature companies. The broad cross-sectoral design could also limit the applicability of the findings to any one sector.

This research was based in Ireland, which is a very small and well-defined market on the global stage. Even though the majority of the cases were multinationals, there is still a potential limited applicability of the findings to the Irish context. As a result this study needs to be replicated in other environments in order to contribute to the generalisability of the findings.

8.8 Recommendations for Further Research

The findings from this research suggest many interesting avenues for future studies. This thesis highlights a range of issues which need further research, as marketing practices become more IT orientated in an IT enabled world. Clearly there is still much to learn about the process of assimilation of IT into marketing practice. The use of the realism paradigm offers one perspective of this study area, the use of the positivist or the critical theory or the constructionist paradigms (see chapter 5) would of course offer different perspectives and a body of research within the different paradigms could develop our understanding in this area.

The following recommendations are provided to assist those interested in pursuing research in this area.

Though justified for this research study, the use of case studies has resulted in certain limitations on the use of the results. A general recommendation for further research, into the assimilation of IT in marketing, would be to test the concepts that were identified by this study on a wider scale using quantitative research within the positivist paradigm. There is an acknowledged need to test any theoretical hypotheses for statistical generalisability with a quantitative research study. As this is theory building research, testing the findings from this study with a quantitative study would provide support for the findings. Quantitative research could be sector specific testing the findings in selective settings or, a broad cross sectoral study along the transactional to relational perspective as utilised for this study.

There is support for the stages theory approach as discussed in section 4.3, but there is a lack of research supporting its use, particularly for the marketing department. Further research is needed to confirm its applicability to marketing's assimilation of IT.

The geographical limitations of the study could be overcome by the completion of research of a qualitative or quantitative nature in other countries which would develop

this study further. This would facilitate comparison with the findings from the Irish marketplace.

This study would benefit from a longitudinal perspective. It would be both interesting and insightful to return to these cases to study their continuing assimilation of IT and the range of challenges they are encountering. This thesis highlights the need for marketing managers to view IT in marketing from a continuous developmental perspective, with time and past practices, as pivotal issues for future developments, so a study over time would provide interesting insights. These studies could have a more critical theory or constructionist perspective which could offer new insights and alternative and varied perspectives.

More specifically, there are general themes from this research which would benefit from further research of a quantitative and/or qualitative nature, which could not be dealt with fully within the scope of the research objective of this study. For instance there is a need for more in-depth studies of relationship marketing practices and IT assimilation along the value chain. A range of studies along various dimension of the value chain would provide a more comprehensive view of the assimilation of IT within marketing practices and increase our knowledge of a broad range of relationship marketing practices.

In addition, research which focused on, or included, the impact of departments external to the marketing department would add an extra dimension to the study, particularly the inclusion of the sales department and customer service. It was noted that the sales force had the dominant influence on customer relationships, but the sales force were not included in this study. One of the findings of this study is that this area needs further research as many relationship marketing practices are outside the domain of the marketing department.

This type of research study could be extended to a wider range of organisations. For example organisations that have fast changing technologies and strategic environments

and characterised by short product life cycles and to sectors, which are known to contain some of the more progressive and innovative businesses. As this research was specific to large organisations a focus on small or medium sized organisations would also be relevant.

In addition further research of leading edge assimilation of IT in marketing could provide further development of the frameworks. As noted in tables 8.3 to 8.5 there is a lack of information for the network and transformational stage of IT assimilation in marketing. Therefore companies which have reached transformational assimilation of IT are needed, to map the changes and the challenges that occur at this stage. Research of similar companies in the American market may supply this required information.

In conclusion, there are a variety of interesting avenues for further research. As IT assimilation continues there is a need for more theory development and testing studies in this area to offer practical support to marketing managers as they attempt to assimilate IT into their practices.

8.9 Conclusions

This research is relevant from both a theoretical and management perspective. This study focused on the stages theory of IT assimilation within the marketing department, along the transactional to relational continuum. It highlights many IT assimilation issues which are challenging for marketers within both the transactional and relational approaches to marketing.

From a marketing perspective the central finding of this study is that there is an IT dimension to relationship marketing practice. It also confirms that there are major challenges for marketers as they attempt to implement relationship marketing practices and also to assimilate IT into their marketing practices.

From an IT perspective there is support for the stages theory of IT assimilation and this study provides guidelines for marketing specific progression through the stages. The main challenge to IT progression to more informational use of IT in marketing is the automational focus of the IT infrastructure within companies. There are a variety of solutions highlighted by this study which marketers are using to overcome the automational focus of IT and to proceed with informational assimilation in marketing.

This thesis was an explanatory case based study into two contemporary issues in marketing practice, relationship marketing and IT. The significant contribution of this study was to highlight the importance of both these areas, the barriers that marketers are encountering and to provide direction and guidance developed through a framework which links the two themes of this research (see table 5.8). Secondary contributions are to encourage and provide direction for further research in these critical areas and document the implications for practice, theory and educators.

The findings in this study show evidence of continued assimilation of IT in marketing. Therefore a time may come when marketers will need to fully embrace IT in marketing and the spelling could reflect this, as marketing becomes known as markITing.

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