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AN EXAMINATION OF THE CONTRIBUTION MADE BY THE INTERNET IN RELATIONSHIP-ORIENTED RETAIL BANKING

by

Mark G Durkin

Doctoral Thesis
Submitted in partial fulfillment of the requirements for the award of Doctor of Philosophy of Loughborough University

December 2004

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Abstract

An understanding of the role the Internet can play in marketing activity is of growing interest to both academics and practitioners. The focus of the research reported in this thesis has Internet-enabled marketing as its centre. The context for this examination is that of Electronic (or Internet-enabled) retail banking. The research sought to identify, assess and evaluate the contribution of the Internet to relationship-oriented retail banking. Given the relational focus of the research it was decided that a focus on both the perspectives of bankers and retail bank customers would be accessed in order to address the research aim most effectively.

The key issues to be explored in this research study were identified in detail through a review of academic literature encompassing inter alia; banks’ use of technology, customers’ use of technology, diffusion of innovation and customer decision-making styles. This literature review resulted in the development of a conceptual model, which was entitled the ‘Interaction Preference Model’. This model sought to integrate the findings from the key literatures reviewed and identified the key management challenges inherent in attempting to reconcile the differing interaction preferences of both bankers and retail bank customers with regard to the e-banking platform. An early conceptualisation of this model was presented at a marketing conference (Durkin and Stewart, 1999) and the final refined model was subsequently published (Howcroft and Durkin, 2000)

Accordingly, this research study was operationalised through two sequential stages. The study took place between the summer of 1998 and winter 2002. Stage 1 of the study was qualitative in nature and involved fifteen in-depth interviews with senior bank executives in Ireland, Great Britain, Sweden and the United States of America. Findings from the in-depth interviews were compared between the countries and a ‘threads of commonality’ model developed which showed (i) areas / issues upon which all bankers agreed as regards the use of the Internet in relationship-oriented retail banking, and (ii) areas of non-agreement. The results of this first stage of the research study were subsequently published (Durkin and Howcroft, 2003).
The key issues from the Stage 1 qualitative study included, (i) relationship management is key, (ii) branches remain the main delivery channel, (iii) as products become more complex they are less suitable for web delivery and a reliance on face to face interaction will prevail, (iv) the typology of customers who will embrace the web for their banking is unclear as is the extent to which the web will be perceived to add relationship value, (v) bank-driven customer education as to the value of the e-banking proposition is a priority.

These important issues helped in the development of the various Stage 2 hypotheses and for the research instrument used in this second part of the study. Stage 2 examined the perspectives of retail bank customers with regard to their use of the Internet generally and for financial services specifically. A survey instrument, the content of which was informed by the Stage 1 findings, had questions relating to relationship status, perceptions with regard to product complexity and web suitability and the perceived importance of face to face interaction in banking interactions of varying complexity. The survey was administered to 5,000 retail bank customers from one Northern Ireland / UK based case bank. A response rate of 9.62% was achieved (480 responses). Through the use of various multivariate techniques employed at various levels of analysis key predictors, influencers and barriers for retail bank customer use of the Internet were identified. Cluster analysis was also used in an attempt to identify the groups of customers according to how they made decisions regarding use of the Internet in their banking.

Stage 2 findings were then integrated with those from Stage 1 of the study. The original ‘Interaction Preference Model’ was elaborated and augmented as a result of this empirical research and developed into an ‘Integrated and Specific Model of Internet Adoption’ which makes a contribution both to academic knowledge and also at the practical level of the bank.

Key findings from the study overall include; (i) bank branch staff have a key role in the education of their customers in order that there is continued growth in e-banking adoption, (ii) reassurance about web security is of prime importance in encouraging customers to adopt e-banking, (iii) awareness of the added value offered by e-banking needs to be generated and communicated by banks according to varying customer clusters, (iv) bank
marketing communications strategies need to be refined in order to better target and help manage the perceptions of varying customer clusters with regard to the e-banking proposition, (iv) in the case bank under study a loss of face to face interaction was not seen as an inhibitor in adoption of the Internet for purchase of products of increasing complexity, (v) banks in general need to move away from a reliance on traditional segmentation approaches and adopt a more motivation driven / behaviourally -based approach to profiling customers.

The thesis ends with an agenda for future research that focuses heavily on the possibilities for internationalising the study.
Acknowledgements

This thesis is the product of 6 years work conducted on a part-time basis. It has only been made possible by the support of family, friends and colleagues. This thesis is dedicated to my parents, Margaret and Patrick, to whom I am indebted for their belief in me, the enduring example of their outstanding work ethic and their unending support throughout this process and throughout my life. It is an inadequate tribute.

To my supervisor, Professor Barry Howcroft, I offer sincere thanks for directional and meaningful supervision which was always delivered with enthusiasm, kindness, good humour and a prevailing sense of possibility. Thanks to my great friend Dr Aodheen O’Donnell (UU) whose intellect and kindness are humbling in equal measure. To Joe Crowe (Bank of Ireland), my friend and industrial mentor without whom this academic direction in my life would never have been possible; to Dr Patrick Butler (Melbourne Business School), my friend and academic mentor for shaping my ability to think – thank you both.

Thanks to all those senior bank executives who participated in this study in the USA, UK, Ireland and Sweden and to Dr Camilla Carlell (Stockholm Business School) for making many introductions in Sweden on my behalf and for still meeting me in a deserted Stockholm restaurant on that very cold dark night of September 11th 2001 to talk about my work with such enthusiasm, interest and hope.

Thanks to my friends for their support and ‘little nudges’ forward; Denis Moonan and Cathy Huey, Bronagh O’Donnell, Elaine Fox, Conor MacCarrick, Clare Durkin, Darryl Cummins, Michael Maguire, Sue Ward, Frank McGonagle, Ruth Brown and Aoife O’Neill. To my friends in the University of Ulster who helped me at so many different, yet equally crucial stages, over the past 6 years especially the wonderful David Demick, Dr Pauric McGowan, Dr Kate Stewart and Dr Gillian Armstrong – inspirations all in their own unique way. To Professor Jim Bell, Dr Hadyn Bennett and Dr Gwyneth Mulholland – thanks to each of you for being interested enough to make the time and for your enduring support. Special thanks to the incomparable Margaret Hickey for unending patience and great resolve in helping pull together the ‘final’ final document with skill and with great humour.

Thanks are due to Bank of Ireland for always supporting and funding any self-development activity asked for during that formative decade from 1986. Thanks especially to the inspiring Des O’Shaughnessy, my first manager, for giving me the necessary opportunities at nineteen to begin my self-development journey. To UU Professors Nick Alexander, Richard Barnett, David Carson, Bill Clarke, Kate Greenan, Robert Hutchinson, Ken O’Neill, Dolores O’Reilly and the unique Stephen Brown my sincere thanks for often asking when (the hell) it would be finished. So, this is really how it works;

“Larry listens. This is how he’s learning about the world, exactly as everyone else does – from sideways comments over a lemon meringue pie, sudden bursts of comprehension or weird parallels that come curling out of the radio, out of a movie, off the pages of a newspaper, out of a joke – and his baffled self stands back and says: so this is how it works.”

(Carol Shields; Larry’s Party, Fourth Estate, 1997, p58)
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CHAPTER 1:

INTRODUCTION AND CONTEXT
CHAPTER 1: INTRODUCTION AND CONTEXT

1.1 Introduction

This chapter provides background and context for this research study. From this background and context the research aim and attendant objectives are delineated and justified. The validity of the topic under investigation is established and contextualised in a brief overview of the literature and the methodology employed to investigate the research objectives is explained and illustrated through conceptual modelling. The linkages and integration between the literature and the two stages of field research employed in this study are explained and justified.

1.2 Background and Context

Retail banking is the context for this research study. The main aim of this research is to identify, assess and evaluate the contribution of the Internet in relationship-oriented retail banking.

Having embraced the concept of marketing relatively recently (Baker, 1993), banks now find themselves operating in a highly competitive and fragmented marketplace, characterised by increasingly empowered and financially literate consumers (Llewellyn, 1996). This fact, together with the proliferation of direct low cost competition from recognised high street brand names (for example, Marks and Spencer, Tesco, Virgin) and dedicated stand alone Internet banks such as Smile, Cahoot and Egg, make the trading environment for traditional banks very difficult (Howcroft and Durkin, 2000). As a result better informed customers have more choices both of providers, and of delivery interfaces, through which to conduct their banking. More customers are interacting through remote technological interfaces, such as the telephone and/or the Internet. With regard to these new technology driven self-service interfaces there is growing concern over the extent to which such interfaces could, or should, replace the traditional branch based interface and specifically the impact on relationship quality of such a transition (Thornton and White, 2001; Neilsen, 2002; Rexha et al, 2003). Lee and Allaway (2002) encapsulate the challenge and set the context for this research when they state;
"Consumers who are used to personal assistance in their service encounters may be less eager to adopt new automated service delivery innovations even though these services might appear to offer clear advantages" (p554)

Lang and Colgate (2003) also argue that IT may not always have a positive impact on the relationship between supplier and customer and highlight the research gap which this research is attempting in part to bridge:

"Few authors have investigated whether the presence of IT-mediated channels have a detrimental effect on firms’ relationships with their customers" (p30).

Lee (2002) states that ‘the importance of channels in building relationships with customers has not been fully integrated yet’ (p238). On a broader note, Bitner et al (2000) also highlight that;

“The absence of technology is apparent in service encounter research and in the frameworks used by service marketers. Due to the emphasis on ‘high-touch’, virtually all service research has explored the interpersonal dynamics of the encounter. The growing role of technology in service encounters has been largely ignored” (p141)

Acknowledging this gap, this research investigates the implications of Internet technology through e-banking for bank-customer relationships.

While there is broad agreement that the Internet can significantly reduce costs for providers (Levinsohm, 1998; Daniel, 2000) it is now considered to be less of the panacea it once was for cost efficient and effective relationship management (Zineldin, 2000). There appears to be growing uncertainty as to what is best practice in the area of managing relationships through remote banking interfaces such as the Internet (Daniel, 1998; Durkin and Howcroft, 2003; O’Donnell, Durkin and McCartan-Quinn, 2002).

Symptomatic of this uncertainty is the emerging trend for virtual stand-alone Internet banks becoming increasingly viable with many now opting to “tangibilise” their offer through the opening of high street branches, or indeed being taken back under the parent brand. This raises important questions regarding customer acceptance of on-line only
banks and raises the question of what are the barriers and influencers to the acceptance of Internet banking by customers (Yaklef, 2001; Holmsen, Simon and Weberg, 1998). Recent research specific to financial services states that 'using electronic mediated networks (such as the Internet) to facilitate two-way communication with customers in order to establish a notion of a relationship, is something that is still in its infancy' (p309) (Kapoulas et al, 2002)

Rexha, Kingshott and Aw (2003) state that 'the literature appears to be uncertain about consumer preferences for self-service options, particularly those that are technologically based'. They make the point that as e-banking becomes more prevalent, technical services will become more standardised at an industry level and customers will evaluate individual banks on their capacity to deliver 'high-touch' rather than 'high-tech' factors. By implication, banks will have to build new relational competencies for existing employees as well their organisation.

Accordingly, the main aim of this research is to identify, assess and evaluate the contribution of the Internet in relationship-oriented retail banking.

The research reported in this thesis focuses on a two-stage study which examines the perceptions of bankers (Research Stage 1) and customers (Research Stage 2) regarding the use of the Internet as a tool in the management of bank-customer relationships.

Most of the key questions arise out of the basic fact that new and emerging delivery channels, in contrast to branch networks, are remote in the sense that bank-customer interactions do not involve face to face contact to the same extent (Stewart and Durkin, 1999).

1.3 Research Issues

It has been argued that the Internet has the potential to make the greatest technological impact on banking to date and for some authors it offers the ultimate tool in effective relationship marketing, (Zineldin 2000; Rayport and Sviokla 1995; Schwartz, 1997; Stroud, 1998). Such authors argue that the Internet constitutes a veritable revolution in the way that key relationships can be managed (Geller, 1998). The interactivity offered by the
Internet facilitates cost effective co-production between buyer and seller (Carrington et al, 1997) and provides an opportunity for one-to-one marketing (Peppers and Rogers, 1995) where this is appropriate. As such the Internet can nurture loyalty and provide scope to establish enduring relationships with customers and a wider network of contacts (Coupey, 2001).

However, Carrington et al (1997) introduce a note of caution for financial services marketers when they state that bringing bank customers on-line ‘transfers control of the business system from the bank to the customer and by doing so banks may lose power because technology is now in the hands of customers.’ This implies that more sophisticated and information aware customers will be less likely to leave substantial balances in low interest bearing accounts and will move them in search of higher returns. Alternative offers will be identified more easily now by customers given the global window offered by the Internet.

This seems especially true given the low interest rate environment prevailing in Europe as well as greater transparency facilitated through the advent of the Euro in early 2002. Such a situation combined with greater transparency and information availability for customers was considered to be a major stimulus for competition in the UK banking market:

‘Knowledgeable consumers provide the best incentive to effective competition. With the right information, consumers can take responsibility for their own financial well being, shop around and exert the pressures on suppliers which drive a competitive and innovative market’ (Cruickshank, 1999:xix).

It would appear then that technology has the potential to empower customers with easy access to comparative data and that it allows them to switch providers at the “click of a mouse”.

What remains unclear however is the extent to which customers will choose to engage in such behaviour and what the typology of such customers will be. Lee and Allaway (2002) caution that “the replacement of human service by a technology usually requires both the development of new knowledge and behaviour associated with the service and increased participation and responsibility in the production of the service” (p554). It is the inherent
uncertainty as to the extent to which varying customer groups will wish to engage in any such adaptation of their dyadic relationship with a bank that is at the core of the research problem.

For financial services firms e-commerce and the Internet do offer the promise of increased information about customers and therefore provide the opportunity for more detailed analysis of customers' behaviour and needs. The risk is that these same technologies lower switching costs and give consumers the power to compare services and switch from one financial services firm to another more easily. Interactive digital television (idTV, t-commerce) and m-commerce facilitated through new WAP mobile phone technology are yet more examples of emerging remote interfaces through which customers will be able to interact with their bank and obtain information about potential competitors.

These developments highlight that a major challenge for banks is to determine how to integrate such technology in a customer-oriented way. The essence of this challenge is succinctly captured by Barnett (1997):

"If technology gets too far ahead of the business, you won’t be able to sell to the customer; if business gets too far ahead of the technology, you won’t be able to deliver to the customer."

Issues of balancing the capability of the technology and the capability of the customer to use this technology therefore becomes important. Such a pervasive technological influence raises the question as to how banks can differentiate themselves and in what ways will the bank-customer relationship change from the perspective of both banker and customer. As a result the former differentiation point of, for example, good service is now at risk as highlighted by Rexha et al (2003) who warn that the use of remote e-banking interfaces makes the industry ‘more transparent, difficult to differentiate offerings and thus result in fiercer price-related competition" (p53). The fact that Rexha, Kingshott and Aw (2003) highlight this risk of homogeneity as an opportunity through which banks can differentiate on service, emphasises the lack of consensus on what is best practice in this area and underlines the need for more work.
1.4 Research Aim

Accordingly, the main aim of this research is to identify, assess and evaluate the contribution of the Internet in relationship oriented retail banking.

Implicit sub-aims are:

a) to gain a deeper insight into how banks position themselves with regard to Internet delivery;

b) to identify and explore the influences on specific consumer segments with regard to adoption decisions for Internet banking offers.

Aladwani (2001) proposes that on-line banking ‘is the least understood delivery channel for retail banking services’ (p213). He highlights that most extant research on e-banking has suffered from one or more of the following drawbacks (p6);

- research mostly lends qualitative insights
- research has mostly been very specific, dealing with best practice case studies
- most of the research has been anecdotal with little theoretical background

The research reported in this thesis overcomes these criticisms in the following ways:

- this research involves a two-stage study which utilises an international qualitative stage and a UK based quantitative stage. Both senior bank decision-makers and customers are participants in this study. A theoretical conceptual model developed from the international study has been published (Durkin and Howcroft, 2003)
- this research does not use any ‘best practice’ case studies as these were found to be very context specific and therefore not generalisable. Rather both the literature findings and the Stage 1 international qualitative study inform and guide the development of the quantitative instrument for circulation to personal retail bank customers in Stage 2 of the research.
- this post-positivistic research encompasses both theory generation (from academic literature and qualitative Stage 1) and theory testing (from quantitative Stage 2).
1.5 Specific Research Objectives

1.5.1 Research Objective 1 is to identify the reasons for relationship-oriented banks going on-line

As banks are operating in an increasingly competitive environment, the development of strong relationships with profitable customer groups is of paramount importance (Howcroft and Beckett, 1995; Colgate, 1996; Devlin, 1995). Whereas such relationships have been traditionally built upon face to face interaction at the level of the bank branch, the Internet provides a more impersonal and remote interface through which banks and customers can interact. The motivations for banks embracing the Internet and the ways in which they see it impacting upon relationship management are of key interest (O'Donnell, Durkin and McCartan-Quinn 2002; Howcroft and Durkin, 2000, Daniel 1998; Daniel 2000).

1.5.2 Research Objective 2 is to identify and assess the extent to which the customer profile influences the level of on-line adoption for Internet banking

Initially many banks felt the Internet would be readily adopted by the majority of customers and that through this cheaper interface, overall costs would decrease. This has been shown not to be the case (Daniel, 1998). In order for banks to have a meaningful Internet strategy there must be greater understanding of what motivates customers to adopt the Internet and what are the barriers to its adoption (Barczak, Ellen, and Pilling, 1997; Ellen, Bearden and Sharma, 1991).

1.5.3 Research Objective 3 is to identify and assess the extent to which varying customer segments prefer referring to branch staff in preference to the Internet interface and to assess whether such preferences vary by customer and/or complexity of need

There is a dearth of academic research that examines the propensity of different customer segments to adopt a remote banking interface and ascertain to what extent the barriers to such adoption are grounded in a preference for face to face interaction. Research in this area has focused on ATMs (Marr and Prendergast 1993, 1994) but there has been no substantive research focus on the perceived relative advantage of the remote banking
interface compared to the face to face alternative (see O’Donnell, Durkin and McCartan-Quinn 2002; Durkin and Howcroft, 2002; Howcroft et al 2002).

Richard, Prefontaine and Sioufi (2001) warn that an over-emphasis ‘on new technologies may well lead to a standardisation of products and services and a gradual robotization that may be poorly received by customers”. There is growing concern over the extent to which self-service technologies (SST) such as the Internet could and should replace the traditional branch based interface and specifically their impact on relationship management strategy development, (Thornton and White, 2001; Nielsen, 2002; Rexha et al, 2003). Equally the influence of product complexity on such bank and customer preferences remains under-researched.

In contrast the importance of socialisation in the service encounter and in relationship development is well documented in the literature (Czepiel, 1990a; Czepiel, 1990b; Solomon, Surprenant, Czepiel and Gutman, 1985; Hollander, 1985). The development of hypotheses which examine the non-social aspects of bank-customer interactions will form a useful contribution to the existing literature.

1.5.4 Research Objective 4 is to assess and evaluate the extent to which an a priori decision-making typology correlates to the profile of case bank customers in order to predict Internet adopters

Harrison (2003) argues that ‘in the academic literature there have been relatively few attempts to develop models that explain consumer decision making processes specifically in the context of financial services’ (p6). Smith (2004) proposes that an approach to segmentation that is not focused on clustering customers according to their motivations “is simply an approximation based on the assumption that descriptors and motivations are closely aligned (and) usually they are not” (p27). It is also the case that existing bank segmentation strategies and customer profiling do little to identify behavioural issues such as motivation and how customer decision styles may impact on motivations to embrace varying delivery platforms. Indeed, Machauer and Morgner (2001) propose that the a priori (Green, 1982) and post hoc segmentation methods (Gwin and Lindgren, 1982) currently employed are of little predictive use to bank marketers. Given the lack of clarity regarding which customer profiles are adopting / not adopting Internet banking (and the
reasons for this) it is proposed to use the established literature on decision-making proposed by Driver to try and better understand the characteristics and motivations of adopters (see Schroder, Driver and Streufert 1967; Driver and Streufert 1969; Driver and Mock 1975; Driver 1979; Driver et al 1993; Driver et al 1996; Driver et al 1998). It is recognised that these are unlikely to be based purely on the segmentation criteria established by banks and recent research supports the need for 'an enhanced understanding of the factors that may influence the adoption decision.' (Black et al, 2001, p390)

1.6 Overview of the Research

The research reported in this thesis was conducted between 2000 and 2003. An overview of the research process is presented in Figures 1.1 and 1.2.

1.6.1 The Literature Review

The literature review considers the research context which is retail banking (see Figure 1.2) and the inherent changes within the industry. As a large part of these changes have been technologically led it is appropriate that the review examines the impact of technology in marketing generally and explores what is meant by E-commerce and, in particular, E-marketing. The Internet which is but one dimension of E-marketing is then explored and such thinking is applied to the retail banking context so a full understanding of Internet banking is in place (Chapter 2).

Given the relational focus of this study it is appropriate that the literature review then explores the impact of new technology on customer relationships. By examining relationship marketing and consumer behaviour theory an appreciation is gained for the determinants of new and predominantly remote, retail banking interaction modes. The importance of socialisation in the service encounter and throughout the relationship life-cycle, is also discussed to better frame the research problem which is examining the area of remote (i.e. non face to face) relationships (Chapter 3). Linking together the two preceding chapters, Chapter 4 focuses on diffusion and adoption of innovations. The Internet banking offer is an innovation to the market and therefore it is important to understand what determines the banks' willingness to offer it and the customers'
willingness to accept it, (Black et al, 2001; Gerrard and Cunningham, 2003). The work of Michael Driver is also used in this final literature chapter and a conceptual model is developed to link together the key issues of remote / personal interaction preferences (Chapters 2 and 3), adoption of an innovation and the decision-making style typology (Chapter 4). This model is explained in Chapter 5 and helps in disseminating the key issues from the literature for application to the field-work study. It has been tested by presentation at several research seminars and by publication (Durkin and Howcroft 2000, 2003).

In Chapter 6 the post-positivist positioning of the research is proposed and justified together with the research methodology. The analytic strategy employed for Stages 1 and 2 of the study are then explained. Chapter 7 reports on Stage 1 of the research which encompasses internationally sourced qualitative interviews with senior bank decision-makers in Ireland, UK, Sweden and the USA. Chapter 7 ends with the key implications from this qualitative stage and describes how such findings inform Research Stage 2. Chapter 8 explains the linkage between Stages 1 and 2 and develops and justifies the methodology for Research Stage 2. Chapter 9 contains a descriptive overview of the survey findings with case bank customers. An explanation of how the dataset was prepared for hypothesis testing is provided. The findings from the analysis to meet Hypotheses 1, 2 and 3 are then detailed and the key issues disseminated. In light of the findings, Chapter 10 presents Outcomes and Conclusions for this study and through an integrative evaluation of the findings from both research stages proposes an initial 'general model' of Internet adoption followed by a more focused and specific model of Internet adoption.

Practical implications for the case bank are derived from the findings and the specific descriptive Internet adoption model and the contribution of this research to the existing body of knowledge is established.

1.6.2 Field Research

A two-stage study is described which examines both supply-side and demand-side issues. The findings from Stage 1, along-with relevant literature inputs and the conceptual models which resulted, helped form the research questions used in Stage 2 (see Table
1.1). It is integral to understanding the usefulness of the Internet in relational exchange to consider the views of both parties in that relationship i.e. both bankers (Stage 1) and customers (Stage 2).

As already stated, the overall aim of this research is to identify, assess and evaluate the contribution of the Internet in relationship oriented retail banking.

1.6.2.1 Research Stage 1 comprising objective 1 is to identify how banks position themselves with regard to Internet delivery and identify the influences on the strategic decision to go on-line.

The extent to which such decisions are customer-led will be examined and the strategic rationale for delivering services on-line will be explored. Interviews will be conducted with senior marketing managers or chief executives of banks which have an on-line presence and which promote themselves as being customer / relationship oriented. These interviews will be conducted internationally; in the USA, Ireland, the UK and Sweden. The rationale is to identify commonality of response on the fundamental issues under study. The sample is purposive and will comprise traditional bricks and mortar banks which have adopted the Internet banking and position themselves as being relationship driven.

1.6.2.2 Research Stage 2 comprises objectives 2-4 and is focused on the customer, rather than the bank. The importance of this research stage is underpinned in two key ways:

- evidence from the academic literature
  - USA based findings which uncovered high rates of discontinuance amongst initial online banking adopters; for example for the year ended July 1999, 3.2m customers had signed up for Internet banking but 3.1m had discontinued use in the same period. A reason for this was that the customers couldn’t see any relative advantage compared to the way they had banked before and found the process frustrating (Smith 1999), mirroring negative press evaluation of services offered by UK banks (Wall 1999, 2000). Therefore an understanding of motives for adoption and how these might vary by customer and product type are clearly of importance.
• Inputs from the Stage 1 qualitative research with international banks

Stage 2 of the research will also be deemed exploratory but will use a quantitative research instrument issued to a sample of bank customers from one UK based case bank.

1.6.2.3 Stage 2 Research Objectives and Hypotheses

The hypotheses detailed below will allow for an identification and assessment to be conducted, (as stated in the overall aim), both of the banks’ approaches to Internet banking with respect to managing relationships (as established in Stage 1) and also in terms of customer acceptance of such initiatives.

The hypotheses proposed for this stage of the research are derived from and correspond to objectives 2-4 and have been distilled from both the literature review and also Stage 1 of the research process. Each objective is detailed first and then the hypothesis and sub-hypotheses which will test the key elements of this objective follow.

Objective 2 – to identify and assess the extent to which the customer profile influences the level of on-line adoption for Internet banking

Customer net worth is a key indicator of demographic profile. For this research stage the case bank has provided data classified according to relationship worth. Those customers who are relationship managed are high net worth and are typically in full-time employment, earning higher than average salaries with high levels of turnover in their bank account. They are also typically social class ABC1 and own their home.

H1: As the net worth of customers increases they will display increasing use of the Internet

Accordingly, the following sub-hypotheses are derived;

• H1.1 – As the net worth of customers increases they will be more likely to have access to the Internet at home and at work.
H1.2 - As the net worth of customers increases they will display increasing use of the Internet for financial services.

H1.3 – Relationship managed customers will have higher income levels.

Objective 3 – to identify and assess the extent to which varying customer segments prefer referring to branch staff in preference to the Internet interface and to assess whether such preferences vary by customer and/or complexity of need

Hypothesis 2 seeks to address this objective in identifying the propensity of varying customer segments to seek out face to face interaction as financial services product requirements become increasingly complex.

H2: In general there will be an inverse relationship between the increasing complexity of customers' financial needs and the propensity of such customers to use the Internet as a means of purchasing financial products

Accordingly, the following sub-hypotheses are derived:

- H2.1 – There will be a significant positive correlation between the views of customers, and the academic literature, on what financial products can be considered ‘complex’
- H2.2 – Relationship managed customers will show a greater potential for online purchase of financial services at lower levels of product complexity than will non-relationship managed customers
- H2.3 – As customer needs increase in complexity customers will be more likely to favour face to face interaction over the alternative Internet banking proposition
- H2.4 – Where customers consider face to face staff referral important pre-purchase this will be influenced by a perceived need for reassurance and an anxiety about the remote intangible platform offered through Internet banking.
- H2.5 – The perceived timesaving and convenience benefits offered by the Internet will be the key predictors in whether or not a customer has registered for Internet banking in the case bank.
Objective 4 - to assess and evaluate the extent to which an a priori decision-making typology correlates to the profile of case bank customers in order to predict Internet adopters

H3: There will be a linkage demonstrated between an a priori decision-making typology and the clusters of customers identified in the study.

In an attempt to better understand more fully the ‘motivations’ behind customers decisions to adopt or reject e-banking it was decided to explore the extent to which existing decision-making models could be used to identify and assess the customer decision for conducting financial affairs online. It was felt that any findings based on conventional customer segments as derived through the case bank database, would still not reveal answers to such behavioural questions. It was decided in Stage 2 of the research to use Michael Driver’s decision-making styles and attempt to group the customers into clusters based on decision-making / behavioural attributes.

1.7 Linkages and Integration

The identification and assessment of the key issues in meeting the overall research aim of this study are established in Stages 1 and 2 of the research process. In light of these research stages the contribution of the Internet in relationship oriented retail banking can therefore be evaluated in line with the stated aim of this research.

The actual linkage and integration between the constituent elements of the research aim; that is, identification, assessment and evaluation in this research is important and is illustrated conceptually in Figure 1.1. The figure collapses the identification, assessment and evaluation elements, and shows where in the research process they are dealt with. It can be seen that the key themes used in the qualitative analysis of Stage 1 are again used as a structure by which to conduct the evaluation. The findings from Stage 1 are also seen to feed into the theory testing undertaken by quantitative analysis with bank customers in Stage 2.

In Table 1.1 the linkage between the themes of the analytical qualitative interview guide from Research Stage 1 and the resultant Stage 2 hypotheses is demonstrated by
categorising the various Stage 2 questions according to these linkages. This demonstrates
the rigorous process undertaken in achieving synergy between the stages of the research.

Figure 1.1 also then shows the linear sequentiality of the stages of research in the context
of the overall thesis and illustrates the change in emphasis from initial issue identification
(Research Stage 1: Theory Generation) through identification and assessment (Research
Stage 2: Theory Testing), and finally the evaluation that follows in light of the research
study overall.

In the context of this thesis the elements of 'assessment' and 'evaluation' are
distinguished thus:

Assessment refers to the Stage 2 quantitative study where inputs identified in Stage 1 help
shape the survey instrument and the analysis undertaken helps make an informed
assessment of what the key issues for customers as regards the adoption of e-banking
might be. The final focus on evaluation follows this customer assessment and takes more
of an overview of both research stages and the academic literature in an attempt to
propose managerial actions.

In order to retain focus and encapsulate the key issues, each chapter will include a list of
summary key points at the end, which will form the basis of the chapter’s conclusion.

1.8 Conclusion

This scene-setting chapter outlines the background and context for this study. The chapter
outlines the thesis structure, the validity of both the research aim, the attendant objectives
and the methodology employed. The rationale of this thesis and the integration between
the two research stages as well as the derivation of a model of Internet adoption in
financial services is also explained.

The next chapter provides an understanding of the technological context of the research.
Research Aim: to identify, assess and evaluate the contribution of the Internet in relationship-oriented retail banking.

Figure 1.1: Conceptual Overview of the Research Process

- Identification
- Identification / Assessment
- Evaluation

Findings Research Stage 1:
(Theory Generation)
International Qualitative Study with bank executives:
Key themes
- Relationship Mgt
- Delivery channel complexity
- Face to face interaction

Findings Research Stage 2:
(Theory Testing)
UK-based Quantitative Study with retail bank customers

Integration of Findings Stages 1 & 2
(Evaluation)
Towards a specific model of Internet adoption

Key Findings
- Managing customer relationships key
- Branches key delivery and relationship channel
- Increasing levels of product complexity are perceived as requiring increasing levels of face to face interaction.
- Lack of clarity on whether the Internet is more appropriate as an enhancement to the relationship-managed customer or for the low net worth transactor
- The typology of consumers who will embrace the Internet is unclear as are their preferred interaction interfaces
- Customer education is key priority and branch is a key platform for this to take place

Stage 2 Hypotheses
- H1 Exploring the relationship value of customers and their net use
- H2.1 Defining Product Complexity
- H2.2 Examines relationship managed customers use of net for FS
- H2.3 Examines product complexity and customer interaction needs
- H2.4 Examines customer need to refer face to face pre-purchase
- H3 Examines customers clusters as to how net adoption decision is made

Findings and Evaluation
- Theme 1: Relationship Mgt
  - Target convenience oriented RM customers for net banking
  - Tailored marketing communications for receptive clusters
- Theme 2: Delivery channel Complexity
  - Target convenience and non-information seeking customers
  - Reassure about web security, ease of use and better service on net banking
- Theme 3: Face to Face
  - Customer facing bank staff to be registered for net banking
  - Improve in-branch promotion to encourage web adoption
- Theme 4: Customer Typology
  - Develop cluster analysis model
Table 1.1: Matrix to show Linkages between Stage 1 Analytical Themes and Constituent Questions from Stage 2 Hypotheses

<table>
<thead>
<tr>
<th>STAGE 2 RESEARCH HYPOTHESES</th>
<th>Hyp 1</th>
<th>Hyp 2.1</th>
<th>Hyp 2.2</th>
<th>Hyp 2.3</th>
<th>Hyp 2.4</th>
<th>Hyp 3</th>
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<tr>
<td>STAGE 1 Qualitative Themes</td>
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<tr>
<td>Rel Mgt</td>
<td>Q18, Q23</td>
<td>Q24</td>
<td>Q23 - 27</td>
<td>Q25</td>
<td>Q21, Q22</td>
<td>Q38</td>
</tr>
<tr>
<td>Channel / Product Complexity</td>
<td>Q24b</td>
<td>Q19</td>
<td>Q13, Q25</td>
<td>Q20, Q21, Q22</td>
<td>Q21, Q22</td>
<td>Q38</td>
</tr>
<tr>
<td>Face to Face</td>
<td>Q18, Q26, Q27</td>
<td>Q26</td>
<td>Q25, Q26</td>
<td>Q26</td>
<td>Q21, Q26</td>
<td>Q38</td>
</tr>
<tr>
<td>Customer typology</td>
<td>Q18, Q28 – Q37</td>
<td>Q1 - 13</td>
<td>Q14 - 22</td>
<td>Q14 - 22</td>
<td>Q21, Q22</td>
<td>Q38</td>
</tr>
</tbody>
</table>

Linkage to derivation of dependent variables used in analysis

**Dependent Variable 1**: Internet appropriateness for financial services as determined by complexity level (new variables derived from Q25).

**Dependent Variable 2**: Perceived importance of referring to a member of staff before purchasing products of varying complexity (new variables derived from Q21).

**Dependent Variable 3**: Whether or not the customer is registered for Internet banking (derived from Q18 only).

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1 Further detail on the derivation of both dependent and independent variables can be found in Chapter 6
CHAPTER 2:
TECHNOLOGY AND BANKS
technological output, it is first necessary to better understand the distinction between data (as an input) and information. It is also necessary to understand the organisational structures and processes that are most conducive to effectively managing and manipulating data input in order that it becomes an asset in terms of organisational knowledge. This understanding will help contextualise the structures and processes which emerge in Stage 1 of this research.

2.3 Data, Information and Knowledge

Data can be considered the basic building blocks of information and knowledge. As such they are, without manipulation and interpretation, largely disorganised and meaningless. The importance of data as an economic factor first became apparent in the 1950’s and 60’s when new technology made it possible to collect and store vast amounts of data. Information, alternatively, is data that have been ‘arranged into meaningful patterns’ and the extent to which such information becomes knowledge depends on the skill and purpose of the user (Davis and Botkin, 1994). Supporting this contention Glazer (1991) states that information can be defined as “data which have been organised or given structure - that is placed in context - and thus endowed with meaning.”

2.4 Using Information: Organisational Learning

As globalisation breaks down barriers between national and regional markets, the level of competition increases and in this more dynamic business environment strategy also has to become more dynamic. Attracting attention at both the practitioner and academic level is the whole area of organisational learning and knowledge management. While relatively new in terms of terminology, the underlying philosophy of both phenomena is prevalent in the literature of internal marketing (see Berry, 1995; Rafiq and Ahmed, 1993), marketing research and the resource-advantage based view of the firm (Teece and Pisano, 1984; Hunt, 1997).

The ability of the organisation to monitor its operating environment and have the inherent flexibility and responsiveness to capitalise on emerging opportunities or limit emergent threats is important. So too is the ability to view such experiences with a ‘learning
orientation' and thereby position the firm for the future. As stated by Stalk et al (1992), "competition is now a war of movement...where the goal of any organisation must be to identify and develop hard-to-imitate organisational capabilities that distinguish a company from its competitors in the eyes of customers." (p62)

New technology has a key role to play in facilitating this transition, through the absorption of more information, making sense of it quickly and sharing new insights, so that firms can get ahead of the competition (Jackson, 1989). While cost-driven firms may be oriented toward the recovery of costs associated with investments in the IT infrastructure, value-driven firms are by contrast those which recognise technology as an enabler and focus on the use of information itself as the source of competitive advantage. (Blattberg et al 1995; Slater and Narver, 1995).

2.5 Using and Managing Information: Relationship Management

The expansion within the marketing literature from a predominantly exchange focus to more relational perspectives in the late 1980s and 1990s brought with it an understanding of the power of information as an asset in its own right. Relationship cultivation through a long-term marketing orientation is purported to be an effective weapon against the growing threat of global competition. Within industrial marketing there was an evolution from the traditional adversarial stances between channel members towards an acknowledgement of the advantages offered by a more collaborative framework (Levitt, 1983; Jackson, 1985b; Gummesson, 1987; Hakansson and Snehota, 1989; Webster, 1992). The development and discussion of relationship life cycles in the literature (see Dwyer et al, 1987; Burdett, 1992; Szmigin, 1993) reinforced the need for and dependence upon, accurate and ongoing information in order that relationship status could be more effectively assessed over time. This increasing focus upon information as a business asset led to an appreciation of technology which will facilitate the transfer of this information not only within the firm but between firms, their customers and wider networks. This is important in order that the commercial value of information can be exploited by firms as they seek longer term competitive advantage (Glazer, 1991; Naude and Holland, 1996).
Blattberg *et al* (1995) argue that one of the key consequences of the information revolution is that firms will be able to identify individual buyers who continually provide the firm with information about their needs and preferences thereby enabling it to develop and provide specific products for them. If this does occur and each customer has a unique relationship with certain firms then each customer effectively becomes a segment in his/her own right (Blattberg *et al*, 1995; McKenna, 1995). The potentially interactive nature of the firm-customer relationship makes the customer an active participant or partner in the production process in certain business contexts enabling more effective and cost efficient customer-driven innovation. Much of the thinking in this area has been shaped by research led throughout the 1990’s by Harvard Business School academics and focused on successful (and profitable) customer-oriented implementation of technology in varying industry contexts (see Blattberg and Deighton, 1991; McKenna, 1995; Peppers and Rogers, 1995; Blattberg *et al*, 1995; Deighton, 1996; Porter, 2001). What is clear is that unsurprisingly many advancing technological applications are strongly linked to prevailing industry practice where philosophies such as de-layering, down-sizing, outsourcing, and process reengineering (BPR) have become prevalent and are all IT-dependent (Handy, 1995; Durkin and Ibbotson, 1997). This move towards greater process orientation and less bureaucratic structures is in keeping with the general trend in business reflecting a move away from hard systems thinking and autonomous management functions towards greater cross functionality and increased levels of internal co-operation (Checkland, 1981; Lynch, 1996; Webster, 1992; Murray and O’Driscoll, 1996).

As technology advances at increasing speed both the quantity and quality of information on offer in industrial and consumer markets requires that marketers harness the potential benefits advancing technology offers in order to remain competitive.
Summary

- The application of technology in marketing has largely been evidenced in the industrial marketing literature.
- Information is being increasingly perceived as an asset in its own right, underpinning concepts like organisational learning.
- Technology is a key enabler in making sense of information quickly and aiding in the quest for competitive advantage.
- In relationship marketing there is a key requirement and dependence upon accurate and ongoing information regarding customers throughout relationship life cycles.
- New technologies allow firms to interact more closely with customers.

2.7 Information and Electronic Commerce

In a macro sense it can be argued that "in any buyer-seller relationship, information can determine the relative bargaining power of the players and in many ways information and the mechanisms for delivering it stabilise corporate and industry structures, and underlie competitive advantage" (Evans and Wurster, 1997). This perspective on the importance of information (and implicitly any agent which impacts upon it such as technology) at an industry level is highly relevant given the emergence of Electronic Commerce and its pervasive impacts on international business activities in terms of structures and processes.

2.8 Defining Electronic Commerce

In its broadest sense the future potential and importance of electronic commerce has become increasingly recognised internationally. It is argued that for the full potential of E-Commerce to be realised, "governments must adopt a market-oriented approach to electronic commerce, one that facilitates the emergence of a global, transparent and predictable environment to support business and commerce" (White House, 1997). Building on the recommendations of Martin Bangemann (Bangemann Report, 1994), the late 1990's saw the advent of various initiatives in the area of electronic commerce which have resulted in a common aim to "encourage the vigorous growth of electronic commerce" (European Commission, 1997). Outside Europe other bodies, such as the
Asian Pacific Economic Cooperation (APEC, November 1997) and the Transatlantic Business Dialogue group (TABD, Rome 1997), are also active in achieving this aim by developing electronic commerce awareness levels globally.

Electronic Commerce has been variously defined:

"the buying and selling of information, products and services via computer networks."
(Kalakota and Whinston, 1996).

"the electronic exchange of information, goods, services and payments."
(Harrington and Reid, 1996).

In essence, from a marketing perspective, Electronic Commerce is the technological facilitation of the exchange processes, in part or in full, that potentially exists throughout the marketing channel (Durkin, 1997). Many commentators propose that technology will transform the way all business is conducted and that no customer-firm relationship will remain untouched by the pervasive force of technological change anywhere in the civilised world (Handy, 1995; Rayport and Sviokla, 1995).

2.9 Marketing Implications of Electronic Commerce

Given that technological change, and therefore Electronic Commerce, is dynamic and continually evolving it is difficult to analyse potential implications fully at any one point in time. It is argued that there are efficiencies to be gained through the use of electronic media in relation to information delivery to customers e.g. marketing, distribution and customer service, administration, and other costs are all expected to fall (Aldin et al, 2004; White and Daniel, 2004; McKenna, 1995; Harrington and Reid, 1996; Bloch et al 1996). New electronic channels also mean that customer knowledge and subsequently expectations may change as a direct result of customers being exposed to more comprehensive information concerning the nature and availability of substitute offerings. The question remains however as to which customers will choose to become better informed through this additional information source and to what extent they will leverage this knowledge to their advantage. This new medium allows marketers to collect comprehensive and 'real-time' information on consumer buying behaviour (Harris and
Cohen, 2003). Subsequently, clearer need identification along-with more effective marketing opportunities can result. These issues as they relate to a banking context are dealt with in detail below.

2.10 E-Commerce Strategies in Banking

Recent research has shown that many banks are now considering taking separate virtual businesses (e.g. Internet only subsidiaries) back under the parent brand due to spiralling costs (Boss et al., 2000). It is reported that many of the new virtual banks, having spent huge resources on promotional activity, are generating relatively little interest amongst consumers. According to one commentator, “on-line banking has not really succeeded, many customers still need the reassurance of visiting their branch” (Boss et al., 2000).

Historically the UK financial services market has experienced three innovations which rely heavily on technology (Hughes, 1994). The first is the introduction of point of sale debit cards, the second is direct (telephone) financial services and third is the advent of database marketing. It is proposed in this thesis that a fourth innovation, which has emerged since 1994, is that of the Internet.

Technology-driven distribution channels can focus products and target customers by ensuring that products are sufficiently differentiated from competitors. Customers can then be locked into products because they are both cost effective and offer a unique quality of service and information (Howcroft, 1992; Rexha et al, 2003). Technology has been recognised as a key enabler of change in financial services and is becoming recognised as a driver of change with products such as electronic data interchange (EDI) and debit and smart cards emerging (Patrico et al, 2003; Wang et al, 2003; Drew, 1995; Bradley et al 1993; Devlin, 1995; Dennenberg and Kellner, 1998).

Technological developments, which for the first time facilitate electronic communication with customers, intermediaries and other suppliers, are seen as important in determining strategy; notably with regard to communications with customers. Indeed consultants report (KPMG, 1997) that the importance for banks of coming to terms with the
opportunities present in advancing technology from both an internal and external perspective is key:

"Banks will have to come to terms with rapid changes in technology, the almost complete re-invention of management and decision-making structures and above all, the need to become as skilled at brand building and customer care as British Airways."

(KPMG, 1997)

Recent research reports that some 95% of banks in Europe offered telephone banking by the year 2000 (33% as at 1997) and that on the home banking front, the increasing penetration of PCs and modems is forecast to support the growth of home banking over the coming years. Remote banking via PC had grown to in excess of 12% of total banking by 2000 in the EU (KPMG, 1997; Nua, 2004). On-line banking via the PC is identified as having greatest potential (Howcroft, 1992; Barrett, 1997) and it is projected that by 2005, at least 24% of the US banking population will transact their business in this way (up from 1% in 1995). One commentator highlights the key challenge for banks as being to integrate such technology in a customer-oriented way:

"If technology gets too far ahead of the business, you won't be able to sell to the customer; if business gets too far ahead of the technology, you won't be able to deliver to the customer."

(Barnett, 1997).

Summary

- The future potential and importance of electronic commerce has become increasingly recognised internationally.
- There are clear efficiencies to be gained through the use of e-commerce technologies.
- The new medium of e-commerce allows marketers the opportunity to collect comprehensive customer data regarding preferences and buyer behaviour.
- In financial services, technology has been recognised as a key enabler for change particularly in areas of cost reduction.
- E-Commerce interaction increases the power of the buyer as a result of greater transparency and clarity of information.
• E-Commerce affords relationship marketers the opportunity to build one to one relationships with customers of their choice.
• Commerce via the Internet remains contingent upon PC access by both individuals and firms although iDTV commerce and m-commerce are slowly growing.

2.11 Electronic Marketing – From Market-Place to ‘Market-Space’

According to perspectives proffered through a Harvard Business School debate (see Deighton, 1996) the discipline of marketing is being transformed through “a shift from broadcast marketing to interactive marketing.” Innovations such as electronic commerce, sales force management, database management and the “sudden blossoming of the World Wide Web all suggest that the marketing discipline is under pressure to reshape” (p151). Blattberg and Deighton (1991) highlight the fact that “new marketing does not deal with consumers as a mass or as segments, but creates individual relationships” (p5). This concept of ‘new marketing’ with its roots in technologically enabled interactivity is extensively developed in a paper by Rayport and Sviokla (1994) which has emerged as a key article in the Electronic Commerce literature. They argue that “the traditional market-place interaction between physical seller and physical buyer has been eliminated”. According to Rayport and Sviokla (1994) the new ‘market-space’ differs from the traditional market-place in three key ways:

- The content of the transaction is different; with information replacing tangible products as the key value proposition.
- The context in which the transaction will occur is different with an on-screen experience replacing the face to face encounter.
- The infrastructure that enables the transaction is different with computers and communication replacing physical retail outlets.

However Schwartz (1997) argues that what Rayport and Sviokla (1994) term the ‘market-space’ is not separate from the market-place in economic terms but rather that “on-line contact often leads to face to face contact...and sometimes digital information represents the physical goods” (p174) and the growing consensus is that space and place are not
separate and discrete but are best conceptualised as opposite ends of a continuum (CSFI, 1997; Daniel, 2000; McCartan-Quinn et al, 2004; White and Daniel, 2004).

2.12 Electronic Marketing Defined

Peterson (1997) identified over one hundred different sub-categories for the term ‘Electronic Marketing’ but concluded that no agreed-upon definition then existed. Definitions offered since range from those which describe the phenomenon in very narrow terms (Kiley, 1995) through to those which offer much broader all encompassing definitions (Coupey, 2001).

“Electronic marketing is selling on-line or via the Internet.”
(Kiley, 1995)

“Electronic marketing utilises electronically generated consumer purchase information in marketing and sales promotional activities.”
(Coupey, 2001))

“Electronic Marketing (EM) is the transfer of goods or services from seller to buyer that involves one or more electronic methods or media.”
(Ngai, 2003)

Given this breadth of definition Peterson concludes that “no comprehensive list can ever be developed...the devices and technologies constitute a hodge-podge and new devices and technologies are being added to weekly” (p8).

Harris and Cohen (2003) attempt to capture the impact of the Internet on marketing activity in various contexts; historical, offer, markets and customers, relationships. They conclude that it is important to assess the impact of the Internet on marketing in a historical context or risk “being lost in hyperbole” (p954). When viewed in a historical context the claims that the Internet will impact marketing in a ‘revolutionary’ way are redolent of similar claims made about steam, radio and television. That view is supported by Porter (2001) who points out that “new technologies trigger rampant experimentation (and) market behaviour is distorted”; he goes on to propose that the most effective use of the Internet is as a complement to existing channels. These rather circumspect views as to the contribution of the Internet in business are contradicted by Tapscott (2003) who
accuses Porter of "being wrong about the Internet". Specifically Tapscott (2003) counters the proposal that the Internet does not offer anything new or different by dismissing Porter’s view as “utter folly” and goes on to state that “the Internet represents something qualitatively new; an unprecedented, powerful, universal communications medium” (p4).

Given these conflicting perspectives it was important in this research to focus not so much on the technologies per se but rather on the generic concept of ‘remoteness’ (i.e. lack of personalised interactions), which such technologies create and facilitate. More important still is the goal of better understanding the motivations of customers to embrace new remote channels and the extent to which the technology exceeded their capability (or desire) to use the technologies.

2.13 The Internet

The Internet has been variously defined, but one of the more succinct and concise definitions comes from Hamill and Gregory (1997) who state that:

"the Internet is simply a global network of inter-linked computers operating on a standard protocol which allows data to be transferred between otherwise incompatible machines."

Hamill and Gregory (p11).

Table 2.1 below shows world figures for Internet connectivity (Nua, 2004)

<table>
<thead>
<tr>
<th>World Total</th>
<th>709 million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ireland</td>
<td>1.31 million (34%)</td>
</tr>
<tr>
<td>UK</td>
<td>22 million (37%)</td>
</tr>
</tbody>
</table>

Commerce via the Internet, at the time of writing is mainly contingent upon PC ownership by both individuals and firms, although there is growing interest in interactive digital TV (idTV) with the advent in the UK of digital delivery. Personal PC ownership levels in the UK are low although recent figures suggest that 57% of the UK population is on-line. Research in 1996 conducted for Banking Technology established that 41% of UK adults
have access to a PC and 28% have one at home, although the number of these connected to the Internet is not known from this survey. Almost 50% of the sample stated they were interested in banking via PC, an increase of 30% on 1994 figures (McMahon, 1996). According to a more recent report by Datamonitor, 75 million Europeans will be banking on-line by 2005, and the PC will remain the most popular on-line channel for banking service (Datamonitor 2004).

2.14 Internet Users

Those individuals who are connected to the Internet have a distinctive profile and many characteristics make them attractive prospects for marketers. For example over 52% of users are male and are aged between 20 - 45 years. They are well educated and affluent (Anderson and Choobineh, 1996; Nua, 2004). In terms of their usage behaviour, over 80% use the Internet to help make more informed purchase decisions and while 63% actually go on-line with the intention to purchase, over three-quarters of these individuals 'become mesmerized' with the amount of information available (Bank Marketing 1996 p6). More recent research by Rohrbacher (2001) examines why consumers abandon web-sites before completing a transaction or purchase and the findings indicate that information overload remains the key reason. While Internet connection growth had been at levels of 15-20%pa in 1996, in 2004 this had fallen to 1% and some countries are now showing negative growth (Nua, 2004).

2.15 Proposed Impact of the Internet on Marketing

Internet marketing is defined as the process of building and maintaining customer relationships through on-line activities to facilitate the exchange of ideas, products and services that satisfy the goals of both buyers and sellers (Ngai, 2003). In order to better understand how the Internet is impacting on marketing activity there now follows an examination of how the Internet is affecting the marketing variables of product, pricing, distribution and communication.
2.15.1 Internet and Product

Research by Ngai (2003) has established that journal publications focusing on the issues of ‘product’ in the Internet marketing context account for 2.8% of total publications. It is argued by many commentators that a key determinant in the fit between products and their appropriateness for Internet delivery is the extent to which information adds value to the product in question (Bloch et al, 1996; Kierzkowski, 1996; Schwartz, 1997). Bloch et al (1996) contend that the interactive nature of the Internet provides an effective additional channel through which firms can communicate and sell to their markets. The two-way nature of Internet exchange gives marketers valuable information on consumer buying behaviour and more proactive marketers (e.g. Geffen Records) have been attempting to harness this customer closeness by involving customers more closely in processes of New Product Development (McKenna, 1995).

It is argued that the Internet is an appropriate medium for the selling of two categories of product:

1. Physical products which are ultimately delivered through a conventional physical channel but where the purchase decision can be better informed by on-line advice and pictures (e.g. PCs)

2. Products that are intangible and can actually be delivered through the Internet (e.g. newspapers, books, software, financial services).

Bloch et al (1996) visually represent such products in the conceptual model illustrated in Figure 2.1 and attempt to make linkages with consumer buying behaviour for each product category described.
2.15.2 Internet and Pricing

Research by Ngai (2003) has established that journal publications focusing on the issues of ‘price’ in the Internet marketing context account for 9.2% of total publication output. There seems general agreement that the global nature of the Internet will lead to greater transparency with regard to pricing (Schwartz, 1997; Hamill and Gregory, 1996; Komenar, 1997). This fact, combined with the launch of the new Euro currency, makes price comparability much easier and more visible internationally. There may be downward pressure on prices and an erosion of price differentials between different countries because of this visibility. Komenar (1997) argues that given this situation “the customer now controls pricing more immediately and more directly than ever before” (p28). Examples of on-line companies offering products at lower prices than high street retailers include CD-Wow and Amazon.com, the latter being the Internet-based book seller frequently cited as demonstrating best practice in relation to on-line marketing. The extent to which consumers will be willing to make purchases over the Internet will depend on the nature of the product in question and on their attitude, and confidence in this new medium. Schwartz (1997) cites examples of empowered consumers clubbing together as a community through the Internet and using their collective bulk buying power to secure lower prices from car retailers in the US (p110). Issues of taxation and other legislative concerns have not yet been fully explored by international governments.
2.15.3 Internet and Distribution

Research by Ngai (2003) has established that journal publications focusing on the issues of 'distribution' (both physical and channels of) in the Internet marketing context account for 21% of total publication output. The impact of the Internet on the marketing channel is arguably at its greatest with regard to distribution activity. The Internet, by connecting end-users and producers directly, will reduce the importance of traditional intermediaries (agents and distributors). In order to survive, these players will have to alter the nature of their value proposition (Schwartz, 1997; Tapscott, 1998). The added value in the proposition will no longer exist principally in the physical distribution of goods and services but in the collection, collation, interpretation and dissemination of vast amounts of information. Given the fact that the WWW renders geographic location largely moot, there has been a growth in strategic alliances between geographically separate partners who can each contribute to the overall value proposition. By working together (forming what Hagel and Armstrong (1997) term a 'community') they can create a 'web destination' which can lead to a critical mass of consumer interest from which they can all derive benefit. Examples of companies who are using the virtual medium of the WWW to their commercial advantage through disintermediation include travel companies. American Airlines are reducing the commission they pay to travel agents as the volume of direct Internet customer business increases. The airline posts special 'Internet fares' for customers who are interested in booking last minute weekend getaways. By auctioning off unsold seats in this way the potential exists to fly at 100% capacity. For airlines, the cost of servicing an on-line ticket is $2 versus a paper generated ticket at $10 (i.e. key savings on paper and employee telephony costs) (Schwartz, 1997; Durkin and Ibbotson, 1997).

2.15.4 Internet and Promotion

Research by Ngai (2003) has established that journal publications focusing on the issues of 'advertising' in the Internet marketing context account for 10% of total output. Internet advertising offers the client a dynamic way to shop-window its products / services and can facilitate both 'one-to-one' and 'many-to-many' communication (Van Raaj, 1998). It has two forms:
- Banner advertisements (Narrow form)
- Corporate, brand and product advertisements (Broad form)

Spend on Internet advertising continues to increase rapidly. In the UK, levels currently represent a value of £81m but projections show this is likely to increase to £170m by 2007. (Nua, 2004)

The major implications of the Internet upon marketing communications activities, and how this differs from traditional media, have been summarised by Berthon et al (1996) as follows:

- The customer has to find the seller in the Internet medium.
- An initial web-site presence is relatively easy to develop and is inexpensive to create.
- The Internet represents a level playing field for all participants and access opportunities are equal for all players regardless of size.
- Share of voice is essentially uniform.
- Marketing communications cost structure is altered if the Internet is used as an advertising medium.

A key factor in Internet web-site and advertising design is the need to continually update the web-site in order to retain the interest of the user and one of the attractions of this particular medium is the speed with which this can be achieved (Kierzkowski 1997; Ducoffe, 1996).

It is argued that Internet, or electronic advertising, has a key role to play in the trend towards more targeted relationship marketing, facilitating as it does improved targeting ability towards smaller and more demographically attractive market segments (Schwartz, 1997). Given that the media context is thought to have an important influence on the value of advertising, new media technology will probably exert the most influence on the future of the advertising industry over the next 10 - 15 years (Ducoffe, 1996).

Thus, the suggestion is that the Internet is a new and evolving communications medium where marketers are only just beginning to understand the new challenges for evolving
communications strategy. Given the close nature of advertising agency-client relationships it would seem reasonable to assume that marketers would approach their advertising agency in its capacity of ‘communications professional / consultant’ in order to better understand the new and emerging Internet medium. However recent research has found advertising agencies lacking in such expertise (Wosson Kassaye, 1997; Durkin and Lawlor, 1998; Durkin and Lawlor, 2001).

2.15.5 Internet and Interactivity

As has been mentioned previously, a key attraction of electronic commerce and Internet marketing is the level of interactivity that can exist between buyer and seller. It seems important therefore to try and more fully understand what exactly ‘interactivity’ represents with regard to the Internet. Deighton (1996) proposes that “the term interactive...points to two features of communication: the ability to address an individual and the ability to gather and remember the response of that individual” (p151). It is argued that the promise of interactivity lies in its ability to put a more human face on the market-place without losing the scale economies of mass marketing (Blattberg and Deighton, 1991). The increasing ‘virtualisation’ of business represents the removal of constraints of time, place and form and is made possible by the convergence of computing telecommunications and visual media. It is argued that interactive computer systems will introduce a fresh approach to the bank / customer relationship. The power of such systems lies in harnessing the different methods of communication to transmit information more clearly and memorably than previously (Baldock, 1997).

The Internet represents a multi-media platform i.e. it offers visual and aural capability and the user is an active participant in the interaction. It has been well established that people remember:

- 20% of what they hear;
- 40% of what they see and hear;
- 70% of what they see, hear and do.
It is argued therefore that the Internet represents an effective communications platform combining as it does; seeing, hearing and doing. It seems reasonable to expect that customers may understand and remember more about bank services than they do through telephone banking or printed literature (Baldock, 1997; Daniel, 1998).

Summary

- The Internet is the key vehicle through which E-Commerce is enabled.
- The Internet impacts on all aspects of the marketing mix and offers the potential to deliver value to customers in a highly cost effective manner.
- Given the Internet's inherent interactivity, the customer can become a more active participant in the company-firm relationship.
- The growth of the Internet has been dramatic and it is now an almost ubiquitous communications medium.

2.16 Internet Enabled Banking

Kiely (1990) argues that direct distribution concerns itself with ways in which the product can be supplied from producer to consumer without the use of a specific intermediary, in this case the bank branch. There are two categories of direct distribution method; those using media (e.g. direct mail, direct response advertising) to stimulate response and those using a sales-force actively engaged in personal selling (see Howcroft and Beckett, 1995). However Greenland (1995) argues that the intangibility of financial services products means the branch has an even more significant role to play when compared to the importance of outlet design in other settings. A similar point is made by Howcroft and Beckett (1995) who propose that banks need to quickly identify the willingness of existing and potential customers to purchase both traditional products (e.g. personal loans and mortgages) and non-traditional more 'high credence' products like insurance and pensions.

Innovative uses of technology have increasingly assisted banks in targeting customer groups and it has ensured that products can be more effectively differentiated from competitors, however, Scarbrough and Lannon (1988) underline the importance of "organisation specific factors in shaping a company's approach to the management of such
innovation” (p51). Melewar and Bains (2002) highlight the impact of changing structures in technology-led banking in their study on corporate identity. They conclude that “the mainstay of the incumbents’ strength reside in brand recognition and trust, an existing customer base, a branch network, reputation for security and probity, and access to customer information” (p65). Direct banking, in attempting to reduce the reliance on branch networks, is now seriously threatening the future viability of comprehensive branch networks (Howcroft, 1998) not least through the adoption of low differentiation direct channels, which may actually erode and fragment customer demand (Ernst and Young 1999). That said, some authors feel that such a consequence is unavoidable. Mols (2001) states that with regard to the adoption of new channels the following are crucial if the bank is to integrate the channel(s) in the most effective way:

- top management support;
- long term / future orientation , and;
- a willingness to cannibalise existing channels.

2.16.1 Advantages Offered by the On-line Model

From the bank’s perspective the potential cost savings of moving customers to electronic banking are attractive. For example recent research in the US showed that a manual paper transaction cost $1.08 while the electronic equivalent costs only $0.13. UK based research confirms these figures citing paper based transaction costs of 65p and Internet-based at 2.5p per transaction (Booth 1999). In addition cost income ratios for banks using the Internet as the dominant delivery method are c15% as opposed to 55 - 60% for branch and 35 - 40% for telephone operations (Booz, Allen and Hamilton 1996; Financial Technology International Bulletin, 1996; CFSI, 1997). Blattberg et al (1995) also identified this cost profile when they categorised firms into either Cost-driven or Value driven with regard to technology. The value driven firm recognises technology as an ‘enabler’ and focuses on the use of information itself as a source of competitive advantage. Interestingly, in her research Daniel (1998) found that many banks were motivated to embrace Internet banking by the potential cost savings. This is especially true in the case of lower quality highly transactional customer groups (Panorama, 1999). Such low net worth individuals frequent the branch network on a regular basis and occupy staff time with transactional issues; time
that could be spent more productively by such staff on selling or relationship management development. The challenge of making such an initiative happen is however not problem-free.

Recent research which involved a survey of 1,000 US banks found that the initial force behind implementing an Internet strategy was largely defensive. However this same survey found that banks were now beginning to focus on ways of reaching new customers not simply preventing or reducing customer attrition (Sheshunoff, 2000). Wisner and Corney (2001) argue that a critical element in such a process is the presence of actionable customer feedback systems. Unfortunately their research revealed that such feedback systems (e.g. email addresses, feedback forms) were notably absent in the banks they surveyed.

2.17 Defining Electronic Banking

Daniel (1998) defines electronic banking as being "the provision of information or services by a bank to its customers via a PC or television". In its simplest form electronic banking can mean the provision of information about the bank and its products via a page on the WWW. At its most sophisticated it may include this information facility combined with full transactional functionality and added value services.

2.18 Electronic Banking and the Internet

In an important research report Booz, Allen and Hamilton (1997) developed a categorisation for the functionality of banking web-sites (see Figure 2.2). It is argued by many commentators that the vast majority (72% according to Ernst and Young 1998) of existing bank web-sites are little more than 'electronic brochures' (Ogilve 1996; Financial Times 1997a; Rudich 1997; CSFI 1997). There seems little recognition that the 'great promise' of the Internet rests in its interactive capabilities with few banks offering truly interactive sites which are both functional (i.e. allow transaction processing, bill payment and intra-account transfers) and also add value; perhaps through the provision of additional information such as economic data or targeted product offerings (Ogilve 1996; Burnham 1997; Mols 2001).
This lack of recognition on the part of many banks is argued to be symptomatic of "banks taking the wait and see approach...which lack of vision is putting their payment systems at risk." Ogilve (1997) argues that banks must develop on-line strategies:

- to increase customer service and convenience;
- to enhance image;
- to cultivate and strengthen loyalty amongst relationship customers.

What banks have to realise is that the Internet web-site should be part of an overall marketing strategy and, as such it must be integrated in a meaningful and considered manner. Ultimately, sustained profitability in virtual banking will only come by offering value-added products across electronic delivery channels that the customer is known to want (McMahon, 1996; Porter, 1997; Durkin, 1998; Hughes, 2003). Recent research by Ernst and Young (1998) found that many financial institutions generally lacked a defined business case for Electronic Commerce activity. They also remained unsure about how and which customers would embrace Internet banking. This issue is crucial to a business case on e-banking and is at the heart of this research project.

**Figure 2.2: Categorisation for Banking Web-site Functionality**

<table>
<thead>
<tr>
<th>Functionality level</th>
<th>Full functionality</th>
<th>Account access/service</th>
<th>Interactive tools</th>
<th>Read-only</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Entry level</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Info dominant</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Basic</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Loan calculators</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Application forms</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Intermediate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Balance / tx reporting</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Personalised info</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Advanced</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Bill payment</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>- Account transfers</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>- on-line advice</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>- on-line a/c opening</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Majority of banks 1996 | Position 2000

Source: Booz, Allen, Hamilton (1997)
2.19 Key Market Drivers

Daniel (1998) proposes that the four key customer-related drivers in determining the uptake of electronic banking products and services are:

- PC ownership;
- on-line service access;
- ATM usage (propensity to bank remotely);
- cheque usage.

According to research conducted by Daniel (1998) the penetration of PCs amongst households is equally high in Germany and Sweden (c30%). Spain has the lowest penetration at 17% while the UK figure is 26%. The UK figure is confirmed by research conducted for The Sunday Times (Hewson, 1995) and over 70% of buyers are of socio/economic grade A, B, C1 (CSFI 1997 p35). Figures are difficult to obtain for the number of modems facilitating Internet connected-ness in these PCs although Daniel confirms that most new PCs are multi-media machines with a modem in-built. Therefore future figures for PC ownership will implicitly reflect Internet access. Daniel (1998) reports on research conducted by Jupiter Communications which accurately forecasted a 23% increase in the number of European households with access to on-line services by 2000. The dramatic growth is explained by the deregulation of telecommunications markets and the growth in ISDN lines.

2.20 Historic Internet Banking Penetration

According to the London based Centre for the Study of Financial Innovation “it is hard to overstate the potential impact of the Internet on retail banking” (Financial Times, 1997a). More than 1000 banks worldwide had a web-site with 261 of these offered by EU banks. The world’s first Internet only bank, Security First Network Bank, launched in October 1995 had within 24 months over 4000 on-line customers with balances in excess of $14m (CSFI 1997: Schwartz 1997). Datamonitor predicted that the number of on-line banking customers in Western Europe would rise by 75% by 2004 (quoted in Financial Times, 1997a) while in the USA Forrester Research (1997) stated that as at the end of 1997
nearly 2m customers were banking on-line. One Swedish bank estimates that 10% of their customers use an on-line service but for all other EU banks the figure is around 5%. In the UK the figure was less than 1% (Daniel 1998: Wilson 1997) but it has increased since the late 90's. Daniel (1998) reports that customers using the Internet have a relatively high disposable income and come from an A, B or C1 socio-economic group. The research also showed that the more television an individual watched the lower his/her awareness of the Internet however the implications for future Internet based TV applications are unclear at this time.

2.21 Current Internet Banking Trends

2.21.1 USA

While US bankers (who operate in a much more paper-intensive environment than in Europe) seem to see the Internet more as a means of reducing transaction costs, Europeans are focusing more on the delivery of high value-added advice. There are now about 29 million users of Internet banking services in the US, up from 2.2 million five years ago, according to Fulcrum Analytics. Interestingly, Daniel (1998) reports that in the US the ‘killer application’ within electronic banking was found to be bill payment. In the USA most bills are paid by personal cheque through the postal system. However, in countries where most consumers use direct debits to pay bills, electronic banking will not offer the same efficiency advantages. Electronic banking is therefore expected to grow less rapidly in countries such as Germany that have a low incidence of payment by cheque.

Forty-five percent of current on-line banking users in the USA are women, up from 23 percent five years ago, and forty-three percent are college graduates, down from 58 percent five years ago. Furthermore, the median annual household income of on-line banking users was US$59,000 five years ago, but it has now fallen to US$55,400. The median age of on-line bankers has not changed since 1997 and remains at 37 (Datamonitor, 2002)
2.21.2 European and Asian Trends

France and Germany represent the two biggest EU markets and have more experience than practically anyone else of on-line banking through Minitel (15m users in France) and T-On-line (1.2m subscribers) (CSFI 1997). New research from Datamonitor shows that 26 percent of European Internet users now bank on-line. Twenty-five percent of European Internet users have made on-line payments in the past year, while 11 percent have traded stocks on-line. The research also found, however, that a personal visit to a bank branch is still the preferred way of purchasing banking products for almost 80 percent of European consumers. Telephone banking is the next most preferred method, followed by on-line banking. Sweden and Germany are the only countries in which on-line banking is more popular than phone banking.

About 1.1 million Europeans currently use wireless banking services, but Datamonitor (2002) believes this figure will rise to 27.1 million by 2005. Digital TV banking is currently used by 750,000 Europeans, but it is estimated that this will rise to 9.81 million by 2005. Swedish Internet users are the most likely to use on-line banking, according to a NetValue study of on-line banking in 12 European and Asian countries. Over 54% of Internet users in Sweden visited banking sites in July 2001, as did 48% of Norwegian users, and 44% of Danish users. Koreans were the next most likely (39.2%), followed by those in the UK (37.2%), France (34.6%), Spain (31.3%), and Singapore (30.3%).

Over 20% of the Taiwanese Internet population used on-line banking, as did 21.7% of Germans, and 26.4% of users in Hong Kong. Korea had the highest number of visitors in the world to on-line banking sites at 5.6 million, followed by the UK with 5.2 million, and France with 3.2 million. Italians spent the longest periods at banking sites with an average of 42.3 minutes per user.

2.21.3 United Kingdom Trends

The UK is among the largest European on-line banking markets, with 7.5 million consumers accessing on-line banking facilities by the end of 2001. Forecasts estimate that the rate of market growth will fall significantly by 2005, as market saturation in Internet
penetration begins to occur. Nevertheless, despite the onset of reduced growth in this period, the UK on-line banking market will equate to 13.3 million consumers by 2005, thereby consolidating the position of the domestic market within Western Europe. Viewed by age sub-division, customers in the 18-34 years category dominate the market, accounting for just less than half of the total market. Corporate strategy will increasingly target the age group 55+, as quantitative analysis supports the notion that middle-aged UK consumers remain predominantly Internet illiterate.

UK on-line banking equates to an increasingly competitive market-place, particularly among the 'new e-Banks' (the recently formed UK stand-alone Internet banks, set up by mortgage banks and retail deposit institutions). Currently, this is resulting in 'rate wars', where the e-Banks vie for new customers by offering attractive interest and borrowing rates.

Egg, owned by Prudential, is a prominent force within the market-place, established via a combination of highly competitive offerings and from the strategic advantage of being a first mover in the UK. However, it has already reached critical mass (in terms of number of on-line customers) and hence it is less inclined to continue with the rate war. Smile, First-e, IF (Intelligent Finance) and cahoot are all striving to establish market position. Indeed, cahoot, the stand-alone bank of the Abbey National, the UK's second largest mortgage lender, has made an impressive impact in the market since its launch in mid-2000. Despite initial technical difficulties experienced at launch, cahoot has branded itself successfully, and bears witness to Abbey National's desire to become more than just a 'mortgage bank'.

However, Abbey National have adopted a dual strategy in the UK's on-line banking market: in addition to the independent stand-alone, cahoot, the company has launched an integrated service as part of an aggressive and offensive strategy in an attempt to cover all angles in terms of attracting on-line customers. Additionally, strong competition is emerging from established bricks and mortar banks with increasingly integrated Internet banking offerings. Traditional banks Barclays, HSBC, Lloyds TSB and Royal Bank of Scotland/Nat West and Bank of Ireland have all taken steps into the Internet banking arena, and pose strong competition for Egg. However, such high street banks can derive
users from their established traditional customer bases. The real battle will therefore probably remain among the stand-alones, especially as the UK economy will only support a few major Internet stand-alones.

2.22 General Future Trends

A new Datamonitor report predicts that 75 million Europeans will use Internet banking by 2005. The number of customers using PC-based Internet banking services is expected to treble over the next five years. The PC will remain the most popular on-line channel for banking services, but with the advent of 2.5 and 3G wireless networks, mobile banking is set to take off as well, although predictions for financial services usage of this platform remain low (Pastore, 2001). The key challenge for banks in this on-line future will be to build customer satisfaction and loyalty. The saturation of many European markets and the negative outlook for Internet investment has made all but the most differentiated standalone Internet propositions not viable.

Datamonitor (2001) research shows that, in spite of this, banks are being successful in migrating their customers onto the Internet, giving them plenty of reasons to continue investing strongly in e-banking services in order to support this growth. The size of the e-banking technology market is expected to virtually double over the four year period 2001-2005 growing from $2.7 billion in 2001 to nearly $5 billion by 2005.

The availability of more and more value-added services, such as account aggregation, bill payment and on-line advice, will continue driving strong consumer uptake of e-banking services. The challenge for banks now will be to retain these customers through advanced personalization and one-to-one marketing technologies to build up loyalty.

Germany, the UK and the combined Nordic markets of Denmark, Finland, Norway and Sweden will continue to account for the greatest number of Internet banking customers; not surprising given that these are the regions where PC penetration is highest and e-banking services the most advanced.
2.23 Evolving Roles for Banks in the Market Place

Ernst and Young (1998) propose that a key role for banks in the on-line market-place will be that of Auction Organiser (Honest Broker). The open nature, and cheap set-up costs of Internet trading will enable many companies to enter the business. The exchange of information with high brand recognition companies will be of paramount importance and banks may emerge as ‘honest brokers’ for various traders with which their customers want to trade electronically. The auction organiser may even aggregate financial services products, services and product bundles (his own and other sourced elsewhere) and may supply intelligence via a selection process based on customer entered criteria.

2.24 Multi-channel Strategy

Increasingly banks are adopting a distribution strategy where a multi-channel marketing strategy is being employed (Black et al, 2001; Freed, 2003). Watkins (1990) describes such channels as including; estate agencies, direct mail, direct response advertising, joint ventures and direct sales forces (p53) while more recently this has been extended to embrace the Internet. According to Howcroft (1994), in deciding the mix of channels choice should be based on the following considerations:

- maintaining a strong market position through attracting and retaining a large profitable customer base;
- introducing new distribution channels to counteract the cost benefit characteristics of the branch network;
- building a distribution channel mix that can respond flexibly to changes in competition;
- exploiting the benefits inherent in the existing infrastructure.

It is argued that any change in the strategic direction of a retail bank’s distribution system would necessitate a gradualistic approach in order to reduce the impact upon the branch structure and the attendant staff and systems. Indeed Ernst and Young (1998) argue that “customer behaviour changes slowly, especially when compared to changes in technology” (p41). Such an assertion is supported by other authors (see Meidan, 1996;
Durkin, 1996) who highlight the fact that each bank must find a way of establishing its identity in the mind of the public. This may be done through a combination of location, services, staff, reputation and image and the growth potential of innovations in areas of distribution which must be balanced with risk. Such a rationale has led to the development of a strategy where many banks offer a combination of distribution channels.

It could be argued, therefore, that the Internet will most likely evolve into yet another distribution channel rather than the mechanism through which banks can make extensive cost savings, (Black et al, 2002). Indeed in their longitudinal research study into financial services firms Ernst and Young (1999) have found that distribution channel costs have actually risen as customers embrace all available 'touch-points'. This is supported by evidence from TSB and Barclays (both cited in Reuters,1999);

"Most customers want to reach us in several ways depending on what they happen to want at any particular time."
(Laurel Powers-Freeling, TSB)

"All the evidence suggests that customers do want a multi-channel model...its all about customer choice."
(Peter Duff, Barclays)

2.25 Balancing Delivery Offers and Platforms in Banking

This proposition presents banks with an interesting dilemma. To be present in all channels is very expensive and therefore what seems to be required is a careful and measured analysis of where the service emphasis should be placed. This requires a knowledge of customer interaction preferences matched to customer relationship worth but this information is not yet being used in retail banks.

Hughes (2003) highlights the marketing challenge facing banks thus;

"It is one thing to develop a web-site, it is quite another to fully integrate it into an existing multi-channel operation. This is a strategic move that has implications for the organisation as a whole."
(Hughes, 2003; p1080)

Such a management decision would be organisation specific and driven by customer demographics and preferences. Black et al (2002) propose that customer channel choice
can be determined by consumer, product channel and organisational characteristics with product-channel interactions and consumer-channel interactions being particularly important. As highlighted by Ernst and Young (1999) “with changing customer behaviours and the unending parade of new technologies it is clear that any firm’s channel mix must by necessity be ‘flexible and dynamic’”. That “customers often behave in very unpredictable ways in their channel preferences” (Ernst and Young 1999, p53) only serves to compound the marketing challenge for providers.

2.26 Issues in Customer Migration Management

Ernst and Young (1999) cite this as a “very controversial area”. Migratory strategies must be balanced with the customers’ needs, and even more importantly, with the customer satisfaction in mind. Financial services firms that are able to offer the right channel mix to the right customers for their specific needs will be able to keep the customers and develop long term relationships (Greenspan, 2003). By charging for specific in-branch counter services commentators argue that those firms may be exposing a gaping competitive weakness that will be exploited by other firms that offer those very same customers access to all channels without a charge. Ernst and Young (1999) state that there are numerous examples of banks that created bad publicity by charging low-value customers for teller visits - for example Abbey National announced it would begin charging for transactions such as bill payment in its branches. This was followed by prompt declarations by all its major competitors that they had no plans to do like-wise.

Ernst and Young (1999) draw an interesting distinction between two very different approaches to channel management: charging a premium for using higher cost channels and offering incentives for use of specific low cost channels. An incentive approach of giving discounts for lower cost channel use is very different. It passes the savings on to the customer - and the benefit is shared.

In a previous report Ernst and Young (1998) voiced concerns over the dominant ‘cost-oriented’ approach by highlighting that “the key question is how does the customer ultimately want to interact with the organisation.” This view is echoed by McMahon (1996) who states that “the delivery of financial services must take into account the
variety of contexts and behavioural patterns within which consumers conduct their day-to-day banking business” (p40).

In support of this, recent international research conducted with 300 bank customer in Malaysia identified issues of accessibility, awareness and reluctance to change had a significant on the extent to which e-banking was adopted (Sohail and Shanmugham, 2002).

2.27 Overall Appropriateness of Financial Services for Internet Delivery

The ‘goodness of fit’ between financial services and the Internet will be examined at both industry and product levels.

2.27.1 Industry Specific

Kierowski et al (1996) propose that financial services have an excellent fit with interactive media at an industry level (see Figure 2.3). They determine this by examining the extent to which the product/service offering is information intensive, transactions can be completed on-line and current users are heavy users. All of these criteria are met by services offered at an industry level.

**Figure 2.3:** Financial Services Fit with Web Media and Relationship Potential

<table>
<thead>
<tr>
<th>Low</th>
<th>Potential for Relationship Building</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>News</td>
<td>Software</td>
</tr>
<tr>
<td>Fit with interactive media</td>
<td>Selected Groceries</td>
<td>Interactive games</td>
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<td></td>
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<tr>
<td>Low</td>
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</tbody>
</table>

Source: Kierowski et al (1997)
2.27.2 Product Specific

Combining the work of Bloch et al (1996), CSFI (1997) and Daniel (1998) models can be developed to illustrate financial services product delivery fit with the Internet channel. It is argued by CSFI (1997) that wholesale banking operations (capital and equity markets, large payments) seem unlikely to embrace the Internet to any great extent since it represents a “bespoke business in which a low cost mass market distribution network is far less important”. It seems then that retail banking is where the Internet will make its greatest impact.

It is proposed that commodity-type products could gravitate towards Internet delivery while more complex finance products could continue to be sold on a face to face basis (see Figure 2.4). The fear is that, without personalisation of services Internet users may develop poor loyalty to any one institution. While the Internet can compensate in terms of being a cheaper distribution system handling greater volumes and more clearly identifying cross sales potential the challenge appears to be how to customise commodity delivery to add relationship value. Jun and Shaohan (2001) acknowledge this problem but argue that Internet-only banks, for example, can build trusting long term relationship with customers if they pay particular attention to issues of reliability, credibility and proactively staying close to customers through virtual means. Furthermore Ghosh (1998) and Mols (2000) highlight the fact that Internet banks can offer a high level of personalisation in order to build loyalty because they can automatically track individual customers’ financial service usage (see also Jayawardhena and Foley, 2000 on this point).

**Figure 2.4:** Delivery Mode / Product Complexity Match

<table>
<thead>
<tr>
<th>Bank Delivery Mode</th>
<th>High Product Complexity</th>
<th>Low Product Complexity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Branch delivery dominant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remote delivery</td>
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</tbody>
</table>

Summary

- Organisation specific factors need to inform the extent to which a bank embraces the Internet in its banking proposition.
- Banks need to identify the propensities of customers to embrace the Internet for their banking.
- Cost savings by encouraging customers to adopt Internet banking are considerable.
- High maintenance, low net worth transaction oriented customers seem obvious targets for Internet banking.
- Across Europe the trend in Internet banking is on the increase.
- The Internet has not replaced other delivery channels but has become another interaction platform through which customers can conduct their banking.

2.28 Contribution of this Literature to the Research Study Objectives

It has been established that the E-commerce environment does not seem to be being effectively exploited by banks, which remain unsure of what strategy to adopt. While it is clear that a multi-channel delivery platform is a competitive necessity, the balance between the platforms on offer is unclear with respect to product and customer segment appropriateness. This emphasises the importance of this research in seeking to gain a deeper understanding of why banks adopt on-line banking to understand the extent to which such decisions are customer driven, and to obtain an insight into the perspectives of the customers themselves in this regard. The first research objective of this study attempts to establish reasons for relationship-oriented banks going on-line. This chapter has examined the extant literature in a general to specific funnelling structure moving from the application of technology in business, then marketing through to e-commerce, e-marketing, Internet marketing and finally Internet banking. The issues uncovered by this review help set the context for Stage 1 of the research study; that which focuses on banks themselves and explores their rationale for moving services on-line. These issues include, *inter alia*;
Relationship marketing is essential for the effective management and development of the customer base. Such approaches enable more effective and efficient sales approaches.

Technology can be a key enabler in marketing activity in general and a key facilitator of effective customer relationships. The balance of the personal and remote interface in the delivery of the customer's value proposition is key to effective relationship management.

The Internet potentially increases the bargaining power of the customer through creating a platform where competitive offers can be more easily sourced and evaluated. This underpins the importance of offering added value.

Blind replacement of personal interaction interfaces with the remote interface of the Internet could erode the basis upon which competitive advantage through service is established in financial services. There is a lack of clear strategic thinking in this regard on the part of banks. It therefore becomes important to explore such thinking on the part of banks.

2.29 Conclusion

It is argued here that to be successful, Internet banking must focus on and be driven by customer needs. The customer's on-line experience must be more pleasant, effective and convenient than that of the 'real world'. The Internet can eliminate much paper-based activity for customers (as well as for banks) and on-line banking services also have the advantage of being available 24 hours a day. Customers now increasingly expect to be able to carry out their banking at a time and place to suit themselves and not necessarily at the bank itself (Kehoe, 1997; Daniel, 1998). A key impact of this is that convenience risks becoming 'commoditised'. All Internet banks will have the same geographic reach, operating hours and service levels. It is argued that at the level of specific segments this change may eliminate the competitive advantage afforded by a branch network and the important human interaction that is offered there (e.g. advice, empathy, personal service) (Burnham, 1997).

It is also the case that Internet banking customers will be able to switch banks with much greater ease than they can today. These lower switching costs combined with generic
convenience could result in a decrease in customer loyalty and increasing price competition (Burnham, 1997).

Considering the fact that the Internet and PC-based home banking physically distances banks from their customers, new challenges are created in terms of cultivating, developing and maintaining customer relationships. It is argued that it will be “first rate customer service with a technology strategy that engenders customer-focused product delivery, new revenue opportunities and economies of scale, that will revitalise both retail and wholesale banking” (Sraeel, 1996). It is proposed that Internet technology, which enables a business to build a detailed demographic profile of its customers, “turns back the clock to the days when personal relationships created sales opportunities and fostered customer loyalty” (Kehoe, 1997).

It would seem that the technology strategy will need to reverse the historic ‘data rich-information poor’ status of many banks still struggling to develop effective Customer Information Systems (CIS) and efficient relationship banker initiatives in order that the remote relationship be better managed (Stewart and Durkin, 1999; Colgate, 1996; McMahon, 1996; Ennew et al, 1993). It is true that “what banks have over competitors is customer information that can be used to meet the vastly changing needs of customers” (Sraeel, 1997; Levy-Lang, 1997) but it is how this information is harnessed and managed that seems central to long term success. Harden (2002) however remains pessimistic about banks being able to leverage technology (especially web-based) to generate and action more meaningful information. He suggests that “it seems the more data banks have about customers the less likely they are to know them on a personal level.....it is inconceivable that bank-customer relationships will become any more intimate in the future” (p323)

These key issues, and those highlighted in the summaries, of this chapter will help inform the key interview guide themes used in the Stage 1 study as is more specifically explained in Chapter 6 (Methodology and Analytic Strategy).
By the nature of the review, some customer issues have also been uncovered that will be explored more fully in Chapter 3. Implicitly, the need for banks to identify the propensity of customers to embrace remote platforms discussed above has key relevance for the next chapter.
CHAPTER 3: 
TECHNOLOGY AND CUSTOMERS
CHAPTER 3: TECHNOLOGY AND CUSTOMERS

3.1 Introduction

While the strategic direction of an individual bank is increasingly motivated by competitor activity it has been established that as an industry banking has become more marketing and customer-oriented albeit in a rather tactical and unsophisticated manner (Baker, 1993).

It is important that the change dynamics that have occurred at the level of the customer are examined and understood as this will provide a context to better examine and evaluate the success and appropriateness of relationship-oriented banking strategies being undertaken. In addition, given the technological nature of the Internet, it is appropriate to examine the issues with regard to consumer adoption of this discontinuous innovation.

This section will take this approach and conclude with an examination of the various modes of bank-customer interaction. By doing so it will attempt to move towards a fuller understanding of the key research issues present in remote interactions and relationships.

3.2 Background

While much of the change affecting financial services institutions at both structural and strategic levels has been generated by environmental and competitive change, customers have also changed in terms of their attitudes, perceptions and expectations. It is argued within the limited literature concerning consumer buying behaviour in financial services that scant attention has been given to the behaviour of customers in deference to an extensive examination of how services can best be managed from the perspective of the organisation. According to several commentators, this focus on how services marketing ‘is different’ has for too long been approached from the perspective of the supplier causing “an extension of our understanding of consumer behaviour taking a back seat” (Betts, 1994; Berry and Gresham, 1986). Betts (1994) explores consumer attitudes with respect to financial services and in particular the “more favourable attitudes towards credit” (p68). She outlines the ‘conspicuous consumption’ which prevailed in the 1980’s and the rapid growth in store and credit cards as facilitators to this spending. In the 1990’s however
there was a small decline in the ratio of debt/income which Betts (1994) proposes may have been influenced by factors such as recession, low inflation levels and appreciation in house prices (p69).

3.3 General Trends

In 1975 only 9m households in the UK (45%) had a bank account with most of the working population being paid in cash. By 1996, 94% of the adult population had some form of account with 83% having a ‘current account’ (Carrington et al 1997). In terms of technological change the growth in ATMs has meant that the ownership and usage levels for plastic cards also increased amongst customers. Almost eighty percent of the UK population now hold a card of some description (e.g. cash, credit, debit) with a clear correlation existing between credit card holder-ship and social class (for example 90% of AB customers have a card). APACS (2004) predict that whereas in 1998 45% of all transactions were made by plastic card, this share is expected to rise to 57% in 2008. A brief outline of key changes in usage of such payments systems now follow. (Also see Figures 3.1 – 3.4)

3.3.1 Debit Cards

The usage of debit cards has dramatically increased since their introduction in 1987 showing a growth in transaction levels of 250% between 1990 - 1995 (NOP Financial Research, 1997). In 2000 two billion transactions were made in this way. Over half of cardholders are regular users and debit card spending has now caught up with personal expenditure by credit card. There remains according to APAC (2004) potential for wider issuance and use of on-line debit cards like Visa Electron and Solo. Overall debit card volumes are forecast to more than double over the next ten years to 3.4 billion in 2008; indeed over the period 2001-2003 there was growth in debit card usage of 11.1%.

3.3.2 ATMs

Figure 3.1 below shows ATM growth over the period 1987-97. Most interesting is the growth in off-site units (i.e. those remote units not installed at a branch). Whereas the
Compounded Annual Growth Rate (CAGR) for ATMs generally over the period is 7.40%, the off-site equivalent is 16.76%. There is a similar trend evidenced in the US where projections for on-site ATM growth between 1997-2001 were 8% (CAGR), off-site much greater at 13% (CAGR) over this period. Cash machines are the main source of withdrawing cash from accounts for over 60% of the UK adult population. UK ATMs in 2003 dispensed £98 billion in 1.9 billion transactions. Forecasts show that by 2008 this volume will increase to 2.8 billion transactions (APAC 2004).

Figure 3.1: Growth in UK ATMs including ‘off-site’ 1987-1997

3.3.3 Electronic Purse

The electronic purse, or stored-value card is still at an early stage of development in the UK making forecasts of its use difficult (APAC 2004). If the purse were to account for 4% of transactions in its most likely market sectors, there would be around 700 million purse payments in 2008. According to APAC (2004) Electronic Commerce could also increase demand for the purse, particularly for low-value transactions over the Internet. Keynote (1999) support this view and highlight the fact that to achieve a 10% penetration into such low-value markets would create some 1.4 billion purse payments by the year 2007.

3.3.4 Credit Cards

The credit card market remains intensely competitive and much growth has been seen in the C2, D, E social classes (APAC, 2004). The introduction of chip technology will provide product innovation opportunities and a major source of growth could be home
shopping over the Internet or interactive digital TV. The government’s purchasing card programme could give business-to-business plastic card transactions a significant boost. Figure 3.2 shows the growth in outstanding balances on credit cards from 1987-2003. Combined credit, charge and store card payment volumes are forecast to reach 2.5 billion in ten years time according to APAC (2004).

Figure 3.2: Average Balance outstanding on Credit Cards (£)

3.3.5 Cheques

Total cheque volumes fell by 3.2% in 1998 to 3.0 billion. The continuing move to automated and plastic card payment was the main factor behind a decline of 3.6% in personal cheque volumes. After several consecutive years of significant increases there was a small fall in business-to-business cheque payments last year. Volumes in both the personal and business sectors are expected to fall over the next ten years with a projection of 1.9 billion cheque transactions in the year 2008. It is forecast that by 2012 only 5% of regular bills will be paid by cheque as compared to 17% in 2003 (APAC, 2004).

3.3.6 Cash

Cash remains the main payment method in the UK within the personal sector. Over 75% of all payments made by individuals are made in cash; last year there were an estimated 25.3 billion cash payments. The enduring trend has been for the proportion of all payments made by cash to fall by around 1% per annum. This is likely to continue leading to an expected 22.9 billion cash payments in 2008.
3.3.7 Telephone and Internet via PC

Increased use of the telephone, PC / Internet and interactive digital TV banking to make bill payments will be a significant factor behind the growth in automated payment volumes. Telephone banking is currently the most popular remote platform and the number of users is expected to double over the next decade to 12 million. Households with access to PCs and the Internet are growing rapidly which will increase on-line banking numbers. Over one million adults used PC/Internet banking in 1998, this had risen to twelve million in 2003 (APAC, 2004). Around four million adults manage their credit card accounts over the Internet (APAC 2004).

3.3.8 iDTV (Interactive Digital Television)

Interactive digital TV (iDTV) has the potential to expand remote banking to groups that currently do not use telephone or Internet banking. The number of customers expected to be using interactive digital TV by 2008 is 10 million while Fletcher Research (1999) reported that in the shorter term access to interactive services via TV will have increased from 8.3% of households in 1999 to 29.4% of households in 2002. Fletcher Research (1999) also points that TV usage is six times higher than that for TV and that the TV sits at the heart of family life, potentially making it a more comfortable choice for users. In a recent survey by INTECO, the number of homes with digital television is expected to increase from 6.1% in 1999 to 36.4% in 2004. A Gallop survey found that 42% of consumers intend to subscribe to digital TV in the next three years.

There are three different channels through which to access iDTV (from Reuters 1999);

1. Digital Terrestrial TV: Freeview (the now ill-fated ITV Digital and ONDigital) - a signal is transmitted and received by the customer through his/her terrestrial aerial. A set-top box is required as is a phone line for interactivity. The predicted market share is 7% by 2004.
2. Digital Satellite TV - Sky dominates this market in the UK. A satellite mini-dish and set-top box is required and a telephone line for interactivity. Satellite TV offers over 200 channels and the predicted market share is 15% by 2004.

3. Digital Cable TV - Connection is via a broadband cable network, which is operated in many areas throughout the UK by franchises. Interactivity is available through a set-top box and no phone line is needed. Digital cable currently offers 40-150 channels but has capacity for 2000. The predicted market share is 21% by 2004.

3.3.9 Mobile (WAP) Internet

It is argued that mobile Internet banking looks set to become the norm for on-line banking, but the inherent complexity of the bank-customer interaction will probably limit widespread use of the mobile channel to more routine transactions. (Reuters 1999). In support of this it appears that by 2012 one card payment in ten will be made in this way.

3.4 Issues for Bank Management

The number of overall remote banking payments is expected to rise from 25 million in 1998 to over 190 million by 2008 but this will still represent a very insignificant proportion of the overall total, (APACS 2004). However as Figure 3.3 illustrates, it is estimated that by 2012 there will be around 25m users of Internet banking either through PC or mobile phone as against 31m of remote banking interfaces in total (inc conventional telephone banking).
A key consideration for banks therefore is the extent to which they should invest in remote channels. They also need to predict the extent to which any one interface might be favoured by certain customer segments and what the typology of such groups will be. Evidence from APAC (2004) suggests that remote banking users who are multi-channel users will rise from current levels of 25% to 40% by 2012.

In any case pre-requisites for banks being able to leverage such technology to interact with customers through such interfaces effectively include;

- a single view of customer showing their product holdings with the bank and with competitors;
- understanding who the most profitable customers are and being able to leverage this to make customised sales offers through the most appropriate channels;
- understanding customers existing and future needs;
- empowerment of staff interfacing with customers to give appropriately speedy responses demanded by the new interfaces;
- consistent, accurate and up to date information;
- ability to generate sales on any channel from leads generated on a different channel in accordance with customers’ preferences. (Reuters 1999).
3.5 Customer Interactions and Changing Needs

Yorke (1982) outlines five key customer needs that banks must try to satisfy: cash accessibility, asset security, money transmission, deferred payment and financial advice. Understanding how customers conceptualise such needs and resolving these needs is considered difficult. Betts (1994) states that “customers who are themselves unaware of what they want until they do not get it cannot be the easiest to satisfy.” Other commentators also highlight the challenge by drawing attention to the fact that “financial services vary enormously in content, use, consumption, delivery, duration and significance to the customer” (Stewart and Durkin, 1998). Storbacka (1994) provides a useful typology of financial services products according to how customers use them, as shown in Table 3.1. In particular the typology shows the differences between the different categories of financial services. Transaction services are usually handled through the current account, which is a continuously delivered and frequently-used service for which the customer contracts to the financial service supplier. The current account links the customer to the bank\(^1\) and provides basic yet fundamental services for the customer. The current account is a high involvement product especially when problems emerge in the conduct of business associated with the account, or indeed with the bank, (Stewart, 1995). Thus, even the most basic financial service product can be involving for the customer at various stages in the consumption process. However, at other times, customer inertia may well be the dominant characteristic. In general, the lifetime financial requirements of customers and the continuous nature of transaction services (once the current account is opened) would suggest that retail banking offers pro-relationship conditions.

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\(^1\) The term bank refers to both banks and building societies.
Table 3.1: Typology Descriptions

<table>
<thead>
<tr>
<th></th>
<th>Transactions</th>
<th>Deposit &amp; Lending</th>
<th>Counselling</th>
<th>Specialist Services</th>
<th>Investment Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>High</td>
<td>Low</td>
<td>Medium</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Regularity</td>
<td>Regular</td>
<td>Iff/regular</td>
<td>Iff/regular</td>
<td>Iff/regular</td>
<td>Iff/regular</td>
</tr>
<tr>
<td>Interaction Duration</td>
<td>Short</td>
<td>Long/regular</td>
<td>Medium/Long</td>
<td>Low</td>
<td>Long</td>
</tr>
<tr>
<td>Customer Control</td>
<td>Low</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Diversity Demand</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td>Customer Participation</td>
<td>High</td>
<td>Low</td>
<td>Medium</td>
<td>Medium</td>
<td>Low/High</td>
</tr>
<tr>
<td>Level of Contact</td>
<td>Low</td>
<td>High</td>
<td>Medium/High</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Initiative</td>
<td>Customer/ Bank</td>
<td>Customer/ Bank</td>
<td>Customer/ Bank</td>
<td>Customer</td>
<td>Customer</td>
</tr>
</tbody>
</table>

Source: Storbacka (1994)

3.6 Models of Buyer Behaviour

Within the buyer behaviour literature there are two sets of models that can help our understanding of how customers make purchase decisions. The first set of models are ‘Attitude Models’ also known as ‘Response Hierarchy Models’. The second are named ‘Comprehensive Models’. Both are now briefly discussed.

3.6.1 Attitude Models

According to Betts (1994) these portray the consumer as progressing through a series of sequential attitude changes, initially acquiring knowledge of the product, then developing a liking for the product, which takes them closer to the cognitive act of purchase. AIDA (Attention, Interest, Desire, Action) is an example of a response-hierarchy model. Research conducted by Guirdham (1987) has led to an adaptation to this sequential and conventional framework which more appropriately illustrates a more involved process better suited to explaining consumer behaviour in the purchase of more complex products (e.g. unit trusts, PEPs).
3.6.2 Comprehensive Models

Such models provide a framework for analysis of all the factors known to influence buyer behaviour. They differ from Attitude Models in that they are broader, embracing not only attitudes but rather phases or stages which the consumer will pass through as they move towards purchase. Probably the most frequently referenced model of this type is the Engel-Kollat-Blackwell model which was developed in 1968. The five stages of the model are: problem recognition, information search, evaluation of alternatives, purchase, post-purchase behaviour. However in a services context where the product is intangible a meaningful search and evaluation of alternatives is made very difficult. Zeithaml (1981) identified the fact that given such intangibility, reference groups and ‘word of mouth’ recommendation become very important. This inter-personal dimension is very important, particularly with regard to the adoption of new innovations (see Rogers 1983 below).

Of course the extent to which the financial services consumer will embark on information search and a comprehensive evaluation of alternatives will depend upon the nature of service sought. This point is supported by Harrison (2003) who argues that “in the academic literature there have been relatively few attempts to develop models that explain...the extent of pre-purchase information search for a variety of financial products” (p7). Such uncertainty, combined with the not inconsequential problems associated with service intangibility make some commentators sceptical about whether purchase decisions pass through any form of orderly sequentaility. Betts (1994) outlines the main criticisms of the earlier models adapted from McKechnie (1992) as follows:

- they assume an infeasibly rational decision-making process;
- evidence suggests that orderly discrete stages can in fact take place both out of sequence and overlap in some buying situations;
- there are no empirically testable hypotheses;
- they consider once-off purchases rather than on-going repeat business which is the nature of the bank-customer interface.
This latter point concerning repeat business is one developed in the literature (see Betts, 1994; McKechnie, 1992; Yorke, 1982) with regard to consumer buying behaviour. The reluctance to embrace the sequential behavioural models led researchers to explore the applicability of the IMP Group’s interaction approach for organisational buying. Ford (1990, 1998) outlines how the IMP Group approach emphasises the active participation of both parties in the relationship and the propensity for long term relationships. Such an approach was much more easily related to the service characteristic of inseparability and the long term and repetitive (as opposed to discrete) relationship which characterised financial services. While Betts (1994) argues that the “orderly sequence is abandoned in favour of a more flexible conceptual framework” the empirical evidence relating to consumers and how they purchase financial services highlights certain important commonalties. McKechnie (1992) highlights the importance of “confidence, trust and customer loyalty” (p7) and goes on to explain that in terms of Gronroos’ (1984) classification of quality into functional (how it is delivered) and technical (what is received) dimensions consumers are more interested in the functional quality aspect of financial services.

Summary of Key Points

- scant research has been conducted into customer buying behaviour and the consumption of continuous products, and;
- traditional behaviour models seem inappropriate in any context.

Addressing Bett’s (1994) request for more conceptual thinking, recent work by Beckett et al (1999) proposes that there are two principal factors which motivate and determine individual buying choices: uncertainty of outcome and level of involvement (see Figure 3.4). The rationale for this approach rests with the work of Max Weber (1949) who argued that given the fact that complex social interactions operate to a set pattern like elements in the physical sciences, it is better to pursue ‘ideal types’ which describe forms of behaviour in certain contexts. This is argued to be a more effective way of analysing behaviour than by seeking to establish general theories that apply in all contexts (p2). By representing level of involvement and uncertainty of outcome (labelled as consumer
Beckett et al (1999) propose a two by two consumer behaviour matrix that illustrates various behaviours in FS contexts and explores the nature of such:

**Figure 3.4: Consumer Behaviour Matrix**

<table>
<thead>
<tr>
<th>Low</th>
<th>Level of Involvement</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repeat Passive</td>
<td>1</td>
<td>Rational Active</td>
</tr>
<tr>
<td>No Purchase</td>
<td>3</td>
<td>Relational Dependent</td>
</tr>
</tbody>
</table>

1. **Repeat Passive**

Consumers are fully aware of the products salient features and display low levels of involvement. They are passive in the sense that they will make repeat purchases without actively seeking alternatives. Trust generated through brand familiarity is important here.

2. **Rational Active**

Involvement is high in terms of control, participation and contact and so too is confidence in terms of understanding financial products and certainty of outcome. Economic theory has viewed these people as the norm. Simon (1957) explains that “rational man is assumed to have a well organised and stable system of preferences” (p241). Situations that lend themselves to such behaviours may be the purchase of commodities (e.g. milk, petrol) where contact is discrete, duration short and outcome certain.
3  **No Purchase**

In a financial service context this category would be exemplified by those individuals who leave significant sums of money on deposit rather than purchase an investment.

4  **Relational Dependent**

This quadrant is representative of highly involved individuals who lack confidence due to product complexity and uncertainty of outcome. In order to make choices such individuals will seek advice from third parties (bankers or brokers) and trust will play a key part in such relationships. Developing issues of rationality highlighted above in the Rational-Active box Beckett *et al* (1999) explore more fully the work of Simon (1957) who argues that while there may still exist a desire to act rationally there exists a tension between actual and desired decision-making behaviour. A compromise state named 'bounded rationality' is proposed by Simon (1957) which proposes limitations between which rationality can operate. A key factor here in this process is 'heuristics', or simplifications, which propose to economise on the costs of information search and thereby reduce decision-making costs for the consumer. This will be more fully explored later but at this stage it is important to recognise that a factor inherent in such 'economising' may be the reliance of the consumer on a third party, particularly where a purchase involves a complex or high credence product.

3.7  **Relationships with Customers**

3.7.1  **From Discrete to Relational Exchange**

It has been argued that if “marketing is to survive as a discipline” there must be a paradigm shift away from the more traditional discrete transactional exchange focus towards a broader more inclusive relationship approach (Gronroos, 1995). Moller (1992) argues that definitions describing marketing purely in terms of managing of the marketing mix “presumes primarily a stimulus response relationship between the firm and its customers.” Brodie *et al* (1997) identify this new paradigm as that of Relationship Marketing (CRM). Aijo (1996) contends that the emergence of RM is attributable to the
changing economic and technological operating environments of business itself in terms of higher customer expectations and increased efficiency requirements. This focus on efficiency is pursued again by Sheth and Sharma (1997) and Zinn and Parasuraman (1997) who argue that the emergence of RM practices between firms and their suppliers is attributable to a need for efficiency; for example in terms of procurement and also in mutually beneficial collaborative working practices. It is clear that Relationship Marketing has had many streams of research contributing to its evolution and subsequent incorporation into both academic research and practitioner activity (Copulsky and Wolf, 1990; Dawkins and Reichheld, 1990; Ghoshal and Bartlett, 1995).

Summary

- While the number of remote bank payments will rise to 190m pa by 2008 this still represents a very insignificant proportion of the total.
- The extent to which customers will avail of the new information search facilities through the Internet is unclear.
- Traditional buyer behaviour models contribute little to our thinking about how customers may use the innovation of the Internet in their banking.

3.8 Advantages of Relationship-oriented Exchange

Within the literature many reasons are put forward in support of relationship development:

- It is cheaper to maintain existing customers than to recruit new customers (Dodge and Fullerton, 1997; Aijo, 1996; Jones, 1996; Stevens, 1998).
- A key to long term profitability is loyalty and loyalty depends on customer retention (Dodge and Fullerton, 1997; Pearce, 1997; Teich, 1997).
- Mass marketing is becoming less viable as markets fragment and customer segments become more discrete and specialised (Gummesson, 1997; Murray and O'Driscoll, 1996; Webster, 1992).
In order to gain a more holistic overview of exactly what the scope of RM actually is it is useful to refer to the work of Brodie et al (1997). The synthesis of Brodie et al’s streams of research illustrates the breadth of marketing influence and the importance of considering the discipline as an organisation wide cohesive and integrative activity.

3.8.1 Levels of Meaning in the RM Concept

Brodie et al (1997) provide a useful analysis of the various meanings attributed to RM as a concept in the academic literature. These levels of meaning are illustrated in Figure 3.5 in terms of their increasing levels of depth and scope.

**Figure 3.5: Scope of Relationship Marketing Meaning**

<table>
<thead>
<tr>
<th>LEVEL SOURCE</th>
<th>MEANING</th>
<th>LITERATURE</th>
</tr>
</thead>
</table>

Adapted from Brodie et al (1997)

The broad and varied meanings attributed to RM as a concept have led to the term being abused and prone to an “abundance of vague interpretations” (Gordon 1998). Indeed Gordon (1998) argues from a practitioner perspective that before organisations can be expected to embrace the RM concept it must “be defined using common terminology...at present every function in a company will have different interpretations if this term” (p85).
The work of Brodie et al (1997) builds on the seminal work of Christopher et al (1991) who propose that in addition to formulating marketing strategy based only on end-consumers’ requirements and influences, a company should consider other ‘markets’ that impact on the effectiveness of this exchange process. The six markets model reflects a broadened view of marketing and comprise of:

- Internal Markets (employees and departments, inter-functional co-operation),
- Referral Markets (sources of referrals e.g. existing customers who will act as advocates),
- Customer Markets,
- Supplier Markets (move away from adversarial stances towards more collaborative exchange processes. Supply chain management);
- Influence Markets (infrastructure, communications of utilities);
- Employee Markets (recruitment and retention of appropriate staff).

Such a categorisation is again mirrored in the work of Buttle (1996) who identifies various forms of ‘partnership’; supplier, lateral, internal and buyer. Given this breadth of classification regarding RM as a concept it is helpful to examine some definitions of RM with the objective of gaining a fuller understanding of exactly what RM is and how it can be operationalised.

3.9 Defining Relationship Marketing

Two key definitions come from the services marketing context and industrial marketing context. It has been argued that these two areas have made “the most developed contributions to relationship marketing” (Gummesson, 1994 p7). The definitions are as follows:

“Relationship marketing is attracting, maintaining and - in multi-service organisations - enhancing customer relationships.” (Berry, 1983)

“Relationship marketing concerns attracting, developing and retaining customer relationships.” (Jackson, 1985a)
Although the context of these definitions may differ, key commonalties can be detected and phases of attraction, maintenance/development and enhancement/retention are clear (Sheth, 2002). Farquhar (2004) outlines an interpretation of relationship exchange as one where “the buyer and seller are active in a rich, multi-dimensional exchange” (p87).

Gronroos (2004) reflects that “the relationship marketing perspective is based on the notion that on top of the value of products and services that are exchanged, the existence of a relationship between two parties creates additional value” (p99).

Research specific to financial services markets has been conducted using these themes as an operational framework (Stewart and Durkin, 1999). Such commonalties suggest a time dimension is central to RM and this is indeed a key characteristic. The development and discussion of relationship life cycles in the literature (Dywer et al, 1987; Burdett, 1992; Szmigin, 1993) reinforces this ‘time’ theme, emphasising that customer - firm relationships are more than just transactions. However what such definitions mean for RM in any operational sense is seldom addressed in the literature. A popular and more recent definition of relationship marketing gives some insight into this challenge:

“Relationship marketing is to identify and establish, maintain and enhance and when necessary also to terminate relationships with customers and other stakeholders, at a profit, so that the objectives of all parties involved are met, and that this is done by a mutual exchange and fulfilment of promises.” (Gronroos, 1997)

3.10 Relational and Transactional Modes

Gronroos (1997) argued that customers can operate on the basis of either a relational or transactional intent. Consumers operating in a transactional mode are not open to relational invitations and their priorities may typically revolve around such considerations as price and convenience. As regards relational consumers, these may be either ‘active’ or ‘passive’. Where consumers in an active mode seek staff contact, consumers in a passive mode are satisfied with the understanding that if needed, the firm will be there for them (Howcroft, Hewer and Durkin, 2003). This difference, in how at various times both customers and firms may be open to relational approaches from each other, is underlined by Zolkiewski (2004) who like Levitt (1986) cautions against a ‘one size fits all’
marketing theory. This is supported by Gronroos (2004) who reflects that “we know far too little about the antecedents of an active or a passive relational mode and about the endogenous or exogenous factors that trigger a shift from transactional mode to relational mode or from a passive relational mode to an active one” (p110).

3.11 Relationship Measurement, Economics and Value

At both operational and theoretical levels, attempting to define a relationship is challenging and is often avoided. This constitutes ‘a glaring omission’ according to Bagozzi (1995) but Gronroos’ 1997 definition (outlined above) goes some way to addressing this omission. At the operational level relationships are somewhat easier to define with a number of episodes or interactions constituting a relationship, (Liljander and Strandvik, 1995; Storbacka, 1994). Some service sectors may lend themselves to easier operational definition of the relationship. For example signing a contract with a telephone supplier can establish a relationship whereas using a supermarket once, does not necessarily constitute a relationship (Stewart and Durkin, 1999)

Gronroos (1997) argues that “marketing in a relational context is seen as a process that should support the creation of perceived value for customers over time” (p407). However he elaborates that there are always latent (or inactive) relationships and it is not always best to activate these relationships because they may not be economically viable. This point was supported by Levitt (1986) who stated that “not all relationships can or need to be at the same level of intimacy or of the same duration, these characteristics depend on the extent of the actual or felt dependencies between the buyers and the sellers” (p120).

At another level, criteria for relationships can be found in the literature on social psychology (see for example Duck, 1991; 1992). These criteria include commitment on both sides; accommodation of the other party; mutual trust; mutual respect; affection; good communications; prioritising interests of the other party; support; and, assistance of the other party’s long-term goals. Clearly these are the rules of a friendship relationship. Just as relationship processes are integral in friendship and marriage, so it is with marketing relationships. The available marketing research shows that successful, continuing relationships are characterised by trust and commitment (Shemwell et al, 1994; Strandvik
and Liljander, 1994; Morgan and Hunt, 1994). Commitment is promoted by satisfaction, lower quality alternatives and greater investment size and can be developed by the provision of benefits superior to the alternatives, shared values, communication and goodwill. These findings echo those in social psychology research into close personal relationships, (see Rusbult and Buunk, 1993; Zolkiewski, 2004).

Examining what relationships mean underlines the fundamental re-orientation required to move from a transactions mode to a relational mode of doing business. Webster (1992) observes that:

"The focus shifts from products and firms as units of analysis to people, organisations and the social processes that bind actors together in on-going relationships." (Webster, 1992: P10)

It is perhaps because of the fundamental nature of this change that Fournier et al (1998) argue that relationship marketing, while powerful in theory, is troubled in practice. They suggest that it is simply untenable for customers to have relationships with all the companies that would want this. Indeed, it has been argued elsewhere that it is not always possible or appropriate for companies with large customer bases to have relationships with each and every customer (Barnes, 1994; Barnes and Howlett, 1998; Saren and Tzokas, 1998; Piercy, 1998). Therefore, what is required is judicious and intelligent relationship marketing and management at a market/segment level and on a customer by customer basis (Stewart, 1995).

Interestingly recent research into the UK financial services industry found that while spending on customer relationship management programmes had risen by over 30% over the past 12 months "there was still great confusion about the definition and context for CRM". It was concluded that this lack of clarity points to a lack of strategic focus and a good example of this was that almost two-thirds of respondents did not know how much their profitability increased or decreased, as a result of their CRM projects (Ernst and Young, 1999).
3.11.1 Relationship Value

The concept of ‘value’ emerged in the 1990’s as a “means of differentiation and as a key to the riddle of how to find a sustainable competitive advantage” (Gronroos, 1997; p411). If transactions are the foundation of marketing then value is related to product/service exchange. This value exchange has to create value not only for the customer but also for the firm. To be able to manage value creation in a relational context the firm must focus on its resources (marketing, personnel, financial, technological, physical, time). harnessing them in a customer driven manner and creating a value proposition attractive to target markets. This value proposition will consist of both tangible and intangible characteristics and it will change over time. In doing this more value is added to the core product, thereby, improving customer satisfaction so that the customer-firm bond is strengthened and customer loyalty achieved (Ravald and Gronroos, 1996; Gronroos, 1997; Buchanan and Gilles, 1990).

The concept of customer perceived value (CPV) has been variously explored. Ravald and Gronroos (1996) define CPV as

\[ CPV = \frac{\text{Perceived Benefits}}{\text{Perceived Sacrifice}} \]

Value is argued to be a subjective evaluation and deemed to vary by individual, depending on personal values, needs and preferences, as well as, the financial resources of the individual customer. There are parallels here with Levitt (1980) who argued that what Ravald and Gronroos (1996) subsequently call the ‘value carrier’, is indeed a complex cluster of value satisfactions which can be more important than the generic product.

Like Ravald and Gronroos (1996), Buchanan and Gilles (1990) developed a technique called the VMR (Value Managed Relationship). This technique is based on the rationale that ‘what gets measured gets done’ and they advocate that maintaining relationships with existing customers leads to a mutuality of value between firm and customer.
This mutuality of value derives from the following:

- consistent orders from satisfied customers;
- satisfied customers generate referrals and buy more;
- competitors become locked out;
- premium prices may be achieved.

### 3.12 Financial Services Relationship Issues

Howcroft, Hewer and Durkin (2003) draw attention to the fact that "research on relationship marketing in financial services has tended to focus on commercial rather than retail banking" (p1002). Much of the work that has focused on retail banking has its origins in the Nordic school of relationship marketing. Holmlund and Kock (1996) identified stable relationships in retail banking in Finland, while Stewart (1995) also identified stability in relationships in retail banking and proposed that such stability created an inertia in customer exit behaviour.

Murphy (1996) argues that the benefits of relationship marketing in retail banking rest in the fact that "it is more profitable to retain customers through developing relationships than to devote high levels of marketing effort to acquiring new customers" (p74). Murphy (1996 p.75) outlines the fact that:

- over time retail bank customers tend to increase their holding of other products across the range;
- long term customers are more likely to become a referral source;
- the longer a relationship continues, the greater the bank’s understanding of that customer;
- customers in long-term relationships are more comfortable with the service, the organisation, methods and procedures.

Moriarty et al (1983) define relationship banking as "a recognition that the bank can increase its earnings by maximising the profitability of the total customer relationship
over time, rather than by seeking to extract the most profit from any individual product or transaction” (p4).

Challenges facing financial services marketers with respect to the implementation of relationship banking initiatives include:

- the ability to measure customer lifetime value (Stewart, 1995; Murphy, 1996; Storbacka, 1994);
- two way communication and information exchange (Abram Hawkes, 1995; Butler and Durkin, 1995) and;
- company culture including employee commitment (Caruana and Calleja 1998; Durkin and Bennett, 1999; Bennett and Durkin, 2000).

Gwinner, Gremler and Bitner (1998) established that relational benefits perceived as important by customers included confidence benefits (perceptions of reduced risk), social benefits and special treatment benefits.

Murphy (1996) proposes that the HSBC Bank subsidiary ‘First Direct’ represents a model of best practice. It consistently attains the highest customer satisfaction ratings in the industry (NOP, 1997) and puts its success down to:

- the creation of a delivery system which provides higher quality at lower cost and with greater convenience;
- creation of a corporate culture designed to support high-quality service rapid customer responsiveness;
- have a competitive advantage with respect to systems and technology.

It is interesting, in the context of this research, that the bank which is being held up as the model of best practice is one which does not have a branch network and manages its customer relationships ‘remotely’ through telephone and Internet technologies.
It is also interesting that many banks are now assessing relationship profitability carefully and are exploring ways to migrate lower net worth customers towards more remote delivery mechanisms (such as the Internet) while those high net worth customers who offer greater cross-sales potential, are being targeted for in-branch selling initiatives.

The challenge of delivery balance and relationship strategy is captured by Gilbert and Choi (2003) who argue that “the reinforcement of a relationship is increasingly important as banking becomes more technical and electronic. With advanced technology banks can benefit from lower operating cost through the Internet or call centre. However personal aspects of customer service are important and a bank may need to develop closer bonds via human contact” (p137).

Summary

- A key to long term profitability is customer loyalty and this depends on customer retention;
- Key stages of relationship management include; attraction, development and enhancement;
- Relationship Marketing while powerful in theory is troubled in practice;
- It is untenable for customers to have relationships with all the companies that would wish it;
- Banks are actively assessing relationship worth and are attempting to match customers to channels in terms of their profitability;

3.13 Personal Relationships: Face to face Customer Interactions

While “the infusion of new technologies in the services sector is ubiquitous” (Lee and Allaway, 2002) there remains limited literature describing studies that have been conducted with regard to the propensity and motives of customers to use technology when interacting with their banks (Zeithaml and Gilly, 1987; Moutinho and Meidan, 1989; Leblanc, 1990). Building on Kotler’s (1997) triangle model, which demonstrates the linkages between firm, employee and customer Parasuraman and Grewal (2000) add
technology and set a new research agenda at the interfaces of firm-technology; employee-technology and customer-technology.

Historically such research in banking focused on the adoption of technology in the form of the Automated Teller Machine technology (ATMs) (see Marr and Prendergast 1991, 1993). The study completed by Marr and Prendergast (1993) found that the main variables encouraging consumer acceptance of such technologies were time convenience, place (locational) convenience and simplicity of use. Interestingly the same study examined motives for consumers not using technology and found that a preference for dealing with humans was a key factor (see also Leblanc, 1990 on this latter point). More recent research, specific to the growth of self-service technologies (SST), has been conducted by Lee and Allaway (2002). They propose that a successful SST improves service firms resource management by lowering delivery costs and by releasing service personnel to provide better and more varied service (p566). This point is also supported by Ricard et al (2001) who claim that SSTs can “ensure a customised service offering, help companies recover from service failure and are often perceived by customers as a delightful experience” (p300). However, Lee and Allaway (2002) emphasise the challenge of integrating SST in a relationship oriented way when they state;

“Consumers who are used to personal assistance in their service encounters may be less eager to adopt new automated service delivery innovations even though these services might appear to offer clear advantages.”

(Lee and Allaway, 2002: p554)

This point is supported by Mattila et al (2003) who, in their study of older bank customers in Finland established that fears about security and a lack of personal contact were the key inhibitors to e-banking adoption (p524).

Lang and Colgate (2003) argue that technology may not always have a positive impact on the relationship between supplier and customer and highlight that “few authors have investigated whether the presence of IT-mediated channels have a detrimental effect on relationships between firms and their customers” (p30). Supporting this Harden (2002) proposes that given the tendency towards virtualisation, “it is inconceivable that bank-customer relationships will become any more intimate in the future” (p323).
The propensity and tolerances of varying customer groups to embrace SSTs and for what purposes, products and services, seems a key consideration in this debate and adds to its complexity. Consistent with Barczak, Ellen and Pilling (1997), who highlighted the importance of individual attitudes in technology use, Thornton and White (2001) argue that “customers who like computers, feel comfortable using technology, and who feel confident using electronic banking are more likely to use such automated and more technical forms of distribution channels... on the other hand human tellers are more likely to be more frequently used by those customers who dislike computers and technology” (p179).

While the logic in this argument is sound in itself, such issues of personal experiential knowledge and self efficacy are argued by Durkin and Howcroft (2003) to be only part of the answer regarding propensity of use. This view is supported by Nielsen (2002), who advocates that “a broader perspective is needed to understand how Internet banking affects the relationship between banks and their customers” (p475).

Such social and relational propositions are firmly grounded in theory. For example social interdependence theory recognises that the behaviours of each relationship party have an effect on the outcomes perceived by the other. Further, it provides a framework for analysis of the balance of dependence and interdependence that shapes the nature and content of the interaction (Czepiel, 1990a). Parallels can be seen between the work of Czepiel (1990a, b) and that of Zeithaml, Berry and Parasuraman (1985, 1988) with respect to perceived service quality levels and resultant challenges for expectations management.

Role theory also recognises that service encounters are human interactions but emphasises the aspect of role performance. Role theory involves the “study of the conduct associated with certain socially defined positions rather than of the particular individuals who occupy these positions” (Solomon et al, 1985, p102). In relation to this, role theory proposes that “each party to the transaction has learned a set of behaviours that are appropriate for the situation and will increase the probability of goal attainment” (p101).
The development of close social relationships ultimately approaches what is known as ‘psychological loyalty’ which binds one to another, even when it seems contrary to self interest. This concept is very important when considering the long-term orientation inherent in the area of relationship marketing. According to Solomon et al (1985) “in pure service situations...customer satisfaction and repeat patronage may be determined solely by the quality of the personal encounter” (p100). Dwyer, Schurr and Oh (1987) support the importance of ‘socialisation’ in the encounter arguing that “relational exchange participants can be expected to derive complex, personal, non economic satisfactions and engage in social exchange” (p12).

3.14 Augmenting Personal Relationships: The Role of the Brand

Feldwick (1996) regards a brand as “simply a collection of perceptions in the mind of the consumer” and goes on to state that at its simplest “a brand is a recognisable and a trustworthy badge of origin and also a promise of opinion”. The relevance of brands in managing consumer perceptions and consolidating or augmenting the face to face interactions involved in relationship development is therefore evident. Randall (1997) argues that the four main uses of the brand are:

- it offers identity to the consumer;
- this identity provides a short hand summary of all the information the consumer holds about the brand;
- the brand name provides reassurance and guarantees to provide the benefits expected; it therefore provides security;
- the brand name offers more than the generic product; it gives added value.

Morrison and Firmstone (2000) propose that “if trust functions to make information manageable and to give confidence over action in the absence of full knowledge then brands function in the same way as trust - they act as ‘summarised knowledge’ ” (p607). The brand can often ‘stand in’ for missing knowledge and trusting in a brand gives the confidence to act, through reducing anxiety and by limiting the possibility of disappointment (Durkan et al, 2003).
Williams et al (1996) conclude that branding is a new challenge for financial services marketers. They propose that there are four key pillars upon which successful brands are built and which must be maintained if a brand is to remain healthy. These are:

- Differentiation - reason for being;
- Relevance - point of differentiation to users;
- Esteem - reputation for delivering; a function of quality and popularity;
- Familiarity - well established / part of everyday life.

Together Differentiation and Relevance constitute what the authors term Brand Vitality while Esteem and Familiarity constitute Brand Stature.

Williams et al (1996) argue that most retail bank brands have eroding potential i.e. relatively low differentiation, falling relevance and esteem but with a high level of familiarity. They argue that although retail banks are well established in the mind of the consumer, it is difficult for consumers to perceive any real difference between them. Such an argument is supported by Whitfield (1999) who states that “where banks fail in branding is in the fact that there is no differentiation” (p26).

The new on-line banking ventures set up by the traditional players have all opted for the development of a new brand name, rather than extending the established corporate brand name into the e-commerce market; for example IF, Egg and Smile.

Reasons proposed for this include the argument that traditional banks want to keep the new e-commerce entities clearly differentiated from the disadvantages associated with the parent brands. However Williams et al (1996) caution that too much differentiation may actually jeopardise the level of trust and familiarity that the traditional bank is built upon. Anything unconventional or surprising they argue may cause anxiety and worry and exaggerate feelings of risk. Esteem, rather than differentiation is therefore proposed as a more effective strategy for banks to pursue. Drivers of esteem include an old-fashioned service mentality and notions of closeness and understanding are also important here.
Closely related to esteem is trust where consumer perceptions of solidity, stability, competence and personally relevant service, all contribute to its creation. Such dimensions inherently important in driving esteem, fit comfortably with the social relationship dimensions highlighted by Czepiel (1990) and Hollander (1985). Indeed it is interesting from a relationship marketing perspective that the initiatives proposed by Williams et al (1996) are very much those built upon face to face encounters, rather than the more remote relationships that exist in on-line only environments. Extending from the more dyadic nature of bank-customer interactions Williams et al (1996) highlight the importance of Integrated Marketing Communications (IMC) which can help cultivate what they term ‘handshake strategies’ between the brand and the customer. For example, sponsorships, parties, integrated messages and interactive dialogue through web-sites all go some way to creating a quasi-physical contact which may help build ‘liking’.

The literature on financial services brands argues that a bank’s brand is made up of much more than what is conveyed through the above the line promotional messages. The Economist (1999) reasons that the origin of the brand values are “in the DNA of the firm - it reflects culture”. In financial services the brand is argued to depend heavily on the people who are employed in the branches. Llewellyn, B. (1996) agrees arguing that the perceptions of the brand are mainly derived from customer experiences with staff. Whitfield (1999) adds a note of caution because “every high street brand is looking at how they can cut back on bricks and mortar” and raise the question “..how do they (the banks) propose to maintain meaningful relationships with their customers.”

3.15 Impersonal Relationships: The Increasing Use of Technological Interfaces

There are, however, models that deal purely in remote relationships and which have been implemented very successfully. Their high level of customer satisfaction (90% according to NOP research) make HSBC’s First Direct a clear success story in this regard and Prudential’s direct banking subsidiary ‘Egg’ was overwhelmed with interest from the general public following its launch. Interestingly in the case of Egg, 20% of enquiries came via the Internet. Broderick and Vachirapompuk (2002) propose that one of the key challenges of the Internet as a service channel is to determine how firms can manage
service quality because the remote nature of these new technology formats bring significant change in customer behaviour.

Overall, there is a limited literature on the propensity and motives of customers to use technology when interacting with their banks (Zeithaml and Gilly 1987; Mouthino and Meidan, 1989; Leblanc, 1990). As mentioned previously (Section 3.13) such research initially focused on ATMs, (see Marr and Prendergast, 1991,1993).

More recently Australian based research has examined customers' usage and attitudes towards distribution channels (Thornton and White, 2001). Surprisingly, this study uses ATM usage as the basis for generating the research hypotheses, and place little emphasis on the Internet. The study establishes that multi-channel delivery is higher cost for banks and that a more benefit focused segmentation approach would therefore be appropriate. Recent research focusing on the propensity of corporate banking customers to favour personal interaction over technological interfaces was undertaken by O'Donnell et al (2002). A most interesting aspect of this study was the disproving of the hypothesis which proposed that as customers became more satisfied with technology as a means of interaction, the importance they attached to personal interaction would decrease. Such customers always wanted a high degree of personal interaction in their banking relationship. In support of this finding, Rotchanakitumnuai and Speece (2003) identified that in Thailand corporate banking customers were resistant to the Internet because of security risks and the need for reassurance from their bankers.

Thornton and White (2001) argue that "customers who like computers, feel comfortable using technology, and who feel confident using electronic banking are more likely to use such automated and more technical forms of distribution channels...on the other hand human tellers are more likely to be more frequently used by those customers who dislike computers and technology" (p179). While the logic in this argument is sound in itself, personal experiential knowledge and self efficacy are only part of the answer regarding propensity of use (Durkin and Howcroft, 2003).

An early identification of the important role of staff was made by Roth and Van der Velde (1989) who argued that the role of branch staff will be even more critical in the future as
technology becomes more pervasive, particularly, in the delivery of non-routine and more complex financial services products. They stated that “...people are necessary for establishing the initial customer relationship and are essential for maintaining and servicing customer accounts” (p32). This supports a key point made by Chase (1978) more than a decade previous when he stated that “technological devices can be substituted for some jobs performed by direct contact workers...the attitude of the customer will determine the ultimate quality of the experience.” Priluck (2003) highlights the importance consumers themselves attach to having a personal relationship because “the buying and information processing tasks are simplified, risk is reduced and psychological comfort is enhanced”(p37). Albrecht (2003) goes further accusing those banks who develop the electronic interface as “building a digital moat around their organisations.” He warns that a severing of personal connections to real communities will cause psychological stress and a sense of ‘connected anonymity’.

Summary

- Self Service Technologies (SSTs) can lower delivery costs and provide more varied and better service;
- However IT may not always have a positive impact on the relationship between supplier and customer;
- Trusted brands can reduce customer anxiety by limiting the possibility of disappointment;
- New on-line banking ventures have, in the main, opted for new brand names rather than using the established corporate brand name of the parent;
- Brands are the DNA of a company, they reflect culture and as given this front line bank employees have much to contribute to how a brand will be perceived by the customer;
- There is limited research with regard to the propensity and motives of customers to use technology when interacting with their banks but insufficient attention is being paid to the negative implications for bank-customer relationships of increasing use of technological interfaces.
3.16 Broadening Perspectives in Personal and Remote Interactions

Given that banks apply greater resources to developing relationships with those clients who have higher net worth potential, it follows that there are likely to be mismatches between what customers and banks deem appropriate interaction mediums (Howcroft and Durkin, 2000). The availability of 'high-touch' services may therefore be the preserve of high net worth relationship clients. That said recent research cautions that new self-service technologies in banking “can result in lower switching costs, makes cross-selling more difficult and customer information harder to obtain” (Rexha, Kingshott and Aw, 2003).

Compounding the difficulty is Gronroos’ (1997) contention that customers can be classed as relational and transactional. While relationships will be shunned by those customers in transactional mode, those in relational mode can be either active or passive (Howcroft, Hewer and Durkin, 2003).

Lee (2002) highlights a need for the availability of both a ‘high-tech’ and a ‘high-touch’ approach where the human service dimensions are considered as important as the technology enabled remote service interactions. Several authors have cautioned against any attempt to replace the availability of human service interaction with technology in various industry contexts (Pine, Peppers and Rogers, 1995; Chase, 1978).

Ricard et al (2001) highlight the difficulty in proposing a broader perspective towards a reconciliation of the extremes of dominantly personal or remote interactions. They highlight two “diametrically opposed schools of thought; one suggests that the use of technology has a positive impact on the relationship approach...the other predicts a negative impact because the technology can diminish the customer’s interest in a relationship approach” (p301).
This dichotomy is illustrated in the conceptual model in Figure 3.6. As well as mapping the literature pertaining to the diametrically opposing views outlined above, a middle-ground is identified, as evidenced in more recent literature. This middle-ground propose...
that it is the bank-customer relationship and the interaction preferences of each party that will drive the balance offered between remote and personal interactions.

In support of this middle-ground approach Ricard, Prefontaine and Sioufi (2001) warn that an over-emphasis “on new technologies may well lead to a standardisation of products and services and a gradual robotization that may be poorly received by customers.” As suggested by Figure 3.6 there is growing concern over the extent to which SST interfaces could and should replace the traditional branch based interface and specifically their impact on relationship quality, (Thornton and White, 2001; Nielsen, 2002; Rexha et al, 2003; McCartan-Quinn et al, 2004).

Supporting the emphasis on the important role for branches and staff contact, Lee (2002) argues that the role of branch staff will be even more critical in the future as technology becomes more pervasive, particularly in the delivery of non-routine and more complex financial services products. Byers and Lederer (2001) suggest that changing customer behaviour and attitude, rather than banks’ cost structure, will significantly affects the banks’ distribution strategy.

This supports a key point made by Chase (1978) when he stated that “technological devices can be substituted for some jobs performed by direct contact workers...the attitude of the customer will determine the ultimate quality of the experience”. According to Pastore (2001), “customers remain decidedly multi-channel in their approach to banking” and the role of the branch as part of that multi-channel mix is still highly important to consumers (see also Black et al, 2001; 2002).

Therefore, at this stage it is not clear to what extent remote communication can replace or complement more traditional methods (Yaklef, 2001). Lee (2002) draws attention to the fact that “the importance of channels in building relationships with customers has not been fully integrated yet” (p238). However, what is clear is that there is an interaction balance to be struck with respect to personal and remote interfaces in relation to customer and bank preferences. This balance appears to be a function of perceived relationship worth from the perspectives of both bank and customer. Theoretically, this is the balanced approach strategy being adopted by the case bank under study.
3.17 Managing Relationship Value Through Migration Strategies

According to The Economist (2000), the biggest problem, which accounts for the recent decline in the on-line banking revolution, has been the banks’ talk of liberating customers from the yoke of traditional branches. This is regarded as having been motivated more by the banks’ needs to reduce cost rather than the needs of their customers (p1). Increasingly banks are now looking at customer relationship profitability and attempting to migrate customers in terms of their potential contribution towards the most appropriate and cost effective delivery channel for the bank. Ernst and Young (1999) cite this as a ‘very controversial area’. Such migratory efforts must be balanced with the customers’ needs, and even more importantly, with the customers’ satisfaction in mind. Financial services firms that are able to offer the right channel mix to the right customers for their specific needs will be able to retain the customers and develop long-term relationships.

3.17.1 Interactive Voice Recognition Systems (IVRs)

A good example of enforced migration toward remote interactions is that concerning interactive voice recognition systems. In recent years, banks have experienced a sharp increase in the volume of calls to customer service centres and they have responded by introducing automation with touch-tone and interactive voice response (IVR) systems (Bigham Bernstel, 2001). IVRs are the interactive recordings that allow the customer to make selections to route them to the specific customer service function which will most likely provide them with the information they seek (Anton, 2000). Such customer service functions will usually be automated but systems will usually cater for the provision of a human operator too should the caller desire this personal interaction. Indeed many authors advocate the need for personal interaction;

"Touchtone phones can only do so much - eventually customers want to speak to real people."
(Harvey, 2001)

Just like the Internet, IVR combines computers and telephones (Hatlevig, 1995). Many banks let customers access account data like records of deposits and withdrawals using
touchtone-based IVR menus. However recent research in the USA found that rather than reducing costs by enabling customers to serve themselves, costs actually rose as customers repeat phoned to talk to a ‘live’ operator with questions about the initial IVR managed query (Hollman, 2002). In fact research has identified concerns about the rationale for IVR use in managing customer interactions. The following quote is typical;

“Technology is alleged to have caused an epochal shift in power from sellers to buyers, putting pressure on companies to establish close and lasting bonds of trust with customers. How then to explain the electronic fortress that so many companies have erected against questions and complaints?” (Nickell, 2001)

Research has shown that it is not uncommon for 40% to 80% of callers to IVR systems to 'bail out to a live agent or hang up before finishing the call' (Bigham Bernstel, 2001). Another commentator argues that the adoption of IVR systems by banks is mainly cost based rather than customer driven. What needs to be considered in greater detail is the cost to the customer of the entire experience in terms of time and often, frustration (Newell, 2001). Such a perspective is very similar to the views proffered by Ernst and Young (1999) regarding the imposition of customer migration strategies in retail banking.

In recognition of the failings of IVR systems, speech recognition systems are argued to offer a better alternative. Such newer systems are known as ASRs (Advanced Speech Recognition Systems) and do not require the customer to key in options of choice. Such choice is facilitated by the customer verbally asking, without prompts, for whatever service is required. Prompts are only invoked when a mistake is made or the system doesn’t recognise the request. ASR is argued to represent a more rich and robust user experience which is also faster (Bigham Bernstal, 2001).

Summary

- Given a new focus on relationship worth it follows that banks and customers may have varying ideas as to the extent of face to face interaction various customer segments warrant.
- There is a key difficulty in reconciling the two apparent extremes of face to face personalised interaction and Internet-enabled remote interactions.
An over-emphasis on new technologies by banks may lead to a standardisation of products and services as well as risk customer dissatisfaction with the new interface (e.g. often evidenced in the case of IVR).

The role of branch staff may become more critical in future as technology becomes more pervasive.

3.18 Contribution of the Literature to the Research Study Objectives

This chapter has outlined the state of adoption of remote interfaces by current and future bank customers. Of interest has been the slow pace of such change within the payments systems. Predictions made by APACS (1999) do not support the view that the branch is dead and that we are rapidly moving to a cashless society. Indeed there appears to be a growing dissatisfaction with remote channels. In a recent article in The Sunday Times, Wall (2000) cites numerous examples of poor on-line service from the new bank websites and states that "the Internet seems more of a dot.con than dot.com". Freed (2003) warns that "dissatisfaction with on-line banking will impact the entire banking relationship with 25% of customers saying a bad experience on-line would create such a negative impact" while Bughin (2003) points out that on-line banking continues to disappoint with only 5%-10% of the customer base using such services (p2).

Conversely, there is agreement that customers generally appear increasingly happy to interact remotely to some extent because of the added value dimension of 'convenience' (Taylor 1994). However the rate at which such innovations are adopted is slow and the range of product uptake through this medium remains unclear.

In America many banks have started to take steps to create more cost-effective alternative delivery systems that also meet the increasing level of consumer demand for convenience. In undertaking this process banks in the US have also discovered that customer attitudes are changing and where once 'convenience' was defined by customers in terms of geographical convenience, consumers in the information age have become 'time-poor' and now define convenience by when they can do their banking rather than where (Barrett, 1997). Indeed research conducted in the US showed that of 1200 Internet users surveyed, the majority of Internet users considered the net "a great place to comparison shop for
financial services, but still with some maturing to do as far as financial services sales are concerned” (Brittan Associates, 1998)

A clear link has been made between the differing literatures allowing for application at the level of the bank-customer interface. However, this has raised a number of important questions; *inter alia* -

- What customers do banks want to interact with them remotely and at what speed is this likely to happen?
- What education and reassurance do such customers need in order to embrace remote delivery platforms?
- What will be the impact on bank relationship management strategy as a result of customers embracing on-line banking?
- Which customers will choose to embrace on-line banking applications first and in what ways will such adoption reflect their propensity to adopt new innovations?

Objectives 2 and 3 of this study focus on customer issues, and in particular which customers are expected to adopt Internet banking and what products will they engage in this remote interaction. This chapter sets a scene of dramatically increasing projections for remote banking but the traditional channels will probably remain dominant until at least 2010. As relationship management becomes increasingly important in retail banking, the bargaining power of the customer will increase thanks to new information sources, ease of competitor shopping and reduced switching costs. The risks are that where face to face interactions are reduced customers may begin to discriminate purely on price, as the added relationship value is absent (Gronroos, 2004). Strong brands however are a way of reducing this risk but there remains a strong need to balance face to face with remote interactions and to understand the particular balance preferences of different customer segments. A consideration of all of these issues is important in the derivation of Research Stage 2 hypotheses.
Important too, is the linkage with the preceding chapter which focused on ‘Technology and Banks’ and parallels in the findings from this chapter can also be found here, *inter alia*;

- Judicious and intelligent relationship marketing enables more effective and efficient sales approaches. Measuring relationship value is central to this.
- In a multi-channel environment the Internet represents a new remote channel to market but the balance between remote and face to face interaction is key to success and this balance must be driven by customer relationship value. In other words customers will have to be matched to channel in terms of value and cost.
- The Internet increases the bargaining power of the customer but (i) only if the customer chooses to use it in this way and (ii) only if the increased customer bargaining power now exceeds the bank’s bargaining power in the relationship

3.19 Conclusion

With regard to this study an understanding of both personal and impersonal relational contexts seem important. Thus far the research context has been examined (Chapter 1) as has the impact of technology generally, and new technologies in particular, on banking (Chapter 2). This chapter has focused more on the impact of such technology on consumers and their relationships with banks and has established the following:

- there will be increased use of remote delivery methods by customers in future although existing channels will still be used extensively. Customers are favouring a multi-channel environment;
- the rate at which new innovations, such as the Internet, may be adopted by such customers remains uncertain;
- the type of interface to be used when accessing the Internet by customers remains uncertain;
- the rate at which customers will embrace remote delivery in general, and what the favoured interface will be remains unclear at this time.
CHAPTER 4:

DIFFUSION OF
TECHNOLOGICAL INNOVATIONS
IN BANKING
CHAPTER 4: DIFFUSION OF TECHNOLOGICAL INNOVATIONS IN BANKING

4.1 Introduction

Building upon the preceding chapters which dealt with the impact of technology, specifically on banks and customers this chapter examines more closely factors which might influence the adoption / non-adoption of such innovations (Black et al, 2001; Gerrard and Cunningham, 2003). This chapter reviews the Diffusion of Innovation literature and that related to decision-making processes as proposed by Driver (1979). The chapter builds towards a conceptual model using this literature, and that reviewed in earlier chapters.

4.2 Background

Given that consumer adoption is central to the success of the Internet as a viable distribution channel and a value proposition, it is necessary to fully understand the diffusion of innovation process.

According to Rogers (1983) research on the diffusion of innovations started with a series of independent intellectual enclaves. The research set out to explore the gap between what is known and what is effectively used in society. An understanding was required to help bridge the gap between how new ideas or innovations spread to potential receivers and the factors which affected their adoption (Rogers and Shoemaker, 1971).

An innovation is "an idea, practice or object perceived as new by an individual." Diffusion is defined as a special type of communication by which innovations spread to members of a social system (Rogers and Shoemaker, 1971).
4.3 Research Traditions

Rogers (1983) proposed nine major diffusion research traditions encompassing a multi-disciplinary contribution of over three thousand publications as at 1983. The number of publications by tradition follow in parenthesis;

- Anthropology (134)
- Early Sociology (10)
- Rural sociology (791)
- Education (336)
- Public Health and medical sociology (226)
- Communication (372)
- Marketing (304)
- Geography (130)
- General sociology (382)
- Other (500)

As far back as 1903 contributions were made by Tarde who set out “to learn why, given one hundred different innovations conceived of at the same time...only ten will spread while ninety will be forgotten” (cited in Rogers 1983 p40). Tarde (1969) observed that an innovation is first adopted by an individual who is socially closest to the source of the new idea, and then it spreads gradually from higher-status to lower-status individuals. Dickerson and Gentry (1983) explain that the early literature on diffusion from rural sociology “painted a picture of the innovator as something of a misfit” whereas more recently, the consumer behaviour literature has portrayed innovators as being socially integrated (see for example Schiffman and Kanuk, 1978).

4.4 Research Perspectives

Brown (1981) classified diffusion research into four perspectives that aid our understanding. These perspectives are as follows:
4.4.1 Economic History Perspective

The economic history perspective posits that innovation is a continual process. The form and function of the innovation and the environment into which it might be adopted are modified throughout the life of the innovation and these changes affect both the innovation and its market. Whether the changes are dramatic or subtle, those innovations which are successful typically become more adopted into the market and will, therefore, be adopted by an increasingly wider range of persons or organisations. Determinants of this progression include differences in the economic, social, location and demographic make up of the population.

4.4.2 Adoption Perspective

The adoption perspective which is primarily used in the geography discipline is best summarised by Rogers and Shoemaker (1971). The main argument is that the adoption of an innovation is primarily the outcome of a learning or communications process. A key and under researched issue within the adoption pattern is however that of resistance; either in terms of discontinuance or resistance to actual trial and adoption itself.

4.4.3 Market and Infrastructure Perspective

While the adoption perspective is concerned with adoption prompted by demand for the innovation, this perspective takes the stance that the opportunity to adopt is contingent on issues of supply. The main argument is that if organisations / governments do not make the innovation available at or near the location of the potential adopter that person or household will not have the option to adopt in the first place. This emphasis is particularly prevalent in disciplines like human geography and sociology where the innovation may represent, for example, farming innovations or an innovation which seeks to prompt a change in social behaviour (e.g. family planning). Thus, conceptually this perspective recognises the supply side of diffusion and shifts attention to the diffusion agency rather than the adopter.
4.4.4 The Development Perspective

Deemed a logical extension of the Market and Infrastructure perspective and first proposed by Brown (1981), this perspective focuses attention on the importance of access to resources and public infrastructure. It questions the commonly held belief that innovation is generically a ‘good thing’ and cites examples of third world nations where the diffusion of innovations has not led to significant economic development or improvements in individual welfare.

4.5 Social Systems and Innovation Characteristics

The diffusion of an innovation has traditionally been defined as the process by which innovation is communicated through certain channels over a period of time to members of a social system (Rogers 1983).

Robertson (1967, 1971) delineated three types of innovations:

- continuous - causes little disruption to behavioural patterns and involves the introduction of a modified product;
- dramatically continuous - causes some disruption in behavioural patterns and may involve the creation of a new product or modification of an existing one;
- discontinuous - a new product, such as the Internet, which requires the establishment of a new set of behavioural patterns (Moore 1995).

The diffusion process consists of four key elements: innovation, communication channels, time and the social system. Since its introduction to marketing in the 1960's (see Arndt, 1967; Bass, 1969; Robertson, 1967) innovation diffusion has sparked considerable debate among consumer behaviour (Gatignon and Robertson, 1985), marketing management and marketing science scholars (Engel, Blackwell and Miniard, 1986; Kotler and Zaltman, 1976; Mahajan et al, (1990b); Brown, 1991) argues that marketing innovation depends on a process whereby people gradually become favourably disposed to a new idea: it is a social learning process which results in consumers slowly changing their attitudes and beliefs (p190).
The seminal work of Rogers and Shoemaker (1971) focused on exploring how social systems are changed through the diffusion of new ideas. They argue that the process of social change consists of three sequential steps:

- innovation: the process by which new ideas are created and developed;
- diffusion - the process by which these new ideas are communicated to members of a social system;
- consequences - the changes that occur within a social system as a result of the adoption or rejection of the innovation.

They argue that a population could be categorised as to how likely they were to adopt a new innovation. These groups were:

- Innovators - 2.5%
- Early adopters - 13.5%
- Early Majority - 34%
- Late Majority - 34%
- Laggards - 16%

The characteristics of the innovation are central to how such social change would occur. Rogers and Shoemaker (1971) propose five characteristics of innovations:

1. Relative Advantage is the degree to which an innovation is perceived as better than the idea it supersedes. Factors such as convenience and satisfaction are important the greater the perceived relative advantage, the faster will be the adoption.

2. Compatibility is the degree to which the innovation is perceived as being consistent with the existing values, past experiences and needs of the receivers.

3. Complexity is the degree to which an innovation is perceived as difficult to understand and use.
4. Trialability is the degree to which an innovation may be experimented with on a limited basis. An innovation that is trialable represents less risk to the individual who is considering it.

5. Observability is the degree to which the results of an innovation are visible to others. The easier it is for an individual to see the results of an innovation the more likely they are to adopt it.

These five characteristics go some way to explaining rates of adoption however this list was expanded by Fliegel and Kivlin (1966) to include characteristics such as financial cost, social cost return to the investment, risk associated with the product and efficiency of the product in terms of (i) time saved and (ii) avoidance of discomfort.

A technological innovation is one which possesses some tangible features never before found in that product class.

In their technological study into adopters of home computers Dickerson and Gentry (1983) established that the adopter profile, as well as exhibiting expected traits such as being well educated, an opinion leader, a high-income earner, an information seeker, and also a 'logical introvert'. Their results strongly showed that adopters of home computers generally had more experience of technical products and services than non-adopters. Such an issue was explored further with direct reference to on-line banking when Karjaluoto et al (2002) found that "prior computer experience had a significant impact on on-line banking usage" (p269).

4.6 Marketing Tradition

Of particular interest to this study is the diffusion tradition that emerged in the marketing discipline in the 1960s and 1970s. Marketing managers in large US companies stimulated such research because of an interest in why so many new products failed. As Rogers (1983) pointed out by 1981 there were 304 marketing publications (10% of the total) and marketing ranked fourth in its contribution to diffusion research. The literature emphasised the marketing of new products, identification of new product markets, strategic planning
for diffusion and studies of how the perceived attributes of an innovation affect its purpose.

4.7 Communication of Innovations

Given that an innovation exists and that it has certain attributes, communication must take place between the source and the receivers of the innovation if it is to spread beyond the inventor. According to Rogers and Shoemaker (1971) one of the obvious principles of human communication is that the transfer of ideas occurs most frequently between a source and a receiver who are alike or 'homophilous'. Homophily is the degree to which pairs of individuals who interact are similar in certain attributes e.g. beliefs, attitudes, education and experience. Rogers and Shoemaker (1971) explained that one of the distinctive problems in the communication of innovations is that the source is usually quite 'heterophilious' to the receiver. Therefore the very nature of diffusion demands that at least some degree of homophily be present between source and receiver. Receivers often seek sources that are slightly more technically competent about innovations than themselves.

The main impetus underlying diffusion research in marketing is the Bass model. Subsuming the models proposed by Fourt and Woodlock (1960) and Lansfield (1961) the Bass model assumes that the potential adopters of an innovation are influenced by two means of communication:

- mass media (external)
- word of mouth (internal)

Bass (1969) further proposed that there are two categories of adopter: innovators who only adopt as a result of being exposed to mass media and imitators who adopt on the basis of word of mouth from the innovators.

'Innovators' i.e. those who adopt on the basis of mass media influence are argued to be present at any stage in the diffusion process. Critics of the Bass model argue that such adopters should not be labelled 'innovators' because by definition innovators are those who are the first adopters of an innovation (see Mahajan, Muller and Srivastava 1990).
Research from Freick and Price (1987) identify individuals who assimilate and disseminate information gathered from external sources (i.e. mass media) and influence others as ‘market mavens’.

The Bass model explicitly considers the influence of internal (i.e. Word of Mouth) and external (i.e. mass media) communication on adoption. The model was developed to represent the conversion of potential adopters to actual adopters. Rogers and Shoemaker (1971) proposed that the essence of the diffusion process is the “human interaction between people” and that “...the inter-personal channel is more persuasive for adoption”. In a similar vein Brown (1981) cited US research about how people first learned about the assassination of President Kennedy. They identified ‘early knowers’ and ‘late knowers’, the former having learned of the event through mass media and the latter by means of interpersonal channels (p79).

4.8 Techno-Ready Marketing

In a recent, and very important book in this area, Parasuraman and Colby (2001) explore how and why certain customers adopt new technologies before others. They argue that consumer behaviour associated with cutting edge technology, and that associated with more familiar or traditional offerings, will differ significantly. They use the term “techno-ready marketing” to capture the concepts critical for successfully marketing innovative products and services that are technology intensive. Parasuraman and Colby argue that customers of technology-based offerings require a lot of education and support:

“A customer who starts to bank on-line will need to learn banking anew and will be faced with uncertainties about the entire process.”
(Parasuraman and Colby, 2001; p7)

4.8.1 Principles of Successful Techno-Ready Marketing

Parasuraman and Colby (2001) put forward four key principles which characterise the uniqueness of techno-ready marketing:
- Principle 1: Technology adoption is a distinct process
  Proposes that customer behaviour for a technology-based product differs from a more conventional one. Where human interaction is being largely replaced a whole set of customer beliefs come into play.

- Principle 2: Technology innovations require different marketing strategies
  Proposes that because the adoption process is different when technology is involved the approach to product design, pricing, communications, distribution and service must also be different.

- Principle 3: Ensuring customer satisfaction is a more weighty challenge for a technology based product or service
  Proposes that customers of technology-based offerings require education and support.

- Principle 4: Technology markets are governed by a law of critical mass, often resulting in a winner takes all outcome
  Proposes that in a technology driven market it is not uncommon for a single company to achieve a dominant position.

4.9 Technological Innovations in Marketing

While Rogers (1983) and Brown (1981) emphasise the extent of research into diffusion of innovations in marketing, many marketing commentators feel the level of research to be inadequate (Brown, 1991; Gatignon and Robertson, 1989; Ellen, Bearden and Sharma, 1991). Making this point Brown (1991) cites the anomaly that while the marketing literature has traditionally portrayed New Product Development as a customer led process, in practice many innovations appear to be technologically driven. These innovations appear to rise from a technology seeking a market rather than a market opportunity seeking a technology. Brown (1991) asserts that this is the very antithesis of the marketing concept and acknowledges that a more likely answer is that technological innovations are often the result of both technological invention and marketing insight, although this interdependence is seldom addressed in the marketing literature. Miles (1999) makes the point that large corporations often develop technological innovations without first identifying
the presence of a market. He cites 3M and Olivetti as examples of successful and innovative corporations which allocate extensive resources to innovation clinics where staff are empowered to create and develop new ideas in the hope of either expanding the existing market or developing a new market. In a similar vein, Hultman (1999) argues that such freedom to innovate is crucial and cites rigid formalised planning processes as barriers to such an innovative corporate culture, especially in the context of SMEs.

Gatignon and Robertson (1989) identify a gap in the marketing literature with respect to diffusion. They state that the diffusion literature pertains almost exclusively to adoption but largely omits rejection. While they acknowledge Rogers’ (1983) review ‘discontinuance’, they argue that rejection as an outcome of the decision process, rather than adoption, is not specifically considered. Recent research countering this omission is that conducted into the diffusion of e-commerce by Eastin (2002). Eastin discovered that a key predictor of adoption was the amount of convenience offered on-line relative to the traditional interface (p265).

Summary

- Diffusion of Innovation research is over one hundred years old and has been examined through many disciplines.
- The critical aspects of marketing innovative products that are technology intensive is known as ‘Techno-ready Marketing’.
- Many marketing commentators feel that the level of research in innovation and diffusion is inadequate.
- A key predictor of the adoption of technological innovations is perceived convenience.

4.10 Resistance to Innovations

One of the most interesting and under-developed areas of research into the diffusion is that which focuses on consumer resistance to adoption. Rogers (1983) does identify what he calls ‘discontinuance’, which he defines as “a decision to cease use of an innovation after previously adopting it.” He argues that later adopters are more likely to discontinue than
early adopters and high discontinuers have less education, lower social status and less change agent contact, i.e. the opposite characteristics of innovators (Rogers, 1983; Rogers and Shoemaker, 1971). Discontinuance can occur for two reasons. 'Replacement discontinuance' occurs when the adopter replaces an existing innovation with an alternative. The second discontinuance reason occurs because of 'disenchantment' and is of particular importance in the context of this research.

4.11 Disenchantment Discontinuance

Disenchantment discontinuance occurs when adoption stops because of dissatisfaction. This may come about because the innovation is inappropriate for the individual and does not result in a perceived relative advantage over alternative practice. Marr and Prendergast (1994) hypothesised that a significant proportion of their sample of bank customers, who had adopted self-service banking technologies in the past would not use them again in the future due to a renewed preference for dealing with human tellers in bank branches. Their findings showed, however, that only a small and less than significant number of people using self-service technologies would prefer a return to the human interface. They stated that what they found was "rather a case of diffusion saturation, in other words diffusion will reach a peak level, which will be less than 100% adoption due to a proportion of non-adopters who will never use the technology."

This is a most interesting conclusion because it supports the notion of a literature gap first identified by Gatignon and Robertson (1989) and shows that the diffusion literature pertains almost exclusively to adoption: there has been little research on rejection as an outcome of the decision process – people who decided not to adopt and rejected the very idea of the innovation without trial (see also Robertson and Gatignon 1986).

Ellen, Bearden and Sharma (1991) set out to examine rejection by examining two important factors affecting an individual’s resistance to a proposed technological innovation. The importance of marketers understanding and reacting to the sources of resistance such as discontinuance of use (Rogers, 1981), problems in implementation (Brynes and Johnson, 1987) and/or even sabotage of the implementation (Goldstein, 1988) is clear.
Ellen, Bearden and Sharma (1991) propose that two key sources of resistance are self-efficacy and motivation / performance satisfaction.

4.11.1 Self-Efficacy

Judgments of self-efficacy represent judgments about one’s own performance capability in specific settings. It is defined by Bandura (1977) as “relating to one’s belief in one’s capability to perform a task.” While many studies have been conducted involving self-efficacy, only a few have focused on self-efficacy and computers (Olivier and Shapiro, 1993) and at the time of writing only two on Internet use and self-efficacy (Torkzadeh and Van Dyke, 2001; Torkzadeh and Van Dyke, 2002).

Fears and insecurities arising from such judgments may lead individuals to choose alternatives they can handle rather than a newer more effective option. Perceptions of self-efficacy come from several sources: personal experience, vicarious experience, verbal persuasion and emotional arousal are all examples. An appropriate example can be found in an Internet based study conducted by Hiltz and Johnson (1990). They found that pre-use expectations of the difficulties associated with using the Internet were closely aligned with lower satisfaction with the system after four months of use. On a similar theme Guirdham (1987) argues that to proceed with the purchase of a complex product, customers must have an understanding of how the product works (what he calls ‘know-how’) combined with adequate self-confidence to buy. These considerations are deemed particularly important for the first time buyer.

In examining self-efficacy and Internet use Torkzadeh and Van Dyke, 2002 found that male respondents consistently scored higher than female respondents for Internet self-efficacy both before and after training sessions.

4.11.2 Motivation and Performance Satisfaction

In looking at performance satisfaction it is important to look at the motivations of the user in wanting to change and adopt the new innovation. Motivations will be determined, to
some extent, by the level of satisfaction with the current behaviour which given its familiarity may be deemed satisfactory when compared with a new learning challenge in the new innovation.

Barczak, Ellen and Pilling (1997) explore the issue of motivation more deeply, arguing that adopters of technological innovations differ because of their motivations for usage. They provide the example of an on-line grocery shopping service, which may be used by one individual through choice but another through necessity perhaps because of a physical disability. Thus similar usage patterns may actually hide different motives for use. Their study based on financial service consumers identified distinct motivational clusters that were independent of the more established demographic segmentation variables banks used in targeting and communicating. The research suggests that customer motivations may be useful in predicting their response to new products as well as persuading them to use existing services for the specific benefits they value. The researchers conclude that all of the clusters identified needed to be informed and educated about the benefits given their own personal motivations. This is important because the generic advertising and merchandising messages undertaken by the bank were not picked up by these distinct clusters.

This issue of education was also highlighted in a recent Italian study into technology adoption in banking. Filotto, Tanzi and Saita (1997) emphasise the need for more technological delivery options for younger customers, explaining that the customer segments that are most likely to be attracted by technology-intensive financial institutions seem to be most profitable. However they warn that the availability of information is a precondition to ‘educating’ customers to be more aware of the more convenient alternatives available to them and that the decision to embrace technology more fully and educate customers in its use “is a decision that cannot be postponed” (see also Falk et al, 1994 for a similar discussion and Parasuraman and Colby, 2001 for recent perspectives on this). Karjaluoto et al (2002) also support the importance of education in a recent study of on-line banking in Finland. They conclude that “it is vital for banks to provide education targeted not only to guide using the Internet but also to provide extensive education in the whole field regarding computers” (p269). Similarly, in their exploration of service quality in on-line banking, Broderick and Vachirapompu (2002) cite the importance of “on-line
education of customers about their new roles and the appropriate service script for dealing with problems” (p334).

A similar point is made by ‘Which? Online’ but they emphasise the need to educate the grey market (the over 55 year olds), which they regard as the fastest growing sector of the Internet population in the USA. They go on to say “if the Internet market is to continue to grow, we in the industry need to attract more people like these subscribers. If we are to attract them, we must take our responsibility to educate very seriously indeed” (Which? Online, 1999)

Research by Gerrard and Cunningham (2003) propose that adopters of Internet banking perceive the service to be more convenient, less complex, more compatible to their needs and more suited to those who are PC proficient. This latter point is also supported by Black et al (2001) who identify that one of the strongest adoption influencers was a person’s previous experience with computers (p397).

4.12 Internet as an Innovation

Moore (1995) in his book ‘Inside the Tornado’ describes the Technology Adoption Life Cycle (TALC) that applies to discontinuous innovations. The Internet is held to be an example in that it requires a behavioural change for use. In other words it represents an entirely new way of completing commercial transactions in the marketplace (Black et al, 2001; Gerrard and Cunningham, 2003). The TALC follows the same path as the Diffusion of Innovation model and Moore argues that in order for electronic commerce to reach the bulk of the population (i.e. early majority, late majority) there is a ‘chasm’ that must be crossed. Greenland (1995) cautions that many customers will still prefer branch banking, because they regard it as having distinct advantages over the ‘impersonal’ remote services like the telephone or Internet. He argues that such customers “perhaps represent late adopters of new technologies and fit into the traditionalist and transition market segments” (p13). This supports Marr and Prendergast’s (1994) contention that the diffusions may never reach 100% of the population.
Moore maps out a strategy for crossing the chasm, which involves establishing a beachhead that consists of a complete product or service that becomes widely used within a small segment of the pragmatic early majority population. It is proposed by some researchers that electronic financial services, such as on-line banking and stock trading, will be that beachhead (Nabhan et al, 1997). However, there seems more widespread agreement that financial institutions have a key role in the enablement of E-comm applications more generally (CFSI, 1997; Ernst and Young 1997, 1998).

The work of Rogers and Shoemaker (1971), Moore (1995) and Parasuraman and Colby (2001) are integrated in Table 4.1 to help better understand the differing perspectives of consumer adoption of technology products and services. Table 4.1 also highlights the important similarities in their work.

### 4.13 Comparing Adoption Patterns

Moore (1995) follows the original categories first proposed by Rogers and Shoemaker (1971) but argues in his Technology Adoption Life Cycle (TALC) that, as previously explained above, there is a chasm between the innovator and early adopter phases through which potential adopters must pass. Parasuraman and Colby (2001) also acknowledge that it is more difficult to succeed in encouraging adoption of technological products they propose some solutions that may lessen the impact of Moore’s “chasm” on adoption.

### Table 4.1: Comparison of Diffusion of Innovation Models

<table>
<thead>
<tr>
<th>Author</th>
<th>Stage 1</th>
<th>Stage 2</th>
<th>Stage 3</th>
<th>Stage 4</th>
<th>Stage 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rogers &amp; Shoemaker 1971</td>
<td>Innovator 2.5%</td>
<td>Early Adopt 13.5%</td>
<td>Early Majority 34%</td>
<td>Late Majority 34%</td>
<td>Laggards 16%</td>
</tr>
<tr>
<td>Moore 1995</td>
<td>Innovator 2.5%</td>
<td>Early Adopt 13.5%</td>
<td>Early Majority 34%</td>
<td>Late Majority 34%</td>
<td>Laggards 16%</td>
</tr>
<tr>
<td>Parasuraman &amp; Colby 2001</td>
<td>Explorer 16%</td>
<td>Pioneers 27%</td>
<td>Skeptics 21%</td>
<td>Paranoids 20%</td>
<td>Laggards 14%</td>
</tr>
</tbody>
</table>

In order to accelerate the growth stage there must be a shift towards the category named ‘Pioneers’. They are described by Parasuraman and Colby (2001) as “needing the product but are not as savvy as the first market entrants. At this stage the product must be customer focused”. They argue that this means building ease of use into product design and that
potential purchasers must be reassured that everything is fine regarding the product. Rather than relying on the potential purchaser to establish for themselves that the product meets their needs, this must be more proactively managed by the marketing of the company in order to accelerate that growth.

4.14 Characteristics of an Innovation

The five characteristics of an Innovation will now be used as a mechanism to explore the social learning process that may be required to facilitate its adoption and to help in the formation of some research propositions.

4.14.1 Relative Advantage

As previously shown, the Internet offers advantages to customers in terms of convenience. Access to accounts, balance transfers and bill payments are all available through the Internet channel. However, a key question remains in terms of the extent to which customers generally perceive the Internet to offer advantage over alternative distribution channels. Specifically, which customers will be early adopters and for what products will the Internet be appropriate. Research by APACS (1999) has already demonstrated that while adoption of remote delivery systems will increase dramatically in the next decade, use of the more traditional payment systems will also continue to rise albeit more slowly than before. Hewer and Howcroft (2000) cite the key advantage of direct banking channels as being convenience. They cite Loudon and Della Bitta (1993) who argued that such convenience can be broken down into five key types: reduction in total time spent, greater flexibility in timing of interactions, saving on physical effort, reduction in potential sources of aggravation and the creation of potential for purchase on impulse.

4.14.2 Compatibility

It may be expected that those customers who represent innovators and early adopters of net-based financial services will already be comfortable with technological and remote interfaces e.g. telephone and PC banking. This is supported in recent research by Black et al (2001). The values, past experiences and needs of such customers are arguably
consistent with Internet technology. It would be surprising if customers who were regular branch users bypassed telephone banking and moved directly to the Internet - this is felt to be more of a migratory process (APACS, 2004). Indeed Hewer and Howcroft (1999) propose that such migration may involve a “significant re-negotiation of consumers current practices and expectations.” Support for Moore’s (1995) contention that such remote technological platforms represent a discontinuous innovation is found within Hewer and Howcroft’s (1999) paper as well as in Hirschmann’s (1981) earlier work.

4.14.3 Complexity

The extent to which the Internet is perceived as complex in the delivery of financial services would seem to be contingent on (i) the IT literacy of the user (see Black et al, 2001) and (ii) the complexity of the product in question (Black et al, 2001; Satyhe, 1999; Gerrard and Cunningham, 2003). Both of these issues are important in that they impact upon the perceived certainty of outcome by the consumer (see Hewer and Howcroft, 2000; Durkin and Howcroft, 2003).

4.14.4 Trialability

Interestingly there are few banks who are actively educating customers in use of their Internet delivery system. Few, if any banks are providing terminals in branches where customers could experience the web-site. While a rationale for this may be that the target customers are already PC literate, it is also the case that it may be desirable for banks to migrate lower quality customers to this remote interface. To do this will require incentive and education, rather than punitive penalties for non-adoption. Such trialability would overcome the problems of self-efficacy highlighted earlier and only by encouraging trial can banks expect consumers to ‘observe’ the relative advantages inherent in the new media. The importance of trialability is re-emphasised by Black et al, 2001 and McCartan-Quinn et al, 2004 in the financial services research context.
4.14.5 Observability

Given the issue of trialability (or rather non-trialability in financial services), it is considered that Internet use for financial services is un-observable at this time.

Sathye (1999) reports on an interesting study conducted in Australia which explored the adoption of Internet banking by consumers. He focussed on security, ease of use, awareness of benefits, price, resistance to change and infrastructure. Interestingly the key barriers were security fears and lack of awareness of benefits (in Rogers termed a lack of perceived relative advantage). Less important were considerations relating to difficulty of use and resistance to change.

Summary

- It is argued that adopters of innovations differ in their usage of technological innovations because of their motivations for usage and their self-belief in their ability to use the innovation.
- Consistently in research studies males score higher in computer and Internet self-efficacy.
- The issue of consumer education about new innovations is highlighted as particularly important in the case of on-line banking.
- The Internet is a discontinuous innovation; that is, an innovation that requires an entirely new way of interacting.
- The five characteristics of an Innovation can be used as a mechanism through which to explore the social learning process that may be required to facilitate adoption.

4.15 Decision-Making Processes in Innovation Adoption

Given the consideration of adoption of innovations it is relevant to more closely examine how individuals make decisions, in order to appreciate better the various influences that may impact upon such adoption processes. Black et al (2001) support the need for such research as “from a provider perspective, an enhanced understanding of why some people
adopt an innovation and others do not alongside an identification of the factors that may influence this decision is likely to be of considerable practical value” (p390)

Harrison (2003) argues that “in the academic literature there have been relatively few attempts to develop models that explain consumer decision processes specifically in the context of financial services” (p6). Smith (2004) proposes that an approach to segmentation that is not focused on clustering customers according to their motivations “is simply an approximation based on the assumption that descriptors and motivations are closely aligned (and) usually they are not” (p27). It is also the case that existing bank segmentation strategies and customer profiling strategies do little to identify behavioural issues such as motivation. Similarly, such strategies shed little light on how customer decision styles may impact on motivations to embrace different delivery channels. Indeed, Machauer and Morgner (2001) propose that the a priori (Green, 1982) and post hoc segmentation methods (Gwin and Lindgren, 1982) currently employed are of little predictive use to bank marketers. Given the lack of clarity regarding which customers are adopting / not adopting Internet banking and the reasons for this, it is proposed to use the established literature on decision-making by Michael Driver to try and better understand the characteristics and motivations of adopters (see Schroder, Driver and Streufert, 1967; Driver and Streufert, 1969; Driver and Mock, 1975; Driver, 1979; Driver et al, 1993; Driver et al, 1996; Driver et al, 1998).

Driver (1979) proposes a maximiser-satisficer approach - a contingency model relating to information search. The satisficer is willing to abandon the search for further information in order to get the decision made quickly. The trade off is often stated as time Vs quality. The maximiser, on the other hand, chooses quality and will seek information until it is of no further value. Psychological research conducted over many decades by Driver would seem to indicate there are, broadly speaking, satisficers and maximisers and various decision styles co-exist (Schroder, Driver and Streufert, 1967; Driver and Streufert, 1969; Driver and Mock, 1975; Driver, 1979; Driver et al, 1993; Driver et al, 1996; Driver et al, 1998).
4.16 Decision Styles

Decision Styles refer to learned habits or patterns of decision-making that reveal themselves as fundamental differences in information gathering and information use tendencies among individuals (Driver et al, 1996). It is argued that two factors account for decision styles:

1. *Information Use*: the amount of information actually considered when making a decision. In satisficing mode the minimum amount of information needed is used to make a decision. In maximising mode all relevant data are examined.

2. *Focus*: the number of solutions considered is also relevant to the decision style. In uni-focus mode information is used to determine only one course of action. By contrast, using information to come up with several alternatives is the multi-focus pattern. Uni-focused individuals are usually those who have very definite ideas about how things ought to be done. Conversely, multi-focused individuals tend to perceive more pros and cons in any course of action or state of affairs.

Combining information use and focus gives the framework for defining five basic decision styles (Driver et al, 1993; Driver, 1996; Driver et al, 1998). (See Figure 4.1).

4.17 Style Dominance

Driver et al (1998) argue that until a style is used in a situation, strengths and weaknesses are merely potential strengths and weaknesses. If a particular style doesn’t fit the demands of a task or a decision situation, its potential strengths don’t really matter nearly as much as its weaknesses which are no longer potential. Key influences upon style dominance are:

- environmental load;
- influence of role style;
- influence of operating style.
4.17.1 Environmental Load

Environmental load is considered to be “anything in the environment that increases a person’s sense of pressure”. Situations in which factors like time pressure, uncertainty, complexity and the potential for important consequences will create high environmental load. When environmental load is very high or very low individuals will typically use satisficing or uni-focus style. When load is moderate conditions are right for using one of the maximising or multi-focus styles.

4.17.2 Role Style

Role style is heavily influenced by both national and organisational cultures. Culture determines role style because it strongly establishes value systems which determine what you think ‘right’ behaviour should be. These cultural forces are strongest when circumstances force you to become aware of how you should act.

4.17.3 Operating Style

Operating Style generally reflects the task demands of a particular job. The dominant forces behind operating style are subtle. Thought processes are constantly changing and being shaped by the tasks performed. Operating style can, therefore, be seen as reflecting the cumulative effects of the task history. Doing varied or complex work seems to create greater complexity of thought process. Operating style is also affected by education, which positively induces multi-focus thinking.

In general Driver argues that individuals tend to use one of the styles shown in Figure 4.1 most frequently, but we can see different styles of behaviour from time to time. Individuals will also vary in how strongly they rely on a given style. For example some individuals will use a particular style so often and so strongly that they almost caricature the style, whereas others will reveal only a weak use of a particular style.
4.17.4 Decisive

Decisive individuals use a minimum amount of information in order to resolve a problem. Decisives prize action, speed, efficiency and consistency. Once they decide on a course of action their tendency is to stick with it. In dealings with people the hallmarks of the decisive style are honesty and loyalty. It might be expected that decisives display a comfortable ‘fit’ with the speed and convenience offered by on-line banking. It is proposed that ‘time-poor’ decisives may also be innovators, constantly seeking new and more efficient ways of doing things and that they are reluctant to wait until others have engaged in the trial of a new innovation before them. It is recognised, however, that for more complex purchase decisions (perhaps characterised by a high environmental load) a greater degree of personalised contact may be required. However it would be expected that once advice has been taken from a third party, the purchase decision would be made fairly quickly.

4.17.5 Flexible

Like the decisive, the flexible individual moves fast but the primary emphasis is on adaptability. Any piece of information is seen as having several meanings or implications. Faced with a problem requiring action, flexibles rapidly identify a line of attack but if it appears not to be working they quickly shift to a second course of action. A key issue for
people with this style is to keep all their options open and never get trapped by overcommitting to any one course of action.

This description implies that flexibles would embrace the information richness of the Internet but given their propensity to evaluate each piece of information carefully, they may risk ‘information overload’. For example recent research has shown that over three-quarters of individuals who go on-line to purchase a financial product “become mesmerised with the amount of information available” (see Bank Marketing, 1996 p6). The need for a relatively quick decision, combined with a fear of overcommitment may cause the flexibles to engage third party intervention. This would seem likely in the purchase of more complex financial products or institutions where environmental load was high.

4.17.6 Hierarchic

These individuals use a lot of information to evaluate a problem and then carefully construct a very detailed and specific plan for handling the problem. They prize thorough analysis and quality of outcome. Hierarchics tend to form relationships based on mutual trust and respect and prefer deep, long term friendships to acquaintances. The relational orientation of the hierarchic may lead to greater reliance on face to face interactions. Certainly the thorough analysis and singularity of focus characteristics of this category would seem to support this view. The Internet would therefore seem to offer only limited use for such individuals but it is likely that in their quest for extensive information they would engage with the Internet.

4.17.7 Integrative

Integrative individuals use a lot of information to evaluate situations. However rather than zeroing in on a single solution they have a tendency to explore a problem from different perspectives to come up with a variety of alternative solutions. Creativity and exploration are therefore highly important but methods and plans are never fixed or final. Integratives are usually thinking on several tracks simultaneously and are particularly suited to working in groups. They thrive best in an atmosphere of cooperation and trust. The Internet would
seem to be an appropriate mechanism through which the maximising multi-focus integrative could find and evaluate information. The importance of trust for these individuals would, however, imply that the web-site would need to come from an established provider with a trusted brand name.

4.17.8 Systemic

This category of style is a recent addition to the Driver model and reflects the fact that some decision makers make frequent use of both the integrative and hierarchic styles. There is also a two-stage decision process in evidence.

Stage 1 involves the systemic approaching a problem like an integrative - using lots of information, sizing up the situation, laying out alternatives.

Stage 2 involves the systemic shifting into a more hierarchic mode as the individual orders or evaluates the alternatives according to one or more criteria. The final result is a prioritised set of strategies for dealing with the situation.

4.18 Contribution of the Literature Review Overall to the Research Study Objectives

This part of the literature review is useful in drawing together and integrating the themes explored in the preceding two chapters. Having already established that new technology impacts on both banks and customers in different ways, the exploration of diffusion of innovation allows for the identification of key issues that influence not only whether a new innovation like Internet banking will be embraced, but at what speed this may occur.

The fact that the Internet is a discontinuous innovation is a useful concept as it reduces the role that prior traditional banking experience may play in new remote bank-customer interactions. It represents "an entirely new way of doing things" and implicit in this recognition is the clear need for customer education programmes to be in place to help with adoption of the new channel. This seems especially important given the literature
findings as regards self-efficacy and performance satisfaction and the inherent complexities presented here.

4.19 Conclusion

This chapter makes an important contribution to understanding issues related to the adoption of Internet banking. That the Internet can be categorised as a discontinuous innovation is important because it brings to bear on the research problem the issue of diffusion of innovation and better contextualises the preceding chapters, which related to how both customers and banks interacted with and adopted technology. The 'nature' and 'characteristics' of the technology to be adopted is also key and the fact that this literature has pointed to the Internet as a discontinuous innovation is important. The contextualisation of innovation research in our understanding of adoption behaviours has already been identified as lacking in extant literature. For example, issues of motivation and performance satisfaction, self-efficacy and discontinuance all enrich the development of a literature based conceptual model, which will serve to build the empirical tools through which to address the research objectives in this study. The characteristics of an innovation also allow for the development of key questions in both Stage 1 and Stage 2 of the research stages.

The culmination of the literature reviewed in this chapter is the focus on decision-making styles. Aligned to the development of thinking regarding the adoption of a discontinuous innovation such as the Internet is the appropriate consideration of how these decisions are actually made by customers. This focus on diffusion of innovation and customer decision-making styles underpins the complexity of issues relating to the research topic and helps in identifying influencers and barriers to adoption.

The potential gap that may exist between what the technology 'can do' for the customers and what the customers expect, perceive or indeed want that technology to do is heavily influenced by the characteristics of an innovation, the diffusion patterns discussed and by the personal decision style of the customers themselves.
The integration of key thinking thus far that has focused on 'Technology and Banks', 'Technology and Customers' and 'Diffusion of Innovation' will now be captured through a conceptual model. This model will be used to draw together the key themes, which will be explored in both stages of this research study and is explained in Chapter 5.
CHAPTER 5:
PROPOSING A LITERATURE-BASED
CONCEPTUAL MODEL
CHAPTER 5: PROPOSING A LITERATURE-BASED CONCEPTUAL MODEL

5.1 Introduction

This chapter serves to integrate the main themes from the preceding literature review chapters. A key issue in this process of integration is to conceptualise how these literature themes interact with each other in order that the research aim and attendant objectives can be understood with greater clarity, and justified with more specificity. This chapter therefore acts as a bridge between the literature themes and research objectives and in performing this role the chapter content leads to a discussion in Chapter 6 as to the most appropriate methodology for addressing these research objectives.

5.2 Towards a Literature-based Conceptual Model

Figure 5.1 illustrates how the literature review chapters enable key themes to emerge and the research issues to be framed with greater clarity. Specifically, Chapter 2 with a focus on ‘Technology and Banks’ illuminates Research Objective 1, which represents the qualitative first stage of this research study. Chapter 3, focusing on ‘Technology and Customers’ builds upon themes derived from Chapter 2 but with a more customer-centric focus and informs key Research Objectives 2 and 3. Research objective 4 is better understood following Chapter 4’s review of relevant literature surrounding diffusion of innovation and decision-making styles.

However, in an attempt to understand more fully the complex relationships that appear to co-exist between themes rather than within each theme individually, a conceptual model is proposed in Figure 5.2 which allows for an exploration of these inter-relationships.
Figure 5.1: Contribution of Literature to Research Problem, Objectives and Themes

Chapter 2
Technology and Banks

Key Issues from Literature:
- Banks do not have a clear E-Commerce strategy
- Relationship marketing is key for bank-customer interactions
- Technology enables but doesn't cause more effective RM
- The Internet potentially reduces banks' bargaining power
- Replacing personal interactions with remote interactions could erode competitive advantage for banks

Chapter 3
Technology and Customers

Key Issues from Literature:
- Customers are favouring a multi-channel environment
- Adoption rates and usage patterns for new channels are unclear
- Customer relationship value is at the heart of channel/interface management
- The Internet potentially increases customers' bargaining power but only if the customers choose to leverage it in this way

Chapter 4
Diffusion of Technological Innovations in Banking

Key Issues from Literature:
- Diffusion of innovation is an under-researched area in the marketing domain
- A key predictor of adoption of technological innovations is that of convenience
- Adopters differ in their use of technological innovations because of their motivations and self-efficacy level
- Customer education is key in encouraging adoption
- As customers adopt new technological innovations there are implications for bank-customer relationships
- The decision styles of customers will impact on their adoption and use of new innovations

Informing Research Objectives

1. Relationships are of key importance in bank-customer relationships.
2. Technology enables more effective relationship value management but can also undermine RM effectiveness where interaction preferences of banks and specific customer segments are mismatched in the channel mix.
3. Potential e-banking adopters will be affected by their motivations to adopt and levels of self-efficacy.
4. Customer decision-making styles will impact adoption behaviour for e-banking.
The purpose of the conceptual model illustrated in Figure 5.2 is to understand better the research objectives and to help determine the qualitative interview guide questions (Research Stage 1) and the survey research questions (Research Stage 2).

The two axes on the matrix are ‘Bank Interaction Preference’ and ‘Customer Interaction Preference’. The constituent elements that influence these preferences have their origins in the literature chapters. Freed (2003) recognises the validity of attempting to develop a conceptual model to link themes as he recognises that “there is a right channel for the consumer, the one that provides the best level of service with the most convenience at the right price. There is also a right channel for the bank, which allows the bank to deliver service and meet the needs of the customer in the most efficient manner”. This quote encapsulates the essence of the model proposed below.

Figure 5.2: Interaction Preference Model

5.2.1 Bank Interaction Preferences

From the literature review ‘Technology and Banks’ (Chapter 2), it is clear that technology offers key benefits to banks in terms of both cost efficiencies and relationship
management effectiveness. What is less clear however is (i) which customer groups the banks should target for face to face and/or remote interaction platforms, and (ii) how such targeting would result in the new remote channel being used by the customers. In a general sense a key preference would seem to be to add relationship value, through the Internet, to higher net worth customers while migrating low net worth high transactors totally onto this medium. The literature review on Diffusion of Innovation helps clarify thinking here. Implicit in banks successfully persuading customers (at any level of net worth) that the Internet is appropriate for them, is the need to convey the ‘relative advantage’ of using this new channel to these customers. Given that the Internet is a discontinuous innovation and given that there exists high ‘complexity’ and low ‘compatibility’ for most customers, there is a need for ‘trial’ by customers and a focused educational campaign on the part of the bank. However, the form that this trial and education might take is unclear at this stage.

5.2.2 Customer Interaction Preferences

From the literature review ‘Technology and Customers’ (Chapter 3) it is clear that customer buying power is potentially increased by the remote medium of the Internet. In general key benefits offered through e-banking are convenience through remote access and improved service in certain circumstances. While it is evident that some customers will favour remote interfaces through which to conduct their banking, others will prefer face to face interfaces. It is unrealistic to expect that this division will reflect the desires of the banks; i.e. - that high net worth customers will prefer face to face while low net worth transactors will embrace the Internet. This dilemma therefore, poses difficulties and specifically an interaction preference mismatch between customers and banks. The risk of dissatisfaction is also compounded when one considers that where a high net worth relationship managed customer does not see added value in being in a relationship with the bank, they will probably begin to discriminate on price and increasingly use Internet banking solutions. Conversely, the low net worth transactional banking customer who may be dependent on the branch interface, may not (i) be technologically literate or have Internet access or (ii) have any desire to interact through the Internet even if such access was available. In the latter case should such a customer be ‘forced’ to embrace the new remote channels and if so how? As previously discussed customers will need to see a
relative advantage in what Internet banking offers and know for what products it is best suited.

Box 1: Bank Personal / Customer Personal

This is a traditional model where delivery and consumption of financial services products are through the branch network. This model is in decline because the role of the branch is changing and technological delivery is becoming more pervasive, however it may remain appropriate for those customers who prefer dealing with a human teller and where the bank desires a close personal relationship. However, recent research from Booz, Allen and Hamilton (2004) highlights the important role for the branch in the future and questions any argument that remote channels will offer better value than that offered face to face.

Innovation Characteristics

The relative advantage of alternative distribution channels are insufficient to warrant any behavioural change by the customer, nor is any change desired by the bank. There already exists compatibility in the relational norms already established. No issues relating to adoption pertain as there is no new innovation at this stage.

Decision Styles

The high net worth older clients, who probably fall within this category, may have investments where certainty of outcome is low. Such individuals will probably take decisions slowly and carefully, and are unlikely to display the characteristics of decisives or flexibles. These individuals are more likely to be hierarchic in character, uni-focused and maximizing in decision style.

Box 2: Bank Remote / Customer Personal

It is proposed that this quadrant represents the situation where the customer desires a personal relationship but the bank would prefer the customer to adopt remote channels. Explanations for this situation may include instances where the customer is perceived of
low net worth and the bank attempts to migrate them to non-branch delivery. Alternatively, the customer may be lonely, or technophobic (see Mitchell, 1994) and have a preference for personalised delivery. This has been shown to be a risky activity with potentially negative PR consequences. Key questions for the bank seem to centre around the appropriateness of remote delivery for the customer segments in question and the implications for product complexity and cross sales interactions.

Innovation Characteristics

The onus is on the bank to convey the relative advantage of new delivery channels to the lower net worth customers. Issues of education through trialability and observability seem important, in order that the perceived complexity of the new channel can be overcome. Another problem may be that these lower net worth individuals do not possess the necessary equipment to access the Internet and are, therefore, potentially laggards who have little propensity to use new technological channels, irrespective of the efforts made by the banks to convince them otherwise. Work by Parasuraman and Colby (2001) suggests that the group characterised here may be ‘Paranoids’ who are insecure about technology, don’t use it often and are low income and possibly middle aged.

Decision Styles

Financial needs are likely to be simple within this lower net worth category but this does not mean that environmental load will be low. Such individuals can feel the same sense of pressure as higher net worth customers albeit for different reasons. It is likely that they will display unifocus satisficing behaviours (possibly decisives) due to a simplicity of financial need and limited need for wide ranging information.

Box 3: Bank Personal / Customer Remote

In this situation the bank is keen to develop a personalised relationship with the customer but the customer feels interactions can be more effectively managed mainly through remote channels. This may possibly be the case where current product needs are simple and can be easily managed at a distance but the bank believes the customer segment is potentially high net worth (e.g. student banking).
Innovation Characteristics

Customers in this category have recognised and embraced remote delivery channels. They are likely to be innovators who are young, venturesome, enthusiastic, not particularly brand loyal and comfortable with change and advancing technologies. The bank are keen to get close to them on a personal relationship basis and are, therefore, unlikely to have targeted these individuals for education of the benefits of remote channels. This reinforces the categorisation of this group as innovators. In support of this interpretation is the work of Parasuraman and Colby (2001) who classify such consumer behaviour as typical Explorers. Explorers are curious and heavy users of technology; they are young, upscale and dominantly male, and are true believers in technology and the benefits it can offer. They are 25% above average on Parasuraman and Colby’s Technology Readiness Index.

Decision Styles

This group are able to make financial decisions largely autonomously and to complete subsequent interactions through remote means. This may be a function of financial sophistication or due to simplicity of need but it suggests that they are likely to be decisives or flexibles.

Box 4: Both Remote

In quadrant 4, both the bank and customer are happy to adopt remote channels. This is the case with First Direct and seems to be true of Egg. Questions about the dynamics of these relationships seem unclear, however, and the extent to which all financial products (differing in complexity) are appropriate for this type of delivery remains unanswered.

Innovation Characteristics

As with Box 3, customers are comfortable with new technological delivery and are likely to be early adopters. The key difference is that in this situation the bank too is happy for those individuals to interact remotely. The bank may have educated this segment in the benefits of going on-line or it is possible that they made this decision autonomously. In
support of this contention, such customers would be characterised by Parasuraman and Colby (2001) as Pioneers or possibly Sceptics. The former are motivated but hampered in their technology beliefs, hence the need for education from the bank. The latter need to be convinced too, but the upper class profile of both categories sits comfortably with their classification as possibly multi-banked. The importance is that both classifications use technology quite readily.

Decision Styles

Such individuals possibly have a high level of financial sophistication or have simple product needs. The latter seems most likely as high net worth individuals would be a more attractive prospect for banks to engage with on a face to face basis. In addition it is also a distinct possibility that such individuals are multi-banked. In terms of decision style such individuals would probably be uni-focused satisificers (i.e. decisives) where this is their only bank relationship or multi-focused maximisers (e.g. integratives) where this relationship is but one of many.

5.3 Integration of Conceptual Model and Research Objectives

The literature based conceptual model proposes the relationship and synergy between literature based themes in the areas of interaction preferences (Howcroft and Durkin, 2000; Durkin and Howcroft, 2003), diffusion of innovation (Rogers, 1983; Miles, 1988) and decision making styles (Driver et al, 1993, 1996, 1998).

The model also serves as an integrative mechanism for the research objectives proposed for this study, and allows for a more appropriate and informed determination of what form the interview guide themes (for Stage 1) and survey questions (for Stage 2) might take in order to meet these objectives.

How the model helps facilitate the research objectives is now outlined. This is followed by a discussion of the research methods in Chapter 6.

An issue arising from the conceptual model is that there will be an unavoidable mismatch between the interaction preferences of the customer and the bank in certain
circumstances. **Boxes 2 and 3** illustrate this potential mismatch clearly. This mismatch underlines the importance of establishing the perceptions of the bank and the customer regarding their preferred interaction mode.

Assessing the influences upon the bank or customer regarding their preferred (remote or personal) interaction mode is important and may cover issues such as; customer profitability, level of technological competence, propensity to use / ability to access the Internet and sophistication of financial need.

Additionally, assessment of such interaction mismatches may lead to a greater understanding of how customers make decisions and to what extent decision-making style actually helps in determining the appropriateness of particular delivery channels. These sort of considerations are conducive to meeting the overall aim of this research and specifically, Research Objectives 2, 3 and 4.

The Overall Research Aim is: *to identify, assess and evaluate the contribution of the Internet in relationship oriented retail banking.*

**Research Objective 2:**

*to identify and assess the extent to which the customer profile influences the level of on-line adoption for Internet banking.*

**Research Objective 3:**

*to identify and assess the extent to which varying customer segments prefer referring to branch staff in preference to the Internet interface and to assess whether such preferences vary by customer and/or complexity of need.*

**Research Objective 4:**

*to assess and evaluate the extent to which an a priori decision-making typology correlates to the profile of case bank customers in order to predict Internet adopters.*

Understanding the role of socialisation in the service encounter and the impact of this socialisation on relationship development is important from both the perspective of bank
and customer. Linked to this is the process by which the bank determines relationship worth, and the extent to which it exhibits an understanding of the dynamic nature of relationship lifecycles. For example, a customer whom the bank currently wants to interact with remotely, may in the future become someone with whom a more personalised face to face relationship would be appropriate (due to changing financial needs or changing relationship status). An important issue in Boxes 2 and 3 is how the bank perceives the key advantages of its Internet offer. Additionally, the question of how the bank communicates these perceived relative advantages to customers (for example, through advertising of education programmes) is important. Such issues are inherent in the identification of bank strategic thinking facilitated through Research Objective 1.

*Research Objective 1 is:*

*to identify the reasons for relationship-oriented banks going on-line.*

While the conceptual model represents a static representation of interaction preferences at a particular point in time, this objective explores the fact that interaction preferences are not static.

5.4 Conclusion

This chapter presented the main themes from the preceding literature and proposed a conceptual model in order to integrate these themes, and through this integration better frame the research aim and attendant objectives.

Accordingly this integrative chapter links the literature driven conceptual thinking part of the thesis through to the process for operationalising the research objectives, which is now explained in Chapter 6.
CHAPTER 6:
RESEARCH METHODOLOGY:
RESEARCH STAGE 1
6.1 Introduction

There are two separate research methodology chapters in this thesis. This chapter outlines the research aim and objectives, the determination of the research positioning and the chosen methodology for the overall study. In addition the analytic strategy for Research Stage 1 is discussed and justified. The chapter ends with a summary of the key themes for analysis in the first stage of the research. The research methods for Research Stage 2 can be found in Chapter 8, which follows the reporting of the Research Stage 1 findings in Chapter 7.

6.2 Towards an Appropriate Methodology

The first stage in the research methodology is the selection of an appropriate paradigm for the research problem. It is argued that the most widely accepted definition of paradigms is that proposed by Kuhn (1962) who argued that a paradigm is a set of assumptions which provide a conceptual and philosophical framework or 'world-view' for the organised study of the world (Deshpande, 1983). Gummesson (1991) elaborates this and defines a paradigm as "a world-view representing peoples value judgments, norms, frames of reference, perspectives, ideologies, myths and theories that govern their thinking and action."

6.3 Assumptions of Science

Scientific approach is grounded on the following set of basic assumptions including:

- Nature is orderly. It is argued that there is a recognisable regularity and order and that events do not occur randomly. This is argued to underlie other observable phenomena.
- We can know nature. This expresses a basic conviction that human beings are just as much part of nature as other objects and although we possess distinctive
characteristics, we can, nevertheless, be understood and explained by the same methods by which we study other natural phenomena.

- All natural phenomena have natural causes. Therefore there is no omnipotent supernatural force.
- Nothing is self-evident. Claims for truth must be demonstrated objectively. Scientists cannot rely on tradition, subjective beliefs and common sense to verify scientific knowledge.

Frankfort-Nachmias and Nachmias (1996) argue that these assumptions are unproven and unprovable.

6.4 Aims of Social Science

The ultimate goal of the social science and indeed, all science is to produce a cumulative body of verifiable knowledge. Such knowledge enables us to explain, predict and understand the empirical phenomena that interest us. Social scientists aim to provide scientific explanations for ‘why?’ questions (Frankfort-Nachmias and Nachmias, 1996).

Roth (1987) highlights the doubts that all social scientists have in relation to the scientific status of their discipline. He identifies two key areas of doubt as regards the efficacy of social science research:

- all ‘real’ (i.e. natural) sciences yield causal laws and instrumental control of the environment;
- the social sciences have not produced distinctively social causal laws, therefore, the social sciences are not genuine sciences.

Roth (1987) goes on to argue that such doubts emanate from the uncritical acceptance of the unity of method thesis (i.e. positivism philosophy). In the absence of this positivistic thesis the doubts cease to have a focus or counter-point.
According to Day (1984) and Bagozzi (1986) marketing should be founded on two pillars: (i) an understanding of the consumers' needs and behaviour, and (ii) a critical analysis of opportunities for competitive advantage in the marketplace. From Kotler and Levy's (1969) perspective, that marketing is 'everything' and enjoys a pervasive influence in society, Kotler then moved towards a "generic concept of marketing", which is concerned with "how transactions are created, stimulated, facilitated and valued" (Kotler, 1972). In 1994 Bartels proposed that the crux of the issue is that the identity of marketing is determined by the nature of its subject matter and by the technology through which it is handled. The science / art debate really moved forward through the work of Shelby Hunt (1983) who maintained that logical positivism is the proper foundation for theory development, while another research group led by Paul Anderson (1983) argued that marketing theories should be judged with relativist criteria. Sheth, Gardner and Garrett (1988) argue that in the quest to become more 'scientific' and therefore 'respected' by other disciplines we have emphasised too much rigor (positivistic methods) at the expense of relevance (relativistic methods). This is reflected in the growing debate over appropriate research methods for empirical research and theory testing. This debate has largely focused on the dichotomy between the methods suggested by the tradition of logical positivism and the methods suggested by the philosophy of humanism.

6.5 Scientific Paradigms

Creswell (1994) argues that paradigms evolve, differ by discipline, and are often contested but there appear to be two main paradigms: qualitative and quantitative.

6.5.1 Qualitative Paradigm

A qualitative research study is designed to be consistent with the assumptions of a qualitative paradigm. Accordingly, such a study will focus on obtaining an insight and understanding of a socially-based or a human-based problem by building a complex holistic picture. This is usually facilitated by words derived through in-depth interviews, observation or focus groups. Creswell (1994) and Deshpande (1983) describe the qualitative paradigm as the idealist's view of the world and is also known as constructivist (Lincoln and Guba, 1985; Creswell, 1994), interpretative (Smith, 1989; Johns and Lee-
Ross, 1998) post-positivist (Carson and Coviello, 1996) or post-modern research (Brown, 1995). Humanism holds that the study of people in areas such as psychology, sociology, marketing and market research makes the methods of the natural sciences incomplete or inappropriate (Gabriel, 1990). Knowledge is contingent upon beliefs, values, standards and cognitive aims of practitioners. As such we are the inventors of our theories, the conductors of our experiments and the assessors of both.

6.5.2 Quantitative Paradigm

A quantitative study is consistent with a quantitative paradigm and is an inquiry into social or human problems, based on the testing of a theory composed of variables, measured with numbers and analysed with statistical procedures in order to determine whether the predictive generalisations of the theory hold true. The quantitative paradigm is the logical positivist's view of the world and is also known as the traditional, the experimental or the empiricist approach (Creswell, 1994) stemming from the empiricist tradition established by authorities such as Comte, Durkheim, Newton and Locke (Roth, 1987; Babbie, 1994; Rosenberg, 1995). Positivism has come to mean those attitudes which prefer research that is seen as involving a minimum of interpretation and a maximum of facts (Gabriel, 1990).

6.6 Positivism and Humanism

It is important to note that categorising the qualitative and the quantitative paradigms as two independent schools of thought, similar to that described above, makes them appear to be mutually exclusive, when in fact they share some common beliefs (Deshpande, 1983).

It is more appropriate to deal with the paradigms as a 'philosophical continuum' which ranges from pure qualitative (idealism or humanism) at one end and pure quantitative (positivism) at the other (Carson et al, 2002). It has been argued that this is an important point to remember as all research areas including marketing usually fall somewhere between these 'extremes' (Deshpande, 1983).
6.7 Understanding Paradigms

As previously stated paradigms are “basic belief systems that guide action” (Guba, 1990). A paradigm is a set of assumptions about the world which is shared by the investigators (Deshpande, 1983). All paradigms can be characterised according to the way their proponents respond to three basic questions:

6.7.1 Ontological

Ontology questions the nature of ‘reality’ (Parkhe, 1993). The basic question concerns whether reality is an external force to the individual or merely the individual’s perception of what is real (Burrell and Morgan, 1979).

6.7.2 Epistemological

Epistomology refers to how knowledge about the phenomena under study becomes known to the researcher and describes the nature of the relationship between reality and the researcher - what is the nature of the relationship between the knower (inquirer) and the known (or knowable) (Parkhe, 1993)

6.7.3 Methodological

Methodology refers to the ways of studying phenomena and is a description of how the researcher finds out about reality. It determines how knowledge should be acquired; whether the approach is to be objective in nature or more subjective. These are the starting points or givens that determine what inquiry is and how it is to be practiced.

6.8 Positivism

In the social sciences the first self-conscious voice proclaiming the positivist method was to be heard through the writings of Auguste Comte in the early part of the nineteenth century. It is argued that Comte’s most important assertion is that society could be studied using the same logic of inquiry as that employed in the natural sciences. His spirit has been
carried on in the works of Mill, Spencer, Durkheim and many others. By the end of the century the scientific - deterministic view of positivism was firmly entrenched in the social sciences (Hughes, 1980; Burrell and Morgan, 1979; Reason and Rowan, 1981).

The basic belief system of positivism is rooted in a realist ontology, that is, the belief that there exists one reality driven by immutable natural laws. The business of 'science' is therefore to discover the 'true' nature of reality. The ultimate aim of science is to predict and control natural phenomena. An objective epistemology is facilitated through the use of a manipulative method which is empirical experimentation.

In terms of epistemology, the inquirer must take a distant, non-interactive stance. Values and other confounding factors are thereby automatically excluded from influencing outcomes. The appropriate methodology will be experimental where questions or hypotheses are stated in advance and subjected to empirical testing under carefully controlled conditions. This deductive approach follows a path where general statements are passed from the universal to the singular.

### 6.9 Post-Positivism

Post-positivism is a modified version of positivism which moves from a purely 'realist' perspective through to a perspective often termed 'critical realism'. Such a perspective acknowledges that it is impossible for humans ever to be able to perceive the 'one reality' but states that such a single reality does exist.

Epistemologically post-positivism recognises the absurdity of assuming that it is possible for the human enquirer to 'step outside' this humanness while conducting an enquiry. Work in the hard sciences shows that 'findings' emerge from the interaction of the inquirer and the inquired information, therefore post-positivism advocates a modified objectivity. This objectivity can be achieved by the researcher divulging their own predispositions.

Methodologically post-positivism provides two responses to emergent challenges:
an emphasis is placed on critical multiplism; a form of elaborated triangulation. Many sources should, therefore, be used to achieve validity;

post-positivism recognises that many imbalances have been allowed to emerge in the zeal for objective enquiry.

6.10 Humanist Alternative

Humanistic approaches to social science generally accept the positivist view of natural science but claim it is inappropriate for the social sciences. Well into the nineteenth century it was held that the positivist methodology was inadequate in understanding human phenomena. Knowledge of persons could only be gained through an interpretative procedure grounded in the imaginative recreation of the experiences of others (Hughes, 1980; Outhwaite, 1987).

6.11 Constructivism

Constructivism is often considered a satisfactory compromise by proponents of the post-positivism, critical theory and positivism approaches. However, constructivists feel that positivism and post positivism are seriously flawed for the following reasons:

- Baldness of facts. Refers to the issue that the ‘facts’ gathered depend on the original theory (hypotheses and questions). Reality therefore only exists in the context of a mental framework for thinking about it in advance.
- Underdetermination of theory. No theory can ever be fully tested because of the problem of induction. Reality can only be seen through a ‘window’ of theory.
- Value-ladenness of facts. Constructivists concur with the ideological argument cannot be value free
- Interactive nature of the inquirer/inquired dyad. Even positivists acknowledge that objectivity is not possible. The results of an enquiry are, therefore, always shaped by the interaction of inquirer and inquired information. This problem of interaction undermines the objectivity sought in both positivism and post-positivism. First, it renders the distinction between ontology and epistemology obsolete - what can be
known and the individual who comes to know it are fused into a coherent whole. Second, it depicts knowledge as the outcome or consequence of human activity. Knowledge, of human construction however, can never be certifiable as ultimately true, but problematic and ever changing.

Ontologically, constructivists are relativists and as such they consider realities to be multiple in the minds of individuals. Epistemologically, the constructivist takes a subjective position and, therefore, subjective interaction seems to be the only way to access realities. Methodologically, the constructivist aims to identify the multiple constructions and identify common ground or consensus.

Burrell and Morgan (1979) provide a useful table (Figure 6.1) that outlines the key differences between positivism and idealism. This is especially useful in understanding differing terminology across the various ways in which social science can be conceptualised:

**Figure 6.1: The Subjective – Objective Dimension**

<table>
<thead>
<tr>
<th>SUBJECTIVE</th>
<th>OBJECTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominalism</td>
<td>ONTOLOGY</td>
</tr>
<tr>
<td>Anti-positivism</td>
<td>EPISTEMOLOGY</td>
</tr>
<tr>
<td>Voluntarism</td>
<td>HUMAN NATURE</td>
</tr>
<tr>
<td>Ideographic</td>
<td>METHODOLOGY</td>
</tr>
<tr>
<td></td>
<td>Nomothetic</td>
</tr>
</tbody>
</table>

Source: Burrell and Morgan (1979) p3

6.12 The Case for Pluralism

At the level of the paradigm Heath (1992) argues that researchers have identified a number of fundamental differences between humanism and naturalism that are thought to preclude their reconciliation. Heath (1992), nevertheless, proposes a compromise between what he terms doctrinaire positivism and doctrinaire humanism. He classes these extremes as ‘liberal positivists’ and ‘conservative humanists’ and proposes that many differences
between the positivist and humanist paradigms are often terminological and that many practices from the two camps are shared.

At a methodological level this view is shared by Martello (1997) who states that both methodologies are concerned with establishing trends via content analysis and theme analysis. O'Guinn and Faber (1989) state that the mixing of qualitative and quantitative data may yield more insight than using either in isolation (p147), a view supported by de Burca (1995) who states that "researchers should keep an open mind by embracing theoretical pluralism".

It is important at this point to distinguish between theoretical pluralism and methodological pluralism.

The concept of methodological pluralism is based on the notion of triangulation where according to Smith (1975) "different kinds of complementary data about a problem may be acquired by using different research techniques in the same empirical study". The belief is that greater validity and reliability can be achieved by triangulation than a single methodological approach to a problem (Denzin, 1970). However methodological pluralism is tenable only on ontological assumptions founded on realism. In contrast, theoretical pluralism is a call to engage in an informed debate on the alternative approaches to research based on their underlying assumptions, instead of engaging in criticism and cynicism which is often embedded in prejudice (de Burca, 1995). Roth (1987) advocates such a pluralistic approach. He states that "the debate that there is just one method of inquiry proper to the physical and social sciences is fruitless and pointless...the point is that social scientists do best by adopting what is a pluralist view of rational enquiry" (p4/5).

It is a methodologically pluralistic or triangulated approach that is taken in this research.

6.13 Chosen Positioning – Combining Methods

This research follows a post-positivist position representing as it does the two stages of theory generation and theory testing. It is argued that no interpretation of the world can
be made independently of human sensations and perceptions and that truth itself is a subjective evaluation. That said, this paradigm does argue that a single reality does exist but this is not perceptible due to the subjectivity of human evaluation.

All knowledge and all science must depend on interpretation. Indeed Popper (1957) proposed that there was no way to express in quantitative terms the qualities of behavioural or economic change. Popper (1957) states "as there is no way of expressing these in quantitative terms then no quantitative laws can be formalised. Thus the causal laws of social and behavioural science, supposing there are any, are qualitative rather than quantitative" (p25).

Hirschman (1986) highlights the importance of researcher closeness to the phenomena under study when she states that "researcher understanding is deemed within the humanistic perspective to arise from direct personal experience rather than the manipulation of experimental variables" (p238). Such closeness is facilitated in this study by the author's extensive experience in financial services both as a practitioner and academic.

Methodologically, in keeping with Denzin and Lincoln's (1994) statement that "both qualitative and quantitative methods may be used appropriately with any research paradigm" this research will employ both qualitative and quantitative research methods. Miles and Huberman (1994) support this approach when they state that "paradigms for conducting social research seem to be shifting beneath our feet and an increasing number of researchers now see the world with more pragmatic eyes...it seems clear that research is actually a craft rather than a slavish adherence to methodological rules" (p5).

Questions of method are therefore argued to be secondary to questions of paradigm, which are defined as the basic belief system or world view, that guides the investigator not only in terms of method but also ontologically and epistemologically in fundamental ways. While both qualitative and quantitative research methods are employed this research remains essentially exploratory in nature although theory is developed and tested within this perspective.
Grant and Fine (1992) cite numerous illustrations of successful combinations of qualitative and quantitative methods in the literature while Greene et al (1989) propose five purposes for combining methods in a single study. These are:

- triangulation; seeking convergence of results;
- complementary; overlapping different facets of a phenomenon may emerge;
- developmentally; the first method is used sequentially to inform the second;
- initiation; where contradictions and fresh perspectives emerge;
- expansion, the mixed methods add scope and breadth to the study.

Regarding this research a developmental position (as defined above) is the most appropriate, where Stage 1 qualitative in-depth interviews help construct and inform the issues examined through to the survey instrument that constitutes research Stage 2. A pragmatic approach is, therefore, undertaken which “supports the view that a false dichotomy exists between qualitative and quantitative approaches” (Rossman and Wilson, 1985; Lancy, 1993).

Building on this theme Creswell (1994) proposes a model entitled the ‘two-stage design’ approach in which the researcher proposes to conduct a qualitative phase and a separate quantitative phase of a study (p177). Creswell argues that in the two-phase design model, two sets of purpose statements and research questions are presented and the results of the qualitative phase of the study are reported separately from the methods and results of the quantitative phase. It is such a framework that is followed within this research.

6.14 Research Aims and Objectives

Accordingly, a two-stage study is used to examine the supply-side and demand-side issues. Stage 1 occurs first and these findings, along-with the relevant literature, inform and shape the research questions used in Stage 2. It is integral to understanding the usefulness of the Internet in relational exchange to look to the views of both parties in that relationship, i.e. both bankers (Stage 1) and customers (Stage 2).
As already established the overall aim of this study is

*to identify, assess and evaluate the contribution of the Internet in relationship oriented retail banking.*

**Stage 1 is exploratory in nature.** Underpinning Research Stage 1 is early evidence from international studies, which suggest that the key motive for banks adopting the Internet is primarily cost savings. An appreciation by banks of the potential advantages offered by the Internet's interactivity for relationship building was not evident in these earlier studies (Ernst and Young, 1999; Daniel, 1998).

Underpinning Stage 2 (see Chapter 8) is recent evidence from the USA that in the year ended July 1999, 3.2m customers had signed up for Internet banking but 3.1m had discontinued use in the same period. A possible explanation for this was that customers could not see any relative advantage in using the Internet (Smith, 1999; Booz, Allen, Hamilton, 2004). This reflected negative press evaluation of Internet services offered by UK banks (Wall, 1999, 2000) and academic concerns about the value proposition offered through e-banking (Durkin and Howcroft, 2003; McCartan-Quinn *et al.*, 2004; O'Donnell *et al.*, 2003). Therefore an understanding of the motives for adoption and how these might vary by customer and product type are clearly of importance (Black *et al.*, 2002; Harrison, 2003; Smith, 2004). Stage 2 of the research will also be deemed exploratory but it will use a quantitative research instrument issued to a stratified sample of bank customers. The content of the questionnaire instrument will be derived from both the literature sources and the initial international interviews with bankers.

**6.14.1 Research Stage 1**

The objective is to gain a deeper insight about how banks position themselves with regard to Internet delivery and to understand more fully the influences (internal and external) on the strategic decision to go on-line. The extent to which such decisions are customer-led are examined and the strategic rationale for delivering on-line are explored. Interviews were conducted with senior marketing managers or chief executives of banks which have an on-line presence and which promote themselves as being customer / relationship oriented. These interviews were conducted internationally, in the USA, Ireland and UK.
and Sweden. The rationale is to discover the degree of commonality in the responses to the fundamental issues raised in the study.

6.14.1.1 Research Stage 1: Objective

to identify the reasons for relationship-oriented banks going on-line.

Justification

It has been argued that the literature on the design of distribution channels has only provided a "superficial and cursory treatment of organisational factors that may drive or serve as barriers to the introduction and promotion of new channels" (Mols, 2001). It is, therefore, appropriate to examine such issues in banking by deepening our understanding of how such distribution channels are introduced by banks and what are the key influencers on consumer adoption.

6.14.1.2 Research Stage 1: Qualitative Interview Guide Themes

In line with this objective four interview themes were derived from the literature:

1. The importance and manifestation of Relationship Marketing Strategy and Sales Culture (derived from Chapter 2).
2. The delivery mix on offer and the balance between these with particular emphasis on the role of the Internet (derived from Chapters 2 and 3).
3. The type of products perceived as suitable for Internet delivery and the reasons why they are perceived in this way (derived from Chapter 3).
4. The perceived value of bank strategies aimed at migrating customers from personal to remote (Internet) delivery channels (derived from Chapter 2).
6.14.1.3 Specific Literature Justification: Theme 1 - RM and Sales Culture

It is clear that Relationship Marketing (RM) has had many streams of research contributing to its evolution and subsequent incorporation into both academic research and practitioner activity (Copulsky and Wolf, 1990; Dawkins and Reichheld, 1990; Ghoshal and Bartlett, 1995). Within the literature many reasons are put forward in support of relationship development

- It is cheaper to maintain existing customers than it is to recruit new customers (Dodge and Fullerton, 1997; Aijo, 1996; Jones, 1996; Stevens, 1998).
- A key to long term profitability is loyalty and loyalty depends on customer retention (Dodge and Fullerton, 1997; Pearce, 1997; Teich, 1997).
- Mass marketing is becoming less viable as markets fragment and customer segments become more discrete and specialised” (Gummesson, 1997; Murray and O'Driscoll, 1996; Webster, 1992).

6.14.1.4 Specific Literature Justification: Theme 2 - Delivery mix and balance with particular emphasis on the role of the Internet relative to branch

While the importance of technology in customer-bank interactions remains undisputed, commentators continue to emphasise the importance of socialisation in the service encounter, and how evaluation of the encounter is shaped by social and personal forces (Hollander, 1985; Czepiel, 1990b). It is argued that, in consumer and business to business settings, the social content of service encounters can often overshadow the economic rationale that may offer a more expedient alternative. Indeed anthropologists hypothesise that perceived honesty in exchange relationships is inversely related to social distance. In other words, relationships managed at a distance, where social interaction is limited, (i.e. the remote relationships which are the focus of this research), can compromise the bonds of trust that exist in a relationship (Czepiel, 1990a, 1990b; Gronroos, 2004). Hewer and Howcroft (2000) support this contention when they highlight that “remote channels may undermine consumers' feelings of trust and adversely affect customer loyalty and retention".
Branches still constitute a substantial barrier to competitive entry and remain a most effective distribution channel. Technology has also reduced the administration pressures on branches through centralisation of administration in dedicated centres and the emergence of ‘hub and spoke’ structures allow for specialisation of service delivery at branch level e.g. dedicated SME, student or personal service outlets (Howcroft, 1998; Howcroft and Beckett, 1996). Roth and Van der Velde (1989) argue that the role of branch staff will be even more critical in the future as technology becomes more pervasive, particularly in the delivery of non-routine and more complex financial services products. They state that “people are necessary for establishing the initial customer relationship and are essential for maintaining and servicing customer accounts” (p32). Renyi (1997) agrees that “branches will continue to play a key role....they create visibility and name recognition. They will continue to be important in delivery well into the twenty-first century”. This view as to the changing but enduring importance of branch banking is supported by recent research published by Booz, Allen and Hamilton (2004). The rationale provided for the endurance of branch-based banking is redolent to that proposed by Greenland (1995), where the intangibility of financial services products was proposed to explain why the branch would continue to have a significant role in bank-customer interactions.

Such arguments support a key point made by Chase (1978) more than two decades previously when he stated that “technological devices can be substituted for some jobs performed by direct contact workers...the attitude of the customer will determine the ultimate quality of the experience”.

6.14.1.5 Specific Literature Justification: Theme 3 - The type of products perceived as suitable for Internet delivery and why

Howcroft and Beckett (1995) propose that banks need to quickly identify the willingness of existing and potential customers to purchase both traditional products (e.g. personal loans and mortgages) and non-traditional or ‘high credence’ products like insurance and pensions. It is becoming increasingly recognised that the extent to which products are deemed suitable for delivery through varying interfaces depends both on the interface and the product itself.
Telephone banking is currently the most popular remote platform and the number of users is expected to double over the next decade to 12 million in the UK. Households with access to PCs and the Internet are also growing rapidly and this will potentially increase on-line banking numbers. Similarly the number of customers expected to be using interactive digital TV by 2008 is 10 million, while Fletcher Research (1999) reports that in the shorter term access to interactive services via TV will increase from 8.3% of households in 1999 to 29.4% in 2002. Fletcher Research (1999) also points out that TV usage is six times higher than that for PC and that the TV sits at the heart of family life, potentially making it a more comfortable choice for users.

In aggregate the number of remote banking payments is expected to rise from 25 million in 1998 to over 190 million by 2008 but this will represent a very insignificant proportion of the overall total of banked population at this time (APACS 2004).

That said we can conclude from the above commentary that in general customers appear increasingly happy to interact remotely as a result of the added value dimension of ‘convenience’ as new technological formats appear (Taylor, 1994) although the rate at which such innovations are adopted is slow and the range of product uptake and delivery balance in remote media remains unclear at this time.

6.14.1.6 Specific Literature Justification: Theme 4 - The perceived value of customer migration strategies toward remote delivery through the Internet

Ernst and Young (1999) draw a distinction between two very different approaches to channel management and migration: charging a premium for using higher cost channels and offering incentives for low cost channels. The incentive approach of giving discounts for lower cost channels is arguably more desirable because it passes the savings on to the customer - and the benefit is shared.

Ernst and Young (1998) voice concerns over the purely ‘cost-oriented’ approach, which they feel is dominating the industry: “the key question is how does the customer ultimately want to interact with the organisation”. This view was first raised by McMahon (1996)
who stated that “the delivery of financial services must take into account the variety of contexts and behavioural patterns within which consumers conduct their day-to-day banking business” (p40). In other words, account must be taken of the perceived benefits or value, which customers derive from the alternative delivery channels.

It can take years before significant numbers of consumers can perceive the benefits from a new innovation (Bandura, 1986; Brown, 1991). King (1985) (cited in Brown, 1991) highlights this problem by stating that “consumer research can tell you what people did and thought at one time; it can’t tell you directly what they might do in a new set of circumstances”.

Filotto, Tanzi and Saita (1997) emphasise the need for more technological delivery options for younger customers, explaining that customer segments that are most likely to be attracted by technology-intensive financial institutions seem to be the most profitable. However, they warn that the availability of information is a precondition for ‘educating’ customers to be more aware of the alternatives and that the decision to embrace technology and educate customers in its use “is a decision that cannot be postponed” (see also Falk et al., 1994 for a similar discussion).

A similar point is made by ‘Which? Online’ when they emphasise the need to educate the grey market (the over 55 year olds) which they purport is the fastest growing sector of the Internet population in the USA. They go on to say that “if the Internet market is to continue to grow, we in the industry need to attract more people like these subscribers. If we are to attract them, we must take our responsibility to educate very seriously indeed” (Which? Online, 1999).

6.15 Sampling Method Research Stage 1

According the Miles and Huberman (1994), “sampling is crucial for later analysis” (p27). For Stage 1 of the research a purposive sample of bankers was taken, rather than the random sampling models favoured in more positivist approaches (Miles and Huberman, 1994; Morse 1989). The reason for this is that banks already embracing the Internet and promoting themselves as relationship oriented were the target for this stage of the study,
and this is not a position taken by all banks. Such banks were chosen using the Gomez (2004) benchmarking criteria, through recommendations from personal contacts and from the findings of previous research conducted in the UK (see Bennett and Durkin, 2000; Butler and Durkin, 1998). The sample was derived from banks in the USA, Ireland, Scotland and Sweden. The international dimension of the research allows for comparison, and an on-going evaluation and reflection (Denzin and Lincoln, 1998).

For the American stage of the research four prominent, but community based relationship oriented, banks in the high technology 'Research Triangle' of North Carolina were used. These banks were Central Carolina, First Citizens, Wachovia and BB&T. This research triangle embraces the cities of Raleigh, Durham and Chapel Hill in North Carolina. In Ireland and Scotland, three of the largest retail banks with an Internet presence in these markets, were interviewed. These banks were: Bank of Ireland, First Trust Bank, Royal Bank of Scotland and Ulster Bank. Five interviews resulted. Once again, these banks emphasised personal service as a key differentiator and had relationship management programmes in place.

In Sweden appropriate banks were identified through research on the Swedish market and expert advice was provided by financial services researchers at Stockholm Business School. Sweden was chosen as a locus for this part of the study because adoption levels of Internet banking, in keeping with the adoption levels of other remote interfaces, is high (Nua, 2004; APACS, 2004; Carlell, 2001; Krueger and Kumar, 2003). All the banks interviewed in Sweden had a dominant Internet presence as well as extensive branch networks and relationship banking strategies were in clear evidence. Four interviews were conducted in Stockholm with the following Swedish banks; Svenska Handelsbanken, Swedbank (ForeingsSparbanken) and Merita Nordenbanken.

6.16 Stage 1 Research: Data Gathering and Analysis

In-depth interviews acted as the primary data collection instrument in this first research stage. As the overriding consideration in data collection is to identify the correct parameters through which (Creswell, 1994; Miles and Huberman, 1994) the purposive
selection of informants can occur in order to address the research question. Given this, three parameters suggested by Miles and Huberman (1984) need to be considered:

6.16.1 Setting

All interviews took place in the offices of the interviewee/informant.

6.16.2 The Actors

The primary informant in the pre-selected companies was always the chief executive or Head of the Marketing function. This was important in order to obtain the necessary strategic perspective. In both the USA and Irish banks more than one interviewee was used. This was due to the fact that Internet banking expertise traversed departmental boundaries.

6.16.3 The Events

This section relates to what the in-depth discussions were about and as detailed above, a flexible interview guide was developed in light of the literature review with various key themes emerging. Informants were guided through these themes but allowed to introduce material which they believed to be relevant. The primary purpose was to make sense of every day challenges that occurred as a result of implementing the bank's Internet strategy.

6.17 Credibility, Transferability, Dependability and Confirmability in Stage 1

The credibility of the research was established by using accepted strategies outlined in the literature (Miles and Huberman, 1994; Gabriel, 1988; Hirschman, 1986). Issues emerging from the transcribed discussions were circulated to participants for corroboration (facilitated by email). Transferability was similarly established through continuous reflection and constant comparison of findings with those from other interviews. Confirmability was established through the public exposure of early thinking (Howcroft and Durkin, 2000; Durkin and Howcroft, 2003) through research conferences and publication.
6.18 Data Coding in Stage 1

Coding is a mixture of data reduction and data complication. It is used to break up and segment the data into simpler categories (using the interview guides themes) but it can also be used to expand and tease out the data in order to formulate new questions and levels of interpretation. The reflection and constant comparison employed in this process are argued to be more important then the procedures themselves (Seidel and Kelle, 1995). Early analysis of the qualitative data facilitated the recognition of areas which respondents found important and this enabled ongoing refinement of the interview guide. This continual reflection also allowed the researcher to see the linkages that respondents made between the various issues. This led to the gathering of even better, more focused data (see Hammersly and Atkinson, 1995; Miles and Huberman, 1994; Tesch, 1990).

6.19 Decontextualising and Recontextualising

Coding facilitates decontextualisation and recontextualisation of data and involves slicing up the data set. Tesch (1990) defines such a process as dividing data into portions that are comprehensible by themselves and large enough to be meaningful. Such a process allows the data to be more effectively examined and enables more effective conceptualisation and exploration of relationships between data items by the researcher (Strauss 1987).

6.20 Steps in Analysis of Stage 1 Data

The first stage was the preparation of the data for analysis. This involved the typing of the fourteen transcripts from the in-depth interviews. This process enabled a good deal of purification of the data by adding in missing content and refreshing the memory of the meetings. An e-mail of the initial transcripts was sent to respondents for confirmation and this also facilitated the ‘purification’ process.

The in-depth discussions were therefore all transcribed and a traditional cut and paste technique employed to compare the relevant themes.
Miles and Huberman (1994), Hammersly and Atkinson (1995) and Coffey and Atkinson (1996) suggest that codes are based on the names of the concepts that they are describing. Keeping codes semantically close to the terms they represent facilitates analysis and this approach was employed.

1. Relationship marketing and sales culture (RMSC) (Green).
2. Delivery mix and balance (DM) (Pink).
3. Type of products perceived suitable for Internet delivery (PA) (Blue).
4. Customer migration strategies (CM) (Yellow).

The respondents were coded with a country of origin prefix: ie USA, IRGB and SWE and categorised numerically in the order in which they were interviewed. Therefore, the first USA bank interview was USA1 and the relevant discussion on delivery mix was cited as USA1DM.

The units of analysis, to which codes were applied, varied by line, sentence and paragraph. Indeed, not every piece of data was coded, however, most of the collected data was used in the analysis. The interview guide worked well and facilitated focused, sequential and highly relevant discussion from respondents.

Analysis was undertaken on an intra and inter-country basis. Comparisons were therefore made on the relevant issues explored through the interview guide between respondents within countries and between countries (see Durkin and Howcroft, 2003).

6.20.1 From Coding to Interpretation

Coffey and Atkinson (1996) state that moving from coding to interpretation is a crucial stage. Miles and Huberman (1994) suggest thirteen tactics for generating meaning from the analysis and several of these were used in deriving meaning from the data. This facilitated a clearer definition of issues for the second stage of the research study. Examples of Miles and Huberman (1994) tactics, which were used in the analysis, are detailed below:
6.20.2 Noting Patterns, Themes

The coding frameworks are a prime example of determining patterns and themes.

6.20.3 Seeing Plausibility

It often happens that during analysis a conclusion is plausible or 'makes good sense'. Such plausibility usually occurs in the early stages of analysis and this tactic was very useful to the researcher who has considerable expertise in financial services.

6.20.4 Counting

In qualitative research numbers tend to get ignored but given the international nature of this stage of the research, it was important to employ counting to identify the presence (or absence) of themes and the extent to which there was variance on a country basis. This was of fundamental importance given the fact that areas of key commonality between the respondents would feed into Stage 2 of the research.

6.20.5 Building Logical Chains of Evidence

Developing logical chains of factors can explain how and why events and processes come together. In this research there were clear linkages between different parts of the interview guide.

6.21 Conclusion

This chapter has outlined the research aim and objectives, the determination of the research positioning and the chosen research methods for the study overall. In addition the analytic strategy for Research Stage 1 was discussed and justified. The analytical process by which Research Objective 1 is addressed is summarised in Figure 6.2 below. The analytic strategy for Research Stage 2, which will be informed and shaped by the Stage 1 findings is developed in Chapter 8.
Chapter 7 outlines the key findings from this first stage of analysis, which then help shape the content of Research Stage 2. This focuses on customer preferences as regards Internet adoption and influencers upon / barriers to use.

Figure 6.2: Relationship between Research Objective 1 and Analytic Strategy

**Research Objective 1**

*R01: To establish reasons for relationship-oriented banks going on-line*

Interview Guide Themes:

1. The importance and manifestation of Relationship Marketing Strategy and Sales Culture (derived from Chapter 2).
2. The delivery mix on offer and the balance between these with particular emphasis on the role of the Internet (derived from Chapters 2 and 3).
3. The type of products perceived as suitable for Internet delivery and why (derived from Chapter 3).
4. The perceived value of customer migration strategies toward remote delivery through the Internet (derived from Chapter 2).

Analysis Technique: Transcript content analysis by theme

- Coding
- Interpretation
- Note patterns
- Counting
- Building logical chains of evidence

Key Issues Carry forward to Stage 2

150
CHAPTER 7:

RESEARCH STAGE 1:

FINDINGS AND DISCUSSION
CHAPTER 7: RESEARCH STAGE – FINDINGS AND DISCUSSION

7.1 Introduction

This chapter describes the qualitative research involved in-depth interviews with banks in the UK / Irish market, USA (North Carolina) and Sweden. Fourteen interviews were conducted in total. The purpose was to identify key issues in relationship oriented Internet banking and gain greater insights into bank managers’ decisions to put their bank on-line and what they saw as key drivers as well as barriers to customer adoption. The interview guide from which these findings are derived is detailed in Chapter 6. This chapter first details the findings on the basis of each country and then collates the findings into those deemed most important overall. These issues are then used as a basis upon which to build the retail bank customer questionnaire which comprises Stage 2 of the overall research study.

7.2 US Based Research

Interviews were conducted with vice-presidents of e-banking in the four banks under study in North Carolina: First Citizen’s, Central Carolina, Wachovia and BB&T. Each interview lasted approximately 90 minutes and followed the key themes outlined in Chapter 6.

7.2.1 Theme 1: The importance and manifestation of Relationship Marketing (RM) Orientation and Sales Culture

All four US banks emphasised the importance of a relationship marketing orientation in their business. Three of the four had personal bankers allocated to customer segments, with only one bank not opting for this approach because they felt it was everyone’s responsibility to interact in a relational way with customers at branch level. One manager talked about the importance of staff retention in maintaining good customer relations, while another stated that the whole business proposition for customers was grounded on the premise that there were knowledgeable and ‘local’ decisionmakers who knew customers throughout the branch network. The branch infrastructure was considered by all interviewees to be a key asset in the management of customer relationships. The branch
was also felt to provide a forum whereby customer information could be most effectively acquired.

"There must be face to face relationship building because relationships are built upon mutual understanding, and the only way such understanding is going to come about, initially at least, is through face to face interaction."
(USA2RMSC)

All respondents cited the importance of cross-sales and said they were customer led and didn’t engage in what they all termed ‘product-push’. Two banks, in particular, emphasised the importance of technology in assessing relationship worth.

"Looking at whether to waive a fee, well the short term economic impact is negative; long term we would like to know what the benefit of doing that is and it needs the right metrics to do that."
(USA4RMSC)

"We need to be able to balance the fact that here is the value of the relationship but this customer comes into the branch four times a day. I don’t think the cost piece is plugged back in there properly yet."
(USA1RMSC)

While all four banks emphasised their commitment to the management of customer relationships, they also placed an emphasis on the importance of selling. The staff in all of the banks under study in North Carolina were incentivised for product sales. Nevertheless, there was an acute awareness that this can create conflict.

"Relationship and sales strategies present a difficult reconciliation."
(USA4RMSC)

"Its really hard. We say to staff ‘Guess what, we’re going to cut your pay by a third and for you to continue to make up your old salary you’re going to have to start selling.’"
(USA1RMSC)

One banker argued that there was less of a conflict where a cross sales thrust was employed, rather than discrete hard selling.

Interestingly, in most cases one of the products for which staff were ‘incented’ (their term) to sell was the ‘Internet banking’ product. An Internet banking product was being
proactively sold in three of the four banks under study at the time of the visit. In all cases, the sales management systems of the banks were able to track and reward staff members who sold this product. Perhaps more importantly, the system would also attribute future sales made through the Internet back to the originating branch, which would receive full volume and margin credit. There was, therefore, a clear incentive for staff to sell this particular product because it did not take business away from the branch. First Citizens was the only bank not proactively selling an Internet product, however it did offer the Internet as a means of interacting with the bank.

“We have kept a pretty low profile because we’re not sure yet how to reconcile an ‘Internet product’ with the same product offered by branches. We don’t bring a whole lot of visibility to ourselves at the present time.”

(USA1RMSC)

7.2.2 Theme 2: The delivery mix on offer and the balance between these with particular emphasis on the role of the Internet

All the US banks were committed to their branch network with only Central Carolina advocating a reduction in coming months. All of the study banks also offered telephone banking and this channel was heavily used. Likewise all of the banks had Internet banking capability but this channel was still in its infancy (1-2 years). The biggest challenge according to the interviewees was systems integration.

“Our objective is for them (the branches) to know the customer and know our relationship with that customer at any touchpoint - we’re not there yet.”

(USA4DM)

One bank in particular seems to have anticipated this problem and designed very flexible systems after storing the original legacy system in a data warehouse from which extracts can be more easily pulled;

“We have a lot of people building middleware that reaches out and touches lots of different systems.”

(USA4DM)

The cost advantages of on-line interactions were recognised and attractive to all of the banks.
"With the Internet channel it is a large fixed cost but on a variable cost basis it adds virtually nothing."
(USA3DM)

It is these cost advantages that appear as the key motivator for banks embracing the web. Indeed, three of the bankers interviewed stated that the Internet was a ‘must-do’ but they were rather more vague about the discernible competitive advantages. One bank, CCB, however was emphatic that their web model was creating a competitive advantage for them. Their system was very community based and enabled other businesses to offer services through the bank site. Through extensive promotion at branch level (having trained branch staff first) they had achieved customer penetration in excess of 10% in the 6 months commencing January 2000. It is however, too early to judge the extent to which business through the Internet channel is replacing that offered through other channels.

Overall, all of the four-study banks regard the Internet as just another channel but the key challenge is to integrate it with the branch and phone in order that the customer can use it effectively when relating to their bank. This issue of integration does, however, appear difficult both in technical and strategic terms.

7.2.3 Theme 3: The type of products perceived as suitable for Internet delivery and why they are perceived in this way

Views on the issue of product appropriateness were fairly consistent amongst the US bankers. Products were not uniformly felt to be appropriate for Internet delivery and one vice-president summed up the general view:

"I know what I’m thinking, but I don’t know how to say it....basically the simpler the product, the better it is going to work."
(USA1PA)

A similar view was proposed by one VP who argued that in the case of small business lending “the quality of the lending decision is a function of the understanding we have of the borrower and that can’t be built up through email - you need face to face interaction” (USA2PA).
All of the bankers interviewed highlighted an apparent paradox in terms of competitive
d Advantage. On one hand they realised that they had to embrace the Internet and all had
increasing levels of customer acceptance for Internet delivery but on the other hand they
all felt it was very difficult to differentiate on this basis alone. One vice-president stated:

"But what we want to do is make sure we differentiate ourselves as being a
provider of quality and excellent service. We are not in business to be a
Walmart."

(USA2PA)

This vice-president feared that commoditisation would occur if customers were
increasingly comparing product offerings through the Internet.

The only bank that felt they were differentiating through the Internet was Central Carolina
(as mentioned above). This was accomplished by the web-site acting as a portal, or
window, through which users could access non-bank services provided by retailers, rather
than through any bank-specific added value.

The banks remained divided on the best target market for their web-based services. First
Citizens are aiming at what they call the ‘low net worth / low maintenance individual - the
pure transactor’ while BB&T were aiming towards upper segments and positioning their
Internet offer as something which represented added value to customers. Unlike Central
Carolina which has a relatively small and affluent customer base (hence the focus on an
innovative web portal site), BB&T serves a mass market. All of the banks were quick to
emphasise that they were not pushing customer groups towards the Internet channel, but
were promoting it and allowing customers to choose. However, some of the banks had in-
branch ‘sales’ targets for their Internet ‘product’.

The Central Carolina manager felt very strongly that eventually the Internet would be an
accepted channel for all product delivery irrespective of the level of complexity involved.
The level of customer intelligence Central Carolina’s Customer Information System (CIS)
holds means that very appropriate offers can be made to customers and purchase trends
tracked automatically without the reliance on human intervention. Emails to prospective
customers are automatically triggered from the system if the profile of the customers fits that campaign profile. The younger, more up-market customer base also means that the vast majority of customers are IT literate and have PCs at home. However this was not true for the other banks interviewed.

7.2.4 Theme 4: The perceived value of bank strategies aimed at migrating clusters from personal to remote (Internet) delivery channels

There was a divergence of views with respect to both the extent and manner of migration strategies that could or should be employed. BB&T for example have not engaged in any sort of migration strategy - they are simply letting customers choose the channel delivery. Their vice-president stated “we are allowing people to move at their own pace in terms of adopting the Internet. We want them to know that we offer it but we don’t want them to think we are rushing them towards it, and we’re not!” At Wachovia a similar message was evident. The primary approach was to ‘encourage’ customers to use the Internet but not to push them. It was felt that there were about a third of customers who interacted remotely in any case and they were first to adopt the Internet channel. The strategy employed was therefore simply to ‘sign up’ those who were interested.

All the banks however, noted the importance of the branch in communicating to customers of Internet banking. This seemed to cluster around two key approaches - in-branch merchandising and staff selling of the package. Two of the banks cited the importance of staff training programmes, with one offering free Internet banking bill payment to encourage use by staff. It was envisaged that if staff were comfortable using the system and convinced of its merits then they would more effectively communicate this to prospective customers.

Another key issue to emerge was the perception amongst respondents that there was only so much you could do to encourage adoption by customers. Factors such as demographics, socio-economic group, education, IT literacy, and financial service needs were all seen to play an important part in the extent to which the Internet would be adopted but there was little clarity on the specific impacts of these variables on adoption behaviour. Societal culture was also seen to play an important role. It was felt that the increasing role of
remote delivery of services such as fast food and 'pay at the pump' gas stations would allow for a gradual acceptance of remote banking, from the telephone interface through to the use of the Internet. This was accepted by the bankers and all seemed reluctant to go beyond simply communicating the core benefit of the Internet system (universally agreed to be 'convenience') and embrace forced migration or differential pricing for channel use. Indeed there was a fear about forcing customers on-line:

“How is the on-line customer going to distinguish one from another. Do you think they are going to recognise OUR features and functions!”
(USA1CM)

Figure 7.1 Key Themes from USA Findings

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<tr>
<th>Key Theme</th>
<th>Key Finding</th>
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<tbody>
<tr>
<td>Relationship Mktg / Sales culture</td>
<td>Relationships are of key importance</td>
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<tr>
<td></td>
<td>Need for localised decisions / responsiveness</td>
</tr>
<tr>
<td></td>
<td>Branch key role in RM mgt</td>
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<td></td>
<td>Difficult to reconcile sales and RM approaches</td>
</tr>
<tr>
<td>Delivery Mix / Net Integration</td>
<td>Branch to remain key channel</td>
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<tr>
<td></td>
<td>Systems integration key barrier</td>
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<tr>
<td></td>
<td>Internet very cost advantageous</td>
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<td></td>
<td>Internet seen as a ‘must do’</td>
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<tr>
<td>Product Appropriateness</td>
<td>Not all products suit</td>
</tr>
<tr>
<td></td>
<td>In general the simpler the better</td>
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<td></td>
<td>Loan decisions need more face to face</td>
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<tr>
<td></td>
<td>Risk of lost differentiation if too much delivered on-line</td>
</tr>
<tr>
<td>Migration</td>
<td>Customers encouraged but not forced to adopt - move at their own pace</td>
</tr>
<tr>
<td></td>
<td>Branch staff perceived as key enablers and customer communicators</td>
</tr>
<tr>
<td></td>
<td>In branch merchandising important</td>
</tr>
<tr>
<td></td>
<td>Society comfort with ‘remote’ service contexts will lead to on-line banking</td>
</tr>
<tr>
<td></td>
<td>Key benefit is convenience</td>
</tr>
</tbody>
</table>
7.3 Ireland / GB Research

Interviews were conducted with the Bank of Ireland, Northern Bank (NAG Group), Ulster Bank, First Trust Bank and Royal Bank of Scotland. This represents the Big Four Irish Banks and Royal Bank of Scotland, which is considered a pioneer in the area of on-line banking. That consideration, combined with the fact that it now owns Ulster Bank and NatWest, explains why it was included in the study. Interviews were conducted with either the Head of Internet banking (if such a post existed) or Head of Marketing/Strategy with specific responsibility for e-banking strategy. In Bank of Ireland the interviews were conducted with the Chief Executive for Northern Ireland and Britain and the Head of Group Marketing in the Irish Republic. Six interviews were conducted in this part of the research.

7.3.1 Theme 1: Importance and manifestation of RM Orientation and Sales Culture

All of the banks cited relationship marketing and sales culture as being paramount in their current business strategy, and had personal bankers as part of this strategy. There was, however, a general acknowledgement that the depth of the relationship needed improvement. Moreover the present lack of depth was a function of a lack of integration amongst the computer legacy systems used by the banks.

“I think there is a recognition certainly in the operating model we have just put in place that we need to work harder at improving and deepening those relationships.”
(IGB1RMSC)

Two of the banks were just in the process of developing a more comprehensive relationship management strategy where relationship managers were allocated to the top 20% of the retail base, and the remaining 80% were equally divided between a less close relationship and no relationship. In the case of the non-relationship managed customers, who were lower net worth and not considered strong relationship prospects, a more remote interface was cited as desirable:
"We want to offer remote interfaces to some types of customer and say ‘that is the only way we want you to bank with us’ and if you want to come into the branch it will cost you £5 per visit; with the more profitable customers we say, come into the branch, you can do everything for free."
(IGB2RMSC)

“We are in the process of a challenge to co-ordinate and manage the variety of channels on offer and to those customers we are not going to relationship manage - to still make them feel valued and able to do business with us.”
(IGB1RMSC)

One banker argued that he was unsure ‘that any relationship was possible any more’ (IGB3RMSC). He thought that it was important to remember that it was the banks that wanted the relationship with customers, not the other way round. However, he maintained that face to face interaction was still very important because it represented “the human face of the bank and tangibilises our values - that is where customers really experience our friendliness, expertise and efficiency” (IGB3RMSC).

All bankers interviewed argued that a sales culture was in place within their organisation and that this was an important component in the overall relationship management strategy. One bank cited the potential difficulties of reconciling the two approaches but argued that staff training and retention were bigger inhibitors than any fundamental mismatch of strategy. Interestingly all respondents felt that while their bank was improving profitability year on year, more long term benefits would accrue if there was greater investment in staff recruitment and training.

7.3.2 Theme 2: The delivery mix on offer and the balance between these with particular emphasis on the role of the Internet

All managers voiced concern over the complexity of integrating new channels into their delivery and one in particular argued that the proliferation of channels led to improved bargaining power for the customer:

“There has been a power shift towards the customer. We are in the process of that taking place and there is a real challenge for us in trying to co-ordinate and manage the variety of channels in a world where the customer really will choose whether he or she wants to use one, two, three or four of those channels.”
(IGB1DM)
Another key challenge emphasised by two of the banks, was that of the ‘single view of customer’. It was argued that the challenge of customer data capture across a range of products and services is difficult and an industry wide problem.

The branch was still considered a key channel by all the respondents however the nature of its role was perceived to be changing in two complementary ways. One change was the move towards sales advice from branch staff, particularly for more complex products and the other was in terms of reduced processing at branch level, allowing staff more time to engage in selling and relationship management activity. The branch was considered to be the key platform for such interaction:

“The branch is still the key channel and will continue to perform two key functions; one is in sales and advice delivered face to face, the other is to tangibilise the brand and allow customers to have a physical ‘place’ to go to.” (IGB1DM)

“A lot of people will always want to see faces. We will definitely need the branch and have no plans to cut branch numbers.” (IGB5DM)

There was a very conscious worry however regarding the consistency of service quality across the various delivery channels. One banker commented:

“Each channel needs to uphold the brand value and look after the customer equally well.” (IGB2DM)

Another respondent, commenting on the same issue, cited the importance of developing new employee skills in order that channel management and integration can be managed more effectively.

“Ten years ago the skills set required of the branch banker was much more limited than it is today - the complexity emerging in the multi-channel environment requires a more adaptable and holistic skills set - the emphasis must be on training and recruitment.” (IGB1DM)
An important point made by all of the bankers was that there was no ‘Internet product’ sold through the branch network. Staff were not incentivised to sell the Internet, nor were they rewarded when their own branch customers adopted this channel. None of the banks had any MIS that enabled it to establish the originating branch and which on-line products were sold after adoption.

“I don't want to get into issues of targeting because the terminology can be very difficult from the Union's perspective....as for attributing volume and margin for Internet products purchased on-line I guess that's the next stage for us and our competitors but we're not there yet.”

(IGB2DM)

7.3.3 Theme 3: The type of products perceived as suitable for Internet delivery and the reasons why they are perceived in this way

All but one of the banks felt that more simple products were more appropriate for Internet delivery, a view summarised as follows:

“I think the precise issue is that as products become more complex, the role of human interaction becomes greater. So, for your investment products or complex lending products such as mortgages, the web is less appropriate a medium than for easy to comprehend transactional service based products.”

(IGB3PA)

One of the banks felt that all types of product were appropriate for Internet delivery, from current accounts through to mortgages although with respect to mortages, another bank stated that it was imperative to 'have a person behind the process' (IGB2PA). A prerequisite to universal adoption, however, was a more educated and technologically literate customer base. One bank was encouraging this through the use of in-branch PCs on the customer side of the counter, and kiosks where customers could try out the new technology. This aspect of 'trial' was considered important but this in-branch education was only evidenced in one of the study banks.

With respect to on-line savings and investments, Egg was frequently cited as a success story but all of the bankers interviewed questioned the validity and sustainability of the sort of price driven strategy utilised by Egg. Indeed two bankers argued that for more complex products the Internet had a role to play in information search but the
personalisation of human interaction remained crucial - 'the personalisation of the 1960’s combined with the technology of the 1990’s’ (IGB3PROD).

It was also argued that Egg was actively recruiting price sensitive and promiscuous customers and that this segment would be hard to cross-sell to and retain.

With respect to how the web might be used by customers shopping for investment products one banker stated:

“It may mean the customer shops around on the Internet, reaches a conclusion in what the two or three ‘best in class’ products are and by doing so prepares himself for the face to face meeting with his relationship manager.”

(IGB1PA)

A third banker emphasised the importance of banks understanding the interaction preferences of customers and of how this would alter depending on product;

“Personal lending is one thing customers appear to do quite happily remotely; investments, no, they like face to face and I can understand why.”

(IGB1PA)

Other bankers felt it was too early to predict how customers would behave with regard to product purchase on-line.

7.3.4 Theme 4: The perceived value of bank strategies aimed at migrating clusters from personal to remote (Internet) delivery channels

None of the banks interviewed was engaged in any form of customer migration towards remote channels. One respondent stated that the channel was secondary to the service and that his bank was trying to match products to their most appropriate delivery platform. Other respondents were keen to emphasise that the key challenge was to be present in all channels and allow the customer to interface with the channel they felt most appropriate for their needs. All of the interviewees believed that a differential advantage could still be secured in the overall value proposition if there was human interaction:
“Added value doesn’t come so much from advice being given but rather in the way it is given. Where you lose the personal contact there is a risk. Customer advisers do add value to the customer shopping experience - it’s not only about price.”

(IGB4CM)

One bank interviewee in particular saw the entire on-line experience as a ‘must-do’ in terms of organisational learning. Rather than being focused on customer migration, the bank was focused on internal integration;

“I think by starting now and having the web as part of our channel strategy there is learning we will acquire......to not enter the race and think you will be able to leap-frog at a later date I think would be high risk.”

(IGB1CM)

Another bank executive highlighted the fact that ‘customers will make calls on what it is that they want to do’. He warned that there was a real danger in trying to migrate customers to on-line delivery;

“To what extent banks intervene to try to promote new customer behaviour is uncertain. There is a real issue around the pace at which customers will change their behaviour. Competitors are waiting to see what bank will lead with their chin and try (through differential pricing perhaps) to migrate customers - and they will be waiting to take advantage of any disaffected customers impacted upon by such a move. It’s risky.”

(IGB1CM)

Other bankers stated that there were no plans to migrate customers to on-line media at this time as it was too early in the adoption of the Internet to make any judgments as to the viability of such a move.
<table>
<thead>
<tr>
<th>Key Theme</th>
<th>Key Finding</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Relationship Mktg / Sales culture</strong></td>
<td>Relationship are of key importance</td>
</tr>
<tr>
<td></td>
<td>Staff retention problems compromise relationship building</td>
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<tr>
<td></td>
<td>Branch has a key role in RM mgt</td>
</tr>
<tr>
<td></td>
<td>Sales culture sits comfortably with RM strategy</td>
</tr>
<tr>
<td></td>
<td>No ‘Internet product’ sold by staff</td>
</tr>
<tr>
<td><strong>Delivery Mix / Net Integration</strong></td>
<td>Branch to remain a key delivery channel &amp; to tangibilise brand values</td>
</tr>
<tr>
<td></td>
<td>Systems integration key barrier to multi-channel delivery</td>
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<tr>
<td></td>
<td>Consistency of quality across channels hard to control</td>
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<tr>
<td></td>
<td>Internet very cost advantageous</td>
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<td></td>
<td>Internet seen as a ‘must do’</td>
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<tr>
<td></td>
<td>New skills required in staff to adapt to E-banking</td>
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<tr>
<td></td>
<td>Not all products suit but Internet good resource for information gathering.</td>
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<tr>
<td><strong>Product Appropriateness</strong></td>
<td>In general the simpler the product the better for Internet delivery.</td>
</tr>
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<td></td>
<td>Investment decisions need more face to face.</td>
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<tr>
<td></td>
<td>Can’t predict how customers will embrace on-line in UK / Irish market</td>
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<tr>
<td><strong>Migration</strong></td>
<td>In-branch awareness and education deemed important</td>
</tr>
<tr>
<td></td>
<td>Customers move at their own pace - no proactive selling of Internet products</td>
</tr>
<tr>
<td></td>
<td>Branch staff perceived as having limited role at this time</td>
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<tr>
<td></td>
<td>In branch merchandising / promotion important to generate awareness</td>
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7.4 Swedish Research

Four interviews were conducted in Stockholm with the following Swedish banks; Svenska Handelsbanken, Swedbank (ForeingsSparbanken) and Merita Nordenbanken. All four respondents were Vice-Presidents with specific responsibility for mobile and/or Internet strategy. In the case of Handelsbanken this involved interviewing two respondents. Each interview lasted for approximately 90 minutes and took place at the respondent’s place of work. Sweden was chosen as a locus for the final stage of the qualitative study due to the high rates of customer adoption of new technologies and the relatively high preferences for remote banking. On average the banks interviewed had over 60% of their personal customer base registered and actively using the Internet.

7.4.1 Theme 1: Importance of RM Orientation and Sales Culture

All banks cited the importance of customer relationships and the need for a pervasive sales culture. One bank, in particular, explained the difficult culture change that had to happen in order for this transition to take place, and emphasised the key role of staff in this process:

“To be honest I think many staff are still quite product oriented but compared to 5 years ago we have changed so much. It’s all about changing culture and that involves more selective recruitment and indeed de-recruitment of staff. The bank would never admit to de-recruitment of staff but realistically if you want to change it will have to be done and it is being done.”

(SE1RMSC)

None of the interviewees saw a conflict between the target driven sales culture currently in existence and the relationship orientation needed for long term profitability.

One major bank had a quite different relationship management and selling culture compared to other banks. All of their 600 branches across Sweden were profit centres, as has been normal practice in the industry for some time, but unusually these profit centres had responsibility for localised marketing.
Pricing parameters and promotional models were co-ordinated centrally but each branch the manager could customise their own product promotions and offers. With respect to the web, each branch has an individual and community based web-site, customised to reflect its local geographical area. Relationship management was, therefore, managed locally and staff in each profit centre were empowered to act in the best interests of their branch, based on their local understanding. When asked about the skills of staff to embrace this autonomy and deal with such direct responsibility for sales and profit, the vice-president stated;

"We invest a lot in training. The major asset we have is enthusiasm, a very strong energy exists, you can almost feel it in the branches. A key thing we offer is that the employees represent the biggest single owner of the bank so we have a high level of commitment. If things are not working in a particular branch, first we change the branch manager, then if that doesn’t work we just close the branch office, it is very simple.”
(SE2RMSC)

The third bank interviewed maintained a network of 300 branches and again emphasised the importance of retaining skilled staff in branches. It was recognised that the role of branch staff centre on relationship oriented selling and advice, rather than on the more basic data inputting duties of cashiers.

“Branch officers are highly educated. To use that knowledge resource efficiently is not to use it at the cashier desk - that is a waste of good competent people and if you use them in this way they will not stay an employee.”
(SE3RMSC)

It was of interest that all of the banks interviewed emphasised the importance of the branch in developing and maintaining customer relationships. As would be expected, however, where profitability was compromised the branch office in question would be closed. However, while two of the banks interviewed had actually closed 4% of their branch network in the previous 12 months, the actual number of alternative physical presences had increased; usually through an outlet opening in a supermarket or a kiosk. Despite this, staff numbers were falling in all of the Swedish banks interviewed.
With regard to the Internet, one banker in particular saw it providing an important role in augmenting the totality of the bank-customer relationship, especially in the ongoing maintenance of such relationships:

"The Internet is a great relationship management asset; maybe not as useful for the creation of relationships but it can certainly serve to deepen the relationship." (SE2RMSC)

The bank most comfortable with all issues relating to relationship interfaces gave the example of always having focused on the importance of CRM and for the need to integrate systems from the outset in order that an accurate and meaningful picture can be formed.

"We’ve had customer relationship management for 25 years and now we are merely opening new channels to it. We put emphasis on laying in a sound infrastructure in order to correlate and manage these new channels and all the information generated into one single point of access." (SE2RMSC)

7.4.2 Theme 2: The delivery mix on offer and the balance between these with particular emphasis on the role of the Internet

All of the Swedish bankers interviewed reported that there was a separately branded ‘Internet banking product’, which was sold through the branch network. One bank though, while acknowledging that the Internet product was sold at branch level, also emphasised the importance of selling it through direct mail:

"We are very very efficient when it comes to direct mail activity. In the main the branches service the branch customers so while they may attract customers on to the Internet, once on-line these customers will be serviced through the Internet." (SE3DM)

All of the bankers interviewed agreed that the Internet and mobile technology represented a key but complementary distribution channel to the branch. With mobile phones used by almost all Swedes the mobile platform is highly important to the banks but all were in agreement that it would be used in a very specific way;
"We win of course if the customers do their banking business themselves through the Internet so they have the mobile Internet channel that is becoming more and more important and that will be a channel within other channels. You have the mobile channel, you have the Internet channel, you have the branch channel as well and perhaps all working together will lead to the development of new markets."
(SE1DM)

One interviewee argued that the mobile would be most effective for the provision of ‘alerts’ where text messages could provide customers with information on share movements or other such financial information that the customer might have requested.

"The mobile channel will provide time critical services perhaps that are interesting because a lot of customers are not logged onto the Internet, 90% of their daily time. But you have your mobile perhaps and things can change; value can be added."
(SE2DM)

The issue of channel integration is critical and clearly relies on effective database management and systems integration. All the banks interviewed seemed to feel this challenge had been overcome through effective internal systems including CIS and various integrated MIS packages. The process was however acknowledged to be difficult and time-consuming. One key dimension of success was the effective capture of branch customer information. In this respect a data warehouse was deemed critical by one bank in particular;

"You need a warehouse, a good data warehouse. And that is very complicated. On the one hand you can make it very sophisticated and then the complexity increases quite randomly. We try to make it customer agreeable very much, so we start with simplicity for the branch offices, and when their demands are increasing we can make it more competent, more efficient, and more usable to the branch office, that is extremely important for our way of working."
(SE1DM)

7.4.3 Theme 3: The type of products perceived as suitable for Internet delivery and the reasons they are perceived in this way

There was general agreement among respondents that at this stage the Internet would be most appropriate for the more simple functions. Examples cited included balance enquiries, account transfers and accessing general information. Interestingly one bank
stated that customers were starting to open accounts on-line but these were predominantly savings based products. In contrast, there was a reluctance to set up borrowings on-line. Explanations for this reluctance were unknown at the time of the interviews, but bank management were surprised because their expectation was that credit related products would sell better on-line than investments given the fact that customers were borrowing ‘the bank’s money’ rather than the bank ‘giving’ the customer’s money.

One banker emphasised the importance of using the Internet proactively through customer profiling and more accurate product offers being made in this way. Provided this was managed properly by the banks, all products were potentially appropriate for delivery through the Internet. It was acknowledged that where the customer is engaged in the search-buy behaviour then it is more likely that more complex products may require human intervention.

“The Internet bank has to be extremely simple and user friendly from the customer’s perspective but also there must be a support capability somewhere who can help the customer out. The need for human touch will always be there.” (SE3PA)

In fact, the role of human interaction was perceived as being central to the success of any Internet banking product by all of the respondents.

7.4.4 Theme 4: The perceived value of bank strategies aimed at migrating clusters from personal to remote (Internet) delivery channels

All four banks interviewed agreed that customers would not be forced to embrace the Internet as a channel. Indeed amongst the Swedish sample there was a recognition that as mobile and digital television came on stream it was neither desirable nor a realistic goal to migrate all customers on-line;

“Overall we estimate about 60% of customers will use either Internet, WAP and/or digital TV. These platforms are not mutually exclusive and some customers may use all. However we feel digital TV will be more mass, it is a poor man’s Internet if you like.” (SE1CM)
The other remaining banks also agreed that two thirds of their personal customer base would be Internet banking users by 2005, although they were unclear about the extent of usage of mobile and iTV.

All interviewees agreed that approximately 40% of existing customers would show a reluctance to embrace the web but through education and the passage of time this figure would be reduced. idTV was thought to be a possible enabler for this minority but exactly how consumer behaviour would change was uncertain. Similarly, no respondent was clear about timescales regarding customer on-line migration but there was agreement that there would always be a percentage of customers (estimated at c10% by the respondents) who would never adopt remote channels.

Once again education was considered to be a key mechanism for encouraging greater adoption and this education process was deemed to consist of a two-pronged strategy. Increased awareness of the Internet solution had to be generated through direct mail to specific customer groups. These customer groups were those who demographically matched the traditional Swedish web user and therefore, the initial target would be males, 25-40 years old, professional, well educated with above average income. The second part of the education strategy was through branch staff but the interviewees had different ways of approaching this.

One interviewee argued that staff selling the Internet product should be users themselves and the banks had introduced an internal training scheme where employees had to show a competence in Internet use and be users of the bank’s Internet products;

"How can you sell something you don’t use yourself, where will your confidence come from? All our employees have to take a course to be ‘e’-certified."
(SE3CM)

While no respondent voluntarily raised the issue of differential pricing specifically in response to this theme, when probed a little they all admitted that interaction platforms (i.e. branch, phone, WAP, Internet) would be priced differently in the future. As relationship value and customer interaction preferences became more understood by the bank, pricing models would be refined and become more ‘personalised’.
### Key Themes from Swedish Findings

<table>
<thead>
<tr>
<th>Key Theme</th>
<th>Key Finding</th>
</tr>
</thead>
</table>
| **Relationship Mktg / Sales culture** | Relationship are of key importance  
Branch has a key role in RM mgt  
Sales culture sits comfortably with RM strategy  
‘Internet product’ sold by staff through incentive system |
| **Delivery Mix / Net Integration** | Branch to remain a key delivery channel & to tangibilise brand values where extensive network exists  
Consistency of quality across channels hard to control  
Internet seen as key to adding value to customer  
New skills required in staff to adapt to E-banking; staff training completed |
| **Product Appropriateness**       | All products suitable for Internet delivery where bank determines appropriateness; need to be proactive  
In general the simpler the product the better for Internet delivery.  
Some evidence that Investment products selling better than credit based on-line  
Can't predict how customers will embrace iTV, WAP and Internet in Sweden |
| **Migration**                     | In-branch awareness and education deemed important  
Customers move at their own pace but are made fully aware of options  
Branch staff perceived as having extensive role in customer adoption  
In branch merchandising / promotion important to generate awareness |
7.5 **Discussion: Towards an Integrated Qualitative Findings Model**

Given the summary themes of Stage 1 of the research it is important to identify threads of commonality in order to integrate the country-specific findings and hopefully build a more holistic model. This model should serve to highlight issues of key importance at a general level, as well as identify those issues that are peculiar to individual countries. This general model will allow for the development of questions for use in the Stage 2 research survey instrument.

Figure 7.4 illustrates the extent to which respondents in different countries either agreed or disagreed. The most effective way of gaining a holistic overview is to view Figure 7.4, and focus on Tables 7.1(a) and 7.1(b) together. Table 7.1(a) shows where all respondents cited a particular issue, and Table 7.1(b) shows where there was a divergence of opinion. For convenience, the number of the interview guide discussion theme is also included in the tables.
Figure 7.4: Integrated Qualitative Findings Model – Identifying threads of commonality between countries

Table 7.1 (a) Issues cited as important by all countries

<table>
<thead>
<tr>
<th>Key</th>
<th>Issues cited as important by all Countries</th>
<th>Interview Guide Theme source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Issue 1</td>
<td>Relationships are key</td>
<td>1</td>
</tr>
<tr>
<td>Common Issue 2</td>
<td>Branches are integral to effective RM</td>
<td>1</td>
</tr>
<tr>
<td>Common Issue 3</td>
<td>Branches will remain a key distribution channel</td>
<td>2</td>
</tr>
<tr>
<td>Common Issue 4</td>
<td>Staff will need new skills to cope with on-line channel</td>
<td>2</td>
</tr>
<tr>
<td>Common Issue 5</td>
<td>Important to educate customers in on-line use</td>
<td>4</td>
</tr>
<tr>
<td>Common Issue 6</td>
<td>Passage of time is key to customer adoption</td>
<td>4</td>
</tr>
</tbody>
</table>
Table 7.1(b) Other issues arising

<table>
<thead>
<tr>
<th>Key</th>
<th>Other Issues Arising</th>
<th>Interview Guide Theme source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue 7</td>
<td>RM and sales culture difficult to reconcile</td>
<td>1</td>
</tr>
<tr>
<td>Issue 8</td>
<td>No Internet product offered</td>
<td>1</td>
</tr>
<tr>
<td>Issue 9</td>
<td>Internet product offered</td>
<td>1</td>
</tr>
<tr>
<td>Issue 10</td>
<td>Systems integration key barrier</td>
<td>2</td>
</tr>
<tr>
<td>Issue 11</td>
<td>Internet attractive mainly for cost reasons</td>
<td>2</td>
</tr>
<tr>
<td>Issue 12</td>
<td>Not all products suits Internet delivery</td>
<td>3</td>
</tr>
<tr>
<td>Issue 13</td>
<td>Consumer behaviour changes not considered a barrier</td>
<td>4</td>
</tr>
<tr>
<td>Issue 14</td>
<td>Direct mail important in communication</td>
<td>4</td>
</tr>
<tr>
<td>Issue 15</td>
<td>Customer will embrace at own pace</td>
<td>4</td>
</tr>
</tbody>
</table>

7.6 Implications

7.6.1 Country Specific Commonalities and Differences

Managing Relationships

All of the respondents clearly viewed managing relationships of paramount importance and they all regarded the bank branch as a key facilitator in this process (Issues 1 and 2). However, USA and Ireland / GB respondents highlighted the difficulty in reconciling branch based incentivised sales campaigns with customer focused relationship marketing strategies (Issue 7). This conflict largely centred around the need for performance related pay for staff to meet individual selling targets, while at the same time ensuring that they act in the best interests of the customer. The Irish / GB respondents were unique in the sample because they did not offer a dedicated Internet product sold at branch level (Issue 8). The Swedish and American banks all had such products and selling strategies in place (Issue 9), and they also had MIS tracking software that was capable of attributing sales made on-line back to branches which originally sold the Internet product.

Delivery Channel Issues

All respondents agreed that branches would remain a key distribution channel well into the foreseeable future but that branch staff would need to have new skills in order to cope with the changing technological environment (Issues 3 and 4). Indeed one Swedish bank had
created an ‘e-certification’ scheme, where all branch staff would have to show a competence in using the web and own the bank’s Internet product prior to being allowed to sell it to customers. In one North Carolina bank, branch staff were all given bank PCs to take home and develop their on-line skills, and to encourage them to use the technology for on-line bill payment. These issues emerged under interview guide theme 2.

Where there was divergence of opinion it centred on US and Irish / GB banks having great difficulty regarding systems integration, specifically the integration of CRM / CIS systems providing customer relationship information and bookkeeping information regarding transactional information. This was not the case in Swedish banks, however, who claimed to have a relationship orientation which, from the origins of computerisation, led to them pursuing the goal of a ‘single view of customer’. Such systems enabled Swedish banks to profile customers and calculate average relationship profitability.

Integrating the Internet through PC, mobile and idTV interfaces did not seem to pose a problem for any of the Swedish banks interviewed. More problematic was predicting the extent to which customers would use the various channels (Issues 10 and 15).

In keeping with this theme and once again highlighting a different perspective in Sweden, it was the Irish / GB and American banks whose key motivation in embracing the web was cost reduction. Swedish banks on the other hand appeared much more driven by ‘adding value’ to the customer proposition (Issue 11).

Product Appropriateness for Web Delivery

This was an area of the interview guide which led to varying opinions (Issue 12). The Irish / GB and the American respondents felt that not all products were appropriate for Internet delivery. In general, it was felt that as products became more complex the greater the need for face to face interaction. While Swedish respondents did not fundamentally disagree with this argument they were much more focused on differentiating between a reactive situation (where the customer initiates the search-buy behaviour themselves through the web-site) and a proactive situation (where the bank actively targets appropriate customer segments with on-line products, through email for example, and anticipates self
completion by the customer). The Swedish bankers argued that their customer knowledge enabled such proactive activity but acknowledged that it would most likely be appropriate for the higher net worth customers. The use of mobile phone ‘alerts’ which draw the customer’s attention to offers on-line was deemed a key facilitator in this sales process. This was expected, given the high penetration of mobile phones in the Swedish population. No bank in any of the study countries was clear on exactly how and when customers would embrace such initiatives but Swedish banks were clearly ahead of the others with regard to trial.

**Customer Education and Migration**

Interestingly all bankers agreed on the importance of customer education in encouraging adoption of on-line banking (Issue 5 and 6). The branch platform and branch staff were seen as key enablers in this process (as has been discussed above), and the American and Swedish banks had initiatives to develop staff skills in this area. Irish / GB and Swedish banks mentioned the unpredictability of consumer behaviour with regard to on-line adoption but there were key differences between these countries on this point. While Irish / GB banks were uncertain about consumer behaviour in general, Swedish respondents were certain about adoption (expecting 66% of the banked population to be on-line banking by 2003) but were less sure about what interface would be favoured by different customer segments (i.e. PC, WAP or iTV). US banks were more circumspect in predicting how consumer behaviour would change and the speed of this change. There was agreement by all banks that, irrespective of in-branch education and general awareness campaigns, consumer behaviour would change slowly and there was only so much that could be done to encourage it. Sweden was the only country where direct mail was mentioned as a means of generating awareness and educating customers in on-line banking. The Swedish respondents felt that direct mail was a very customised way of reaching customers and in collaboration with in-branch merchandising / trial displays it would add to overall effectiveness.

No bank advocated actively migrating customers to on-line delivery channels but they also recognised that certain customer groups would be more cost effective if they were encouraged to use on-line channels. Differential pricing was mentioned by respondents as
a possible future means of encouraging such adoption. One respondent captured the general view when he said, ‘there is no such thing as an unprofitable customer, just unprofitable channels’. Interestingly there was a marked difference between Sweden and America in terms of what customers’ banks felt were the most appropriate targets for on-line delivery. In Sweden banks felt that the higher net worth customer would be most appropriate while in America the ‘low net worth high transactor’ was the preferred target, although one US bank was also aiming at higher net worth clients (Central Carolina Bank).

7.7 General Contribution of Stage 1 Qualitative Findings to Stage 2 of Research

A key purpose of this international qualitative research (see Durkin and Howcroft, 2003) was to gain an overview of what bankers thought of as key issues in relationship-orientated Internet banking.

The bankers’ perceptions of how they felt customers would embrace the Internet for banking was also established. The three country study served to highlight important areas on which all bankers agreed and these areas of agreement served as key inputs to the quantitative survey that forms Stage 2 of the research and which was issued to a cross section of personal customers from a large UK retail bank.

The general agreement between bank respondents was that there is a lack of clarity regarding consumer buying behaviour with on-line banking and which interfaces (i.e. PC, WAP, idTV) would be used for what products. This lack of clarity underpins the justification for the second stage of the research which focuses on customers and the influences which determine their decision to adopt / not adopt e-banking, and how they make such decisions.

In Stage 1 bankers were not in agreement as to which customer segments would be best served by the Internet and in what ways this matched the strategic direction of the banks themselves as regards e-banking strategy. That relationship management remains a key objective for all banks interviewed points to the importance of gaining a better understanding of the role which can be played by the Internet in managing customer
relationships of varying worth. The role of the branch in relationship management and as a platform for educating customers about the benefits of the Internet is also of interest. Accordingly, a better identification of what are the actual motivators and inhibitors as regards Internet banking for customer segments of varying worth is central to effective relationship management in the future multi-channel environment.

Within this process of influencing customer adoption the issue of e-banking product appropriateness becomes important and is determined through customer perceived levels of product complexity. It has been established that conventional ad hoc or post hoc segmentation techniques do not service such analyses effectively (Harrison, 2003; Smith, 2004, Black et al, 2002) and alternative approaches in identifying the key variables that impact/predict customer behavioural or decision-making style are important.

### 7.8 Conclusion

The chapter has shown that as consumer usage of remote bank delivery channels increases, managing bank-customer relationships will become more important as well as more challenging. Significantly, this importance stems from the fact that with most remote delivery channels, the opportunity for social interchange is reduced. To compensate for this social deficiency there will, therefore, be an increased need to collect information on consumer behaviour patterns and use such information to reinforce the bank customer relationship. In one respect it is perhaps rather fortunate that the Internet and other forms of remote delivery channels, are conducive to collecting information and directly accessing customers. This provides the banks with an opportunity to target specific customer segments with messages and products. However, the lack of face to face contact will remain a long-term problem. This probably explains why all of the respondents anticipate a future role for branch networks, in order to tangibilise the bank’s brand and introduce a social aspect into bank customer interactions. Similarly, although respondents in Sweden had a slightly different opinion, the interviewees from the U.K. and USA believed that more complicated products were best retailed via a face to face interface through branch networks.
This suggests that the future mix of bank delivery channels will consist of a combination of traditional and new delivery channels. Moreover, rather than being perceived as discrete or competitive, the findings indicate that these channels will be complementary. For example, it is envisaged that in some instances, on-line products will be sold from branches and revenues generated from these products will be attributed to the branches which originated the sales. Such an approach will involve radical changes in staff training programmes in order to provide staff with the necessary on-line skills and product knowledge. Explicit in these training programmes, however, will be the need to fundamentally re-educate bank staff (and bank customers too) and move away from regarding technology solely as a means of efficient book keeping, towards regarding it as a means of accessing information and providing a more appropriate way of satisfying customer needs.

This is important because the findings suggest that the U.K. and USA respondents have a tendency to regard technology as a method of increasing transaction banking efficiency rather than as a means of improving relationship management. This belief might have its origins in the fact that both the U.K. and USA respondents perceived the primary advantage of remote delivery channels, almost exclusively in terms of cost reduction. In contrast, however, the Swedish bankers, who were far more aware of the relationship management potential of technology, saw the primary advantage in terms of adding value to the bank customer relationship.

Finally, although there were differences of opinion within the sample about the future role of remote delivery channels in relationship management, there was unanimous agreement that the real difficulty lay in predicting which customers would use remote channels and exactly when wholesale adoption would take place. There was also general agreement that consumer behaviour, irrespective of bank strategy, would only change gradually. Therefore, although all of the respondents recognised the potential of differential pricing in encouraging the usage of remote delivery channels, its introduction was unanimously tinged with caution by all of the respondents. The power of one party in the bank-customer relationship was being perceived as increasingly important and unusually in this industry, that party was not now the bank, but rather the customer (Durkin and Howcroft, 2003).
CHAPTER 8:
RESEARCH METHODOLOGY:
RESEARCH STAGE 2
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RESEARCH STAGE 2

8.1 Introduction

This chapter builds upon the research methodology chapter (Chapter 6) and links the key findings from Research Stage 1 (Chapter 7) to the research objectives of Research Stage 2.

The Research Stage 2 hypotheses, detailed below, allow for an identification and assessment to be conducted (as stated in the overall aim) of the banks' approaches to Internet enablement with respect to managing relationships (as established in Stage 1) and customer acceptance of Internet banking.

The hypotheses proposed for this stage of the research were derived from and correspond to Objectives 2-4 and have been distilled from both the literature review and Stage 1 of the research process. Each objective is detailed first and then supported by the relevant literature. The hypotheses and sub-hypotheses which will test the key elements of this objectives then follow.

8.2 Research Stage 2 — Data Gathering and Analysis

The survey instrument used for this data collection can be found on pages 192 to 199.

8.3 Stage 2: Sample Determination and Extraction

8.3.1 Researcher — Bank Interaction Process

Meetings were held with the study bank in Summer 2001 to approve the questionnaire and establish an issue date for the questionnaire. Upon the instruction of the Director of Retail Banking, the direct marketing unit had booked the mailing into the schedule for October 2001. Unfortunately, due to unforeseen competitor activity and urgent customer mailings to meet new legislative demands, the survey was delayed until July 2002. In the interim, the bank underwent two organisational restructures which had a direct impact on
the researcher’s bargaining position and all previous agreements had to be re-negotiated with the new management. This led to fifteen further meetings being held between November 2001 and June 2002. The mailing was eventually issued the first week of July 2002 at the researcher’s own cost and with no support from the bank other than database facilitation.

8.3.2 Sample Determination

The case bank in Northern Ireland has approximately one hundred thousand personal current account customers. The bank breaks these down into relationship managed and not relationship managed and they are categorised in terms of account turnover, credit history, length of account being open and assessment of potential.

The personal customer base breaks down as follows:

**Category Y:** Relationship managed, high net worth – 8% (8000 customers). Turnover in excess of £1000 per month

**Category G:** Non-relationship managed, medium net worth – 24% (24,000). Turnover from £750 - £999 per month

**Category K:** Non-relationship managed, low - medium net worth –11% (11,000). Turnover from £400-£749

**Category E:** Non-relationship managed, low net worth – 57% (57,000). Turnover below £400 per month.

It was important that the sample chosen was stratified according to the above classifications so that it was representative of the case bank’s customer base. A stratified database extract of 5,500 (5.5% of the personal customer base) was chosen and after cleaning the data for wrong, missing or incomplete addresses this number fell to 5,050. The percentages in the sample break down as follows:

**Category Y:** Relationship managed, high net worth – 9% (454 customers). Turnover in excess of £1000 per month.

**Category G:** Non-relationship managed, medium net worth – 24% (1213 customers). Turnover from £750 - £999 per month
Category K: Non relationship managed, low - medium net worth –10% (505 customers). Turnover from £400-£749

Category E: Non-relationship managed, low net worth – 57% (2878 customers). Turnover below £400 per month.

A response rate of 9.7% was achieved (491 responses) from the July 2002 mailing. This was a disappointing response because as the questionnaire was accompanied with a letter detailing that it was equally relevant for Internet users and non-users alike. An incentive was also offered for completion. However, the timing was very bad as the main Northern Ireland holidays occur during the ‘July Fortnight’ i.e. the first two weeks of the month. To compensate for this the deadline for responses was extended from the end of July through to mid-August 2002. There were only 8 spoiled questionnaires with another 3 pre-paid envelopes being returned empty. Interestingly, two of the eight spoiled questionnaires stated on the front that they were on-line banking customers but didn’t have time to fill in a paper-based questionnaire.

The 480 usable responses broke down into the following classifications:

Category Y: Relationship managed, high net worth – 10%
Category G: Non-relationship managed, medium net worth – 26%
Category K: Non relationship managed, low - medium net worth – 14%
Category E: Non-relationship managed, low net worth – 50%

These proportions are now summarised according to population, sample extract and valid returns in Table 8.1:

Table 8.1: Sample Comparisons by Relationship Status

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>8%</td>
<td>24%</td>
<td>11%</td>
<td>57%</td>
<td></td>
</tr>
<tr>
<td>Sample c/a extract</td>
<td>9%</td>
<td>24%</td>
<td>10%</td>
<td>57%</td>
</tr>
<tr>
<td>Valid returns</td>
<td>10%</td>
<td>26%</td>
<td>14%</td>
<td>50%</td>
</tr>
</tbody>
</table>
8.4 Stage 2: Field Research

The overall aim of this research is to identify, assess and evaluate the contribution of the Internet in relationship-oriented retail banking.

Research Stage 1, which has already been discussed comprised of objective 1, which was to gain a deeper insight into how banks position themselves with regard to Internet delivery and to identify the influences (internal and external) on the strategic decision to go on-line.

Research Stage 2 comprises objectives 2-4 and is focused on the customer, rather than the bank. The importance of this research stage is underpinned in two key ways:

- literature evidence as follows:
  - USA based findings which uncovered high rates of discontinuance amongst initial on-line banking adopters; for example for the year ended July 1999 3.2m customers had signed up for Internet banking but 3.1m had discontinued use in the same period. A reason for this was that the customers couldn’t see any relative advantage to the way they had banked before and found the process frustrating (Smith, 1999; Black et al, 2001), thereby mirroring negative press evaluation of services offered by UK banks (Wall 1999, 2000). Emerging research at this time also identified the need for a greater understanding of motives for adoption and how these might vary by customer and product type (Black et al, 2001, 2002)

- Inputs from the Stage 1 qualitative research with international banks (see below).

A key purpose of the international qualitative research (see Durkin and Howcroft, 2003) was to gain an overview of what bankers thought of as key issues in relationship-oriented Internet banking. The three-country study served to highlight important areas on which all bankers are agreed and these areas of agreement acted as key inputs to the quantitative survey that forms Stage 2 of the research.
8.5 Stage 2: Research Objectives and Hypotheses

The hypotheses detailed below allow for an identification and assessment to be conducted, (as stated in the overall aim), of the banks' approach to Internet enablement with respect to managing relationships (as established in Stage 1) and also in terms of customer acceptance of such initiatives.

Such identification and assessment will allow for an overall evaluation of the totality of the research. In light of both research stages the contribution of the Internet in relationship oriented retail banking can therefore be analysed, assessed and evaluated in line with the stated aim of this research. A conceptual model, which will attempt to capture this contribution will also be proposed.

The hypotheses proposed for this stage of the research are derived from and correspond to objectives 2-4 and have been distilled from the literature review and Stage 1 of the research process. Each objective is detailed first and then the hypothesis and sub-hypotheses will follow.

Objective 2

  to identify and assess the extent to which the customer profile influences the level of on-line adoption for Internet banking

Customer net worth is a key indicator of demographic profile and the case bank for this research stage provided data classified according to relationship worth. Those customers who are relationship managed are typically high net worth and are characteristically in fulltime employment, earning higher than average salaries, with high levels of turnover in their bank account, they are typically social class ABC1 and own their home. For that reason, the following hypotheses focus on net worth as determined by relationship status to address this objective. Customers who are high net worth are likely to be sophisticated financial services consumers, who have strong bargaining power with their bank(s). As such, they may be less likely to engage the advice of bank staff to help them deal with products that many other customer segments may find prohibitively complex. It is also proposed that such individuals will have more access to Internet technologies than those less affluent customer groups. The interviews in Sweden supported the view that higher
net worth customers embrace Internet banking more readily. However, in the UK and US, bankers focus on the lower net worth high transactor customers for Internet access. Accordingly, Hypothesis 1 is stated thus;

**H1: As the net worth of customers increases they will display increasing use of the Internet**

- H1.1 - As the net worth of customers increases they will be more likely to have access to the Internet at home and at work;
- H1.2 - As the net worth of customers increases they will display increasing use of the Internet for financial services;
- H1.3 - Relationship managed customers will have higher income levels.

**Objective 3**

*to identify and assess the extent to which varying customer segments prefer referring to branch staff in preference to the Internet interface and to assess whether such preferences vary by customer and/or complexity of need*

Hypothesis 2 seeks to address objective 3 in identifying the propensity of varying customer segments to seek out face to face interaction as financial services products become increasingly complex.

While higher net worth customers may be more financially sophisticated, it follows that as product complexity increases, so will the tendency for all customers to seek third party advice and help. The extent to which this advice / help may be sought at branch level is unclear – it is possible for example, that customers may engage the help of an Independent Financial Adviser in preference to branch based staff. The UK and US respondents felt that branch staff would be key in providing advice and resolving queries. However the Swedish bankers argued that the Internet interface was just another way for customers to access financial services and that it was not possible to predict what products and which customers would find the web platform appropriate at any given point.
H2: In general there will be an inverse relationship between the increasing complexity of customers' financial needs and the propensity of such customers to use the Internet as a means of purchasing financial products

- H2.1 - There will be a significant positive correlation between the views of customers, and the academic literature, on what financial products can be considered 'complex';
- H2.2 - Relationship managed customers will show a greater potential for on-line purchase of financial services at lower levels of product complexity than will non-relationship managed customers;
- H2.3 - As customer needs increase in complexity customers will be more likely to favour face to face interaction over the alternative Internet banking proposition;
- H2.4 - Where customers consider face to face staff referral important pre-purchase this will be influenced by a perceived need for reassurance and an anxiety about the remote intangible platform offered through Internet banking;
- H2.5 - The perceived timesaving and convenience benefits offered by the Internet will be the key predictors in whether or not a customer has registered for Internet banking in the case bank.

Objective 4:

to assess and evaluate the extent to which an a priori decision-making typology correlates to the profile of case bank customers in order to predict Internet adopters

H3: There will be a linkage demonstrated between an a priori decision-making typology and the clusters of customers identified in the study

In an attempt to better understand the 'motivations' behind customers decisions to embrace e-banking (or not) it was decided to explore the extent to which existing decision-making models could be used to identify and assess the customer decision for conducting financial affairs on-line. It was felt that any findings based on conventional customer segments as derived through the case bank database would still not reveal answers to such behavioural questions. It was decided in Stage 2 of the research to use
Michael Driver’s decision-making styles and attempt to group the customers into clusters based on more decision-making / behavioural attributes.

8.6 Identifying Linkages between Stage 1 and Stage 2 Research Themes

Figure 8.1 illustrates the linkages between Research Stage 1 Findings and Research Stage 2 Hypotheses.

**Figure 8.1** Linkage between Stage 1 and Stage 2 Research Themes

<table>
<thead>
<tr>
<th>Stage 1 – Key Findings Themes</th>
<th>Stage 2 – Themes informing research objectives and attendant hypotheses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managing customer relationships key</td>
<td>Relationship managed customers will be more likely to purchase on-line than non-relationship managed</td>
</tr>
<tr>
<td>Branches key delivery and relationship channel</td>
<td>As customer needs increase in complexity customers will increasingly favour face to face interaction</td>
</tr>
<tr>
<td>Increasing levels of product complexity are perceived as requiring increasing levels of face to face interaction</td>
<td>Where customers consider face to face staff referral pre-purchase this will be influenced by a perceived need for reassurance about Internet security</td>
</tr>
<tr>
<td>Lack of clarity on whether the Internet is more appropriate as an enhancement to the relationship-managed customer or for the low net worth transactor</td>
<td>Time-saving and convenience will be key predictors in determining Internet banking registration</td>
</tr>
<tr>
<td>The typology of consumers who will embrace the Internet is unclear as are their preferred interaction interfaces</td>
<td>Customer education is key priority and branch is a key platform for this to take place</td>
</tr>
</tbody>
</table>

Source: Author

By explicitly demonstrating the alignment of the findings from Stage 1 with the hypotheses of Stage 2, key themes through which to compare and integrate the overall findings emerge. The four themes listed below, therefore, have their origin in the academic literature, the conceptual model in Chapter 5 and the findings from Research Stage 1. Together these themes help to contextualise the hypotheses.

1. **Relationship Management**: Given the importance placed on relationship management by all of the international respondents in Stage 1, it follows that the
Stage 2 quantitative study identifies and compares the responses of relationship managed and non-relationship managed customers according to various measures. **Sub-hypothesis 2.2** explicitly examines the propensity of relationship managed and non-relationship managed customers to use the Internet for the purchase of financial services of varying complexity.

**2. Delivery Issues / Product Complexity:** All Stage 1 respondents felt that complex products were those that involved more comprehensive evaluation by customers and as such were difficult for customers to understand. **Hypothesis 2.1** involves examining whether the literature classification of simple and complex products accorded with what customers themselves felt about complexity. Additionally, all Stage 1 respondents felt that as product complexity levels increased the need for face to face interaction increased. **Sub-hypothesis 2.3**, therefore, examines the propensity of customers to purchase financial products of varying complexity online.

**3. Face to Face Interaction / Education:** All Stage 1 respondents felt that branch staff had a key role in educating customers as to the benefit of Internet banking. The role of face to face interaction in general, and specifically, as regards pre-product purchases, is examined in **sub-hypothesis 2.4**.

**4. Customer Typology:** There was general disagreement amongst Stage 1 respondents as regards which customer segments would be most appropriate targets for Internet banking. Targets ranged from high net worth relationship managed customers (where the Internet was deemed to offer added relationship value) through to low net worth high transactor (where the web platform was seen as a desirable low cost interface). This lack of clarity prompted **Hypothesis 3**, which rather than attempting to segment customers in a conventional way, sought to identify clusters of customers who based on their decision-making styles, may provide distinct segments for the banks to target.
8.7 Analytic Strategy for Research Stage 2

Many of the survey questions were not quantitative in the mathematical sense of the word. The data collected was largely ordinal rather than interval, i.e., the numbers used in the Likert scales in some of the questions, represent order rather than magnitude. While this would restrict the use of parametric tests, custom and practice in analysing data of this type is to employ non-parametric tests in social science research (Miles and Shevlin, 2001).

8.8 Stage 2: Questionnaire Design

The purpose of the questionnaire is to gain a deeper understanding of the attitudes of retail bank customers in Northern Ireland to on-line banking. As such, the research instrument is essentially exploratory and is, therefore, in keeping with the theoretically post-positivist philosophy adopted in this research study.

Research Stage 2 is essentially focused on theory testing than theory generation which was part of Stage 1 and which culminated in the development of a conceptual model (see Durkin and Howcroft, 2003). The research objectives, which are in part addressed by this quantitative instrument, seek consensus constructions in the hope of testing the theoretical constructs put forward by the academic literature and the theory generated through Stage 1 of this research.

The instrument is constructed in five sections:

- Section 1 focuses on the respondents' use of the Internet in a general sense and examines issues of access and purchase behaviour. Issues such as frequency of access, the interface used (PC, WAP phone or idTV), usage behaviour and barriers to on-line purchasing are all explored. Such issues were deemed particularly significant through the qualitative interviews with bankers.
- Section 2 explores the respondents' banking needs and how these are currently serviced. Product specific purchase questions are used and issues relating to channel-product delivery preferences are also explored.
Section 3 links Sections 1 and 2 and explores respondents’ use of the Internet in financial services. It examines issues of perceived product appropriateness for the Internet and asks a question on discontinuance.

Section 4 captures demographic information about the respondent which will enable the profiling of respondents and facilitate more meaningful analysis of on-line behaviour. This information will be used in conjunction with the Bank’s profile and classification of the respondent sample database, which is stratified according to net worth.

In section 5, questions adapted from the Driver-Stutfort index will be used. This will facilitate cluster analysis and hopefully the emergence of decision-making types. Correlation analysis will be undertaken between these decision-making typologies and the more general segment information.
Section 1, comprising questions 1-13, is detailed below.

Q 1 Do you have regular access to a computer:
   Yes (11) No (12)
   at home
   at work

Q 2 Do you regularly use e-mail:
   Yes (13) No (14)
   at home
   at work

Q 3 Have you ever used the Internet?
   Yes (15) No (16)

Q 4 From where do you access the internet most frequently?
   From work
   From home
   From work and home
   From place of education
   From a public library
   From an Internet café
   Other PLEASE SPECIFY: ...........................................................

Q 5 How frequently do you access the Internet?
   Every day
   At least once a week
   At least once a month
   Less than once a month

Q 6 Of the last 10 times you accessed the internet, how many times was it through each of these devices?

<table>
<thead>
<tr>
<th>Device</th>
<th>HOW MANY TIMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer</td>
<td>(18-19)</td>
</tr>
<tr>
<td>WAP / Mobile phone</td>
<td>(20-21)</td>
</tr>
<tr>
<td>Television</td>
<td>(22-23)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>10</td>
</tr>
</tbody>
</table>

Q 7 Have you ever used the Internet to gather information to help you make purchase decisions?
   Yes (24) No (25)

Q 8 Have you ever actually purchased anything on-line?
   Yes (26) No (27)

Q 9a Which of these have you ever purchased?
   Travel (e.g., flight tickets, hotel bookings)
   Book
   CD
   Video
   Software
   Clothes
   Tickets (Theatre / sport event etc.)
   Other PLEASE SPECIFY: .......................................................

Q 9b What was your most recent purchase?

<table>
<thead>
<tr>
<th>Purchase Type</th>
<th>Q9a</th>
<th>Q9b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Book</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CD</td>
<td>(26)</td>
<td>(27)</td>
</tr>
</tbody>
</table>
Questions 1-5 attempt to classify the frequency of Internet access and whether it originates at home or at work. The questions also explore the extent of access through emerging channels, such as WAP phone or interactive television. While not highlighted as an issue in the academic literature, such an issue was found to be important in the qualitative interviews with bankers, particularly those in Sweden. In line with the thinking of Black et al, 2001, 2002, and of particular interest, is multi-interface access to the Internet (i.e. where customers may use both remote interfaces and the personal platform of the branch to varying degrees) and how interface choice may be dictated by purpose and complexity of product interaction.

Section 1 also explores the extent to which the respondent has a propensity to purchase on-line (Q7, 8), to what extent they find such a process easy (Q10) and for what products / services the process is used (Q11, 12). The products / services cited in the questionnaire have their origins in the academic literature and more recent commercial research in this area (see for example Booz, Allen and Hamilton, 2004). The barriers to on-line purchase cited in Q13 all have their origins in the academic literature (see for example Rotchanakitumnuai and Speece, 2003; Albrecht, 2003; Smith and Rubb, 2003; Joseph and Stone, 2003)
Responses to these questions will allow for an assessment to be made of the extent to which respondents can be deemed to be innovators / early adopters. Section 1 will also provide information on their attitude to risk and to what extent they display characteristics related to any of Driver's decision-making styles which are detailed in Section 5 of the instrument.

Section 2, comprising questions 14-21, is detailed below:

Q.14 Do you have a CURRENT account into which your salary, pension or other income is paid? TICK ONE ONLY

Yes No (33)

Q.15 Which of these do you currently have? TICK ALL THAT APPLY

Motor insurance
House contents insurance
Buildings insurance
Life assurance
Mortgage
Personal loan
Credit card
PEP
ISA
Stocks and shares (34)
Unit Trusts
TESSA
Pension Plan
Premium Bonds
Post Office Savings Account
Bank / building society / savings account
Other investments specify

Q.16 Do you have all these products with the same bank / financial provider? TICK ONE ONLY

Yes No (36)

Q.17 Where do you do most of your banking or financial transactions (including paying bills)? TICK ONE ONLY

In person at a branch?
By telephone?
By post?
Through the internet?
Through direct debit?
Through standing order? (32)

Q.18 Are you registered as a user of online banking?

Yes No (38)

Q.19 How would you describe your financial service requirements? TICK ONE ONLY

Very simple
Fairly simple
Fairly complex
Very complex
Just leave a box (39)

Q.20 On how many occasions do you talk to someone face-to-face at your bank or with another financial advisor in a normal year?

Q.21 For which of the following financial services do you think it would be important to refer to a member of staff before purchasing? TICK ALL THAT APPLY

Motor insurance
House contents insurance
Buildings insurance
Life assurance
Mortgage
Personal loan
Credit card
PEPs
ISA
Stocks and shares
Unit Trusts
Financial advice
TESSA
Pension Plan (42)
This section includes questions relating to the respondents' banking characteristics and channel preference behaviour. Q15 establishes the respondent's financial sophistication by identifying the range of credit, deposit and insurance products held. Q16 identifies whether these are all serviced by the same provider. Remaining questions (Q17-21) identify which channel the customer primarily uses and whether or not they are registered as an on-line banking customer. Question 17.1 is included because the case bank's database does not incorporate a flag or identifier that can establish whether a customer has registered for on-line banking. This range of questions also explores the extent to which face to face interaction is important to the customer and the extent to which face to face interaction may vary according to product type / complexity. All the issues explored in this section were identified as being important in the qualitative interviews with bankers.

Section 3, comprising questions 22-26, is detailed below

Q.22 At what point in the purchase process of a financial service do you think face-to-face contact with a bank staff member or other financial advisor becomes important? TICK ONE ONLY
- Important from the time I have decided to purchase
- Important to narrow down the options I have initially considered
- Important to gain reassurance once I have made decision
- Never important

SECTION 3 USING THE INTERNET FOR FINANCIAL SERVICES

Q.23a Have you ever used the Internet for any financial services purpose? TICK ONE ONLY
- Yes \[\text{GO TO Q.23b}\]
- No \[\text{GO TO Q.24}\]

Q.23b IF YES AT Q.23a For which of these purposes have you ever used the internet? TICK ALL THAT APPLY
- Product information
- Product purchase PLEASE SPECIFY
- Balance enquiry
- Funds transfer
- Bill payment
- Check exchange rates
- Check share portfolio information
- Browse financial sites
- Other PLEASE SPECIFY...
Q. 23c Are there any of these purposes for which you would no longer use the Internet? TICK ALL THAT APPLY

Product information
Product purchase PLEASE SPECIFY:
Balance enquiry
Funds transfer
Bill payment
Check exchange rates
Check share portfolio information
Browse financial sites
Other PLEASE SPECIFY:

IF ANY TICKED AT Q23c

Q23d What are the main reasons you would no longer use the internet for this / these purposes?

Q. 24a For each of these types of financial products, please indicate how familiar you are with the process of their purchase or set-up. Would you say you were unfamiliar with this process (i.e. haven't purchase / set-up this product before), or familiar with this process (i.e. you have purchase / set-up this product before)?

<table>
<thead>
<tr>
<th></th>
<th>FAMILIAR</th>
<th>UNFAMILIAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current account</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insurance based (e.g. motor. home)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credit based (e.g. personal loan)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment based (e.g., PEP, shares)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q. 24b How would you prefer to purchase / set-up the following types of financial products?

<table>
<thead>
<tr>
<th></th>
<th>AT BRANCH</th>
<th>AT ATM</th>
<th>TELEPHONE</th>
<th>INTERNET</th>
<th>POST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current account</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insurance based (e.g. motor. home)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credit based (e.g. personal loan)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment based (e.g., PEP, shares)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q. 25 In general, how suitable or unsuitable is the Internet as a means of purchasing the following financial services? TICK ONE BOX FOR EACH FINANCIAL PRODUCT

<table>
<thead>
<tr>
<th></th>
<th>VERY SUITABLE</th>
<th>FAIRLY SUITABLE</th>
<th>NEITHER SUITABLE NOR UNSUITABLE</th>
<th>FAIRLY UNSUITABLE</th>
<th>VERY UNSUITABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor insurance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(10)</td>
</tr>
<tr>
<td>House contents insurance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(11)</td>
</tr>
<tr>
<td>Buildings insurance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(12)</td>
</tr>
<tr>
<td>Life assurance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(13)</td>
</tr>
<tr>
<td>Mortgage</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(14)</td>
</tr>
<tr>
<td>Personal loan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(15)</td>
</tr>
<tr>
<td>Credit card</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(16)</td>
</tr>
<tr>
<td>PEPs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(17)</td>
</tr>
<tr>
<td>ISA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(18)</td>
</tr>
<tr>
<td>Financial Advice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(19)</td>
</tr>
<tr>
<td>Stocks and Shares</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(20)</td>
</tr>
<tr>
<td>Unit Trusts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(21)</td>
</tr>
<tr>
<td>TESSA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(22)</td>
</tr>
<tr>
<td>Pension plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(23)</td>
</tr>
</tbody>
</table>

Q. 26 How important would the following factors be in prompting you to use an Internet banking service? TICK ALL THAT APPLY

<table>
<thead>
<tr>
<th></th>
<th>VERY IMPORTANT</th>
<th>FAIRLY IMPORTANT</th>
<th>NEITHER IMPORTANT NOR IMPORTANT</th>
<th>FAIRLY IMPORTANT</th>
<th>NOT IMPORTANT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved service</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(24)</td>
</tr>
<tr>
<td>24 hour service</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(25)</td>
</tr>
<tr>
<td>Convenience (time-saving)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(26)</td>
</tr>
<tr>
<td>Lower fees</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(27)</td>
</tr>
<tr>
<td>Family / friend recommendation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(28)</td>
</tr>
<tr>
<td>Newspaper article</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(29)</td>
</tr>
<tr>
<td>Staff demonstration in my home</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(30)</td>
</tr>
<tr>
<td>Staff demonstration and / or in branch trial</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(31)</td>
</tr>
<tr>
<td>Reassurance about security</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(32)</td>
</tr>
<tr>
<td>Other PLEASE SPECIFY:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(33)</td>
</tr>
</tbody>
</table>
Questions in Section 3 explored more fully the specific impact of Internet customers' behaviour. Q22 establishes where in the purchase process (if at all) face to face contact with a staff member becomes important. Q23 establishes whether the respondent has used the Internet for a financial services purpose and if so, what that purpose was. The most common reasons for use of the Internet in a financial services context cited in the literature are provided as options (see Joseph and Stone, 2003; Smith and Rupp, 2003). Where the respondent may have used the Internet in the past but has subsequently stopped using it (a more common trend in the US than UK), this is captured in Q22c.

Specifically Q24 allows respondents to assess the suitability of the Internet for the purchase of different products, which vary in complexity. To some extent one would anticipate a correlation between responses to these questions and those in Section 2, specifically Q20 and 21, which focus on the desire for face to face interaction. Q25 examines the suitability of the Internet for different financial products and service and Q26 identifies the importance of various factors in determining Internet use in financial services.
Section 4, comprising questions 27-36, is detailed below:

Q.27 Which of the following will be important in your banking in the future?  TICK ALL THAT APPLY
- Branch
- Telephone
- Personal computer
- WAP / Mobile phone
- Television

SECTION 4: GENERAL INFORMATION ABOUT YOURSELF

To enable us to make the best use of your answers, we would be grateful if you would answer a few questions about yourself and your family.

Q.28 Are you male or female?  TICK ONE ONLY
- Male
- Female

Q.29 What is your marital status?  TICK ONE ONLY
- Single
- Married / co-habbing
- Divorced / separated
- Widowed

Q.30 What was your age last birthday?  TICK ONE ONLY
- 18 - 25 years
- 26 - 35 years
- 36 - 45 years
- 46 - 55 years
- 56 - 65 years
- 65+

Q.31 Which of the following qualifications do you possess?  TICK ALL THAT APPLY
- 'O' levels / GCSE (or equivalent)
- 'A' levels (or equivalent)
- First degree
- Postgraduate qualification
- Professional qualification

Q.32 How many dependent children do you have?  TICK ONE ONLY
- None
- One
- Two
- Three+

Q.33 Are you in paid employment?  TICK ONE ONLY
- Yes CONTINUE (40)
- No GO TO Q 36

Q.34 Is this employment part-time or full-time?  TICK ONE ONLY
- Part-time
- Full-time

Q.35 Does your work involve...  TICK ALL THAT APPLY
- A high level of telephone usage?
- A high level of computer usage?
- A high level of internet usage?

Q.36 What is your current household annual income before tax and other deductions?  TICK ONE ONLY
- £5,000 to £9,000
- £10,000 to £19,999
- £20,000 to £29,999
- £30,000 to £49,999
- £50,000+

The standard demographic data captured in Section 4 will allow for an accurate picture of the respondents in terms of the extent to which they match the profile of an Internet user as identified in the literature. Such data is crucial in facilitating the cluster analysis methodology and for developing the linkage with the Driver decision making classification. It will also enable a more meaningful correlation to be made between this data and the net worth classification provided on the sample by the bank.
Section 5 concerns the questions derived from Driver’s work (see below). There are twenty-six attitude statements and in each case the respondent indicates to what extent the attitude statement is characteristic of them.

**SECTION 5: FINAL SECTION**

Q 38 This final section of the questionnaire asks questions that relate to your personality, behaviour and your decision-making style. On a scale of 1 to 5, where 1 = Not at all characteristic, and 5 = Very characteristic, please tick from the following statements.

<table>
<thead>
<tr>
<th>I consider myself extremely short of time in my life</th>
<th>Not at all characteristic of me</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Very characteristic of me</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convenience is highly important to me in my life</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(50)</td>
<td>(51)</td>
</tr>
<tr>
<td>I would be willing to pay for added convenience that saved me time</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(52)</td>
<td>(53)</td>
</tr>
<tr>
<td>I would be willing to try out new ways of doing things if I thought it would save me time</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(54)</td>
<td>(55)</td>
</tr>
<tr>
<td>I would describe myself as venturesome and enthusiastic</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(56)</td>
<td>(57)</td>
</tr>
<tr>
<td>I make decisions quickly and am unlikely to change my mind</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(58)</td>
<td>(59)</td>
</tr>
<tr>
<td>I consider myself a trusting person and I am loyal and honest</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(60)</td>
<td>(61)</td>
</tr>
<tr>
<td>I value long term and personally based relationships</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(62)</td>
<td>(63)</td>
</tr>
<tr>
<td>I make decisions quickly but may change my mind if an alternative course of action seems better</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(64)</td>
<td>(65)</td>
</tr>
<tr>
<td>I explore problems from as many perspectives as possible before I make a decision</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(66)</td>
<td>(67)</td>
</tr>
<tr>
<td>I would describe myself as creative</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(68)</td>
<td>(69)</td>
</tr>
<tr>
<td>I like to refer to others before taking any decision</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(70)</td>
<td>(71)</td>
</tr>
<tr>
<td>I like to keep my options open and not risk overcommitting to any one course of action</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(72)</td>
<td>(73)</td>
</tr>
<tr>
<td>If faced with too much information I will seek the expert advice of a third party</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(74)</td>
<td>(75)</td>
</tr>
<tr>
<td>I value many sources of information and would analyse all before reaching a decision</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(76)</td>
<td>(77)</td>
</tr>
<tr>
<td>I am loyal and value personal relationships highly</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(78)</td>
<td>(79)</td>
</tr>
<tr>
<td>When purchasing I would prefer to buy brands I know over those that I do not know</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(80)</td>
<td>(81)</td>
</tr>
<tr>
<td>Brand is an important consideration to me</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(82)</td>
<td>(83)</td>
</tr>
<tr>
<td>I feel pressure to make decisions quickly</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(84)</td>
<td>(85)</td>
</tr>
<tr>
<td>I buy the latest technology in order to be seen to have it first</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(86)</td>
<td>(87)</td>
</tr>
<tr>
<td>I buy the latest technology after I can see real benefits to me</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(88)</td>
<td>(89)</td>
</tr>
<tr>
<td>I buy the latest technology when prices begin to fall</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(90)</td>
<td>(91)</td>
</tr>
<tr>
<td>I surf the web regularly but mainly for information</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(92)</td>
<td>(93)</td>
</tr>
<tr>
<td>When surfing the web I feel there is too much information to take in</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(94)</td>
<td>(95)</td>
</tr>
<tr>
<td>I think surfing the web for information takes too long</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(96)</td>
<td>(97)</td>
</tr>
<tr>
<td>I worry about security on the web and this would make me reluctant to buy on-line</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(3)</td>
<td>(98)</td>
<td>(99)</td>
</tr>
</tbody>
</table>

Thank you for your help.

Please return your completed questionnaire in the stamped, addressed envelope provided.
8.9 Research Stage 2: Pilot Studies

Pilot Stage 1

The survey instrument underwent eight drafts. The first draft was issued to a convenience sample of three academics, two retail bank managers and one director of a commercial research agency. Feedback from this initial stage mainly related to issues of sequencing and clarity of questions. One respondent asked what the difference between a bank ‘product’ and ‘service’ was as both terms had been used on the original draft. The order of the sections also changed. While the demographic data was always included towards the end of the instrument, the survey in its original form had started with the section ‘About your banking’. Two respondents felt that quickly getting into the questions about Internet usage more clearly set the tone for the questionnaire and made for a more meaningful completion process by respondents.

There was also a concern expressed by three of the respondents (and shared by the author) that the questionnaire was too long and this was addressed in Stage 2 by careful editing of the questionnaire.

Pilot Stage 2

In autumn 2001 a second pilot study was issued. Seventy-eight revised questionnaires were issued to the following constituent groups:

- retail bank managers (4) (different from those used in Stage 1)
- academic researchers (5)
- head of Central Government NI (1)
- research agency director (1)
- retail bank customers (25)
- student users of on-line banking services (7)
- student users / non-users of on-line banking services (35)
Respondents were asked to both complete the questionnaire and comment upon its ease of completion and highlight any issues they thought could be improved. All data was input to ensure that the results could be effectively analysed.

The questionnaire was amended in light of this feedback. It was encouraging that the length of the questionnaire did not seem to be such a big issue to respondents and comments about the alignment of response boxes to comments was very valuable and subsequently corrected.

8.10 The Case Bank

The case bank is a large Irish retail bank with an extensive branch network in Northern Ireland (the locus of this stage of the study) and in mainland UK. For the past three years the bank has increasingly used telephone banking and in the past 18 months has been offering an Internet proposition to customers. This Internet proposition is seen as a stage beyond telephone banking but in terms of functionality it is largely the same, the only difference being that customers can transfer balances between accounts and make payments themselves rather than calling a telephone operator to do it for them. In Northern Ireland, the bank is a relatively small player with only 46 branches. It has a market share of 11%, the lowest of the Big Four in this market.

The case bank's personal customer base totals 100,000 in Northern Ireland with 40,000 of these registered for telephone banking. With respect to on-line registrations the bank estimates this to be 11,000 (i.e. less than 7% of base is registered). MIS is not available in the bank to track who is actually 'using' telephone and Internet banking and no definitions have been established as to how a 'user' of these interfaces might be defined. Figures for usage (i.e. call volumes for example) is available as follows: in the year to March 2001, 148,000 calls were made by 16,000 customers (although the bank cannot identify who such customers are). In the 11 months to Feb 2002, 335,000 calls were made by the now 40,000 registered customers (9.13 calls per registered customer annualised).
8.11 Variable Construction – Research Stage 2

Independent Variables

The derivation of the independent variables in research Stage 2 was established through an examination of the key research objectives 2-4 and their associated hypotheses. The variables are grouped into four sections and the derivation process is explained.

Section A (highlighted in red below) identifies those variables which are related to customer / demographic profiles including relationship status and the pre-determined classification of customer net worth attributed by the case bank.

Section B (blue) shows those variables that will help highlight motivators and inhibitors for the adoption of the Internet in banking.

Section C (pink) is a new variable created from the data which identifies the highest level of product complexity held by the customer (complexity levels having already been established in the literature). The will help reveal the extent to which product complexity impacts Internet use in banking.

Section D (violet) brings together variables which impact on behavioural / decision-making attributes. For example, how the Internet is used by customers, derived from Q7, how easy Internet use is perceived (Q10) and the factors that were derived from Driver’s decision making Q38 also feature in this section.

Section A (red)

1. Q16 All products with the same provider
2. Relationship Status (coded ‘relst’)
3. Chief Income Earner (coded ‘cie’)
4. Social Class (coded ‘class’)
5. Age and Sex (coded ‘age’ and ‘sex’)
6. New Variable – Highest Qualification Level (Coded ‘HighQual’)

201
Section B (blue)

7. Q26 but not to include ‘other factors’
8. Q13 Reluctance stimuli for Internet use but exc Q13p (none of the above)

Section C (pink)

9. Highest Level of Product Complexity (coded ‘hleomp’)

Section D (violet)

10. New 7 decision styles as detailed above from new factor analysis (coded ‘nfl’ – ‘nfl7’)
11. Q7 - Use of Internet to help make purchase decisions
12. Q10 - Perceived ease of buying process on-line
13. Q1/2 – Use the Internet at home / work; email at work and home (coded 1a, 1b, 2a, 2b)

Where any categorical data was taken as independent variables have three or more groups (e.g. Relationship Status) these were re-coded. This was done in order to prevent SPSS treating the categorical variable as if it were continuous. This eliminated the need for more specific dummy variable coding.

Dependent Variables

This part of the analysis will use three dependent variables. The derivation of the dependent variables was established through an examination of the key research objectives 2-4 and their associated hypotheses.
Dependent Variable 1 (DV1): Internet appropriateness for financial services purchase as determined by product complexity level

This variable has its origins in Q25 of the survey, where customers responded to how suitable they felt the Internet was as a means of purchasing various financial products. Three new variables were created from the Q25 data and because products were classified in three different levels of complexity perceived suitability was also classified on the same basis. The new variables which were created and used in this dependent variable were:

- **SIMPSUIT**: customer perceived suitability of simple financial products for Internet purchase
- **MEDSUIT**: customer perceived suitability of medium financial products for Internet purchase
- **COMPSUIT**: customer perceived suitability of complex financial products for Internet purchase

The creation of these new variables from Q25, and the establishment of this as a key dependent variable, is directly linked to objective 3, where it is obviously important to determine the extent to which customers perceive the Internet as an appropriate vehicle to purchase financial products of differing complexity.

The extent to which any of the independent variables will impact on that perception and how they influence perceptions will be established through multi-variate regression analysis.

Dependent Variable 2 (DV2): Perceived importance of referring to a member of branch staff before purchasing products of varying complexity

This variable has its origins in Q21, which asked customers to identify which financial products they thought it would be important to refer to a member of staff before purchasing.

---

1 (derived from Q25 – new variables created Simpsuit, Medsuit and Compsuit)
2 from the new variables 'refsimp', 'refmed', and 'refcomp' defined from data gathered in Q21
Three new variables were created from the data relating to Q21 and because it was possible to classify the product list according to three different levels of complexity, perceived customer importance of referring to a member of staff before purchasing, was also classified on the same basis. The new variables which were created and used in this dependent variable were:

- **REFSIMP**: customer perceived importance of referring to a member of staff before purchasing a simple financial product
- **REFMED**: customer perceived importance of referring to a member of staff before purchasing a medium financial product
- **COMPSUIT**: customer perceived importance of referring to a member of staff before purchasing a complex financial product

The creation of these new variables from Q21, and the establishment of this as a key dependent variable, is directly linked to Objective 2 where it is important to determine the extent to which customers perceive it appropriate to refer to a member of staff before purchasing different products.

The extent to which the independent variables will impact on that perception and how they will influence perceptions will be established through multi-variate regression analysis.

**Dependent Variable 3 (DV3): Whether or not the customer is registered for Internet banking (Q18)**

It was anticipated that being registered for Internet banking will increase the likelihood of using the Internet in financial services activities. However from the Stage 1 qualitative research it has already been established that many banks, in order to boost their publicised Internet adoption figures, have been automatically registering many customers for Internet banking. The extent to which customers registered for Internet banking in the case study bank data have self-selected the service is unknown to the researcher. However, this analysis will try to identify the extent to which independent variables account for customers being registered for Internet banking or not.
The analytical technique undertaken for this dependent variable will be logistic regression as the dependent variable is dichotomous.

8.12 Conclusion

The main aim of this research is to identify, assess and evaluate the contribution of the Internet in relationship-oriented retail banking. The hypotheses detailed in Stage 2 of the study allow for an identification and assessment to be conducted in terms of customer acceptance of Internet banking channels in the delivery of various products.

The adoption or discontinuance of technology-orientated channels by customers clearly raises important questions for the management of bank-customer relationships (Lang and Colgate, 2003; Black et al, 2002). Most of these questions arise out of the basic fact that new and emerging delivery channels, in contrast to branch networks, are remote in the sense that bank-customer interactions do not involve face to face contact to the same extent. How customers accept these new channels and for what reasons, is of paramount importance to the overall aim of the research.

Accordingly, in Stage 2 of the study it is important to identify not only which groups of customers use the Internet for banking, but also to gain an appreciation of what motivators and inhibitors are involved (DV1, DV3). The products that customers perceive to ‘fit best’ with the Internet and the identification of the point in the customers’ search-buy process when they refer to a member of staff are also important considerations (DV2).

From a management perspective the independent variables through which to examine variability in the three dependent variables are key. Regression analysis will reveal which independent variables are of most influence on the three dependent variables. The key themes already identified provide a framework or a rationale for selecting the independent variables.
The regression analysis undertaken between these dependent and independent variables will allow management action to be targeted on the independent variables that contribute most to the variability in either:

- Propensity to use the Internet for financial services purchase (DV1);
- Perceived importance of referring to a member of bank staff pre-purchase (DV2);
- Whether or not the customer is registered for Internet banking (DV3).

This will allow bank managers to target their resources at the issues they know to be important predictors of the dependent variables.

Four figures now follow which illustrate in summary form the linkage between each research objective, the attendant hypothesis, dependent and independent variables and analytic approach.
to identify and assess the extent to which the customer profile influences the level of on-line adoption for Internet banking

Hypothesis 1: As the net worth of customers increases they will display increasing use of the Internet

- H1.1 - As the net worth of customers increases they will be more likely to have access to the Internet at home and at work
- H1.2 - As the net worth of customers increases they will display increasing use of the Internet for financial services
- H1.3 - Relationship managed customers will have higher income levels

Dependent Variable 1:
Internet Appropriateness for financial services purchase as determined by Product Complexity level

INDEPENDENT VARIABLES
- Customer Profile
- Motivators / Inhibitors
- Defining Complexity Levels
- Behavioural / Decisionmaking

Analysis Technique: Multi-Variate Regression
Research Objective 3

to identify and assess the extent to which varying customer segments prefer referring to branch staff in preference to the Internet interface and to assess whether such preferences vary by customer and/or complexity of need

Hypothesis 2: In general there will be an inverse relationship between the increasing complexity of customers' financial needs and the propensity of such customers to use the Internet as a means of purchasing financial products

- H2.1 – There will be a significant positive correlation between the views of customers, and the academic literature, on what financial products can be considered 'complex'
- H2.2 – Simple customers will be more likely to use the Internet for product purchase than Complex customers
- H2.3 – Complex customers will be more likely to favour face to face interaction over the alternative Internet banking proposition
- H2.4 – Relationship managed customers will show a preference for remote interaction at lower levels of product complexity (i.e. simple and medium)

Dependent Variable 2:
Perceived Importance of referring to a member of branch staff before purchasing products of varying complexity

INDEPENDENT VARIABLES
- Customer Profile
- Motivators / Inhibitors
- Defining Complexity Levels
- Behavioural / Decisionmaking

Analysis Technique: Multi-Variate Regression
**Figure 8.4:** Relationship between Research Objectives, Hypotheses, Variable Construction and Analytic Strategy

**Research Objective 3**

To identify and assess the extent to which varying customer segments prefer referring to branch staff in preference to the Internet interface and to assess whether such preferences vary by customer and/or complexity of need.

Hypothesis 2: In general there will be an inverse relationship between the increasing complexity of customers’ financial needs and the propensity of such customers to use the Internet as a means of purchasing financial products.

- H2.5 – The perceived timesaving and convenience benefits offered by the Internet will be the key predictors in whether or not a customer has registered for Internet banking in the case bank.

Dependent Variable 3: Whether or not the customer is registered for Internet banking.

**INDEPENDENT VARIABLES**

- Customer Profile
- Motivators / Inhibitors
- Defining Complexity Levels
- Behavioural / Decisionmaking

**Analysis Technique:** Logistic Regression
Figure 8.5: Relationship between Research Objectives, Hypotheses, Variable Construction and Analytic Strategy

**Research Objective 4**

_to assess and evaluate the extent to which an a priori decision-making typology correlates to the profile of case bank customers in order to predict Internet adopters_

\[ \downarrow \]

Hypothesis 3: There will be a linkage demonstrated between Driver's decision-making typology (Decisives, Flexibles, Hierarchics, Integratives) and the clusters of customers identified in the study.

\[ \downarrow \]

**Analysis Technique:** Cluster Analysis on Q38
CHAPTER 9:

RESEARCH STAGE 2:
DESCRIPTIVE OVERVIEW, ANALYSIS
AND FINDINGS – HYPOTHESES 2, 3 AND 4
CHAPTER 9: RESEARCH STAGE 2: DESCRIPTIVE OVERVIEW, ANALYSIS AND FINDINGS - HYPOTHESES 2, 3 AND 4

9.1 Introduction

Following on from the Literature Review and the Stage 1 qualitative research findings this chapter addresses Research Objectives 2, 3 and 4. The chapter follows a structured approach beginning with a descriptive overview of the survey questionnaire responses. The chapter explains how the raw data from the customer questionnaire was prepared for hypothesis testing. It then addresses each research objective in turn and details the findings from each hypothesis. In line with the overall research aim, 'to identify, assess and evaluate the contribution of the Internet in relationship-oriented retail banking', the goal of the analysis at this stage is to identify and assess the implications of the key issues uncovered in both the literature review and research Stage 1. This will allow for a more meaningful evaluation of the overall findings in Chapter 10.

9.2 Descriptive Overview of Survey Findings

In this section the responses are assessed at a general level according to each of the sections in the questionnaire. Question numbers are indicated in the commentary for reference.

A summary at the end of this section outlines the main findings and provides further discussion to help establish a context for the analysis of the three Stage 2 Hypotheses. Where the information was available, each of the tables that follow have a final column representing confidential MORI data for Northern Ireland and for UK bank customers. While the sample is clearly representative of the case bank base, and the valid responses are representative of the sample, the MORI extracts will make for a more meaningful assessment of how generalisable the findings are.

9.2.1 Demographic Profile (from Questionnaire Section 4)

Of the 480 respondents in the survey 56% were male, and 44% female. A predominantly younger customer responded to the questionnaire with 51% being under 35 and 72% being under 55 years of age. The vast majority of respondents were in paid employment
(72%) and almost three quarters of these were in full-time employment. Over half of the respondents were married or co-habiting while 39% were single. The respondent base reflects a well-educated group with almost one third having a first degree and over 18% holding a professional qualification. Over 55% of respondents are homeowners and the majority earn between £10,000 and £30,000.

9.2.2 Socio-Economic Profile

Table 9.1: Sample Socio-economic Profile versus NI and UK

<table>
<thead>
<tr>
<th>Class</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>MORI - NI</th>
<th>MORI - UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB</td>
<td>92</td>
<td>19</td>
<td>19</td>
<td>14</td>
<td>26</td>
</tr>
<tr>
<td>C1</td>
<td>124</td>
<td>26</td>
<td>26</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>C2</td>
<td>84</td>
<td>18</td>
<td>18</td>
<td>24</td>
<td>21</td>
</tr>
<tr>
<td>DE</td>
<td>77</td>
<td>16</td>
<td>16</td>
<td>32</td>
<td>23</td>
</tr>
<tr>
<td>NO REPLY</td>
<td>103</td>
<td>21</td>
<td>21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>480</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

As might be expected for a survey of this kind, the response rate from the AB class group, at 19%, was higher than average for the NI market which is 14%. However, a relatively smaller response was received from the DE class group (at 16%) compared to the national average for NI and the UK. Almost 43% of AB’s are classified by the case bank as high net worth and are relationship managed. From the responses from this group over 57% earn between £20,000 and £50,000. With regard to DEs almost 69% of them are classified low net worth by the case bank and from the responses 84% of this group earn between £5,000 and £19,000 pa.

9.2.3 Internet Familiarity and Usage (from Questionnaire Section 1)

Almost two-thirds of the respondents have a computer in their home and 45% of these regularly use email from home. Over half of respondents have access to a computer at work and 37% use email as part of their job. Three quarters (74%) have used the Internet and this happens most frequently from home (39%) rather than at work (13%). Those who access the Internet do so regularly, with 52% accessing it at least once a week. The preferred interface through which to access the Internet was the personal computer (89%). Mobile phone and TV on-line access use was very marginal. When asked if they used the Internet as an information source in purchase decisions 74% indicated that they did. Of
those who indicated that they are Internet users, 63% indicated that they had actually made on-line purchases. The most favoured purchases are illustrated by Table 9.2.

### Table 9.2: On-line Purchases

<table>
<thead>
<tr>
<th>Purchased On-line</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel</td>
<td>34%</td>
</tr>
<tr>
<td>Tickets</td>
<td>21%</td>
</tr>
<tr>
<td>Books</td>
<td>17%</td>
</tr>
<tr>
<td>CDs</td>
<td>15%</td>
</tr>
<tr>
<td>Clothes</td>
<td>12%</td>
</tr>
<tr>
<td>Software</td>
<td>9%</td>
</tr>
<tr>
<td>Videos</td>
<td>7%</td>
</tr>
<tr>
<td>Other</td>
<td>8%</td>
</tr>
</tbody>
</table>

When one considers the perceived ease of the on-line buying process the results can be seen for respondents who are Internet users in Table 9.3. This is analysed by social class in Table 9.4.

### Table 9.3: Sample Perceived Ease of On-line buying Process

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very easy</td>
<td>93</td>
<td>19.4</td>
<td>45.6</td>
</tr>
<tr>
<td>Fairly easy</td>
<td>95</td>
<td>19.8</td>
<td>46.6</td>
</tr>
<tr>
<td>Neither easy nor difficult</td>
<td>13</td>
<td>2.7</td>
<td>6.4</td>
</tr>
<tr>
<td>Fairly difficult</td>
<td>3</td>
<td>.6</td>
<td>1.5</td>
</tr>
<tr>
<td>Very difficult</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>204</td>
<td>42.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Not asked</td>
<td>275</td>
<td>57.3</td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>.2</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>276</td>
<td>57.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>480</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

213
Table 9.4: Perceived Difficulty of Buying On-line by Social Class

<table>
<thead>
<tr>
<th>Social Class</th>
<th>Very easy</th>
<th>Fairly easy</th>
<th>Neither easy nor difficult</th>
<th>Fairly difficult</th>
<th>Very difficult</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>%</td>
<td>Count</td>
<td>%</td>
<td>Count</td>
</tr>
<tr>
<td></td>
<td>Count</td>
<td>%</td>
<td>Count</td>
<td>%</td>
<td>Count</td>
</tr>
<tr>
<td>AB</td>
<td>27</td>
<td>29.0%</td>
<td>33</td>
<td>34.7%</td>
<td>3</td>
</tr>
<tr>
<td>C1</td>
<td>36</td>
<td>38.7%</td>
<td>26</td>
<td>27.4%</td>
<td>1</td>
</tr>
<tr>
<td>C2</td>
<td>11</td>
<td>11.8%</td>
<td>14</td>
<td>14.7%</td>
<td>3</td>
</tr>
<tr>
<td>DE</td>
<td>5</td>
<td>5.4%</td>
<td>6</td>
<td>6.3%</td>
<td>5</td>
</tr>
<tr>
<td>NO REPLY</td>
<td>14</td>
<td>15.1%</td>
<td>16</td>
<td>16.8%</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>93</td>
<td>100.0%</td>
<td>95</td>
<td>100.0%</td>
<td>13</td>
</tr>
</tbody>
</table>

Table 9.4 illustrates the marked difference between the perceived ease of the on-line process for the differing social classes. As class moves from AB to DE the perceived ease of transacting on-line decreases. For example, 63.7% of respondents who felt buying on-line was very or fairly easy were AB. In contrast, only 11.7% of DE respondents perceived on-line transactions to be very/fairly easy.

Payment for goods purchased on-line was largely completed by credit card (71%) with debit cards being the next most popular option (19%). Regarding the purchase of products where the brand name was unfamiliar or not recognised, over 71% of respondents indicated a reluctance to proceed with the transaction while 21% stated they would not have a problem.

When given the option to state what other factors would create a reluctance to purchase on-line, Table 9.5 illustrates the most popular answers:
Table 9.5: Sources of Reluctance in Purchasing On-line

<table>
<thead>
<tr>
<th>Source of reluctance for on-line purchasing</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No access to computer</td>
<td>30%</td>
</tr>
<tr>
<td>Expense of phone bills</td>
<td>19%</td>
</tr>
<tr>
<td>Only use Internet in work</td>
<td>9%</td>
</tr>
<tr>
<td>Lack of trust that purchase has been made</td>
<td>23%</td>
</tr>
<tr>
<td><strong>Don’t want credit card details known</strong></td>
<td>48%</td>
</tr>
<tr>
<td>Don’t need to purchase on-line</td>
<td>23%</td>
</tr>
<tr>
<td>Process is too slow</td>
<td>14%</td>
</tr>
<tr>
<td>Too much information to examine</td>
<td>20%</td>
</tr>
<tr>
<td>Don’t know enough about it</td>
<td>0.2%</td>
</tr>
<tr>
<td><strong>Lack of face to face contact</strong></td>
<td>29%</td>
</tr>
<tr>
<td>Expense of carriage charges</td>
<td>23%</td>
</tr>
<tr>
<td>Previous bad experiences of on-line purchase</td>
<td>18%</td>
</tr>
<tr>
<td>Unable to see / touch product</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Delivery delays</strong></td>
<td>36%</td>
</tr>
</tbody>
</table>

Adapted from Question 13

The statements that have been bolded in the above table indicate the four most popular reasons for respondents being reluctant to purchase on-line. The most popular response, concerning security fears, is unsurprising and is frequently cited in the literature and popular press as being a source of customer fear regarding the Internet. The second most popular choice, the issue of delivery delays, suggests this is a response based on prior experience for respondents and again is a frequently cited reason in the literature. Much press attention is given to this issue especially in relation to Christmas purchasing.

Lack of access to a computer is ranked third. Lack of face to face contact in the virtual world is also an important source of concern for many respondents but the literature would suggest its impact seems specific to the nature of the product being purchased. Interestingly the very low figure for ‘Don’t know enough about it’ suggests respondents have broad experience of Internet use and are confident in its use. Arguably, the most surprising finding is the low figure for ‘Unable to see / touch product’, particularly when one considers it in conjunction with the high figure for lack of face to face interaction.
9.2.4 Respondents Banking Characterisation (From Questionnaire Section 2)

Almost 86% of all respondents had a current account into which their salary was paid. Some 30% of ABC1 respondents had all of their accounts with the same provider whereas 53% were multi-banked. By contrast, 42% of C2DEs had their account with the same provider and only 30% were multi-banked. Q15 explored the product holdership of the respondents and Table 9.6 illustrates this:

<table>
<thead>
<tr>
<th>Product holdership</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor Insurance</td>
<td>64%</td>
</tr>
<tr>
<td>Home Contents Insurance</td>
<td>56%</td>
</tr>
<tr>
<td>Buildings Insurance</td>
<td>49%</td>
</tr>
<tr>
<td>Life Insurance</td>
<td>47%</td>
</tr>
<tr>
<td>Mortgage</td>
<td>39%</td>
</tr>
<tr>
<td>Personal Loan</td>
<td>26%</td>
</tr>
<tr>
<td>Credit Card</td>
<td>56%</td>
</tr>
<tr>
<td>PEP</td>
<td>7%</td>
</tr>
<tr>
<td>Stocks / Shares</td>
<td>18%</td>
</tr>
<tr>
<td>ISA</td>
<td>17%</td>
</tr>
<tr>
<td>Unit Trusts</td>
<td>4%</td>
</tr>
<tr>
<td>TESSA</td>
<td>5%</td>
</tr>
<tr>
<td>Pensions</td>
<td>27%</td>
</tr>
</tbody>
</table>

Regarding the completion of banking transactions (Q17), 54% of respondents dealt with their bank face to face at branch level. Of these, 47% estimated that they visited the branch between 1 and 8 times a year (Q20). The remainder interacted largely by post (60% of remaining).

Almost all (93.5%) described their financial requirements as being either 'very simple' or 'fairly simple' (Q19) and 22% of respondents were registered for on-line banking. This latter figure is significantly above the industry average for Northern Ireland (10%).

When considering which product purchases necessitated speaking to a member of staff (Q21), the following results are found (see Table 9.7):
Table 9.7: Importance of Referring to a Member of Staff Pre-financial Purchase

<table>
<thead>
<tr>
<th>Financial Product</th>
<th>% considering important to talk to member of staff pre-purchase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor Insurance</td>
<td>35%</td>
</tr>
<tr>
<td>Home Contents Insurance</td>
<td>33%</td>
</tr>
<tr>
<td>Buildings Insurance</td>
<td>33%</td>
</tr>
<tr>
<td>Life Insurance</td>
<td>47%</td>
</tr>
<tr>
<td>Mortgage</td>
<td>68%</td>
</tr>
<tr>
<td>Personal Loan</td>
<td>59%</td>
</tr>
<tr>
<td>Credit Card</td>
<td>31%</td>
</tr>
<tr>
<td>PEP</td>
<td>22%</td>
</tr>
<tr>
<td>Stocks / Shares</td>
<td>29%</td>
</tr>
<tr>
<td>Unit Trusts</td>
<td>35%</td>
</tr>
<tr>
<td>Advice</td>
<td>22%</td>
</tr>
<tr>
<td>TESSA</td>
<td>46%</td>
</tr>
<tr>
<td>Pensions</td>
<td>22%</td>
</tr>
</tbody>
</table>

It appears from Table 9.7 that as product complexity increases so too does the need for interaction with members of staff. A follow-up question (Q22) asks at what point in the purchase of a financial service does face to face interaction become important. Over 80% of respondents stated that human interaction was either important from the start (39.6%) or to help in the narrowing down of various choices (41.6%). Very few respondents (15%) thought that it was important as a mechanism for reassuring them that they had made the right decision.

9.2.5 Using the Net for Financial Services (From Questionnaire Section 3)

Table 9.8 reveals that just over 22% of respondents (86 individuals) have used the Internet in their banking activities, a figure significantly above the average for NI and even above the UK average.

Table 9.8: Use of the Internet in Banking

<table>
<thead>
<tr>
<th></th>
<th>Respondent %</th>
<th>MORI NI</th>
<th>MORI UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use the Internet in banking</td>
<td>22%</td>
<td>8%</td>
<td>15%</td>
</tr>
</tbody>
</table>
When these Internet bankers are broken down by social class the following pattern, shown in Table 9.9 emerges:

Table 9.9: Internet Bankers by Social Class: Sample versus UK

<table>
<thead>
<tr>
<th></th>
<th>Respondents</th>
<th>MORI UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB</td>
<td>29%</td>
<td>25%</td>
</tr>
<tr>
<td>C1</td>
<td>28%</td>
<td>19%</td>
</tr>
<tr>
<td>C2</td>
<td>21%</td>
<td>15%</td>
</tr>
<tr>
<td>DE</td>
<td>13%</td>
<td>12%</td>
</tr>
<tr>
<td>No reply / other</td>
<td>9%</td>
<td>29%</td>
</tr>
</tbody>
</table>

In terms of gender, 25% of males and 18% of female respondents were using the Internet for their banking as against a UK average of 20% males and 12% females (Mori, 2002).

Of the 22% of respondents who use the Internet for their banking the key reason was for balance inquires (13%) and general information (9%). Other less popular reasons included ‘bill payment’ (7%) and ‘transfer of funds’ (7%). When exploring whether there were any purposes for which customers would no longer use the Internet, single figure responses were provided. However, Q23d allowed respondents to provide free response answers as to why they might have discontinued use. Again only seven respondents chose to complete this box citing reasons such as:

- ‘too slow’ / ‘download problems’ – 2 respondents
- ‘face to face or phone is quicker’ – 1 respondent
When exploring how familiar the respondents were with setting up various types of account, the following results, as revealed in Table 9.10, were found:

Table 9.10: **Familiarity with Product Set-up**

<table>
<thead>
<tr>
<th>Product Type</th>
<th>% Familiar with account set-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current account</td>
<td>80%</td>
</tr>
<tr>
<td>Insurance based</td>
<td>51%</td>
</tr>
<tr>
<td>Credit based</td>
<td>41%</td>
</tr>
<tr>
<td>Investment based</td>
<td>18%</td>
</tr>
</tbody>
</table>

In an attempt to understand what interface customers might prefer to use for setting up these different product types, Q24b asked respondents to indicate their interaction preferences between the following choices: branch, ATM, telephone, Internet, post. The following results, as shown in Table 9.11, were found:

Table 9.11: **Customer Interface Preferences for Account Set-up**

<table>
<thead>
<tr>
<th>Preference for opening accounts</th>
<th>At branch</th>
<th>Through ATM</th>
<th>By Telephone</th>
<th>Through Internet</th>
<th>By Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Account</td>
<td>80%</td>
<td>3%</td>
<td>5%</td>
<td>10%</td>
<td>2%</td>
</tr>
<tr>
<td>Insurance based</td>
<td>52%</td>
<td>1%</td>
<td>30%</td>
<td>14%</td>
<td>3%</td>
</tr>
<tr>
<td>Credit based</td>
<td>73%</td>
<td>0.2%</td>
<td>14%</td>
<td>10%</td>
<td>3%</td>
</tr>
<tr>
<td>Investment based</td>
<td>79%</td>
<td>0.5%</td>
<td>7%</td>
<td>11%</td>
<td>2.5%</td>
</tr>
</tbody>
</table>

ATM and postal opening of accounts were unpopular but the branch remains the most popular platform for customers to establish new business of any type with a financial provider. The telephone proves a popular interface for Insurance based products and this is the only category of product that impacts on the clear overall preference for branch interaction. The Internet remains fairly constant at between, 10-14%, across all product types. Question 25 then explored to what extent all respondents felt that the Internet was suitable for purchasing financial services / products of differing types.
Table 9.12: Perceived Suitability of Individual Products for Internet Purchase

<table>
<thead>
<tr>
<th>Product Type</th>
<th>Very Suitable</th>
<th>Fairly Suitable</th>
<th>Neither Suitable</th>
<th>Fairly Unsuitable</th>
<th>Very Unsuitable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor Insurance</td>
<td>20%</td>
<td>36%</td>
<td>24%</td>
<td>7%</td>
<td>13%</td>
</tr>
<tr>
<td>Home Insurance</td>
<td>18%</td>
<td>34%</td>
<td>26%</td>
<td>10%</td>
<td>12%</td>
</tr>
<tr>
<td>Buildings Insurance</td>
<td>17%</td>
<td>36%</td>
<td>25%</td>
<td>11%</td>
<td>13%</td>
</tr>
<tr>
<td>Life Assurance</td>
<td>12%</td>
<td>21%</td>
<td>31%</td>
<td>18%</td>
<td>19%</td>
</tr>
<tr>
<td>Mortgage</td>
<td>8%</td>
<td>12%</td>
<td>29%</td>
<td>22%</td>
<td>30%</td>
</tr>
<tr>
<td>Personal Loan</td>
<td>12%</td>
<td>20%</td>
<td>28%</td>
<td>17%</td>
<td>22%</td>
</tr>
<tr>
<td>Credit Card</td>
<td>19%</td>
<td>25%</td>
<td>25%</td>
<td>15%</td>
<td>16%</td>
</tr>
<tr>
<td>PEP</td>
<td>8%</td>
<td>14%</td>
<td>39%</td>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td>ISA</td>
<td>9%</td>
<td>15%</td>
<td>37%</td>
<td>19%</td>
<td>20%</td>
</tr>
<tr>
<td>Advice</td>
<td>8%</td>
<td>12%</td>
<td>27%</td>
<td>25%</td>
<td>29%</td>
</tr>
<tr>
<td>Stocks and Shares</td>
<td>13%</td>
<td>19%</td>
<td>30%</td>
<td>18%</td>
<td>20%</td>
</tr>
<tr>
<td>Unit Trusts</td>
<td>7%</td>
<td>17%</td>
<td>36%</td>
<td>18%</td>
<td>22%</td>
</tr>
<tr>
<td>TESSA</td>
<td>7%</td>
<td>17%</td>
<td>37%</td>
<td>18%</td>
<td>21%</td>
</tr>
<tr>
<td>Pension Plan</td>
<td>6%</td>
<td>12%</td>
<td>29%</td>
<td>25%</td>
<td>28%</td>
</tr>
</tbody>
</table>

Tables 9.12 and 9.13 support the literature and indicate that the more simple products (such as motor and home insurance) are deemed to be more suitable for remote delivery through the Internet. However as complexity increases, especially for credit and investment products, there is a decrease in the percentage of respondents considering the Internet an appropriate delivery interface. Indeed only half as many respondents feel the Internet is suitable for investment purchases compared to insurance based products. This will be explored later through the specific hypotheses but is beyond the scope of this overview section.

Table 9.13: Varying Product Types and their Perceived Suitability to Internet

<table>
<thead>
<tr>
<th>Account Type</th>
<th>Very or fairly suitable for Internet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insurance based</td>
<td>48%</td>
</tr>
<tr>
<td>Credit based</td>
<td>32%</td>
</tr>
<tr>
<td>Investment based</td>
<td>24%</td>
</tr>
</tbody>
</table>

* - calculated as average for the constituent dimensions indicated below taken from Table 9.12 above

Insurance based – Motor, Home, Buildings, Life
Credit based – Mortgage, Loan, Credit Card
Investment based – PEP, ISA, Shares, Unit Trusts, TESSA, Pension
Still focusing on the propensity of respondents to use Internet banking services, Q26 examines which factors would be positive influencers in this adoption process. The results are shown in Table 9.14:

### Table 9.14: Importance of Influencers to Encourage Internet Banking Adoption

<table>
<thead>
<tr>
<th>Benefit to encourage adoption Of Internet Banking</th>
<th>Very Important</th>
<th>Fairly Important</th>
<th>Neither</th>
<th>Not very important</th>
<th>Not Important at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved Service</td>
<td>49%</td>
<td>25%</td>
<td>14%</td>
<td>5%</td>
<td>8%</td>
</tr>
<tr>
<td>24 hour service</td>
<td>57%</td>
<td>20%</td>
<td>11%</td>
<td>4%</td>
<td>8%</td>
</tr>
<tr>
<td>Convenience</td>
<td>60%</td>
<td>20%</td>
<td>9%</td>
<td>4%</td>
<td>7%</td>
</tr>
<tr>
<td>Lower fees</td>
<td>68%</td>
<td>15%</td>
<td>7%</td>
<td>3%</td>
<td>7%</td>
</tr>
<tr>
<td>Recommendation</td>
<td>19%</td>
<td>26%</td>
<td>34%</td>
<td>8%</td>
<td>13%</td>
</tr>
<tr>
<td>Newspaper article</td>
<td>6%</td>
<td>16%</td>
<td>40%</td>
<td>18%</td>
<td>20%</td>
</tr>
<tr>
<td>Staff demonstration in home</td>
<td>13%</td>
<td>13%</td>
<td>32%</td>
<td>19%</td>
<td>24%</td>
</tr>
<tr>
<td>Staff demonstration / in-branch trial</td>
<td>18%</td>
<td>23%</td>
<td>26%</td>
<td>15%</td>
<td>18%</td>
</tr>
<tr>
<td>Reassurance about security</td>
<td>64%</td>
<td>15%</td>
<td>8%</td>
<td>4%</td>
<td>8%</td>
</tr>
</tbody>
</table>

In ranking those factors that are deemed the most important, the following Table 9.15 can be determined.

### Table 9.15: Perceived Key Benefits / Importance of E-banking Adoption

<table>
<thead>
<tr>
<th>Benefit to encourage adoption Of Internet Banking</th>
<th>Very Important</th>
<th>Fairly Important</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower fees</td>
<td>68%</td>
<td>15%</td>
<td>83%</td>
</tr>
<tr>
<td>Convenience</td>
<td>60%</td>
<td>20%</td>
<td>80%</td>
</tr>
<tr>
<td>Reassurance about security</td>
<td>64%</td>
<td>15%</td>
<td>79%</td>
</tr>
<tr>
<td>24 hour service</td>
<td>57%</td>
<td>20%</td>
<td>77%</td>
</tr>
<tr>
<td>Improved Service</td>
<td>49%</td>
<td>25%</td>
<td>74%</td>
</tr>
<tr>
<td>Recommendation</td>
<td>19%</td>
<td>26%</td>
<td>45%</td>
</tr>
<tr>
<td>Staff demonstration / in-branch trial</td>
<td>18%</td>
<td>23%</td>
<td>41%</td>
</tr>
<tr>
<td>Staff demonstration in home</td>
<td>13%</td>
<td>13%</td>
<td>26%</td>
</tr>
<tr>
<td>Newspaper article</td>
<td>6%</td>
<td>16%</td>
<td>22%</td>
</tr>
</tbody>
</table>

As can be seen, the top four issues relate to lower fees, convenience, reassurance about security and 24 hour access.
9.2.6 Overview Commentary

Tables 9.1 to 9.15 provide a broad overview of the composition of the sample respondents and provide a snapshot of their Internet use behaviour. The split between male and female respondents is broadly in line with the norm for the case bank (56% male, 44% female), while the age distribution shows a bias towards younger customers with almost 71% of the respondents aged between 18yrs and 45yrs. Given the younger age profile of the respondents, one would anticipate a greater than average propensity to use the Internet amongst the respondents. Certainly this was the case when the sample data was compared to the MORI data. Over two thirds of the sample had used the Internet with just over one quarter never having used it. Of these users, over 55% were male and 45% were female, and within the Internet user group 63% have purchased something on-line. When the numbers of respondents registered for Internet banking is determined, it is significantly above the industry norm of 10%, at 21.4%. This is unsurprising given the young bias evident in the respondents profile.

9.3 Preparing the Quantitative Data for Hypotheses Testing

9.3.1 Introduction

Having gained an overview of the survey responses it is important that the data is prepared for the hypothesis testing, which constitutes Stage 2 of this research study.

Specifically, this involves determining levels of product complexity according to the literature classification and, as was discussed in Chapter 8, this is a pivotal issue in relation to Hypothesis 2.

The question of product complexity is an extremely important issue and central to this research. Exploring this hypothesis demands that some judgement is made as to what products can be classified as complex or not and how such a judgement can be formed with objectivity and confidence.
There were two primary influences on the way in which product lists were classified in the questionnaire:

1. Academic literature;
2. Qualitative feedback from international respondents in Stage 1 of research study.

Each of these is now discussed and justified more fully:

9.3.1.1. Understanding Product Complexity in Academic Literature

A research gap has been identified by Harrison (2003) in terms of our lack of understanding of customer search-buy behaviour for financial products of varying complexity (p7). The seminal research, which focused on the area of product complexity, was that of Shostack (1987). She considered if ‘processes are the service equivalent of a product’s raw materials, can processes be designed, managed and changed?’ Shostack goes on to describe processes according to the steps and procedures that constitute the process itself and also the variability possible in the completion of those steps and procedures. Through ‘blue-printing’, the constituent elements of service processes can be broken down, and better understood and managed. Shostack (1987) proposed that a service’s complexity level can be defined ‘as the number and intricacy of steps required to perform it’ (p35). This focus on process breakdown is characteristic of what Howcroft, Hewer and Durkin (2003) term the ‘confidence school of thought’. It focuses upon the ‘degree of complexity and divergence in the interactions and the certainty of outcome or risk which is determined by the nature of different financial products’ (p1004). This focus on risk, certainty of outcome and the complexity of process stages, contrasts with the ‘involvement school of thought’, which examines the degree of contact between customers and staff, and the nature of this contact rather than the complexity of the underlying process. As detailed in Chapter 3, Storbacka’s (1994) typology of financial services classifies products according to how customers use them, as shown in Table 9.16, and this is useful in helping to measure product complexity. Transaction services usually handled through the current account are continuously delivered and frequently used, and this familiarity makes such products low in complexity. However, the current account is a high involvement product, especially when problems emerge in the conduct of the account, (Stewart, 1995). Thus, even the most basic financial service products can be involving for
the customer at some stage in the consumption process, namely purchase and when problems occur. At other times however, customer inertia or apathy may well be the dominant customer characteristic.

Table 9.16: Storbacka’s Typology Descriptions for Financial Services

<table>
<thead>
<tr>
<th></th>
<th>Transactions</th>
<th>Deposit &amp; Lending</th>
<th>Counselling</th>
<th>Specialist Services</th>
<th>Investment Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>High</td>
<td>Low</td>
<td>Medium</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Regularity</td>
<td>Regular</td>
<td>Irr/regular</td>
<td>Irr/regular</td>
<td>Irr/regular</td>
<td>Irr/regular</td>
</tr>
<tr>
<td>Interaction Duration</td>
<td>Short</td>
<td>Long/Medium</td>
<td>Medium/Long</td>
<td>Long</td>
<td>Long</td>
</tr>
<tr>
<td>Customer Control</td>
<td>Low</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Diversity Demand</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td>Customer Participation</td>
<td>High</td>
<td>Low</td>
<td>Medium</td>
<td>Medium</td>
<td>Low/High</td>
</tr>
<tr>
<td>Level of Contact</td>
<td>Low</td>
<td>High</td>
<td>Medium/High</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Initiative</td>
<td>Customer/</td>
<td>Customer/</td>
<td>Customer/</td>
<td>Customer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bank</td>
<td>Bank</td>
<td>Bank</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Storbacka (1994)

Building on the work of Shostack (1987) and Storbacka (1994), Howcroft, Hewer and Durkin (2003) classified financial products into three broad categories which facilitate the determinations of complexity.

- transaction services encompassing current accounts and simple personal loan products. These services have low involvement interaction modes (e.g. ATM) where certainty of outcome is high and the process is short-term and easy to understand, as indicated by the small number of process stages;

- insurance services encompassing pure insurance products, where certainty of outcome is high and the process is short-term and simple, as indicated by few process stages;

- specialist services encompassing investment products, such as stocks, shares, bonds, pensions and longer term lending products such as mortgages. These products typically have more complex search-buy processes given their long term nature and the uncertainty of outcome.
9.3.1.2. Product Complexity Categorisation

In Ireland / UK, USA and Sweden the respondents were broadly in agreement that as products became more complex, use of the Internet would reduce and the need for human interaction would increase. For example, one senior executive in a leading Irish bank respondent felt that, "the precise issue is that as products become more complex, the role of human interaction becomes greater. So, for your investment products or more complex lending products such as mortgages, the Internet is less appropriate a medium than for easy to comprehend transactional service based products." (IGB3PA). However, there is a definite minority view in Ireland / UK and the USA that all types of product were appropriate for Internet delivery, from current accounts through to mortgages but one of the UK banks emphasised that it was imperative to 'have a person behind the process for more complex products' (IGB2PA).

In Sweden, there was general agreement among respondents that at this stage the Internet would be most appropriate for the more simple functions. Examples cited included balance enquiries, account transfers, instant access deposit and current accounts and general information.

It appears therefore that complexity is a multi-faceted dimension. Products can appear complex to customers depending on:

- their own prior experiences of interacting with banks with regard to such products. For example, the prior experiences of a customer purchasing a mortgage, the search-buy behaviour process, the certainty of outcome and the number of process stages will all shape the customer view as to what extent that product may appear 'complex'. Where customers have simple financial needs and are confident in using the Internet, they might over-estimate the appropriateness of the Internet in the delivery of certain products.

- the customer's own level of self-efficacy, i.e. self-efficacy represents judgements about one's own performance capability in specific settings. Perceptions of self-efficacy come from several sources: personal experience, vicarious experience, verbal persuasion and emotional arousal are all examples (Ellen, Bearden and
With regard to the Internet, one might expect a high level of computer and Internet usage, to reduce any concerns about self-efficacy; the customer's feeling of control over the product itself. Can they cope with understanding how to 'manage' a product through the Internet? Where products require a low level of contact over a long duration (such as mortgages or investments) this may be more difficult, as the regular interactions through the Internet that might develop confidence and familiarity in the more simple and transactional products would be missing (Storbacka, 1994).

In summary, findings from bank respondents and the academic literature suggest that product complexity does have a significant bearing on appropriateness for web delivery. In light of these findings the following typology was developed to help in the classification of financial products in this research (see Figure 9.1). The rationale used was as follows:

- Complex Products – applied in instances where certainty of outcome was low and outcome needed to be monitored; process stages were varied and the product was difficult to understand.

- Simple Products – applied in instances where certainty of outcome was high; process stages were relatively few and the product was deemed easy to understand.

- Medium Products – this classification was derived mainly from feedback from the qualitative interviews and it was indicative of products that were deemed to fall between purely complex or purely simple products.
New variables were then created to reflect these broader categorisations. These were developed in the following way;

Question 15 requested the respondent to indicate what products they held. Since the new variables for simple, medium and complex products had been newly established, it was now appropriate to develop a new variable for each customer which was referred to as the ‘Highest Level of Complexity’ (HLC). Where customers had indicated that they held ‘simple’ products, then their HLC was 1 (Simple). Where customers had at least one product in the ‘medium’ category, but none in the complex category, their HLC was 2 (Medium) and in instances where customers had at least one product in the ‘complex’ category, their HLC was then 3 (Complex).

Such a classification enabled comparisons to be made between customers’ perceptions of product appropriate for delivery by the Internet. It also allowed the researcher to view
this in the knowledge of what their own experiential knowledge of such products was. This made interpreting the significance more meaningful.

With respect to Questions 21 and 25, products were classified according to their complexity as indicated above. For example, in Q21 the following list of simple products could be derived:

Simple Products: Motor, House, Buildings Insurance, Credit Card (i.e. 4 products);

Medium Products: Life assurance, Personal Loan, Stocks and shares (3 products);

Complex Products: Mortgage, PEP, ISA, Unit Trusts, TESSA, Pension plan (6 products).

With respect to Q21, 3 new variables were created representing the percentage of each category of product for which a customer regarded it as important to refer to a member of staff before purchasing.

The next section examines the findings and provides a discussion of the results from the analysis of Hypothesis 2, 3 and 4.

9.3.2 Analysis and Findings: Research Objective 2

Research Objective 2 is stated thus; to identify and assess the extent to which the customer profile influences the level of on-line adoption for Internet banking.

Accordingly, Hypothesis 1 addresses this objective:

**H1:** As the net worth of customers increases they will display increasing use of the Internet.

- **H1.1** - As the net worth of customers increases they will be more likely to have access to the Internet at home and at work;
- **H1.2** - As the net worth of customers increases they will display increasing use of the Internet for financial services;
- **H1.3** - Relationship managed customers will have higher income levels.
Background

Firstly, in adopting the case bank’s pre-classification of customer net worth (through the ‘Relstat’ variable in SPSS) it is worth exploring the extent to which this is consistent with other indicators of net worth in the questionnaire. Accordingly, an explanation was made of the relationship between relationship status (from which the bank determined net worth) and social class (SPSS variable ‘Class’), income, and education. The analysis conducted through cross tabulations is as follows:

Table 9.17: Relationship Status and Class

<table>
<thead>
<tr>
<th>Relationship status * CLASS Crosstabulation</th>
<th>All</th>
<th>C1</th>
<th>C2</th>
<th>DE</th>
<th>NO REPLY</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HIGH NET WORTH</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>47</td>
<td>13</td>
<td>9</td>
<td>4</td>
<td>9</td>
<td>91</td>
</tr>
<tr>
<td>Expected Count</td>
<td>8.9</td>
<td>12.1</td>
<td>8.3</td>
<td>7.6</td>
<td>10.1</td>
<td>9.0</td>
</tr>
<tr>
<td>% within Relationship status</td>
<td>23.4%</td>
<td>27.7%</td>
<td>21.3%</td>
<td>8.5%</td>
<td>19.1%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% within CLASS</td>
<td>12.1%</td>
<td>10.6%</td>
<td>11.9%</td>
<td>5.2%</td>
<td>8.7%</td>
<td>9.9%</td>
</tr>
<tr>
<td>% of Total</td>
<td>2.3%</td>
<td>2.7%</td>
<td>2.1%</td>
<td>0.6%</td>
<td>1.9%</td>
<td>9.8%</td>
</tr>
<tr>
<td><strong>TURNOVER MORE THAN 750</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>124</td>
<td>35</td>
<td>17</td>
<td>17</td>
<td>91</td>
<td>229</td>
</tr>
<tr>
<td>Expected Count</td>
<td>23.6</td>
<td>31.9</td>
<td>21.8</td>
<td>20.0</td>
<td>26.7</td>
<td>124.0</td>
</tr>
<tr>
<td>% within Relationship status</td>
<td>22.6%</td>
<td>28.2%</td>
<td>27.4%</td>
<td>8.1%</td>
<td>13.7%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% within CLASS</td>
<td>30.8%</td>
<td>29.5%</td>
<td>40.5%</td>
<td>13.0%</td>
<td>16.5%</td>
<td>25.9%</td>
</tr>
<tr>
<td>% of Total</td>
<td>5.9%</td>
<td>7.3%</td>
<td>7.1%</td>
<td>2.1%</td>
<td>3.9%</td>
<td>9.8%</td>
</tr>
<tr>
<td><strong>TURNOVER 400 TO 750</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>66</td>
<td>22</td>
<td>14</td>
<td>10</td>
<td>15</td>
<td>91</td>
</tr>
<tr>
<td>Expected Count</td>
<td>12.6</td>
<td>17.0</td>
<td>11.6</td>
<td>10.6</td>
<td>14.2</td>
<td>66.0</td>
</tr>
<tr>
<td>% within Relationship status</td>
<td>22.7%</td>
<td>33.3%</td>
<td>7.8%</td>
<td>15.2%</td>
<td>21.2%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% within CLASS</td>
<td>16.5%</td>
<td>12.9%</td>
<td>6.0%</td>
<td>13.0%</td>
<td>13.6%</td>
<td>13.8%</td>
</tr>
<tr>
<td>% of Total</td>
<td>3.1%</td>
<td>4.6%</td>
<td>1.0%</td>
<td>2.1%</td>
<td>2.9%</td>
<td>13.8%</td>
</tr>
<tr>
<td><strong>TURNOVER LESS THAN 400</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>241</td>
<td>53</td>
<td>53</td>
<td>53</td>
<td>63</td>
<td>241</td>
</tr>
<tr>
<td>Expected Count</td>
<td>45.9</td>
<td>62.0</td>
<td>42.4</td>
<td>38.8</td>
<td>51.9</td>
<td>241.0</td>
</tr>
<tr>
<td>% within Relationship status</td>
<td>15.4%</td>
<td>22.0%</td>
<td>14.5%</td>
<td>22.0%</td>
<td>28.1%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% within CLASS</td>
<td>40.7%</td>
<td>43.1%</td>
<td>41.7%</td>
<td>68.8%</td>
<td>61.2%</td>
<td>50.4%</td>
</tr>
<tr>
<td>% of Total</td>
<td>7.7%</td>
<td>11.1%</td>
<td>7.3%</td>
<td>11.1%</td>
<td>13.2%</td>
<td>50.4%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>478</td>
<td>123</td>
<td>84</td>
<td>77</td>
<td>103</td>
<td>478</td>
</tr>
<tr>
<td>Expected Count</td>
<td>91.0</td>
<td>123.0</td>
<td>84.9</td>
<td>77.0</td>
<td>103.0</td>
<td>478.0</td>
</tr>
<tr>
<td>% within Relationship status</td>
<td>19.0%</td>
<td>25.7%</td>
<td>17.6%</td>
<td>16.1%</td>
<td>21.5%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% within CLASS</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% of Total</td>
<td>19.0%</td>
<td>25.7%</td>
<td>17.6%</td>
<td>16.1%</td>
<td>21.5%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Chi-Square Tests

<table>
<thead>
<tr>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>36.781</td>
<td>.000</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>38.138</td>
<td>.000</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>14.087</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 7.57.
The results shown in Table 9.17 indicate that there is a significant relationship between bank determined relationship status and social class as determined through the survey results. When Observed and Expected cases were compared it was clear that at higher levels of relationship status (as determined by net worth here), there were fewer than expected C2,D,E respondents. Equally, at lower net worth levels there were fewer than expected AB respondents and more than expected at DE. This is also the case in Table 9.18 which explores the relationship between income level and bank determined relationship status. High net worth customer customers exceed expected levels of representation across salary bands from £20,000pa to £50,000+pa.

Table 9.18: Relationship Status and Income

<table>
<thead>
<tr>
<th>Relationship status * Income Crosstabulation</th>
<th>Income</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>£05,000 TO £9,999</td>
<td>£10,000 TO £19,999</td>
<td>£20,000 TO £29,999</td>
<td>£30,000 TO £49,999</td>
<td>£50,000+</td>
</tr>
<tr>
<td>HIGH NET WORTH</td>
<td>Count</td>
<td>15</td>
<td>21</td>
<td>14</td>
<td>5</td>
</tr>
<tr>
<td>Expected Count</td>
<td>10.9</td>
<td>14.2</td>
<td>11.2</td>
<td>7.7</td>
<td>3.0</td>
</tr>
<tr>
<td>% within Relationship status</td>
<td>2.1%</td>
<td>12.8%</td>
<td>44.7%</td>
<td>29.8%</td>
<td>10.6%</td>
</tr>
<tr>
<td>% within Income</td>
<td>1.0%</td>
<td>4.7%</td>
<td>21.0%</td>
<td>20.3%</td>
<td>18.5%</td>
</tr>
<tr>
<td>% of Total</td>
<td>2.2%</td>
<td>1.4%</td>
<td>5.0%</td>
<td>3.3%</td>
<td>1.2%</td>
</tr>
<tr>
<td>TURNOVER MORE THAN 750</td>
<td>Count</td>
<td>6</td>
<td>42</td>
<td>43</td>
<td>21</td>
</tr>
<tr>
<td>Expected Count</td>
<td>27.3</td>
<td>35.7</td>
<td>29.1</td>
<td>19.4</td>
<td>7.8</td>
</tr>
<tr>
<td>% within Relationship status</td>
<td>5.1%</td>
<td>35.5%</td>
<td>36.4%</td>
<td>17.8%</td>
<td>5.1%</td>
</tr>
<tr>
<td>% within Income</td>
<td>6.2%</td>
<td>33.1%</td>
<td>43.0%</td>
<td>30.4%</td>
<td>22.2%</td>
</tr>
<tr>
<td>% of Total</td>
<td>1.4%</td>
<td>10.0%</td>
<td>10.2%</td>
<td>5.0%</td>
<td>1.4%</td>
</tr>
<tr>
<td>TURNOVER 400 TO 750</td>
<td>Count</td>
<td>19</td>
<td>19</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>Expected Count</td>
<td>14.1</td>
<td>18.4</td>
<td>14.5</td>
<td>10.0</td>
<td>3.9</td>
</tr>
<tr>
<td>% within Relationship status</td>
<td>31.1%</td>
<td>31.1%</td>
<td>13.1%</td>
<td>19.7%</td>
<td>4.9%</td>
</tr>
<tr>
<td>% within Income</td>
<td>19.6%</td>
<td>15.0%</td>
<td>8.0%</td>
<td>17.4%</td>
<td>11.1%</td>
</tr>
<tr>
<td>% of Total</td>
<td>4.5%</td>
<td>4.5%</td>
<td>1.9%</td>
<td>2.9%</td>
<td>7%</td>
</tr>
<tr>
<td>TURNOVER LESS THAN 400</td>
<td>Count</td>
<td>71</td>
<td>60</td>
<td>28</td>
<td>22</td>
</tr>
<tr>
<td>Expected Count</td>
<td>44.8</td>
<td>56.7</td>
<td>46.2</td>
<td>31.9</td>
<td>12.5</td>
</tr>
<tr>
<td>% within Relationship status</td>
<td>36.6%</td>
<td>30.9%</td>
<td>14.4%</td>
<td>11.3%</td>
<td>6.7%</td>
</tr>
<tr>
<td>% within Income</td>
<td>73.2%</td>
<td>47.2%</td>
<td>28.0%</td>
<td>31.9%</td>
<td>46.1%</td>
</tr>
<tr>
<td>% of Total</td>
<td>15.9%</td>
<td>14.3%</td>
<td>6.7%</td>
<td>5.2%</td>
<td>2.1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>Count</td>
<td>97</td>
<td>127</td>
<td>100</td>
<td>69</td>
</tr>
<tr>
<td>Expected Count</td>
<td>67.0</td>
<td>127.0</td>
<td>100.0</td>
<td>69.0</td>
<td>27.0</td>
</tr>
<tr>
<td>% within</td>
<td>23.1%</td>
<td>30.2%</td>
<td>23.6%</td>
<td>16.4%</td>
<td>6.4%</td>
</tr>
<tr>
<td>% within Income</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% of Total</td>
<td>23.1%</td>
<td>30.2%</td>
<td>23.6%</td>
<td>16.4%</td>
<td>6.4%</td>
</tr>
</tbody>
</table>

Chi-Square Tests

<table>
<thead>
<tr>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>85.613(^a)</td>
<td>.000</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>96.186</td>
<td>.000</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>42.195</td>
<td>.000</td>
</tr>
</tbody>
</table>

\(^a\) 2 cells (10.0%) have expected count less than 5. The minimum expected count is 3.02.
As regards the relationship between relationship status and education level a significant relationship is again evidenced with high net worth customers having three times the expected level for being educated to post-graduate level (Table 9.19).

Table 9.19: Relationship Status and Education

<table>
<thead>
<tr>
<th>Relationship status</th>
<th>Qualifications: Postgrad Crosstabulation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
</tr>
<tr>
<td>HIGH NET WORTH</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>TURNOVER MORE THAN 750</td>
<td>Count</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>TURNOVER 400 TO 750</td>
<td>Count</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>TURNOVER LESS THAN 400</td>
<td>Count</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Chi-Square Tests

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>31.925a</td>
<td>3</td>
<td>.000</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>27.466</td>
<td>3</td>
<td>.000</td>
</tr>
<tr>
<td>Linear-by-Linear</td>
<td>9.089</td>
<td>1</td>
<td>.003</td>
</tr>
<tr>
<td>Association N of Valid Cases</td>
<td>478</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 4.72.
9.3.3 Addressing Hypothesis 1

Cross tabulation analysis allows for an examination of the extent to which customer net worth influences propensity to access and use the Internet, for general use and more specifically, for financial services products.

Table 9.20 shows a significant relationship between relationship status and where the Internet is accessed from. Findings indicate that higher net worth customers access the Internet from work while lower net worth access from home.

Table 9.20: Relationship Status and Internet Access

<table>
<thead>
<tr>
<th>Relationship status</th>
<th>HIGH NET WORTH</th>
<th>TURNOVER MORE THAN 750</th>
<th>TURNOVER 400 TO 750</th>
<th>TURNOVER LESS THAN 400</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Q.4 ACCESS THE INTERNET MOST FREQUENTLY</strong></td>
<td><strong>Count</strong></td>
<td><strong>Expected Count</strong></td>
<td><strong>Count</strong></td>
<td><strong>Expected Count</strong></td>
<td><strong>Count</strong></td>
</tr>
<tr>
<td>From work</td>
<td>8</td>
<td>15.0</td>
<td>41</td>
<td>39.0</td>
<td>20</td>
</tr>
<tr>
<td>From home</td>
<td>6.1</td>
<td>6.1</td>
<td>46</td>
<td>15.9</td>
<td>23</td>
</tr>
<tr>
<td>From work and home</td>
<td>18.2</td>
<td>18.2</td>
<td>47.2</td>
<td>47.2</td>
<td>25.5</td>
</tr>
<tr>
<td>From place of education</td>
<td>3.4</td>
<td>3.4</td>
<td>8.7</td>
<td>8.7</td>
<td>4.7</td>
</tr>
<tr>
<td>From a public library</td>
<td>2.4</td>
<td>2.4</td>
<td>8.2</td>
<td>8.2</td>
<td>3.3</td>
</tr>
<tr>
<td>From an Internet Cafe</td>
<td>.6</td>
<td>.6</td>
<td>1.5</td>
<td>1.5</td>
<td>.8</td>
</tr>
<tr>
<td>Other</td>
<td>.4</td>
<td>.4</td>
<td>1.0</td>
<td>1.0</td>
<td>.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>47</td>
<td>47.0</td>
<td>122</td>
<td>122.0</td>
<td>66</td>
</tr>
</tbody>
</table>

Chi-Square Tests

<table>
<thead>
<tr>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>40.799a</td>
<td>21</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>49.188</td>
<td>21</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>1.121</td>
<td>1</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>476</td>
<td></td>
</tr>
</tbody>
</table>

a. 15 cells (46.9%) have expected count less than 5. The minimum expected count is .39.
Table 9.21 examines the extent to which relationship managed (High Net Worth) and non-relationship managed customers differ in whether or not they have made an online purchase. A significant relationship was identified.

### Table 9.21 Managed and Non-managed Customers and Online Purchase

<table>
<thead>
<tr>
<th>Q.8 PURCHASED ON-LINE</th>
<th>Relationship status Crosstabulation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HIGH NET WORTH</td>
</tr>
<tr>
<td>Q.8 PURCHASED ON-LINE</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
</tr>
<tr>
<td></td>
<td>Expected Count</td>
</tr>
</tbody>
</table>

A higher than expected number of high net worth relationship managed clients had purchased online while the number of lower net worth cases were not as high as expected for this activity.

### Chi-Square Tests

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>7.812*</td>
<td>3</td>
<td>.050</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>8.243</td>
<td>3</td>
<td>.041</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>5.720</td>
<td>1</td>
<td>.017</td>
</tr>
</tbody>
</table>

* 0 cells (.0%) have expected count less than 5. The minimum expected count is 14.71.

When the data is looked at through the separate selection of cases that are relationship managed and not managed, it can be seen that:

- Ever used the Internet: RM-ed = 83%; non-RM-ed = 66%.
- Access the Internet from home and work: RM-ed = 14% as against 6% for non-RM-ed.
- Daily frequency of net access: RM-ed = 32%; non-RM-ed = 24%.
- Actual on-line purchase: RM-ed = 66% as against 39% for non-RM-ed.
With regard to Hypothesis 1.2, Table 9.22 reveals a significant relationship between overall relationship status and the use of the Internet for a financial service purpose.

Table 9.22: Net worth and use of the Internet for a financial service purpose

<table>
<thead>
<tr>
<th>Q.23A EVER USED THE INTERNET FOR ANY FINANCIAL SERVICES PURPOSE * Relationship status Crosstabulation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Relationship status</strong></td>
</tr>
<tr>
<td>Q.23A EVER USED THE INTERNET FOR ANY FINANCIAL SERVICES PURPOSE</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

**Chi-Square Tests**

<table>
<thead>
<tr>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>9.044 (^a)</td>
<td>3</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>8.484</td>
<td>3</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>8.331</td>
<td>1</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>468</td>
<td></td>
</tr>
</tbody>
</table>

\(^a\) 0 cells (0.0%) have expected count less than 5. The minimum expected count is 8.26.

Once again there are more observed cases of higher net worth relationship managed clients using the Internet for a financial services purpose than expected. The findings with regard to lower net worth non-relationship clients are consistent.

9.3.4 Summary of Key Findings related to Hypothesis 1

Overall the relational classification of customers by the bank was consistent with the collated data and the literature. Higher net worth customers were shown to have characteristics such as post-grad qualifications, increasing income levels and rising social class.

**H1.1** In relation to the sub-hypothesis that as relationship worth of customers increases so too will their levels of access to the Internet at work and at home; this sub-hypothesis was supported.
H1.2 In relation to the sub-hypothesis that: as relationship worth of customers increases they will display increasing use of the Internet for financial purposes this sub-hypothesis was supported.

H1.3 Finally, the sub-hypothesis that: relationship managed customers will have higher income levels was supported.

9.4 Analysis and Findings: Research Objective 3

9.4.1 Introduction

Research Objective 3 seeks to identify and assess the extent to which varying customer segments prefer referring to branch staff in preference to the Internet interface and to assess whether such preferences vary by customer and/or complexity of need.

Accordingly Hypothesis 2, which addresses this objective, can be stated thus:

H2 In general there will be an inverse relationship between the increasing complexity of customers' financial needs and the propensity of such customers to use the Internet as a means of purchasing these financial products.

In addressing Hypothesis 2, the following sub-hypotheses are proposed:

- H2.1 - There will be a significant positive correlation between the views of customers, and the academic literature, on what financial products can be considered ‘complex’;
- H2.2 - Relationship managed customers will show greater potential for on-line purchase of financial services at lower levels of product complexity than will non-relationship managed customers;
- H2.3 - As customer needs increase in complexity customers will be more likely to favour face to face interaction over the alternative Internet banking proposition
- H2.4 - Where customers consider face to face staff referral important pre-purchase, this will be influenced by a perceived need for reassurance and an anxiety about the remote intangible platform offered through Internet banking.

- H2.5 - The perceived timesaving and convenience benefits offered by the Internet will be the key predictors in whether or not a customer has registered for Internet banking in the case bank.

9.4.2 Overview

Given the previous discussion about the different influences that impact upon the extent to which a product may be deemed 'complex', the following discussion attempts to illuminate this issue further and considers the differing perspectives of both relationship managed and non-relationship-managed customers.

Descriptive Statistics

With respect to Q24 which looks at respondents' familiarity with, and interaction preference for, different types of product. The following tables summarise the findings:

Table 9.23: Respondent familiarity with account set-up for products by relationship classification (from Q24)

<table>
<thead>
<tr>
<th>Familiarity with Account Set-Up</th>
<th>RM</th>
<th>Non-RM</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current a/c</td>
<td>88.9</td>
<td>78.8</td>
<td>10.1</td>
</tr>
<tr>
<td>Insurance-based</td>
<td>68.9</td>
<td>49</td>
<td>19.9</td>
</tr>
<tr>
<td>Credit-based</td>
<td>61.9</td>
<td>38.9</td>
<td>23</td>
</tr>
<tr>
<td>Investment</td>
<td>27.9</td>
<td>16.2</td>
<td>11.7</td>
</tr>
</tbody>
</table>

Table 9.23 reveals that there are high levels of familiarity with all categories of financial product. However, consistent with both the literature and qualitative research findings in Stage 1, there is less familiarity in both relationship groups for the more complex category of Investment products.
Table 9.24: Preferred Interaction Mode for Product Purchase by Relationship Management Status (from Q24)

<table>
<thead>
<tr>
<th>Purchase Preference</th>
<th>Relationship - Managed</th>
<th>Branch</th>
<th>ATM</th>
<th>Phone</th>
<th>Net</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RM</td>
<td>RM</td>
<td>RM</td>
<td>RM</td>
<td>RM</td>
<td></td>
</tr>
<tr>
<td>Current a/c</td>
<td>80.4</td>
<td>2.2</td>
<td>4.3</td>
<td>13.0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Insurance-based</td>
<td>34.8</td>
<td>0.0</td>
<td>43.5</td>
<td>17.4</td>
<td>4.3</td>
<td></td>
</tr>
<tr>
<td>Credit-based</td>
<td>65.1</td>
<td>0.0</td>
<td>16.3</td>
<td>16.3</td>
<td>2.3</td>
<td></td>
</tr>
<tr>
<td>Investment</td>
<td>73.3</td>
<td>0.0</td>
<td>13.3</td>
<td>8.9</td>
<td>4.4</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-RM-ed</th>
<th>Branch</th>
<th>ATM</th>
<th>Phone</th>
<th>Net</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-RM</td>
<td>Non-RM</td>
<td>Non-RM</td>
<td>Non-RM</td>
<td>Non-RM</td>
</tr>
<tr>
<td>Current a/c</td>
<td>80.0</td>
<td>3.4</td>
<td>5.4</td>
<td>9.9</td>
<td>1.2</td>
</tr>
<tr>
<td>Insurance-based</td>
<td>53.5</td>
<td>1.3</td>
<td>28.5</td>
<td>14.0</td>
<td>2.7</td>
</tr>
<tr>
<td>Credit-based</td>
<td>73.9</td>
<td>0.3</td>
<td>14.1</td>
<td>9.5</td>
<td>2.2</td>
</tr>
<tr>
<td>Investment</td>
<td>80.1</td>
<td>0.6</td>
<td>5.7</td>
<td>11.1</td>
<td>2.6</td>
</tr>
</tbody>
</table>

Table 9.24 shows that there is a clear and overwhelming preference for branch interaction across all product categories and across both relationship classifications. With the current account it is interesting that more than three quarters of both relationship classifications desire face to face interaction when purchasing this product. However, there is a willingness among some customers to use other more remote modes of interaction to open the current account. The fact that the Internet scores more highly than the telephone for this purchase, in both relationship classifications, seems surprising. Relationship managed customers show greater acceptance than non-relationship managed to purchase insurance based products by phone (43.5% vs 28.5% resp). This pattern is also evident for investment products. Another interesting finding here is the figure for non-relationship managed customers relative to relationship managed customers in relation to the purchase of investment products on-line (11.1% vs 8.9 resp). However, from Table 9.24 we see low familiarity for investment products amongst the non-relationship managed customers. It is therefore a possible sign of confidence being transferred from other product categories where the Internet is used by this group (e.g. insurance or credit based).
Question 22 asked respondents at what point in the purchase process they felt face to face contact with a member of staff became important. Table 9.25 shows the results from the two groups, which were very similar.

Table 9.25: Point in purchase decision when face to face contact becomes important

<table>
<thead>
<tr>
<th>Q22 Point in purchasing where F-F contact with staff becomes important</th>
<th>Relationship Managed</th>
<th>Non-relationship-managed</th>
</tr>
</thead>
<tbody>
<tr>
<td>From the time of decision</td>
<td>45.7%</td>
<td>38.9%</td>
</tr>
<tr>
<td>To narrow down options</td>
<td>41.3%</td>
<td>41.6%</td>
</tr>
<tr>
<td>For reassurance once decision made</td>
<td>10.9%</td>
<td>15.5%</td>
</tr>
<tr>
<td>Never</td>
<td>2.1%</td>
<td>3.9%</td>
</tr>
</tbody>
</table>

Interestingly, Booz, Allen and Hamilton (2004) have recently reported the findings from a research study, which explores bank customer preferences regarding different interfaces to access product information and how this differs according to the product. The findings are summarised in Figure 9.2 and support the findings detailed above which indicate a predominant preference for branch interaction particularly for the sale of more complex products (e.g. mortgage).

Figure 9.2: Preferred Interaction Interface for Information versus Sale

9.4.3 Sub-Hypothesis 2.1

Sub-Hypothesis 2.1 There will be a significant positive correlation between the views of customers, and the academic literature, on what financial products can be considered 'complex'.

This is important because for the findings to be sufficiently robust both the a priori classification of products according to their 'literature determined complexity', and the customers' own perceptions of product complexity should be consistent.

The approach taken was to conduct a correlation analysis adopting a non-parametric methodology and using Q19 in which customers described the complexity of their product holdings and the new variables developed from the literature 'Highest Level of Complexity' (see Chapter 8).

**Table 9.26: Nonparametric Correlations - Between Actual Complexity Product level and Customer Perceived Complexity**

<table>
<thead>
<tr>
<th></th>
<th>Q.19 FINANCIAL SERVICE REQUIREMENTS</th>
<th>Highest Level of Complexity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spearman's rho Q.19</td>
<td>Correlation Coefficient</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>460</td>
</tr>
<tr>
<td>Highest Level of Complexity</td>
<td>Correlation Coefficient</td>
<td>.265**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>439</td>
</tr>
</tbody>
</table>

**Correlation is significant at the .01 level (2-tailed).**

As can be seen from Table 9.26, a positive and significant correlation (P<0.01) is found between the variables.

**We can therefore conclude that H2.1 is supported.**
The next section addresses the remaining sub-hypotheses drawn from Hypothesis 2. These relate to an examination of the customer perceived appropriateness of the Internet by which to purchase products of varying complexity. Customers are examined both on the basis of their relationship status (Analysis level 2, Hypotheses 2.2) and the complexity of their product holder-ship (Analysis level 3, Hypotheses 2.3).

9.4.3.1 Outline of Analytical Approach

**Dependent Variable 1:** Internet Appropriateness for financial services purchase as determined by Product Complexity level

The structure of this analysis will be in three stages and move from the general to the specific:

**Level 1:** General examination of all customers' perceptions as to the appropriateness of the Internet for the purchase of financial services products of varying complexity.

**Level 2:** Examination of Relationship-managed and Non-relationship managed customers as to the appropriateness of the Internet for the purchase of financial services products of varying complexity. Level 2 analysis specifically addresses Hypothesis 2.2.

**Level 3:** Specific examination of customer perceptions by product holdership as to the appropriateness of the Internet for the purchase of financial services products of varying complexity. Level 3 analysis specifically addresses Hypothesis 2.3.

---

1 (derived from Q25 – new variables created Simpsuit, Medsuit and Compsuit)
9.4.3.2 Establishing Context and Method: Analysis Level 1:

Examination of all customers' perceptions as to the appropriateness of the Internet for the purchasing of financial services products of varying complexity

When a multiple regression was run on all of the independent variables (as derived in Chapter 8) the dependent variables (simple, medium and complex products for web suitability as derived in Chapter 8) the following results emerged. Overall adjusted $R^2$ scores for varying levels of complexity were as follows:

- Simple Products - 18.3%
- Medium Products - 9.5%
- Complex Products - 4.0%

It is recognised that these $R^2$ are very low and this reflects the fact that all of the respondents have been included in the analysis. This indicates that the analysis was diluted by the fact that the perceptions of respondents who might not have purchased some of the products have been included in the analysis. When examining in detail the impact of the independent variables on the variance in the dependent variables the following explanations emerge:
Simple Products

The independent variables influence on a propensity to use the Internet for the purchase of simple products were:

- Q26 Timesaving; Standardised Beta = -0.354
  This suggests that as the importance of timesaving increased so too did the propensity to deem the web appropriate for simple products.

- Desire for Technology Benefits (nf6); Standardised Beta = +0.201
  This indicates that for those customers who see benefits in new technology there is a correlation with a propensity to use the Internet for simple product purchases.

- Desire for Information (nf2); Standardised Beta = -0.216
  This result indicates that there is a negative correlation between a desire to seek out additional information and propensity to deem the Internet suitable for purchase of simple products.

Table 9.27: All Customers – Suitability to use the Web for Varying Products

<table>
<thead>
<tr>
<th>% suitability to use web for various products</th>
<th>All Customers</th>
<th>Adjusted R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple Products Q26 The importance of timesaving; Beta = -0.354</td>
<td>11.7%</td>
<td>11.7%</td>
</tr>
<tr>
<td>Desire for Technology Benefits; Beta = +0.201</td>
<td>14.7%</td>
<td>14.7%</td>
</tr>
<tr>
<td>Desire for Information; Beta = -0.216</td>
<td>18.3%</td>
<td>18.3%</td>
</tr>
<tr>
<td>R²adj = 18.3%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Medium Products Desire for Information (nf2) Beta = -0.245 | 5.1% | 5.1% |
| Desire for Technology Benefits; Beta = +0.238 | 9.5% | 9.5% |
| R²adj = 9.5% | | |

Complex Products Chief Income Earner; Beta = +0.224
R²adj = 4%

4%
Commentary

These findings in relation to simple products are consistent with previous findings. The key issues of timesaving and the benefits of technology would be expected to correlate with propensity to deem the net appropriate for the purchase of simple products. The negative correlation with new variable (nf2), Desire for Information, is consistent with the desire for timesaving / convenience because it indicates that as the perceived suitability of the Internet for simple product purchases rises, the desire for additional information falls.

Medium Products

Independent variables influence on propensity to use the Internet for medium products were as follows:

- Desire for Information (nf2); Standardised Beta = -0.245
  This indicates that there is a negative correlation between a desire to seek out additional information and propensity to deem the net suitable for the purchase of medium products.

- Desire for Technology Benefits; Standardised Beta = +0.238
  This suggests that for those customers who see benefits in new technology there is a correlation with a propensity to deem the Internet suitable for medium product purchases.

Commentary

As product complexity increases these findings raise interesting issues. As was the case with Simple products the correlations with the two new variables; Desire for Information (nf2) and Desire for Technology Benefits (nf6), indicates that the propensity to deem the Internet an appropriate mechanism through which to purchase medium products is driven in large, part by the benefits offered by the technological interface itself and by the fact that there is little perceived risk in purchasing on-line, rather than through face to face.
Complex Products

The independent variables influence on propensity to use the Internet for Complex products were as follows:

- Chief Income Earner (CIE); Standardised Beta = +0.224
  This indicates a negative correlation between chief income earner and propensity to deem the Internet appropriate for purchasing complex products.

Commentary

The negative relationship shows that being the chief income earner has no bearing on customer propensity to deem the Internet appropriate for purchasing complex products.

9.4.4 Sub- Hypothesis 2.2: Analysis Level 2

Hypothesis 2.2  Relationship managed customers will show a greater potential for on-line purchase of financial services at lower levels of product complexity than will non-relationship managed customers

This issue is addressed by an examination of relationship managed and non-relationship managed customers as to the appropriateness of the Internet for the purchase of financial services products of varying complexity

The results of the linear regression are illustrated in the following tables. The independent variables which have most predictive power on the dependent variable are detailed with standardised beta scores and overall $R^2$ for each quadrant.

If a simple level shift was to be expected between relationship managed and non-relationship managed customers then it would have been appropriate to build just one model. However, as different influencers between relationship managed and non relationship managed customers were expected separate models were built.
Table 9.28: Matrix to show the variables influencing the propensity to purchase financial products of varying complexity on-line according to relationship management status

<table>
<thead>
<tr>
<th></th>
<th>Relationship Managed</th>
<th>Adj R²</th>
<th>Not Relationship-Managed</th>
<th>Adj R²</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Simple Products</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q26: Reassurance about security; Beta = -0.563</td>
<td>28.3%</td>
<td>Q26 Timesaving; Beta = -0.387</td>
<td>13.9%</td>
<td></td>
</tr>
<tr>
<td>Ease of on-line buying process; Beta = -0.465</td>
<td>47%</td>
<td>Desire for Technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highest Qualification; Beta = +0.397</td>
<td>61%</td>
<td>Benefit(nf6); Beta = +0.288</td>
<td>21.1%</td>
<td></td>
</tr>
<tr>
<td>Income; Beta = -0.335</td>
<td>70.3%</td>
<td>Sex; Beta = -0.231</td>
<td>25.6%</td>
<td></td>
</tr>
<tr>
<td>Branding; Beta = -0.254</td>
<td>75.9%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q26 Convenienc; Beta = -0.249</td>
<td>80.7%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^{2adj} = 80.7%$ (n=27)</td>
<td></td>
<td>$R^{2adj} = 25.6%$ (n=322)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Medium Products</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desire for Convenience (nf3); Beta = -0.516</td>
<td>22.8%</td>
<td>Q13, Reluctant due to credit card details known; Beta = -0.268</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>Q26 Reassurance about security; Beta = -0.473</td>
<td>43.2%</td>
<td>Desire for Convenience (nf3); Beta = +0.251</td>
<td>11.2%</td>
<td></td>
</tr>
<tr>
<td>$R^{2adj} = 43.2%$ (n=36)</td>
<td></td>
<td>Desire for Information (nf2); Beta = -0.255</td>
<td>14.7%</td>
<td></td>
</tr>
<tr>
<td><strong>Complex Products</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highest level of Complexity; Beta = 0.542</td>
<td>25.9%</td>
<td>No output</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desire for Technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benefit (nf6); Beta = 0.396</td>
<td>37.4%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income; Beta = -0.339</td>
<td>47.3%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^{2adj} = 47.3%$ (n=41)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Commentary**

With *relationship managed* customers and simple products, over 80% of the variability in the dependent variable is accounted for by the independent variables listed. As might be expected the importance of being reassured about the security of the Internet systems is a key issue (contribution of 28.3%) for customers in determining the extent to which they would consider the Internet an appropriate platform through which to purchase simple products. This is also apparent for the relationship-managed customer with medium products (contribution of 20.4%).
For relationship managed customers with simple products, the ease of the on-line buying process (Q10) positively correlates with the propensity to consider the Internet an appropriate platform to make purchases (as do increasing levels of income) and accounts for 18.7% of the variability in the dependent variable. A positive correlation is also evident in the timesaving/convenience offered by the web and propensity to consider purchases on the Internet, although the magnitude of this correlation is much less than the other variables.

The new variable (Branding, nf5) which focuses on the extent to which customers consider brand important negatively correlates with propensity to consider the web appropriate for simple products and accounts for 5.6% of the variability in the dependent variable.

For complex products and relationship managed customers, one quarter of the variability in the dependent variables is accounted for by the complexity level, while over 12% is accounted for by the variable Desire for Technology Benefit. This indicates that customers characterised by a desire for technology benefits will see the Internet as an increasingly appropriate medium to purchase products.

With regard to non-relationship managed customers, the variance in the dependent variable was much less across all of the product categories. For simple products the timesaving / convenience benefits of the Internet are again evident and account for 13.9% of the variability. The positive correlation with Desire for Technology Benefit (nf6) is not surprising because as the need for technology benefits become more important, customers will regard the Internet as appropriate.

The possibility of credit card fraud acting as a barrier to suitability of the Internet for financial services is seen not to be the case here, however non-relationship managed customers who perceive the net as increasingly appropriate for the purchase of simple products also attach increasing levels of importance to being reassured about security. The customers for whom a desire for timesaving / convenience is not particularly important are positively related to the perceived suitability of the Internet for simple product purchase. The positive correlation with Desire for Technology Benefit (nf6) is
therefore not surprising as it indicates a general increase in the perceived importance of technology for this purpose.

9.4.4.1 Key Issues Resulting from Level 2 Analysis

- For relationship managed customers, when reassured about the security of the Internet will see the medium as appropriate for simple and medium products.
- For relationship managed customers the easier the on-line buying process is deemed to be, the greater the propensity to view the web as an appropriate mechanism through which to purchase products on-line.
- Relationship managed customers, who are characterised by being timesaving / convenience oriented, perceive the web as an increasingly appropriate mechanism to purchase on-line.
- Non-relationship managed customers with simple products, who are characterised by being timesaving / convenience oriented, perceive the web as an increasingly appropriate mechanism to purchase on-line.
- Non-relationship managed customers, while not put off by fears over their credit card details becoming known on the web, perceive the net as increasingly appropriate when more importance is placed on reassurance about security on-line.

Based on the analysis it can be concluded that relationship managed customers will show a greater likelihood for on-line purchase of financial services at lower levels of product complexity. This is legitimised by the fact that the over 80% of the variability in the dependent variable is found at the level of simple products. Provided the ‘inhibitor’ issues raised for simple products (which account for the figure of over 80% in the variability in the dependent variable) are addressed by the case bank then it could be concluded that sub-hypothesis 2.2 is supported.
9.4.5 Sub-Hypothesis 2.3: Analysis Level 3

Sub-Hypothesis 2.3 As customer needs increase in complexity customers will be more likely to favour face to face interaction over the alternative Internet banking proposition.

The issue is addressed by an examination of customer perceptions by product holdership as to the appropriateness of the Internet for the purchase of financial services products of varying complexity.

Having examined the independent variables, which influence and determine Internet adoption for different levels of product complexity, the analysis will now examine the independent variables which influence Internet adoption by different categories of customers.

These customer groupings are determined on the basis of the complexity of their own product holdings. In other words, by virtue of their own product holder-ship simple customers only have simple products so only their responses that relate to simple products only will be taken into account. Medium customers can hold simple and medium products but do not have complex product holdings. Only their views on simple and medium product appropriateness will therefore be considered. Complex customers by definition have the highest product complexity level possible and all of their views will be taken into account (ie for simple, medium and complex products).

Regression analyses allows for the construction of matrices which ultimately facilitate comparisons to be drawn between the three different levels of product and customer (Tables 9.29(i-iii)).
Table 9.29(i): Matrix showing results from linear regression for Simple Customers and their corresponding products held

<table>
<thead>
<tr>
<th>% suitability to use web for various products</th>
<th>Simple Products</th>
<th>Adj R2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple Customers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Q26 The importance of convenience; Beta = -0.651</td>
<td>37.2%</td>
<td></td>
</tr>
<tr>
<td>Desire for Information (Q38); Beta = -0.506</td>
<td>61.2%</td>
<td></td>
</tr>
<tr>
<td>Q26 The importance of Improved Service; Beta = -0.387</td>
<td>75.3%</td>
<td></td>
</tr>
<tr>
<td>Q13 Reluctance caused by slow download time; Beta = -0.365</td>
<td>88%</td>
<td></td>
</tr>
<tr>
<td>( R^{2\text{adj}} = 88% ) (n=132)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Note: The reader is reminded that the classification of customers as 'simple', 'medium' and 'complex' is determined from their individual highest level of complexity in their own product holder-ship (SPSS Variable 'hcomp'))

The \( R^{2\text{adj}} \) figure of 88% for simple customers shows a high level of generalisability back to the sample and it also reveals that the influence of each independent variable on the dependent variable is high.

The combined issues of convenience (Q26), Desire for Information (Q38) and the improved service (Q26) offered by the Internet explain over three-quarters of the variability in the dependent variable (75.3%). As a Desire for Information becomes increasingly uncharacteristic of customers, the perceived suitability of the Internet for simple product purchase increases. The importance of improved service as a motivator in perceiving the web as an appropriate mechanism through which to purchase simple products is also supported by the data.

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For Medium customers (identified in Table 9.29(ii)) above, $R^{2adj}$ is very strong for Simple products. The importance of being reassured about the security of the web explains 46% of the variability in the dependent variable and the inhibitor of not having face to face interaction is negatively related suggesting that it is not an important consideration for these customers.
Table 9.29(iii): Matrix showing results from linear regression for Complex Customers and their corresponding products held

<table>
<thead>
<tr>
<th>% suitability to use web for various products</th>
<th>Simple Products</th>
<th>Adj R2</th>
<th>Medium Products</th>
<th>Adj R2</th>
<th>Complex Products</th>
<th>Adj R2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complex Customers</td>
<td></td>
<td>7</td>
<td></td>
<td>8</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>Q26 Importance of improved service; Beta = -0.36</td>
<td>11.1%</td>
<td>6.4%</td>
<td>Q13 Reluctant to use due to lack of trust that purchase was properly made; Beta = -0.271</td>
<td>5.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desire for Technology benefit (n=9); Beta = +0.249</td>
<td>16.1%</td>
<td>10.8%</td>
<td>Desire for Technology benefit (n=6); Beta = 0.248</td>
<td>10.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desire for face to face (n=1); Beta = -0.259</td>
<td>21.8%</td>
<td></td>
<td>Importance of staff web demonstration in my home to encourage use; Beta = 0.246</td>
<td>15.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Recommendation, Beta = +0.216</td>
<td>25.3%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2adj R = 25.3% (n=194)</td>
<td>2adj R 10.8% (n=196)</td>
<td>2adj R 15.3% (n=192)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Complex customers (identified in Table 9.29(iii) above) reveal low levels of variance across all product types. For simple products the importance of improved service as a motivator in deeming the web an appropriate mechanism through which to purchase accounts for the greatest level of variability in this quadrant at 11.1%. Those customers for whom a desire for convenience is important, also regard the Internet as an appropriate medium for purchasing simple products. As regards complex products, lack of trust and not having a staff in-home web demonstration (4.6%) were not significant inhibitors.

9.4.5.1 Common Themes

Some common themes emerge from the matrix. Especially with regard to simple products where ‘convenience’ and ‘improved service’ are powerful reasons for determining Internet suitability this highlights a key opportunity for bank management in their attempts to encourage adoption.

Medium and complex customers do not regard a lack of face to face interaction (Q13) for simple products as a potential inhibitor. In support of this, complex customers also reveal a positive correlation (Beta = +0.216) between ‘Desire for Technology benefit’ and suitability of the Internet for simple and complex products.
For simple customers there is a negative correlation between the suitability of the web for simple products and ‘Desire for Information’. This suggests that time consuming information searches negatively contribute to the propensity to embrace the Internet for purchases of simple products. This accounts for almost 25% of the variability in the dependent variable making this an important finding. Consistently the influence of a personal recommendation for Internet use does not appear to be an important factor, nor does family / friend recommendation for simple products or bank staff demonstration of web use for complex customers.

Relationship Status appears only once for medium customers with medium products. This finding suggests that in this product category as customer net worth decreases (i.e. moves from high net worth relationship managed through to low net worth non relationship-managed customers) the suitability of the Internet increases. This suggests that higher net worth customers are more likely to have their financial affairs managed through a relationship manager.

9.4.5.2 Key Issues Resulting from Level 3 Analysis

- The perceived suitability of the Internet as a mechanism for the purchase of simple products increases as customer desire for information decreases.
- The importance of being reassured about security increases as the perceived suitability of the Internet for the purchase of medium products increases.
- For medium customers with medium products, as relationship status decreases – i.e. moves towards lower levels of net worth, the perceived suitability of the Internet for the purchase of these products increases.
- As the perceived suitability of the Internet as a means for medium customers and simple product purchase increases the importance of face to face interaction decreases.
- Complex customers deem the importance of improved service as the key motivator in using the Internet for simple product purchases.
- In-home staff web demonstration for customers becomes increasingly unimportant as customers perceived the net suitable for the purchase of complex products.
With respect to sub-hypothesis 2.3, that as the complexity of customer needs rose so too would the need for face to face interaction, this is **NOT** supported.

Customers with financial needs of medium complexity do not seem to regard lack of face to face interaction at ‘simple’ product levels as important and customers who have complex product needs display a negative relationship to face to face interactions. As has already been stated, it appears that irrespective of product complexity, the key issues influencing customer use of the Internet for financial services products focus around issues of convenience, reassurance about security and technology benefit.

### 9.5 Threads of Commonality in All Levels of Analysis for Dependent Variable 1

In an attempt to better integrate the findings from the three different levels of analysis undertaken\(^1\), and to seek to identify if there are variables common at the differing levels Table 9.30 shows the independent variables for each product complexity type (i.e. Simple, Medium, Complex). Only where a variable occurs more than once is it included and is colour-coded for easy identification.

<table>
<thead>
<tr>
<th>Complexity / Level</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SIMPLE PRODUCTS</strong></td>
<td>Timesaving</td>
<td>Convenience</td>
<td>Convenience</td>
</tr>
<tr>
<td></td>
<td>Desire for</td>
<td>Reassurance on</td>
<td>Reassurance on</td>
</tr>
<tr>
<td></td>
<td>Technology Benefit</td>
<td>Security</td>
<td>Security</td>
</tr>
<tr>
<td></td>
<td>Desire for Info</td>
<td>Income</td>
<td>Desire for</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Technology Benefit</td>
</tr>
<tr>
<td><strong>MEDIUM PRODUCTS</strong></td>
<td>Desire for</td>
<td>Convenience</td>
<td>Chief Income Earner</td>
</tr>
<tr>
<td></td>
<td>Technology Benefit</td>
<td>Reassurance about</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Desire for Info</td>
<td>Security</td>
<td></td>
</tr>
<tr>
<td><strong>COMPLEX PRODUCTS</strong></td>
<td>Chief Income earner</td>
<td>Desire for Technology Benefit</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Income</td>
<td></td>
</tr>
</tbody>
</table>

\(^1\) Level 1 – Establishing context and method (all customers). Level 2 – Relationship managed and non relationship managed for products of varying complexity. Level 3 – Specific examination of customers’ own holdership.
From Table 9.30 it can be seen that the most frequently cited independent variables are:

**Desire for Technology Benefit** (5 times) – in all levels and all product complexity types;

**Time-saving and Convenience** (4 times) – in all levels but mainly at the lower levels of product complexity;

**Income / Chief Income Earner** (4 times) – at all levels for all product categories;

**Desire for Information** (3 times) – at levels 1 and 3 in Simple product category only;

**Reassurance on Security** (3 times) – at levels 2 and 3 in Simple and Medium product complexity categories.

**Interpretation**

The continual presence of a positive correlation between the increasing Desire for Technology Benefits (variable nf6) and customer propensity to use the Internet for purchases of financial service products is important. The Desire for Technology Benefit variable was created from a factor analysis on Q38 which consisted of Driver’s decision-making index. The components of this factor are (i) a desire to buy the latest technology when prices fall and (ii) a desire to buy the latest technology when real benefits can be discerned. The relationship displayed suggests that the Internet banking proposition is perceived as increasing value and benefit to the consumer while face to face interaction has a very limited role at any level of product complexity. The fact that the Desire for Technology Benefit variable often features in the top three in terms of the cumulative $R^{2adj}$ again supports its importance in these findings.

Likewise the consistent negative correlations between Desire for Information and the customer propensity to use the Internet to purchase financial services products is also important. As was the case with the Desire for Technology Benefits (nf6) variable, Desire
for Information (nf2) was born from the Q38 factor analysis and consisted of the following components:

- M 0.758  I like to keep my options open and not risk over-committing;
- L 0.714  I refer to others before taking any decision;
- N 0.702  If faced with too much information I seek advice from a third party;
- O 0.565  I value many sources of information and would analyse all before making a decision.

The theme of continual referral to others within this factor is evident from the above attitude statements. That it resulted in a negative correlation with the propensity to purchase financial products online is, therefore, unsurprising and is consistent with the discussion on the Technology Benefits variable.

**Implications**

From the analyses it is clear that most of the explanation for variability in the dependent variable is accounted for by the relationship managed customer segment, and in particular at the level of simple products. For marketing decision-makers in banks there would seem clear advantages in targeting the key variables that are explaining variability in the perceived suitability of the Internet for product purchase in the relationship managed segment at the level of simple products. This is further discussed in Chapter 10.

**9.6 Sub-Hypothesis 2.4**

Sub-Hypothesis 2.4 Where customers consider face to face staff referral important pre-purchase this will be influenced by a perceived need for reassurance about security and an anxiety about the remote intangible platform offered through Internet banking.

This issue is addressed through an examination of customer perceived importance of referring to a member of branch staff before purchasing products of varying complexity.

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\[^1\] from the new variables 'refsimp', 'refmed', and 'refcomp' defined from data gathered in Q21. DV2.
As was the case in analysing the first dependent variable the structure of this analysis will be in three stages and move from general to specific:

**Level 1:** General examination of all customers' perceptions as to the importance of referring to a member of staff before purchasing financial services products of varying complexity.

**Level 2:** Examination of Relationship-Managed and Non-relationship managed customers as to the importance of referring to a member of staff before purchasing financial services products of varying complexity.

**Level 3:** Specific examination of customer perceptions by product holdership as to the importance of referring to a member of staff before purchasing financial services products of varying complexity.

9.6.1 Establishing Context and Method: Analysis Level 1

*General examination of all customers perceptions as to the importance of referring to a member of staff before purchasing financial services products of varying complexity.*

When a multiple regression was run on all of the independent variables and the dependent variables (importance of referring of a member of staff before the purchase of simple, medium and complex products) the following results emerged. Overall adjusted $R^2$ scores for varying levels of complexity were as follows:

- Simple Products - 12.1%
- Medium Products - 23.1%
- Complex Products - 24.2%

When examining in detail the impact of variables on the variance in the dependent variable, the following explanation emerged as shown in Table 9.31.
Table 9.31: All Customers – Perceived importance of referring to staff pre-purchase

<table>
<thead>
<tr>
<th>% importance of referring to staff pre-purchase</th>
<th>All Customers</th>
<th>Adj R²</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Simple Products</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desire for Convenience; Beta = -0.255</td>
<td></td>
<td>5.6%</td>
</tr>
<tr>
<td>Sex; Beta = +0.214</td>
<td></td>
<td>9.3%</td>
</tr>
<tr>
<td>Regular access to PC at work; Beta = +0.194</td>
<td></td>
<td>12.1%</td>
</tr>
<tr>
<td>( R²_{adj} = 12.1% ) (n=345)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Medium Products</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex; Beta = +0.341</td>
<td></td>
<td>10.8%</td>
</tr>
<tr>
<td>Staff demo in-home; Beta = -0.243</td>
<td></td>
<td>9.5%</td>
</tr>
<tr>
<td>Desire for Convenience; Beta = -0.222</td>
<td></td>
<td>20%</td>
</tr>
<tr>
<td>Face to Face seeking; Beta = +0.212</td>
<td></td>
<td>23.1%</td>
</tr>
<tr>
<td>( R²_{adj} = 23.1% ) (n=373)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Complex Products</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reluctant due to inability to see / touch; Beta = +0.293</td>
<td></td>
<td>7.7%</td>
</tr>
<tr>
<td>Regular access to a PC at work; Beta = +0.253</td>
<td></td>
<td>13.3%</td>
</tr>
<tr>
<td>Desire for Convenience; Beta = -0.203</td>
<td></td>
<td>16.6%</td>
</tr>
<tr>
<td>Importance of lower fees to encourage adoption; Beta = -0.180</td>
<td></td>
<td>18.9%</td>
</tr>
<tr>
<td>Importance of newspaper article to encourage adoption; Beta = -0.220</td>
<td></td>
<td>21.3%</td>
</tr>
<tr>
<td>Importance of staff demo in home; Beta = -0.220</td>
<td></td>
<td>24.2%</td>
</tr>
<tr>
<td>( R²_{adj} = 24.2% ) (n=289)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Simple Products**

The Independent Variables Influence in assessing the importance of referring to a member of staff before purchasing of simple financial products were:

- Desire for Convenience (nf3); Standardised Beta = -0.255
  The negative correlation indicates that as a desire for convenience (manifest in statements reflecting a ‘time-poor’ characteristics – see nf3) increases the importance of referring to a member of staff pre-purchase decreases.
- **Sex; Standardised Beta = +0.214**
  
The results indicate that while male dominant, the direction of the relationship suggests that females may be more disposed to see importance in referring to a member of staff pre-purchase.

- **Regular access to a computer at work (Q1); Standardised Beta = +0.194**
  
The direction of the relationship indicates that not having access to a PC at work contributes to the importance of referring to a member of staff pre-purchase.

**Medium Products**

The Independent Variables of Influence in assessing the importance of referring to a member of staff before purchase of an increasing number of medium financial products were:

- **Sex; Standardised Beta = +0.341**
  
  This indicates that while male dominant, the direction of the relationship suggests that females may be more disposed to see importance in referring to a member of staff pre-purchase.

- **Staff demonstration in my home (Q26); Standardised Beta = -0.243**
  
  The negative correlation indicates that the importance of a demonstration of Internet banking in the customers' homes is positively related to the importance of referring to a member of staff pre-purchase.

- **Desire for Convenience; Standardised Beta = -0.222**
  
  The negative correlation indicates that as a desire for convenience (manifest in statements reflecting 'time-poor' characteristics – see nf3) increases the importance of referring to a member of staff pre-purchase decreases.

- **Desire for Face to face; Standardised Beta = +0.212**
  
  This suggests that an increasing desire for face to face interaction is positively correlated with the importance of referring to a staff member pre-purchase of a medium product.
Complex Products

The Independent Variables of Influence in assessing the importance of referring to a member of staff before purchase of an increasing number of complex financial products were:

- Unable to see / touch product (Q13); Standardised Beta = +0.293
  This indicates that the inability to see / touch a product pre-purchase is positively correlated with the perceived importance of speaking to a staff member.

- Regular access to a computer at work (Q1); Standardised Beta = +0.253
  This direction of the relationship indicates that not having access to a PC at work contributes to the importance of referring to a member of staff pre-purchase.

- Desire for Convenience; Standardised Beta = -0.203
  The negative correlation indicates that as a desire for convenience (manifest in statements reflecting a ‘time-poor’ characteristics – see n3) increases the importance of referring to a member of staff pre-purchase decreases.

- Importance of lower fees to prompt adoption (Q26); Standardised Beta = -0.180;
  This suggests that lower fees for Internet banking would not have an influence on the perceived importance of referring to a member of staff pre-purchase of a complex product.

- Importance of a newspaper article to prompt adoption (Q26); Standardised Beta = +0.178
  The results indicate that newspaper recommendations for Internet banking would not have an influence on the perceived importance of referring to a member of staff pre-purchase.
- Importance of Staff demonstration in home (Q26); Standardised Beta = -0.220;
The negative correlation indicates that the importance of a demonstration of Internet banking in the customers' homes is positively related to the importance of referring to a member of staff pre-purchase

Commentary

This general level of examination looks at all customers and identifies the independent variables that account for variability in the perceived importance of referring to a member of staff before purchasing increasing numbers of financial products of varying complexity. Across all levels of product the desire for convenience, so positively correlated to Internet adoption in the analysis of the first independent variable, is in this case negatively related. In other words as the need to make expedient decisions increases there is a negative relationship to the importance of talking to a member of branch staff. The regression outputs show consistently that issues like a desire for face to face interaction, concerns about the inability to 'see and touch' the online product (as number of complex products increases), a desire for personal reassurance through staff 'in-home' demonstrations of Internet banking (with rising numbers of medium and complex products), all indicate that while Internet banking offers convenience and efficiency (established in previous analyses) those respondents who indicated a preference to refer to staff pre-purchase are not confident in dealing with such products autonomously through the web.

9.6.2 Sub-Hypothesis 2.4: Analysis Level 2

Examination of relationship managed and non-relationship managed customers as to the importance of referring to a member of staff before purchasing financial services products of varying complexity.

The results of the linear regression are illustrated in the following tables. The independent variables which have most predictive power on the dependent variable are detailed with standardised beta scores and overall R${}^{2adj}$ for each quadrant.
Table 9.32: Matrix to show the variables influencing the perceived importance of referring to a member of staff pre-purchase of the various product categories according to relationship status

<table>
<thead>
<tr>
<th>Relationship Managed</th>
<th>Adj R2</th>
<th>Non Relationship-Managed</th>
<th>Adj R2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Simple Products</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q26 Staff in-home demonstration; Beta = -0.608</td>
<td>33.8%</td>
<td>Desire for Convenience; Beta = -0.267</td>
<td>6%</td>
</tr>
<tr>
<td>Q26 Reassurance about security; Beta = +0.448</td>
<td>52%</td>
<td>Chief Income Earner; Beta = +0.222</td>
<td>9.8%</td>
</tr>
<tr>
<td>Highest Qualification; Beta = -0.366</td>
<td>63.5%</td>
<td>Highest Qualification; Beta = +0.213</td>
<td>13.4%</td>
</tr>
<tr>
<td>Creativity; Beta = -0.340</td>
<td>74.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to a PC at work; Beta = +0.272</td>
<td>79.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q13 Reluctant due to credit card details being known; Beta = -0.249</td>
<td>84%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desire for Face to Face (nX); Beta = +0.237</td>
<td>87.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>( R^2_{adj} = 87.2% (n=34) )</td>
<td></td>
<td>( R^2_{adj} = 13.4% (n=380) )</td>
<td></td>
</tr>
<tr>
<td><strong>Medium Products</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reluctant due to credit card details known; Beta = -0.514</td>
<td>22.7%</td>
<td>Sex; Beta = +0.333</td>
<td>10%</td>
</tr>
<tr>
<td>Reluctant due to slow download time; Beta = -0.451</td>
<td>41.1%</td>
<td>Reluctant due to inability to see / touch product; Beta = +0.220</td>
<td>13.8%</td>
</tr>
<tr>
<td>Staff in-home demonstration; Beta = -0.401</td>
<td>56.5%</td>
<td>Reluctant due to not necessary for my needs; Beta = +0.217</td>
<td>17.6%</td>
</tr>
<tr>
<td>Age; Beta = -0.357</td>
<td>68.7%</td>
<td>Desire for Face to Face; Beta = +0.198</td>
<td>20.6%</td>
</tr>
<tr>
<td>Improved Service of Internet; Beta = +0.371</td>
<td>81.2%</td>
<td>Desire for Convenience; Beta = -0.278</td>
<td>26.8%</td>
</tr>
<tr>
<td>Ease of online buying; Beta = +0.254</td>
<td>92.8%</td>
<td>( R^2_{adj} = 26.8% (n=404) )</td>
<td></td>
</tr>
<tr>
<td>( R^2_{adj} = 92.8% (n=25) )</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Complex Products</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speed (n7); Beta = -0.455</td>
<td>16.7%</td>
<td>Reluctant due to inability to see / touch product; Beta = +0.326</td>
<td>9.5%</td>
</tr>
<tr>
<td>Age; Beta = -0.438</td>
<td>33.5%</td>
<td>Regular access to a PC at work; Beta = +0.235</td>
<td>14%</td>
</tr>
<tr>
<td>( R^2_{adj} = 33.5% (n=45) )</td>
<td></td>
<td>Reluctant due to not necessary for my needs; Beta = +0.208</td>
<td>17.4%</td>
</tr>
<tr>
<td>( R^2_{adj} = 23.7% (n=431) )</td>
<td></td>
<td>Reluctant due to expense of phone bills; Beta = +0.213</td>
<td>20.8%</td>
</tr>
<tr>
<td>( R^2_{adj} = 23.7% (n=431) )</td>
<td></td>
<td>Reluctant due to lack of face to face; Beta = +0.220</td>
<td>23.7%</td>
</tr>
</tbody>
</table>

Commentary

As might be expected for relationship managed, high net worth customers, many factors account for the variability in the perceived importance of talking to a member of staff.
when purchasing products of varying complexity. The $R^{2\text{adj}}$ for the non-relationship-managed group is less explained across the product categories indicating less scope for management intervention since the inhibitors are not known.

The greatest variability in the dependent variable is explained by ‘Staff demonstration of the net in my home’ with 33.8% of the total variance. For the relationship managed customer, this indicates that as the perceived importance of referring to a member of staff pre-purchase of a simple product increases so too does the importance of staff demonstration of Internet in the customer’s home. It is important to note, however, that this does not mean that if the case bank were to invest in sending staff to relationship managed customers’ homes, this would lessen their need for staff referral before purchasing such products.

Other key issues within the relationship-managed group are a desire for face to face interaction (3.2% of variability), not having access to a PC at work (5.4% of variability) and not considering the Internet to provide improved service (12% of variability in medium products).

As regards ‘reassurance about security’ (Q26) (variability of 18%) this indicates that as the perceived importance of referring to a member of staff pre-purchase increases, the importance of being reassured about web security decreases. Intuitively, one might suppose that increasing the level of reassurance about web security, one might lessen the extent of perceived importance for staff referral pre-purchase but this cannot be concluded from these findings.

The positive correlation for ‘ease of online buying process’ for medium products, which accounts for almost 12% of dependent variable 2 variability, indicates that as the buying process becomes increasingly difficult the perceived importance of referring to a member of staff for an increasing number of products also increases. In looking at the ‘Age variable (see medium and complex in RM) it is interesting to note that there seems to be a tendency for younger customers to perceive the importance of staff referral although this could be a function of the younger profile of this base. Similar factors also emerge for the non-relationship managed customers, especially, with respect to the Internet not being
perceived as relevant to their needs and the fact that there is an inability to see / touch
products. For medium and complex products in this customer group, there is a clear
emphasis on the preference for face to face interaction which is positively related to the
perceived importance of referring to staff members pre-purchase.

9.6.3 Key Issues Resulting from Level 2 Analysis

- Where relationship managed customers perceive increasing importance of referring
to a member of staff pre-purchase they will also see the importance of in-home staff
demonstration of the web as increasingly important too. This is most evident at lower
levels of product complexity.
- Where relationship managed customers perceive increasing importance of referring
to a member of staff pre-purchase they will also see the importance about being
reassured about web security decrease.
- Where relationship managed customers perceive increasing importance of referring
to a member of staff pre-purchase for medium and complex products they will also
demonstrate a preference for this referral to happen in a face to face interaction.
- Where relationship managed customers perceive increasing difficulty in the online
buying process the importance of referring to a member of staff pre-purchase will
increase.

9.6.4 Sub-Hypothesis 2.4: Analysis Level 3

Specific examination of customer perceptions by individual product holder-ship as to the
importance of referring to a member of staff before purchasing financial services
products of varying complexity.

Having examined the independent variables which influence the perceived importance of
referring to a member of staff before the purchase of products varying in complexity the
analysis will now examine the independent variables in terms of the simple, medium and
complex customers separately.

These customer groupings are determined on the basis of the complexity of their own
product holdings. In other words, by virtue of their own product holder-ship simple
customers only have simple products so only their responses that relate to simple products only will be taken into account. Medium customers can hold simple and medium products but do not have complex product holdings. Only their responses as to the need to refer to a member of staff pre-purchase of simple and medium products will therefore be considered. Complex customers by definition have the highest product complexity level possible and all of their views will be taken into account (i.e. for simple, medium and complex products).

The regression analyses allows for the construction of matrices which facilitate comparisons to be drawn between the three different levels of product and customer (see Tables 9.33(i – iii).
Table 9.33(i): Matrix showing results from linear regression for Simple Customers and their corresponding products held

<table>
<thead>
<tr>
<th>% of products of varying complexity for which it is important to refer to staff pre-purchase by customer product holder-ship</th>
<th>Simple Products</th>
<th>Adj R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple Customers</td>
<td>Reluctant due to credit card details being known; Beta = -0.701</td>
<td>44.6%</td>
</tr>
<tr>
<td></td>
<td>Lower Fees for net banking Q26; Beta = -0.484</td>
<td>66.8%</td>
</tr>
<tr>
<td></td>
<td>Improved service with online; Beta = +0.491</td>
<td>81.8%</td>
</tr>
<tr>
<td></td>
<td>Desire for Convenience; Beta = +0.277</td>
<td>89.6%</td>
</tr>
<tr>
<td></td>
<td>Regular access to email at home; Beta = -0.196</td>
<td>94%</td>
</tr>
<tr>
<td></td>
<td>Adjusted $R^2 = 94%$ (n=101)</td>
<td></td>
</tr>
</tbody>
</table>

(Note: The reader is reminded that the classification of customers as 'simple', 'medium' and 'complex' is determined from their individual highest level of complexity product holdership (Variable 'chlcomp'))

Commentary

With respect to customers who have only simple needs (Table 9.33(i)) the key variables which influence their perceived importance of referring to a member of staff pre-purchase are consistent with previous findings. The key predictor at the simple customers’ level is the reluctance to trust credit card details online and this accounts for almost 45% of the variability in the dependent variable. However, the direction of this relationship is interesting as with regard to simple products it shows credit card fear is inversely related to the perceived importance of referring to a member of staff pre-purchase. In other words as customers interact with staff before purchasing, the issue of trust in credit cards and possible fraud becomes less of an inhibitor.

The issue of convenience / timesaving (Q26) is positively related (Beta = +0.277) for simple products and accounts for 7.8% of the dependent variable indicating that as a desire for convenience increases the perceived importance of referring to a member of staff pre-purchase also increases.
Table 9.33(ii): Matrix showing results from linear regression for Medium Customers and their corresponding products held

<table>
<thead>
<tr>
<th>% of products of varying complexity for which it is important to refer to staff pre-purchase by customer product holder-ship</th>
<th>Simple Products</th>
<th>Adj R²</th>
<th>Medium Products</th>
<th>Adj R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium Customers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Q13 Reluctant due to lack of see/touch product; Beta = +0.539</td>
<td>25.1%</td>
<td>5</td>
<td>Desire for Convenience; Beta = -0.535</td>
</tr>
<tr>
<td></td>
<td>Q26 Reassurance about Security; Beta = +0.475</td>
<td>45.9%</td>
<td></td>
<td>Age; Beta = 0.427</td>
</tr>
<tr>
<td></td>
<td>Q13 Reluctant due to Internet at work only; Beta = -0.629</td>
<td>69.5%</td>
<td></td>
<td>Sex; Beta = +0.407</td>
</tr>
<tr>
<td></td>
<td>Q13 Reluctant due to expense of online phone bills; Beta = -0.419</td>
<td>81.5%</td>
<td></td>
<td>Relationship Status; Beta = -0.423</td>
</tr>
<tr>
<td></td>
<td>Q26 Staff in-home demo of net banking; Beta = -0.247</td>
<td>85.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q13 Reluctant due to slow download time; Beta = +0.253</td>
<td>92.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Q13 Reluctant due to possible delay in receiving product; Beta = +0.197</td>
<td>97.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R² = 97.2% (n=47)</td>
<td></td>
<td></td>
<td>Adjusted R² = 71.9% (n=62)</td>
<td></td>
</tr>
</tbody>
</table>

In Table 9.33(ii) with regard to medium level customers, a similar theme emerges as was evident with Simple customers. As before the positive correlation with the inability to see/touch online products is a key variable (explaining 25% of dependent variable variability) while other ‘inhibitor’ variables from Q13 indicate a negative relationship to the perceived importance of referring to staff pre-purchase. Examples include, reluctance due to the cost of phone bills (12%), Internet access at work only (24%), slow download times (6%) and possible delays in delivery from online purchases (4.5%). Interestingly with regard to medium products, medium customers’ relationship status emerges as an important factor, explaining 16.7% of variability. The negative correlation indicates that as net worth increases the perceived importance of referring to staff for a greater number of medium products also increases. This is interesting because it indicates that these customers consider it important to refer to a member of staff prior to purchasing medium and complex products.

Medium customers also differ from their simple customer counterparts (in Table 9.33(i)) as regards medium products because as the perceived importance of referring to a
member of staff pre-purchase increases, the desire for convenience decreases. This is also true for complex customers and complex products. It probably indicates that when such customers hold medium and complex products, referring to a member of staff pre-purchase is perceived as important, especially when they do not regard convenience as a priority. Medium customers also regard being reassured about web security for simple products as less important than referring to a member of staff pre-purchase. As regards bank staff demonstration of the web in their homes, the importance of this increases together with the perceived importance of referring to staff pre-purchase for simple products.

Table 9.33(iii): Matrix showing results from linear regression for Complex Customers and their corresponding products held

<table>
<thead>
<tr>
<th>% of products of varying complexity for which it is important to refer to staff pre-purchase by customer product holdership</th>
<th>Simple Products</th>
<th>Adj R²</th>
<th>Medium Products</th>
<th>Adj R²</th>
<th>Complex Products</th>
<th>Adj R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complex Customers</td>
<td>7 Q26 Staff in home demo of net banking; Beta = -0.290</td>
<td>7.1%</td>
<td>8 Sex; Beta = 0.328</td>
<td>9.5%</td>
<td>9 Q13 Reluctant due to lack of see/touch product; Beta = 0.310</td>
<td>8.3%</td>
</tr>
<tr>
<td></td>
<td>Desire for technology benefit; Beta = -0.279</td>
<td>13.4%</td>
<td>Staff in home demo of net banking; Beta = -0.249</td>
<td>14.4%</td>
<td>Desire for convenience (noC); Beta = -0.289</td>
<td>15.3%</td>
</tr>
<tr>
<td></td>
<td>Speed (m/s); Beta = -0.217</td>
<td>17%</td>
<td></td>
<td></td>
<td>Q13 Reluctant due to delivery delay in product; Beta = +0.226</td>
<td>19%</td>
</tr>
<tr>
<td></td>
<td>Chief Income Earner; Beta = -0.242</td>
<td>21.8%</td>
<td></td>
<td></td>
<td>Income; Beta = +0.243</td>
<td>23.4%</td>
</tr>
<tr>
<td></td>
<td>Adjusted R² = 21.8 (n=202)</td>
<td></td>
<td>Adjusted R² = 14.4% (n=217)</td>
<td></td>
<td>Lower fees as incentive; Beta = -0.232</td>
<td>25.4%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Regular access to a PC at work; Beta = +0.211</td>
<td>30.7%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Adjusted R² = 36.7% (n= 174)</td>
<td></td>
</tr>
</tbody>
</table>

For complex customers (see Table 9.33(iii)) with simple and medium products, the desire for an in-home staff demonstration increases as the importance of referring to a member of staff pre-purchase increases. With regard to complex products a reluctance to deal with the intangibility of the online offer appears once again, as does the negative correlation with the desire for convenience and technology benefits (indicating respondents here do not consider themselves time-poor, nor do they see any real pragmatic advantages offered by technology).
9.6.4.1 Key Issues Resulting from Level 3 Analysis

- For customers with simple product needs, referring to staff pre-purchase reduces the inhibiting impact of credit card fraud fears; in other words staff referral pre-purchase appears to reassure the customers.
- For customers with simple product needs who are characterised by a desire for convenience, the perceived importance of referring to a member of staff pre-purchase increases accordingly.
- For customers with medium product needs as the inhibiting influence of not being able to see / touch the products becomes more pronounced so too does the perceived importance of referring to a member of staff pre-purchase.
- For customers with medium and/or complex product needs and who are not characterised by a desire for convenience / timesaving, the perceived importance of referring to a member of staff pre-purchase increases.
- For complex customers with medium and complex product needs the importance of staff in-home web demonstration increases along-with the perceived importance of referring to a member of staff pre-purchase.

Sub-hypothesis 2.4 stated that where customers consider face to face staff referral important pre-purchase this will be influenced by a perceived need for reassurance about security and an anxiety about the remote intangible platform offered through Internet banking. The findings demonstrate that as product holdership increases, at each complexity level the need for reassurance pre-purchase is much more broad ranging them was at first anticipated. Where there is a need to refer pre-purchase the desire for convenience is largely eliminated for more simple products because this referral in itself is perceived as convenient. The relationship between the perceived importance of staff referral and the importance for in-home staff demonstration of the Internet is interesting and emphasises that reassurance goes further than customers being just reassured about security issues. These customers seem to desire face to face interaction at all times and importantly, as has been highlighted previously, it does not follow that by providing in-home demonstration of the web that the perceived importance of referring to staff pre-purchase will be reduced.
As regards the importance of being reassured about Internet security those customers who see that as becoming less important as the need to refer to staff becomes more important pre-purchase, may be possible targets for such ‘reassurance’ messages in an attempt to reduce their reliance on face to face / branch interaction.

9.7 Threads of Commonality in All Levels of Analysis for Dependent Variable 2

In an attempt to better integrate the findings from the three different levels of analysis undertaken, and to seek to identify if there are common variables at the differing levels Table 9.34 shows the independent variables of influence for each product complexity type (i.e. Simple, Medium, Complex). Only where one variable occurs more than once is it included and it is colour-coded for easy identification.

<table>
<thead>
<tr>
<th>Complexity / Level</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIMPLE PRODUCTS</td>
<td>Convenience  Sex  Access to a PC at work</td>
<td>Staff in-home demonstration  Reluctance due to credit card detail being known  Desire for Face to Face Interaction</td>
<td>Convenience  Reluctance due to credit card detail being known  Improved service  Inability to see/touch product  Staff in-home demonstration</td>
</tr>
<tr>
<td>MEDIUM PRODUCTS</td>
<td>Convenience  Sex  Staff in-home demonstration  Desire for Face to Face Interaction</td>
<td>Staff in-home demonstration  Reluctance due to credit card detail being known  Improved service</td>
<td>Convenience  Sex  Staff in-home demonstration</td>
</tr>
<tr>
<td>COMPLEX PRODUCTS</td>
<td>Convenience  Inability to see/touch product  Staff in-home demonstration</td>
<td>Inability to see/touch product  Lack of Face to Face interaction</td>
<td>Convenience  Inability to see/touch product</td>
</tr>
</tbody>
</table>

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Commentary

From Table 9.34 it can be seen the most frequent independent variables cited are:

Desire for Convenience (6 times) –
    in all levels and all product complexity types. Note – a negative relationship with the DV2.

Importance of Staff in-home demonstrations (6 times) –
    in all levels but mainly at the lower levels of product complexity.

Inability to see/ touch product (4 times) –
    at all levels for all product categories especially at level of Complex products.

Reluctance to provide credit card details (3 times) –
    at levels 2 and 3 in Medium product category only.

The variable that appears most often across all product levels, as well as the analysis levels, is the ‘Desire for Convenience’ (nf3). The negative relationship consistently displayed is the perceived importance of referring to a member of staff for an increasing number of products which as it increases has a negative relationship with time-saving and convenience.

This makes sense and when taken together with the positive correlation for staff in-home demonstration as a motivator for Internet adoption the need for face to face interaction pre-purchase is reinforced. The inability to see / touch, especially for complex products is positively correlated to the perceived importance of referring to staff pre-purchase. This again underpins the need for customer-staff interaction and reassurance.
9.8 Summary

9.8.1 Mutually Supporting Themes in Multi-level Analysis of DV1 and DV2

**Dependent Variable 1:** Internet appropriateness for financial services products as determined by product complexity level.

- Technology Benefits (5 times) –
  - in all levels and all product complexity types.

- Time-saving and Convenience (4 times) –
  - in all levels but mainly at the lower levels of product complexity.

- Income / Chief Income Earner (4 times) –
  - at all levels for all product categories.

- Information Searching (3 times) –
  - at levels 1 and 3 in Simple product category only.

- Importance of reassurance about Security (3 times) –
  - at levels 2 and 3 in Simple and Medium product complexity categories.

**Dependent Variable 2:** Perceived importance of referring to a member of staff before purchasing products of varying complexity.

- Desire for Convenience (6 times) –
  - in all levels and all product complexity types. Note – a negative relationship with the DV2.

- Importance of staff in-home demonstrations (6 times) –
  - in all levels but mainly at the lower levels of product complexity.

- Inability to see/ touch product (4 times) –
  - at all levels for all product categories especially at level of Complex products.
9.9 Discussion

General Issues Emerging from Research Objective 3 - Multiple Regression on Sub-Hypotheses 2.3 and 2.4 using Dependent Variables 1 and 2 follow.

The two dependent variables chosen for this stage of the analysis are important in gaining an understanding of the factors which influence customers to use the Internet for financial services and at what point (if at all) human interaction from bank staff becomes important. The multi-level analysis stages employed, for each dependent variable, allow for that determination to be made in general (with regard to the overall sample), in terms of the relationship status of customers and according to individual customers own level of product holder-ship as defined by product complexity.

Through this analysis, the constituent sub-elements of Hypothesis 2 are addressed. The commonalities identified between the analysis levels with each of the two dependent variables now allow for a broad overall comparison to be made in order to establish some mutually supporting and over-arching themes between the variables. This provides a greater meaning to the findings as they relate to the hypotheses.

What is at first apparent, is that relationship managed customers with financial needs at the lower levels of complexity, demonstrate the greatest potential for bank marketers to target and influence them to adopt on-line banking. Within this group, the regression analyses in both dependent variable 1 and dependent variable 2 reveals many significant independent variables that contribute to the variability of the dependent variable and which predict in either propensity to purchase on-line or the need to refer to a member of staff pre-purchase.

More specifically and common to the analysis stages for each dependent variable is the variable 'Desire for Convenience'. Perhaps unsurprisingly the issue of 'time-saving' and 'convenience' with regard to the Internet appears central to possible web adoption. That it appears frequently in both dependent variable analysis outputs is important. More important still is the way in which the findings from each dependent variable are consistent with the other. Where convenience and timesaving were positively correlated to the perceived suitability of the Internet to purchase products (DV1), desire for
convenience was negatively correlated to the perceived importance of referring to a member of staff pre-purchase as medium and complex product holdership levels increased (DV2).

In other words, while the expedience of the Internet for product purchase was evident, if and when there was a need to refer to a member of staff pre-purchase, this would outweigh any such timesaving advantages. In support of this once again is the 'Desire for Information' factor (nf7), which was negatively correlated to DV1. This indicates that the need for further information, often through a third party, was not important in determining propensity to use the Internet for product purchase.

Within DV1 the pragmatic 'Desire for Technology' variable comes out strongly positively correlated to the perceived suitability of the Internet for product purchase. That the intangibility of the Internet is an issue in DV2 (see 'inability to see / touch product') also supports the general thrust that face to face referral for advice, information and reassurance is important. However, as regards staff in-home web demonstration for customers it is clear that as the importance of this consideration increases, so too does the perceived importance of referring to a member of staff pre-purchase. This latter point is interesting because while it might be intuitively concluded that as staff in-home Internet demonstration became more important for customers, the reliance on face to face may decrease, this is not the case. In other words, demonstration of the Internet by staff in customers' homes does not indicate that these customers will then replace future staff referral interactions with Internet based interactions.

From a relationship marketing perspective, what appears to the be the case from the analysis of sub-hypotheses 2.3 and 2.4, is that as the perceived importance of referring to a member of staff pre-purchase increases the importance of being reassured about Internet security decreases. This is not entirely surprising but what the findings intuitively imply but do not actually present is that if reassurance messages about Internet security are provided to customers, this may reduce a reliance on the perceived importance of staff referral.
9.10 Addressing Hypothesis 2.5

Hypothesis 2.5 The perceived timesaving and convenience benefits offered by the Internet will be the key predictors in whether or not a customer has registered for Internet banking in the case bank.¹

9.10.1 Introduction

It is anticipated that being actually registered for Internet banking will increase the likelihood of using the Internet in financial services activities.

However from the Stage 1 qualitative research it has already been established that many banks, in order to boost their publicised Internet adoption figures, have been automatically registering customers for Internet banking. However, the extent to which those registered for Internet banking in the case bank data have self-selected the service is unknown to the researcher. This analysis will identify the extent to which independent variables may account for customers being registered for Internet banking.

The analytical technique undertaken for this dependent variable will be logistic regression as the dependent variable is dichotomous.

¹ Addressed through logistic regression analysis on Dependent Variable 3. Whether or not the customer is registered for Internet banking is Dependent Variable 3 in this analysis as established in Q18
9.10.2 Analytical Approach

Adopting a forward stepwise Wald approach, 33% of the cases (n=160) were included in the analysis. The remaining respondents did not answer this question.

The psuedo $R^2$ figures from Cox and Snell and Nagelkerke are shown in Table 9.35 and indicate adjusted generalisability back to the population of between 22.8% and 31.5%.

Table 9.35:

<table>
<thead>
<tr>
<th>Step</th>
<th>-2 Log likelihood</th>
<th>Cox &amp; Snell R Square</th>
<th>Nagelkerke R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>193.586</td>
<td>.074</td>
<td>.102</td>
</tr>
<tr>
<td>2</td>
<td>185.618</td>
<td>.119</td>
<td>.165</td>
</tr>
<tr>
<td>3</td>
<td>179.192</td>
<td>.154</td>
<td>.213</td>
</tr>
<tr>
<td>4</td>
<td>173.132</td>
<td>.185</td>
<td>.256</td>
</tr>
<tr>
<td>5</td>
<td>168.862</td>
<td>.207</td>
<td>.286</td>
</tr>
<tr>
<td>6</td>
<td>164.462</td>
<td>.228</td>
<td>.315</td>
</tr>
</tbody>
</table>

The classification Table 9.36 shows the six-step process involved in the logistic regression analysis and as can be seen from the Step 6 figures, almost three out of four respondents (74.4%) are correctly classified according to the independent variables under analysis.

What these independent variables are and in what ways they affect the dependent variable will next be examined.
Table 9.36:

<table>
<thead>
<tr>
<th>Step</th>
<th>Observed</th>
<th>Q.18 REGISTERED AS A USER OF ONLINE BANKING</th>
<th>Predicted</th>
<th>Percentage</th>
<th>Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1</td>
<td>Q.18 REGISTERED AS A USER OF ONLINE BANKING</td>
<td>Yes</td>
<td>0</td>
<td>55</td>
<td>.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>0</td>
<td>105</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>Overall Percentage</td>
<td></td>
<td></td>
<td></td>
<td>65.6</td>
</tr>
<tr>
<td>Step 2</td>
<td>Q.18 REGISTERED AS A USER OF ONLINE BANKING</td>
<td>Yes</td>
<td>34</td>
<td>21</td>
<td>61.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>28</td>
<td>77</td>
<td>73.3</td>
</tr>
<tr>
<td></td>
<td>Overall Percentage</td>
<td></td>
<td></td>
<td></td>
<td>69.4</td>
</tr>
<tr>
<td>Step 3</td>
<td>Q.18 REGISTERED AS A USER OF ONLINE BANKING</td>
<td>Yes</td>
<td>26</td>
<td>29</td>
<td>47.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>18</td>
<td>87</td>
<td>82.9</td>
</tr>
<tr>
<td></td>
<td>Overall Percentage</td>
<td></td>
<td></td>
<td></td>
<td>70.6</td>
</tr>
<tr>
<td>Step 4</td>
<td>Q.18 REGISTERED AS A USER OF ONLINE BANKING</td>
<td>Yes</td>
<td>30</td>
<td>25</td>
<td>54.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>25</td>
<td>80</td>
<td>76.2</td>
</tr>
<tr>
<td></td>
<td>Overall Percentage</td>
<td></td>
<td></td>
<td></td>
<td>68.8</td>
</tr>
<tr>
<td>Step 5</td>
<td>Q.18 REGISTERED AS A USER OF ONLINE BANKING</td>
<td>Yes</td>
<td>31</td>
<td>24</td>
<td>56.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>25</td>
<td>80</td>
<td>76.2</td>
</tr>
<tr>
<td></td>
<td>Overall Percentage</td>
<td></td>
<td></td>
<td></td>
<td>69.4</td>
</tr>
<tr>
<td>Step 6</td>
<td>Q.18 REGISTERED AS A USER OF ONLINE BANKING</td>
<td>Yes</td>
<td>30</td>
<td>25</td>
<td>54.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>16</td>
<td>89</td>
<td>84.8</td>
</tr>
<tr>
<td></td>
<td>Overall Percentage</td>
<td></td>
<td></td>
<td></td>
<td>74.4</td>
</tr>
</tbody>
</table>

a. The cut value is .500

The variables in the equation emerging as best predictors as to whether or not a customer is registered for Internet banking are:

Q26B – How important would ‘24 hour service’ be in prompting you to use an Internet banking service?

Q1 – Regular access to a computer at work?

Q28 – Gender.
Q13L – ‘A bad experience previously when I purchased on the Internet would make me reluctant to use the Internet for purchasing on-line’.

Q26I – How important would ‘reassurance about security’ be in prompting you to use an Internet banking service?

Q26F – How important would ‘a newspaper article’ be in prompting you to use an Internet banking service?

Each of these variables will now be analysed to identify the extent to which they predict the variability of the dependent variable i.e. whether or not the respondent is registered for Internet banking. To aid in this interpretation the values for Exp(B) in Step 6 of Table 9.36 will be examined. Where Exp(B) values <1, this means that increasing values of the variable correspond to decreasing odds of the events occurrence; in this case decreasing odds that the person will not be registered for Internet banking (i.e. they will be registered). Where Exp(B) values >1 this means that increasing values of the variable correspond to increasing odds of the events occurrence; in this case this means increasing odds that the person will not be registered.

Independent Variable 1 – ‘24 hour service’; Beta = +0.788; Exp(B) = 2.199

The positive Beta and Exp(B) value > 1 indicates that as 24 hour service becomes less important as a motivator for banking on-line, there is a greater likelihood that the respondent will not be registered for Internet banking.

Independent Variable 2 – ‘Regular access to a computer at work’; Beta = +1.048; Exp(B) = 2.852

The positive Beta and Exp(B) value > 1 indicates that as people have access to a PC at work they will be less likely to be registered for Internet banking.

Independent Variable 3 – ‘Sex’ Beta = 1.075; Exp(B) = 2.929
The positive Beta and Exp(B) value > 1 indicates that females are less likely than males to be registered for Internet banking.

Independent Variable 4 – 'A bad experience previously when I purchased on the Internet would make me reluctant to use the Internet for purchasing on-line'; Beta = -1.096; Exp(B) = 0.334

The negative Beta and Exp(B) value < 1 indicates that respondents who have not had a bad prior Internet purchase experience will be more likely to be registered for Internet banking.

Independent Variable 5 - How important would 'reassurance about security' be in prompting you to use an Internet banking service? Beta = -0.536; Exp(B) = 0.585.

The negative Beta and Exp(B) value < 1 indicates that respondents who regard reassurance about security as being unimportant are more likely to be registered for Internet banking.

Independent Variable 6 - How important would 'a newspaper article' be in prompting you to use an Internet banking service? Beta = 0.410; Exp(B) = 1.506.

The positive Beta and Exp(B) value > 1 indicates that as people perceive newspaper recommendation as being less important as a motivator they will be less likely to be registered for Internet banking.

9.10.3 Answering Hypothesis 2.5

Hypothesis 2.5 The perceived timesaving and convenience benefits offered by the Internet will be the key predictors in whether or not a customer has registered for Internet banking in the case bank.

Consistent with the findings from the other multiple regression analyses on DVI and 2 the results show that convenience (through 24 hours access) and reassurance about security, issues that appeared frequently in previous analyses, are important considerations.
Sub-hypothesis 2.5 is therefore supported.

It is unsurprising to find that those customers who do not consider 24/7 access important would be likely to register for Internet banking because this aspect of time-saving / convenience came out as a key motivator in the other regression analyses.

As regards reassurance about Internet security, those customers who are registered for Internet banking see this as increasingly important. This is once again consistent with previous findings.

That a bad previous experience should lead to non-registration is again consistent with the overall findings. As regards newspaper articles, customers who are less likely to be registered for Internet banking will see the role of newspaper articles in encouraging adoption of the Internet as less important. This of course does not necessarily mean that a greater extent of press coverage about Internet banking will lead to greater adoption levels.

9.11 Overall Summary Research Objective 3 / Hypothesis 2

Research Objective 3 sought to identify and assess the extent to which varying customer segments prefer referring to branch staff in preference to the Internet interface and to assess whether such preferences vary by customer and/or complexity of need. This objective was operationalised through the constituent sub-hypotheses of Hypothesis 2.

- H2.1 – There will be a significant positive correlation between the views of customers, and the academic literature, on what financial products can be considered ‘complex’.

- Supported. The a priori determination of simple, medium and complex products significantly and positively correlated with how customers themselves classified their own product holdings as regard complexity.
H2.2 - Relationship managed customers will show greater potential for on-line purchase of financial services at lower levels of product complexity than will non-relationship managed customers.

- Supported. Through multiple regression analyses it was shown that the greatest level of predictors as to whether or not a customer would adopt the Internet for the purchase of financial products was to be found at the level of relationship managed customers and simple products.

H2.3 - As customer needs increase in complexity customers will be more likely to favour face to face interaction over the alternative Internet banking proposition.

- Not supported. There was no evidence that as complexity of need increased so too did the need for face to face interaction.

H2.4 - Where customers consider face to face staff referral important pre-purchase this will be influenced by a perceived need for reassurance and an anxiety about the remote intangible platform offered through Internet banking.

- Supported. However the influencers upon the need to refer to a member of staff pre-purchase was also impacted upon by many other factors. There was a clear suggestion that the relationship marketing effort should be placed pre-purchase rather than after the Internet has been determined an appropriate delivery platform.

H2.5 - The perceived timesaving and convenience benefits offered by the Internet will be the key predictors in whether or not a customer has registered for Internet banking in the case bank.
Supported. Customer perceived timesaving and convenience benefits were key in determining whether or not a customer would be registered for Internet banking.

9.12 Analysis and Findings – Research Objective 4

Research Objective 4 is stated thus: to assess and evaluate the extent to which an a priori decision-making typology correlates to the profile of case bank customers in order to predict Internet adopters.

As has been reported in the Stage 1 qualitative findings a common feature of the feedback from the interviewed bankers was the fact that trying to predict customer behaviour in the area of Internet banking adoption was fraught with problems.

Given this it seems appropriate to examine the decision-making characteristics of customer respondents to see the extent to which decision-making style is consistent with attitudes to Internet banking. Such an analysis may be helpful in allowing banks to better target their communication and education efforts more appropriately.

H3: There will be a linkage demonstrated between an a priori decision-making typology and the clusters of customers identified in the study.

As was established in Chapter 4, Driver's decision-making style typologies have been used in this research. Q38 of the questionnaire features 26 questions (labelled in SPSS as 'a'-'z') that have been derived from both the Driver-Streufert Complexity Index and more general indicators of decision style characteristics as described in Driver et al (1998). The four different types of decision style that are being used in this research are: Decisive, Flexible, Hierarchic and Integrative. The components of Q38 (i.e. 38a – 38z) feature questions that can be grouped according to decision style from the Driver literature as follows:

<table>
<thead>
<tr>
<th>Decision Style</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decisive</td>
<td>a,b,c,d,e,f,g,s,t,u,x,y</td>
</tr>
<tr>
<td>Flexible</td>
<td>a,d,i,o</td>
</tr>
<tr>
<td>Hierarchic</td>
<td>g,h,o,p,r,u,w,x,y,z</td>
</tr>
<tr>
<td>Integrative</td>
<td>j,k,l,m,n,o,q,r,v,z</td>
</tr>
</tbody>
</table>
The questions are all presented in the form of attitude statements with the respondent being asked to indicate the extent to which each statement is characteristic of them. Reliability analysis was then conducted on these grouped statements and the Cronbach's alpha scores which result (see Table 9.37) indicate adequate reliability levels in all groups.

Table 9.37: Decision styles and Cronbach Alpha Scores

<table>
<thead>
<tr>
<th>Decision Style</th>
<th>Alpha score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decisive</td>
<td>0.646</td>
</tr>
<tr>
<td>Flexible</td>
<td>0.513</td>
</tr>
<tr>
<td>Hierarchic</td>
<td>0.619</td>
</tr>
<tr>
<td>Integrative</td>
<td>0.707</td>
</tr>
</tbody>
</table>

While the score for Flexibles is rather low, tolerance can be found for this in the literature (Nunnally, 1978). Indeed, Tabachnick and Fidell (1983) note that in circumstances where the use of factor analysis (FA) is exploratory then “both the theoretical and the practical limitations of FA may be relaxed in favour of a frank exploration of the data” (p377). It must also be remembered the statements chosen are adapted from Driver's work rather than a replication of it therefore lower reliability scores might be expected.

Having established the reliability of the decision style groupings it was then necessary to create a new variable called 'Decision Making Style' (DMS) that would enable an overall decision style score to be awarded to each respondent. Before this could be achieved, four new variables had to be created that would represent the percentage scores of the respondents on each decision style. This allowed all respondents to be assessed in terms of how decisive, flexible, hierarchic and integrative they were, with a minimum of 0% and a maximum of 100%. This calculation was done for each using the following formula:

\[
\%_{\text{style}} = \frac{(\text{sum of all scores for style questions}) - \text{minimum score}}{\text{Interval}} \times 100
\]
So for Decisives the following calculation would be performed:

\[
\% D \text{ score} = \frac{(a+b+c+d+e+f+g+s+t+u+x+y) - (12X1) \times 100}{(12X5)-(12X1)}
\]

\[
\% D \text{ score} = \frac{(sum -12) \times 100}{48}
\]

The same formula for each other style is now shown:

% score Flexibles = ((a+i+o+u) / 16) * 100

% score Hierarchics = ((g+h+o+p+r+u+w+x+y+z) - 10) / 40 * 100

% score Integratives = ((i+k+l+m+n+o+q+r+v+z) - 10) / 40 * 100

A problem was identified in the form of missing values. A decision had to be taken as to how respondents who didn’t complete all the questions would be treated in each style category. It was decided that if half or more of the constituent style questions were left missing then the respondent would not gain a ‘mark’ for that decision.

Where respondents failed to answer all the questions relating to any one DMS (but answered at least half), their scores take this into account. Respondents were therefore awarded % scores based on the number of statements they actually responded to and this required an analysis of missing values for each respondent for each DMS.

The final stage of the process was to place the respondents into one dominant decision style category i.e. Decisive, Flexible, Hierarchic or Integrative. A respondent’s DMS category was determined as follows:

A respondent’s DMS is the DMS in which they scored the highest % as long as that % was above 50%.

Therefore, respondents who didn’t score above 50% on any of the four dimensions remained unclassified (Missing Value Category 1). Similarly, respondents who scored equally on more than two dimensions were not classified (Missing Value Category 2). Finally, respondents who did not answer at least half of the relevant questions on any of
the dimensions were not classified (Missing Value Category 3). The breakdown of respondents into the four DMS, together with the number of unclassified respondents are shown below in Table 9.38.

Table 9.38: Decision Style Frequency in Research Case Bank Sample

<table>
<thead>
<tr>
<th>Decision Style</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decisive</td>
<td>19</td>
<td>4.0</td>
<td>5.2</td>
<td>5.2</td>
</tr>
<tr>
<td>Flexible</td>
<td>116</td>
<td>24.2</td>
<td>31.7</td>
<td>36.9</td>
</tr>
<tr>
<td>Hierarchic</td>
<td>100</td>
<td>20.8</td>
<td>27.3</td>
<td>64.2</td>
</tr>
<tr>
<td>Integrative</td>
<td>131</td>
<td>27.3</td>
<td>35.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Sub-Total</td>
<td>366</td>
<td>76.3</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Missing Value Categories:

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 1</td>
<td>29</td>
<td>6.0</td>
</tr>
<tr>
<td>Category 2</td>
<td>65</td>
<td>13.5</td>
</tr>
<tr>
<td>Category 3</td>
<td>20</td>
<td>4.2</td>
</tr>
<tr>
<td>Sub-Total</td>
<td>114</td>
<td>23.8</td>
</tr>
<tr>
<td>TOTAL</td>
<td>480</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Given the fact that Driver's decision-making styles have overlap between the constituent elements it was anticipated that there may be a degree of correlation between the styles.
As indicated by the black arrows in Figure 9.3, a correlation was anticipated between styles sharing the same focus (i.e. uni or multi) or the same information use style (i.e. maximiser or satisficer) but no correlation, as indicated by the red arrows, was anticipated between Decisives and Integratives, and Flexibles and Hierarchics. Unfortunately as illustrated by Figure 9.4 such unexpected correlations were found.

![Figure 9.3: Correlations between Sample Decision Styles](image)

<table>
<thead>
<tr>
<th></th>
<th>Degree of flexibility</th>
<th>Degree of decisiveness</th>
<th>Degree of hierarchy</th>
<th>Degree of integrative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree of flexibility</td>
<td>1</td>
<td>.644</td>
<td>.501</td>
<td>.539</td>
</tr>
<tr>
<td>Degree of decisive</td>
<td>.644</td>
<td>1</td>
<td>.639</td>
<td>.382</td>
</tr>
<tr>
<td>Degree of hierarchy</td>
<td>.501</td>
<td>.639</td>
<td>1</td>
<td>.735</td>
</tr>
<tr>
<td>Degree of integrative</td>
<td>.539</td>
<td>.382</td>
<td>.735</td>
<td>1</td>
</tr>
</tbody>
</table>

This therefore threw the use of the DMS calculated for each respondent into serious question and after considerable review it was decided to abandon the DMS as calculated and undertake a factor analysis on the data-set. Items 38w-38z were omitted as they focus on the likelihood of respondents to use the Internet for making decisions. As such they
were deemed to be interfering and therefore may not be of any meaningful use to the analysis of the hypothesis.

Accordingly, a factor analysis was conducted on the remaining 22 Driver attitude statements.

To establish the validity of employing factor analysis for the 22 item attitude scale the following tests were conducted. Bartlett’s test of sphericity is a statistical test for the presence of correlations among the variables. It provides the statistical probability that the correlation matrix has significant correlations among at least some of the variables. The Kaiser-Meyer-Olkin measure of sampling adequacy (also known as MSA) assesses the extent to which the partial correlations among the variables is small (will lie between 0-1 where closer to 1 indicates that each variable is highly predicted without error by the other variables).

Table 9.39: KMO and Bartlett’s Test on Driver’s Attitude Statements

<table>
<thead>
<tr>
<th>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</th>
<th>0.782</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bartlett’s Test of Sphericity</td>
<td></td>
</tr>
<tr>
<td>Approx. Chi-Square</td>
<td>2830.502</td>
</tr>
<tr>
<td>Df</td>
<td>231</td>
</tr>
<tr>
<td>Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>

As Table 9.39 shows, the KMO is 0.782 and therefore lies between 'middling' and 'meritorious' as defined by Hair et al (2002). Barlett’s test figure is significant indicating that there are correlations between the variables and the scale is therefore appropriate for factor analysis. Additionally, inspection of the reproduced correlation matrix shows that there are 85 (36%) of non-redundant residuals with absolute values > 0.

The factors found, which accounted for 65.2% of the total variance, are identified below together with a descriptive label attributed by the researcher:
New Factors

Factor 1:

H 0.801 I value long term and personally held relationships
P 0.798 I am loyal and value relationships highly
G 0.756 I consider myself trusting and am loyal and honest
T -0.647 (I buy the latest technology in order to be seen to)

Factor 2:

M 0.758 I like to keep my options open and not risk over-committing
L 0.714 I refer to others before taking any decision
N 0.702 If faced with too much information I seek advice from a third party
O 0.565 I value many sources of information and would analyse all before making a decision

Factor 3:

B 0.776 Convenience is highly important to me
C 0.711 I would be willing to pay for added convenience
A 0.612 I consider myself extremely short of time
D 0.549 I would be willing to try out ways if I thought it would save me time

Factor 4:

K 0.744 I would describe myself as creative
E 0.713 I would describe myself as venturesome / enthusiastic
J 0.486 I explore problems from many perspectives
Factor 5:

R 0.912  Brand is important to me
Q 0.893  I prefer to buy brands I know

Factor 6:

V 0.876  I buy the latest technology when prices begin to fall
U 0.665  I buy the latest technology after I can see real benefits

Factor 7:

I 0.833  I make decisions quickly but may change my mind if an alternative seems better
S 0.548  I feel pressure to make decisions quickly

These seven new factors replace the imperfect variables derived from the original analysis on Driver's decision-making variables described above and will be used in subsequent analysis. It must be noted that these 7 new factors represent groups of 'questions' rather than groups of 'customers'. To develop the customer groups a cluster analysis on the seven new factors will be undertaken.

9.13 Cluster Analysis

Cluster analysis is concerned with allocating individuals to one or more several groups (or clusters) in such a way that each individual is more like individuals in its group than individuals outside its group. Cluster analysis is the generic name for a wide variety of procedures that can be used to create a classification. More specifically, a clustering method is a multi-variate statistical procedure that starts with a data-set containing information about a sample of entities and attempts to reorganise these entities into a relatively homogeneous groups (Aldenderfer and Blashfield, 1984).

Cluster analysis is not as much a typical statistical test as it is a 'collection' of different algorithms that 'put objects into clusters'. Unlike other statistical procedures, cluster
analysis methods are mostly used when we do not have any a priori hypotheses but are still in the exploratory phase of the research. In essence, cluster analysis finds the 'most significant solution possible' (Statsoftinc, 2003).

Clustering methods are used to discover structure in data that is not readily apparent by visual inspection. This strategy differs from that embodied by discriminant analysis which is more properly described as an identification procedure. Discriminant analysis assigns objects to already existing groups and does not seek to create new ones. Cluster analysis methods are really heuristics (simple rules of thumb). They are little more than plausible algorithms that can be used to create clusters or cases. This stands in sharp contrast to factor analysis which is based on an extensive body of statistical reasoning (Aldenderfer and Blashfield, 1984).

Cluster analysis may be used for:

- data reduction;
- hypotheses generation (but this cannot be used as its own evidence);
- producing groups for a classification scheme useful for predictive purposes
  (Everitt, 1974)

The general objective of cluster analysis is to partition or sub-divide a set of objects into homogeneous sub-groups or into a hierarchical arrangement of homogeneous sub-groups. The techniques are designed to:

- identify natural clusters with a mixture of entities believed to represent several distinguishable populations;
- construct a useful conceptual scheme for classifying entities;
- generate hypotheses within a body of data by discovering unsuspected clusters;
- test hypothesised classes believed present within a certain group of cases;
- identify homogeneous subgroups characterised by attribute patterns for prediction.
  (Lorr, 1983)

In the context of this research both a hierarchical (using Ward's method) and k-means clustering approach were undertaken. In using the hierarchical approach four main
clusters were identified in the dendogram produced. This was helpful since Driver’s decision-making classification offers four main groupings. However, Ward’s hierarchical method represents just a single pass through the data and there exists the possibility that points may be joined together that with hindsight would be allocated to different clusters. With the k-means clustering approach the test does multiple (iterative) passes through the data and so allows this concept of ‘hindsight’ to happen throughout the process. It therefore results in a fine-tuning around the edges of the clusters. With the k-means approach the researcher must indicate the number of clusters preferred. Given the Driver classifications and the preliminary hierarchical findings, four clusters were chosen as shown in Tables 9.40 and 9.41:

**Table 9.40: Initial Cluster Centres**

<table>
<thead>
<tr>
<th>Initial Cluster Centres</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cluster</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desire for face to face</td>
<td>5.00</td>
<td>4.00</td>
<td>1.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Desire for Information</td>
<td>1.00</td>
<td>5.00</td>
<td>1.75</td>
<td>3.00</td>
</tr>
<tr>
<td>Desire for Convenience</td>
<td>4.00</td>
<td>5.00</td>
<td>1.00</td>
<td>3.25</td>
</tr>
<tr>
<td>Creativity</td>
<td>1.00</td>
<td>5.00</td>
<td>2.33</td>
<td>4.67</td>
</tr>
<tr>
<td>Brand important</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Desire for Technology benefits</td>
<td>1.00</td>
<td>5.00</td>
<td>4.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Speed</td>
<td>5.00</td>
<td>5.00</td>
<td>2.50</td>
<td>1.00</td>
</tr>
</tbody>
</table>

**Table 9.41: Number of Cases in each Cluster**

<table>
<thead>
<tr>
<th>Number of Cases in each Cluster</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cluster 1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>Valid</td>
</tr>
<tr>
<td>Missing</td>
</tr>
</tbody>
</table>

It was encouraging to see a good spread between the four clusters. The final cluster centres were eventually established and are repeated in Table 9.42. This is then represented graphically in Figure 9.5.
Table 9.42: Final Cluster Centres

<table>
<thead>
<tr>
<th></th>
<th>Cluster 1</th>
<th>Cluster 2</th>
<th>Cluster 3</th>
<th>Cluster 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desire for face to face</td>
<td>4.61</td>
<td>4.57</td>
<td>2.27</td>
<td>4.57</td>
</tr>
<tr>
<td>Desire for Information</td>
<td>3.51</td>
<td>4.00</td>
<td>2.25</td>
<td>3.56</td>
</tr>
<tr>
<td>Desire for Convenience</td>
<td>2.93</td>
<td>3.68</td>
<td>2.56</td>
<td>3.12</td>
</tr>
<tr>
<td>Creativity</td>
<td>3.33</td>
<td>3.93</td>
<td>2.31</td>
<td>3.75</td>
</tr>
<tr>
<td>Brand important</td>
<td>4.23</td>
<td>4.20</td>
<td>2.29</td>
<td>2.30</td>
</tr>
<tr>
<td>Desire for Technology benefits</td>
<td>2.31</td>
<td>3.79</td>
<td>2.56</td>
<td>2.79</td>
</tr>
<tr>
<td>Speed</td>
<td>2.58</td>
<td>3.47</td>
<td>2.68</td>
<td>2.67</td>
</tr>
</tbody>
</table>

All mean scores fall between 1 and 5 as this was the range on Q38 from which the questions in 7 factors clustered here were originally derived. The range of responses to the questions were from 1 (not very characteristic of me), through to 5 (very characteristic of me).

Figure 9.5: Final Cluster Centres from Sample Data

In general, all the clusters, apart from Cluster 3, showed Desire for Face to Face Interaction as the most important.
On analysing the components of the four different clusters the following was found:

**Cluster 1:** The seven factors are evenly spread throughout the 1-5 range in this cluster. Face to face orientation is important, as is Brand orientation and Information orientation. Less important in this cluster is Technology Benefit, Speed and Convenience orientations.

**Cluster 2:** Unlike the case of Cluster 1, here the 7 factors are bunched towards the ‘very characteristic of me’ end of the continuum. Again most important is Face to face orientation, followed by Brand orientation. While Speed orientation falls last in this cluster it is important to highlight that the score is still higher than for any other cluster.

**Cluster 3:** Similar to Cluster 2, the 7 factors are again bunched together in this cluster but here it is towards the ‘not very characteristic of me’ end of the continuum. Speed orientation was most important while Face to face and Information orientations were least.

**Cluster 4:** As was the case with Cluster 1, the 7 dimensions are again spread throughout the 1-5 scale in this cluster. As in the case of Clusters 1 and 2, Face to face orientation scored highest followed by Creative orientation. The perception that brand is important is seen to be least characteristic and speed orientation is second from last.

9.14 Comparisons to Driver’s Classification

As was established in Chapter 5, Driver’s four key decision-making styles were:

*Decisive* (unifocus, satisficer)

The style was characterised by a minimum of information use to make decisions, and speed was a factor in decision making. The decisive is characterised by being honest and loyal, time-poor, convenience-oriented.
Hierarchic (unifocus, maximiser)

This style was characterised by the use of a lot of information to make decisions. Individuals were slow to decide as they plan the implementation of the one decision they have reached on the basis of the information. Hierarchics are relationship oriented, enjoy face to face relationships built on mutual trust.

Flexible (multi-focus, satisficer)

This style was characterised by the use of minimum information to make a decision but considering various interpretations of this information. This over-consideration can slow down decision making and therefore may refer to a third party for help in reaching a final decision rather than search out more information on their own.

Integrative (multi-focus, maximiser)

This style was characterised by the use of a lot of information to evaluate situations with many perspectives being considered rather than one solution being focused upon. Creativity and exploration are the keys in this process. Integratives are very adaptable and thrive in atmospheres of co-operation and trust.

Figure 9.6 compares Driver’s four key decision-making styles with the clusters found in the data.
9.15 Threads of Commonality between Driver and Sample Clusters

Figure 9.6: Threads of Commonality between Driver styles and Clusters found in Research Study Sample

Summary:

Decisive = Cluster 3
Hierarchic = Cluster 4
Flexible = Cluster 2
Integrative = Cluster 1
The commonalities are proposed matches between Driver and the Cluster analysis output derived from this research study is mapped in Figures 9.6 and 9.7.

**Figure 9.7: Research Clusters mapped with Driver Clusters**

<table>
<thead>
<tr>
<th>Satisficer</th>
<th>Maximiser</th>
</tr>
</thead>
<tbody>
<tr>
<td>My Cluster 3</td>
<td>My Cluster 4</td>
</tr>
<tr>
<td>Driver Decisive</td>
<td>Driver Hierarchic</td>
</tr>
<tr>
<td>My Cluster 2</td>
<td>My Cluster 1</td>
</tr>
<tr>
<td>Driver Flexible</td>
<td>Driver Integrative</td>
</tr>
</tbody>
</table>

The membership percentages of the new clusters as compared to the original classification, which preceded the factor analysis, shows a degree of commonality as illustrated in Figure 9.8.

**Figure 9.8: Post Factor Analysis Respondent Classification**

<table>
<thead>
<tr>
<th>Decision Style</th>
<th>Original classification of respondents (%)</th>
<th>Post-factor analysis classification of cluster membership (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decisive (new C3)</td>
<td>5.2%</td>
<td>8.7%</td>
</tr>
<tr>
<td>Flexible (new C2)</td>
<td>31.7%</td>
<td>39.1%</td>
</tr>
<tr>
<td>Hierarchic (new C4)</td>
<td>27.3%</td>
<td>23.1%</td>
</tr>
<tr>
<td>Integrative (new C1)</td>
<td>35.8%</td>
<td>28.9%</td>
</tr>
</tbody>
</table>

**9.16 Further Exploration of Cluster Profiles**

In an attempt to assess the extent to which each of the new clusters had a distinct demographic profile cross tabulations were conducted on the membership of each cluster against the demographic data captured through Q36.
Table 9.43: Cluster membership for Case-Sex Cross tabulation

<table>
<thead>
<tr>
<th>Cluster Number of Case</th>
<th>MALE</th>
<th>FEMALE</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>62</td>
<td>67</td>
<td>129.0</td>
</tr>
<tr>
<td>Expected Count</td>
<td>70.5</td>
<td>58.5</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>99</td>
<td>74</td>
<td>173.0</td>
</tr>
<tr>
<td>Expected Count</td>
<td>94.5</td>
<td>78.5</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>29</td>
<td>10</td>
<td>39.0</td>
</tr>
<tr>
<td>Expected Count</td>
<td>21.3</td>
<td>17.7</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>52</td>
<td>50</td>
<td>102.0</td>
</tr>
<tr>
<td>Expected Count</td>
<td>55.7</td>
<td>46.3</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>242</td>
<td>201</td>
<td>443.0</td>
</tr>
<tr>
<td>Expected Count</td>
<td>242.0</td>
<td>201.0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chi-Square Tests</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>9.388</td>
<td>3</td>
<td>.025</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>9.721</td>
<td>3</td>
<td>.021</td>
</tr>
<tr>
<td>Linear-by-Linear</td>
<td>.561</td>
<td>1</td>
<td>.454</td>
</tr>
<tr>
<td>Association</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>443</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\* 0 cells (0\%) have expected count less than 5. The minimum expected count is 17.70.

Table 9.43 shows output from an examination of issues of gender balance within the clusters. It can be seen that clusters 1 and 4 have a greater proportion of female respondents than would be expected. Conversely, clusters 2 and 3 have a greater proportion of male respondents. In examining age profile it was found that there was a significant relationship and clusters 3 and 4 were younger with more observed cases than expected in categories 18-25 yrs (C3) and 18-35 yrs (C4). Similarly, cluster 2 had more 26-45 yrs than expected this being at the expense of older age categories. Conversely, cluster 1 offered an older profile with almost twice the number of observed cases than expected in the 46-55 yrs category; 27 versus 14. When cross tabulations were conducted on Q35 which explored the extent to which respondents’ work involved a high degree of Internet usage findings were significant at the 0.10 level. Observed cases significantly exceeded expected in Clusters 1 and 2 while clusters 3 and 4 were broadly in line with expectations.
No significant relationship (p<0.05) was found between cluster membership and Social Class, Income level or home ownership.

Commentary

Hypothesis 3 states that there will be a linkage demonstrated between Driver's decision-making typology (Decisives, Flexibles, Hierarchics, Integratives) and the clusters of customers identified in the study and this has been supported.

While the clusters do not exactly replicate the components of Driver's decision-making model there are commonalities in evidence. Replicating Driver's work was not the purpose of this part of the study – rather it was designed to ascertain the extent to which an adapted a priori model of decision-making might lend itself to adoption when adjusted for bank customers and their interactions on the Internet. Indeed, as Driver highlights, the manifestation of style can be situation specific and when environmental load changes (e.g. additional stress, time pressures) subject style behaviour can also change.

Decisives -- Cluster 3

This cluster has the least number of respondents classified (39) but it has the greatest degree of commonality. The Decisive profile of individuals who prize action, make quick decisions and use minimum information is reflected in the 'Desire for Speed, low 'Desire for Information' and no need for face to face orientation as identified in this cluster. This cluster showed a younger profile than expected especially in category 18-25yrs.

Hierarchics -- Cluster 4

This cluster had 103 respondents classified. Commonalities can be found in the relatively high level of information required / desired, no focus on speed as being important and an enthusiasm for face to face relationship building. This cluster had a greater number of female constituents than expected and displayed a younger profile, especially in the 26-35 yrs age grouping.
Flexibles – Cluster 2

This cluster had 174 respondents classified. Commonalities can be found in the relatively low level of information required / desired but combined with no need to achieve a quick decision. The desire for face to face interaction and a propensity to refer to a third party to help make the final decision are also mutually supporting. The cross tabulation analysis on demographic predictors for membership of this cluster did establish a significant relationship with ‘Work involves a high level of Internet use’ (Q35). This cluster had significantly more 26-35 yrs members than expected.

Integratives – Cluster 1

This cluster had 129 respondents classified. Desire for Information is a common feature and so too is a lack of focus on technology benefit or convenience. Decision processes are slow and all options are considered. Face to face relationships and decisions by consensus are desired. Interestingly, this cluster exceeded the expected level of cases where ‘work involved a high level of internet usage’ (Q35). This cluster was also shown to be more female dominant than expected and older especially in the 46-55 age group.

9.17 Conclusion

Chapter 9 has reported on the findings from Stage 2 of this research study. Research Stage 2 encompassed a survey of attitudes of the retail case bank customer base. The analysis from which the findings resulted consisted of factor analysis, multiple regression, logistic regression and cluster analysis. The overall purpose of this research stage was to identify and assess the contribution of the Internet in retail banking from the customer perspective. Combined with research stage 1 this analysis allows for a meaningful evaluation to take place in the context of the overall study in this regard.

The chapter began with a descriptive overview of the survey findings at a general level. Using a literature based framework and the qualitative findings from Stage 1 of the study, product complexity was defined and the quantitative data prepared for hypothesis testing. Accordingly, Research Objectives 2 and 3 were then addressed in the following ways:
Research Objective 2 sought to identify and assess the extent to which there was a relationship between on-line adoption and customer profile. Dependent variable 1 was used in this research objective which was ‘Internet appropriateness for financial services purchase as determined by product complexity level’ (derived from Q25). Research objective 2 was operationalised through correlation analyses and ‘t’ tests in Hypothesis 1 (through constituent sub-hypotheses 1.1, 1.2 and 1.3).

Research Objective 3 sought to identify and assess the extent to which customer segments varying by net worth preferred referring to branch staff rather than using the Internet. Whether such preferences vary by customer type and/or complexity of need was assessed. This objective was operationalised through a three level multiple regression analytical approach within Hypothesis 2 (through constituent sub-hypotheses 2.1-2.5). In order to integrate more meaningfully the regression findings between the sub-hypotheses regression findings, two ‘Threads of Commonality’ models were developed to provide this overview. These two commonality models were then integrated and compared in order that the key predictors and influencers of Internet use by customers of varying net worth could be more readily identified and assessed in the overall research context.

Sub-hypothesis 2.5 explored the influence of ‘timesaving’ and ‘convenience’ ability offered by the Internet on e-banking registration. This sub-hypothesis was investigated by logistic regression. A summary page showing whether the research findings supported the various sub-hypotheses was provided.

Research Objective 4, which sought to examine the extent to which groups of customers could be classified into clusters according to Driver’s a priori decision-style classification was investigated next. Hypothesis 3 proposed that a linkage between the a priori styles and the research findings would exist. Factor analysis and cluster analysis were the two analytical approaches undertaken in this part of the study. Commonalities between the research findings and Driver’s style clusters were discussed and illustrated in a ‘Threads of Commonality’ model. Cross tabulations were also used in an attempt to discover the customer typology of the various clusters identified.
The findings from this research stage, and the Stage 1 qualitative findings, allow for the identification and assessment of barriers and influencers in the adoption of the Internet in banking by customers of varying worth.

The findings from the two research stages are integrated in Chapter 10. Accordingly, this chapter focuses on the development of an integrated managerially-focused model of Internet adoption. This model will enable marketing decision-makers to better evaluate the barriers and influencers for the effective adoption of the Internet in banking by customers of varying net worth. The model underpins this study’s original contribution to knowledge in this field.
CHAPTER 10:
EVALUATING OUTCOMES
AND
CONCLUSIONS
CHAPTER 10: EVALUATING OUTCOMES AND CONCLUSIONS

10.1 Introduction

Chapter 10 examines the outcomes of this research study both in terms of how the research objectives have been met and also in terms of the overall contribution of this study in increasing our understanding of bank-customer relationships in Internet banking. This contribution will be examined at the levels of both theory and practice.

This chapter will first develop the linkages between the two research stages (with bankers in Stage 1 and customers in Stage 2) in order to evaluate better their contribution to the use of the Internet in relationship oriented retail banking.

The chapter will first focus on an overview of the findings from each research stage separately, establish how Stage 1 has informed Stage 2, how the research objectives have been specifically addressed and finally identify key implications of the overall findings for bank management through a proposed theoretical model of Internet banking adoption.

10.2 Specific Research Issues and Stages

The research reported in this thesis was derived from a two-stage study, which examined the perceptions of both bankers and retail bank personal customers regarding the use of the Internet in the bank-customer relationship.

What remained unclear from extant research, and from the Stage 1 findings, was the extent to which customers would choose to engage in using the Internet for their financial services needs, what the typology of such customers would be, what products these customers would deem appropriate for Internet delivery and the nature of the relationship platform.

Lee and Allaway (2002) cautioned that “the replacement of human service by a technology usually requires both the development of new knowledge and behaviour associated with the service and increased participation and responsibility in the production of the service” (p554).
It was the inherent uncertainty, as to the extent to which varying customer groups wish to engage in such adaptation in their dyadic relationship with a bank which was at the core of the research study and in what ways adoption behaviour might be identified.

10.3 Aim of this Research

As has been established, the main aim of this research was to **identify, assess and evaluate** the contribution of the Internet in relationship oriented retail banking.

Implicit sub-aims were:

a) to gain a deeper insight as to how banks position themselves with regard to Internet delivery;

b) to identify and explore the influences on specific consumer segments with regard to adoption decisions for Internet banking offers.

The linkage between the stages of identification, assessment and evaluation undertaken in this research is illustrated in Figure 10.1, which is replicated from Figure 1.1 in Chapter 1.
Figure 10.1: Conceptual overview of the research process

Research aim: to identify, assess and evaluate the contribution of the Internet in relationship-oriented retail banking.

- Literature Review
  - Identification
  - Identification / Assessment
  - Evaluation

Findings Research
Stage 1: (Theory Generation)
International Qualitative Study with bank executives
Key themes:
- Relationship Management
- Delivery channel complexity
- Face to face interaction

Findings Research
Stage 2: (Theory Testing)
UK-based Quantitative Study with retail bank customers

Integration of Findings Stages 1 & 2 (Evaluation)
Towards a specific model of Internet adoption

Key Findings
- Managing customer relationships key
- Branches key delivery and relationship channel
- Increasing levels of product complexity are perceived as requiring increasing levels of face to face interaction.
- Lack of clarity on whether the Internet is more appropriate as an enhancement to the relationship-managed customer or for the low net worth transactor
- The typology of consumers who will embrace the Internet is unclear as are their preferred interaction interfaces
- Customer education is key priority and branch is a key platform for this to take place

Stage 2 Hypotheses
- H1 Exploring the relationship value of customers and their Internet use
- H2.1 Defining Product Complexity
- H2.2 Examines relationship managed customers use of Internet for FS
- H2.3 Examines product complexity and customer interaction needs
- H2.4 Examines customer need to refer face to face pre-purchase
- H3 Examines customers clusters as to how Internet adoption decision is made

Findings and Evaluation
- Theme 1: Relationship Mgt
- Target convenience oriented RM customers for Internet banking
- Tailored marketing communications for receptive clusters
- Theme 2: Delivery channel Complexity
- Target convenience and non-information seeking customers
- Reassure about web security, ease of use and better service on Internet banking
- Theme 3: Face to Face
- Customer facing bank staff to be registered for Internet banking
- Improve in-branch promotion to encourage web adoption
- Theme 4: Customer Typology
- Develop cluster analysis model
10.4 Overview and Contribution of Stage 1 of Field Research

Research Stage 1 constituted an internationally based set of fourteen qualitative interviews with key bank decision-makers in the UK / Ireland, Sweden and the USA.

The purpose of this research stage was to gain a deeper insight as to how banks position themselves with regard to Internet delivery and to better understand the influences on the strategic decision to go on-line. The extent to which such decisions were perceived to be customer-led was examined and the strategic rationale for delivering on-line was also explored.

10.5 Research Stage 1

10.5.1 Research Stage 1: Objective 1

to identify the reasons for relationship-oriented banks going on-line.

In line with this objective four interview themes were derived from the literature for exploration with the various Internet bankers. These themes were:

1. The importance and manifestation of the Relationship Marketing Strategy and Sales Culture.
2. The delivery mix on offer and the balance between these with particular emphasis on the role of the Internet.
3. The type of products perceived as suitable for Internet delivery.
4. The perceived value of customer migration strategies aimed at remote delivery through the Internet.

10.5.2 Research Stage 1: Key Findings

As has been established in Chapter 7 threads of commonality were identified between the respondents from the different countries and the findings were classified by theme. Issues of difference, which were highlighted in Chapter 7 will not be repeated here, rather what follows represents a synthesis of where the international respondents agreed on key issues and, in particular, what issues emerged that directly informed Research Stage 2.
10.5.2.1 Managing Relationships

All respondents in all three countries under investigation considered relationship management to be of paramount importance and the bank branch was considered a key facilitator in this process. Ireland/GB respondents cited a difficulty in reconciling branch based incentivised sales campaigns with a true customer focused relationship marketing strategy and this was an important consideration when reviewing linkages with Research Stage 2. All respondents perceived their bank branch networks as being a key platform through which to stimulate relationship management activities. Convenience was the key benefit consistently identified in e-banking.

10.5.2.2 Delivery Channel Issues

All respondents agreed that branches would remain a key distribution channel well into the foreseeable future. US and Irish/GB banks had difficulty regarding systems integration, specifically this related to the integration of CRM / CIS systems providing customer relationship information and book-keeping information regarding transactional information. This was not the case with Swedish banks, however, who claimed to always have a relationship orientation, which from the origins of computerisation, led to them pursuing the goal of a ‘single view of customer’. Such systems enabled Swedish banks to profile customers and calculate average relationship profitability. Most problematic in the eyes of all respondents, was predicting the extent to which customers would use the various interfaces to access the Internet (e.g. mobile phone, PC).

10.5.2.3 Product Appropriateness for Internet Delivery

This was an area of the interview guide that led to varying opinions. Irish / GB and the American respondents felt that not all products were appropriate for Internet delivery. In general it was felt that as products became more complex, the greater the role for face to face interaction. No bank in any of the countries was clear on exactly how and when customers would embrace such initiatives but Swedish banks were clearly ahead of the others with regard to trial.
10.5.2.4 Customer Education and Migration

Interestingly, all bankers agreed on the importance of customer education in encouraging adoption of on-line banking and the branch platform and branch staff were seen as key enablers in this process. Irish/GB and Swedish banks mentioned an unpredictability to consumer behaviour with regard to on-line adoption but there were key differences between these countries on this point. While Irish/GB banks were uncertain about consumer behaviour in general, Swedish respondents were certain about adoption in general but less sure about what interface would be favoured by different customer segments (i.e. PC, WAP or iTV). US banks were more circumspect in predicting how consumer behaviour would change and the speed of that change. There was agreement by all of the banks however, that irrespective of in-branch education and general awareness generation campaigns, consumer behaviour would change slowly and there were limitations on what could be done to encourage it.

Interestingly there was a marked difference between Sweden and the US in terms of which customers were the most appropriate targets for on-line remote delivery. In Sweden banks felt that the higher net worth customer would be best served by remote delivery means whereas in the US the ‘low net worth high transactor’ seemed the preferred target. However, one US bank was aiming at higher net worth clients.

10.5.3 Key Findings from Stage 1

- Relationship management is important although there are perceived difficulties in reconciling sales targets and true needs based relationship marketing.
- Branch networks will remain a key platform through which to build relationships.
- Branches will remain a key delivery channel.
- Convenience is perceived as a key Internet banking benefit.
- Increasing levels of product complexity are perceived as requiring increasing levels of face to face interaction.
- Lack of clarity on whether the Internet is more appropriate as an enhancement to relationship-managed customers or to more cost effectively manage the low net worth transactor.
The typology of consumers who will embrace the Internet is unclear, as are their preferred interaction interfaces.

Customer education is a key priority and the branch is a key platform for this to take place.

Lack of clarity about who exactly to target and with what message to stimulate adoption.

10.6 Overview of Stage 2 of Field Research

Research Stage 2 comprises objectives 2-4 and focused on the customer, rather than the bank.

Stage 2 of the research was also deemed exploratory but it used a quantitative research instrument issued to a stratified sample of bank customers from one dedicated UK based case bank.

10.7 Stage 2 Research Objectives and Hypotheses

The hypotheses detailed allowed for an identification and assessment to be conducted, (as stated in the overall aim), both of the banks' approaches to Internet enablement, with respect to managing relationships (as established in Stage 1) and also in terms of customer acceptance of such initiatives.

Such identification and assessment of both senior banker and customer perspectives enabled an overall evaluation on the totality of the research to be completed.

The hypotheses proposed for Stage 2 were derived from and correspond to objectives 2-4 and were distilled from both the literature review and Stage 1 of the research process, as demonstrated above. Each objective is detailed first and then the hypothesis and sub-hypotheses which tested the key elements of this objective follow.

Objective 2

to identify and assess the extent to which the customer profile influences the level of on-line adoption for Internet banking.
H1: As the net worth of customers increases they will display increasing use of the Internet

- H1.1 - As the net worth of customers increases they will be more likely to have access to the Internet at home and at work
- H1.2 - As the net worth of customers increases they will display increasing use of the Internet for financial services
- H1.3 Relationship managed customers will have higher income levels.

Objective 3
to identify and assess the extent to which varying customer segments prefer referring to branch staff in preference to the Internet interface and to assess whether such preferences vary by customer and/or complexity of need

Hypothesis 2 sought to address this objective in identifying the propensity of varying customer segments to seek out face to face interaction as financial services products become increasingly complex.

H2: In general there will be an inverse relationship between the increasing complexity of customers' financial needs and the propensity of such customers to use the Internet as a means of purchasing financial products

- H2.1 - There will be a significant positive correlation between the views of customers, and the academic literature, on what financial products can be considered ‘complex’
- H2.2 - Relationship managed customers will show a greater potential for on-line purchase of financial services at lower levels of product complexity than will non-relationship managed customers
- H2.3 - As customer needs increase in complexity customers will be more likely to favour face to face interaction over the alternative Internet banking proposition
- H2.4 - Where customers consider face to face staff referral important pre-purchase this will be influenced by a perceived need for reassurance and an anxiety about the remote intangible platform offered through Internet banking.
H2.5 - The perceived timesaving and convenience benefits offered by the Internet will be the key predictors in whether or not a customer has registered for Internet banking in the case bank.

**Objective 4**

to assess and evaluate the extent to which an a priori decision-making typology correlates to the profile of case bank customers in order to predict Internet adopters.

**H3:** There will be a linkage demonstrated between Driver's decision-making typology (Decisives, Flexibles, Hierarchics, Integratives) and the clusters of customers identified in the study.

**10.8 Stage 2 – Summarised Key Findings**

The findings from the various hypotheses discussed in detail in Chapter 9 are now summarised in order to simplify the process of making linkages with the Stage 1 findings. The hypotheses are discussed under each of the Stage 2 research objectives.

**Research Objective 2**

**Hypothesis 1**

- Relationship managed high net worth customers in the case bank did show higher levels of home ownership, qualifications, income and social class compared to their non-relationship counterparts.
- Higher net worth relationship managed customers did not reveal higher levels of access to the Internet at home and work compared to non-relationship managed customers.
- As relationship status increased (i.e. went from low net worth to high net worth) there was an increase in use of the Internet for financial services purposes.
Research Objective 3

Sub-hypothesis 2.1

- There was a significant correlation between what the literature considers simple, medium and complex products and the complexity levels which customers attribute to themselves.

Sub-hypothesis 2.2

- For relationship managed customers holding simple and medium products, an increasing propensity to view the Internet as suitable for product purchase, increases the importance that these customers feel reassured about the security of the Internet.
- For relationship managed customers the easier the on-line buying process is deemed to be, the greater the propensity to view the Internet as an appropriate mechanism through which to purchase products on-line.
- Those relationship managed customers characterised by being time-saving / convenience oriented will perceive the Internet as an increasingly appropriate mechanism through which to purchase on-line.
- Non-relationship managed customers with simple products, who are characterised by being time-saving / convenience oriented, will perceive the Internet as an increasingly appropriate mechanism through which to purchase on-line.
- Non-relationship managed customers, while not put off by fears over credit card details becoming known on the Internet, will perceive the Internet as increasingly appropriate for product purchase where more importance is placed on reassurance about security on-line.

Sub-hypothesis 2.3

- The perceived suitability of the Internet as a mechanism for the purchase of simple products increases as customer desire for information decreases.
- The perceived suitability of the Internet as a mechanism for the purchase of simple products increases as customer desire for convenience increases.
The importance of being reassured about security increases as the perceived suitability of the Internet for the purchase of simple products increases.

As the perceived suitability of the Internet as a means for medium customers and simple product purchase increases the importance of face to face interaction decreases.

Complex customers regard improved service as the key motivator in using the Internet for simple product purchases.

In-home staff Internet demonstration for customers is viewed as increasingly unimportant as customers perceive the Internet suitable for the purchase of complex products.

Sub-hypothesis 2.4

Where relationship managed customers perceive increasing importance in referring to a member of staff pre-purchase, they will also see the importance of in-home staff demonstration of the Internet as increasingly important. This is most evident at lower levels of product complexity.

Where relationship managed customers perceive increasing importance in referring to a member of staff pre-purchase they will also see the importance of being reassured about Internet security will decrease.

Where relationship managed customers perceive increasing importance in referring to a member of staff pre-purchase for medium and complex products, they will also demonstrate a preference for this referral to happen in a face to face interaction.

Where relationship managed customers perceive increasing difficulty in the on-line buying process, the importance of referring to a member of staff pre-purchase will increase.

For customers with simple product needs, referring to staff pre-purchase reduces the inhibiting impact of credit card fraud fears; in other words staff referral pre-purchase appears to reassure the customers.

For customers with simple product needs, who are characterised by a desire for convenience, the perceived importance of referring to a member of staff pre-purchase increases accordingly.
- For customers with medium product needs, as the inhibiting influence of not being able to see/touch the products becomes more pronounced, so too does the perceived importance of referring to a member of staff pre-purchase.
- For medium customers with medium products it appears that the increasing importance of referring to staff pre-purchase, will be amongst increasingly older age groups with a tendency towards the female sex.
- For customers with medium and/or complex product needs, who are not characterised by a desire for convenience/timesaving, the perceived importance of referring to a member of staff pre-purchase increases.
- For complex customers with medium and complex product needs, the importance of staff in-home web demonstration increases along with the perceived importance of referring to a member of staff pre-purchase.

Sub-hypothesis 2.5

- Customers who regarded 24/7 access to their financial affairs is unimportant will be less likely to register for Internet banking.
- Those customers who are registered for Internet banking perceive the need to be reassured about Internet security as increasingly important.
- A negative experience on the Internet is consistent with non-registration for Internet banking.

Research Objective 4

Hypothesis 3

- The hierarchical clustering approach on the seven new factors revealed four distinct clusters.
- A K-means cluster analysis using four clusters identified groupings that had strong parallels with Driver's decision style classification.
- Key commonalities were seen between research-generated clusters and Driver's clusters in terms of Information Use (whether Satisficer or Maximiser) and Focus (whether Uni-focus or Multi-focus).
Logistic regression was used to reveal characteristics that demonstrate significant differences between each cluster in terms of demographic profile / Internet usage preferences.

The only common predictor was that of 'work involves a high level of Internet usage' (Q35), which was found in Cluster 2 (Flexible).

10.9 Evaluating Linkages between Stage 1 Findings and Stage 2 Findings

The ways in which the findings of Stage 1 informed the Stage 2 hypotheses has already been established. This section develops linkages between the findings from Stage 1 and Stage 2 for the first time. The integration of the two sets of findings then allows an evaluation to be developed in line with the overall research aim of the research project. The findings are integrated under the broad themes originally developed from the Stage 1 qualitative interview guide which helped shape the analytic strategy for research Stage 2. These themes are:

1. Relationship Management.
2. Delivery Channels and Product Complexity.
3. Face to face Interaction and Customer Education.

Each evaluation section will be informed by the findings from Stage 1 and Stage 2 and by the relevant literature. In this way a better broad understanding of the contribution of this research to the existing body of knowledge can be assessed. Where literature is absent from a particular section this indicates that none was found relating to the specific point being made. Such absences will be discussed in Section 10.14, which describes the contribution of this study to original knowledge.

10.9.1 Theme 1: Relationship Management

Stage 1 qualitative interviews revealed a common recognition by all bank executives that relationship management was a key consideration to the success of their business. What was less clear, was the way in which they saw the Internet contributing to the customer perceived value of these relationships.
The 'correctness' of any balance between virtual and face to face interaction was undecided within the respondent group. Respondent views varied from the Internet being the best single means to cost effectively manage low net worth customers and relationship managed customers being dominantly managed face to face, through to the Internet offering added value to the interactions of the relationship managed base. One respondent proposed that the key challenge was to match customers according to their relationship value with channels appropriate to their status. He argued that there were no unprofitable customers, just unprofitable channels. However this comment presupposes that banks are clear on how customers will respond to various channels proposition irrespective of their relationship status and there was little evidence of any such clarity on the part of the bank executives in the sample. The fact that no customer migration strategy was being considered by any bank, underpins the vagueness which surrounded the bank executives ambitions regarding new channel adoption and development.

While many UK banks clearly desire face to face relationships with high net worth customers, many of these customers may prefer remote interaction. Equally, where banks may prefer low net worth, high transactors to embrace the remote interface of the Internet, many of these customers may prefer branch based interactions.

In Stage 2, the views of customers themselves were gathered - both relationship managed and non-relationship managed customers from a UK case bank. As has been established in Chapter 9, relationship managed customers with simple or medium products accounted for the majority of the variability in the dependent variable. In DV 1 for simple and medium products, over 80% and 40% was explained by the analysis respectively.

The greatest contributory factor in relationship managed customers perceiving the Internet as an appropriate means to purchase products of simple and medium complexity, was reassurance about the security of the Internet (H2.2). The perception by the customers that the on-line buying process is straightforward, also increased their likelihood to use the Internet (the reverse is also found to be true) and where the relationship managed customer is someone who prizes convenience, this added to the likelihood of embracing the Internet for financial services purchases (H2.2).
For DV 2 for simple and medium products over 87% and 92% of the variability in the dependent variable was explained by the analysis.

Interestingly, for relationship managed customers for whom referring to a member of staff before purchasing a product is important, a preference was expressed for a face to face referral. They also regarded staff demonstration of the web in their home as increasingly important but saw the importance of being reassured about Internet security as being relatively unimportant (H2.4).

As regards medium customers with medium products, in general (irrespective of relationship status) the findings suggested that the perceived importance of referring to a member of staff pre-purchase increase along-with increases in relationship status (i.e. from low net worth to high net worth). Once again, at the level of medium products, medium customers who felt increasingly uncomfortable with issues of product intangibility perceived it important to refer to staff pre-purchase (H2.4). Non convenience oriented customers with medium and complex needs saw the increasing importance of referring to a member of staff pre-purchase.

In H2.5, which looked at the predictors of whether customers will be registered for Internet banking, the convenience of 24 hour service and being reassured about security were again found to be key considerations.

10.9.1.1 Evaluation

In evaluating how the views of bankers and customers can be reconciled the following issues appear as important.

While research Stage 1 highlighted a common recognition from all bank executives that relationship management was key to their business success what was less clear from them was the way in which they saw the Internet contributing to the customer perceived value of these relationships. This problem has already been highlighted in the academic literature in the work of Thornton and White, 2001; Nielsen, 2002 and Rexha et al, 2003.
The issue of understanding appropriateness in the balance between virtual and face to face interactions was undecided within the respondent group and this problem has been highlighted by authors who have tried to achieve what was termed in Chapter 4 'a relationship-driven integrated balance' (see Joseph et al, 1999; Bitner et al, 2000; Selnes and Hansen, 2001).

To the extent that the case bank may want relationship managed customers to use the Internet for the purchase of financial services products there appears to be an opportunity to achieve this at the level of simple and medium complexity products because most of the variability in the dependent variables was found at these levels. This is clearly evident in the very high $R_{adj}^2$ scores for the independent variables, which were identified as key predictors. Focusing on these predictors may allow the bank to influence the behaviour of its relationship-managed customers.

This could be achieved by recognising that these customers feel it is important to be reassured about Internet security. Rotchanakitumnuai and Speece (2003) identified that in Thailand, corporate banking customers were reluctant to adopt the Internet because of security risks and were in need of reassurance from the bank. The same has been found of personal customers in this retail bank study.

For those relationship managed customers who regard it as important to have a staff web demonstration in their home, the case bank should not assume that this will lead to a migration on-line by this group. The findings only indicate that the importance of staff web demonstration increases along-with the perceived importance of referring to a member of staff pre-purchase; there is no indication that, once it is provided, the in-home demonstration would reduce any desire for continued face to face interaction. This cautionary note is supported by the fact that these customers do not regard being reassured about security as important when the importance of referring to staff pre-purchase increases. This suggests that staff contact may be perceived as providing a preferable interaction interface than that offered by the Internet.

For those relationship managed customers who do use the Internet for their financial services needs, the site design and ease of navigation are obviously important as the 'ease
of the on-line buying process' was another key predictor deemed to be important for on-line purchase. Increasing levels of relationship status (i.e. a move from low to high net worth) positively correlates with an increase in the use of the Internet for financial services but ease of use remains a key enabler / influencer.

To proactively act on these findings, a possible first step might be for the case bank to target those relationship managed customers who prize 'time-saving and convenience'. There is the opportunity to communicate more directly with this group about the benefits of the Internet banking proposition. These benefits would include, for example, improved service, reassurances about both security and integrity of the Internet system and its user friendly and easy to use interface.

The difficulty for the case bank (which would be common to all banks examined in Stage 1) is in identifying relationship managed customers who prize 'time-saving / convenience' because conventional segmentation of the base does not include such psychographic and behavioural information (Smith, 2004; Harrison, 2003).

The new clusters of the customer base, which are more behaviourally / decision-making oriented could be proposed as a starting point (see Hypothesis 4).

The key issues for Theme 1, identified from both research stages, are illustrated in Figure 10.2.
10.9.2 Theme 2: Delivery Channels / Product Complexity

The issue of product complexity and its impact on the extent to which the Internet would be deemed an appropriate medium for the purchase of financial services was central to the Stage 1 qualitative interviews. All bankers interviewed felt that products, which were more long term in terms of tangible outcomes (e.g. PEPs, bonds, mortgages), and which were characterised by more involved buying behaviour could be deemed complex (as established in Chapter 9). The bank executive respondents felt that as product complexity increased, customers’ need for face to face interaction would increase too.

Research Stage 2, sub-hypothesis 2.1, explored the extent to which the literature determined classification of product complexity matched the customers’ perception of complexity. The significant positive correlation between the two indicated a robustness in the dataset, which was encouraging.

Sub-hypothesis 2.3 then explored the Stage 2 findings and established that these do not support the main contention raised by the bank executive respondents, namely that as
product complexity increases in an e-banking context so too would the need for face to face interaction.

The multiple regression analysis conducted on the data for sub-hypothesis 2.3 established the influence of key predictors and the extent they impacted on customer propensity to use the Internet for financial services purchases of varying complexity (DV1).

The greatest amount of variability was explained at the levels of Simple Customers / Simple Products (88%) and Medium Customers / Simple Products (79.4%). For simple customers (who by definition can only hold simple products) the perceived suitability of the Internet for purchasing these products on-line increased with the perceived importance of convenience (H2.3). Also interesting was the finding that those simple customers who wouldn’t characterise themselves as information searchers, are more likely to use the Internet for the purchase of simple products. As before, the importance of improved service quality being offered through the Internet influenced the on-line purchase of simple products.

For medium customers with simple products the importance of being reassured about Internet security increased as the perceived suitability of the Internet for the purchase of simple products increased. Most interesting with this customer group however was the inverse relationship between perceived suitability of the Internet for simple purchases and any lack of face to face interaction making the customer reluctant to use the Internet. In other words, as the perceived suitability of the Internet increased, the lack of face to face interaction was seen as less of an inhibitor.

In relation to customers with complex needs the importance of the improved quality of service was most important for simple product purchases. As regards complex products, these customers were not reluctant to regard the Internet a suitable medium due to a lack of trust. However there was a corresponding increase in the importance placed on staff demonstrating the web in the (complex) customer’s home.
10.9.2.1 Evaluation

In evaluating how the views of bankers and customers can be reconciled the following issues appear as important:

In this analysis customer views were based on their individual product holdings. This was to avoid customers making judgements about products, the complexity of which they were not familiar with.

From the literature (Storbacka, 1994; Shostack, 1987; Howcroft, Hewer and Durkin, 2003) and Stage I qualitative interviews, it was expected that as product complexity levels increased there would be an increased emphasis on face to face interaction (Q26), or that the lack of face to face interaction would be perceived as an inhibitor (Q13), or that where a desire for face to face interaction was characteristic of the customer group in question (Q38), that this would lead to a reduction in the propensity to perceive the Internet as an appropriate medium to purchase financial products.

None of these factors was found to be significant in the analysis of the case bank’s customer data. However a relationship between increasing product complexity and an increased preference for a face to face interface was found in the literature review and the Stage 1 findings. A possible explanation might lie in the specifics of the case bank and, in particular, how this bank manages customer relationships.

However, similar themes concerned with the importance of being reassured about Internet security, improved service quality and the convenience offered by the Internet dominated. These issues are redolent of the findings from research by Daniel (2000), Rotchanakitumnuai and Speece (2003) and Booz, Allen and Hamilton (2004), which emphasise security reassurance and convenience as the two key motivators in Internet adoption. The findings of Sathye (1999) based on Australian data also established that concerns about security and a lack of perceived benefit were two most important inhibitors for e-banking adoption.

Customers who don’t require a great deal of information to help make decisions also seem to regard the Internet as appropriate for product purchases at lower levels of
complexity. When complex customers are examined with respect to complex products increasing importance is attached to in-home web demonstrations by staff.

A great deal of previous research has examined the factors which determine the adoption of the Internet in financial services but no research has examined complexity level. For example Gerrard and Cunningham (2003) explored dimensions which influence the adoption and non-adoption of e-banking in Singapore. While the findings established that adopters found the Internet ‘less complex’ than non-adopters the issue of product complexity level was not explored or defined. Black et al (2001), through focus groups, established that adopters did raise concerns with respect to the use of technology for more complex products. Non-adopters retained a suspicion over the loss of the face to face interaction and their perception of attendant risks that this brought about.

In encouraging adoption, the findings suggest that the case bank should focus on simple and medium customers and simple products. This is where the greatest variability in the perceived suitability of the Internet for financial services was found.

Once again, the key issues for bank-customer communication include focussing on the importance of convenience and improved service quality through the Internet and reassuring customers about the integrity of Internet security.

Complex customers who saw the Internet as appropriate for simple and complex products displayed a ‘Desire for Technology Benefit’. This indicated that those customers were comfortable with technology and innovation (from Q38). In a similar vein, those customers who displayed characteristics associated with being convenience-oriented, rather than information seekers, would also be prospective targets for bank marketers (also see Booz, Allen and Hamilton, 2004). This is interesting and highlights an opportunity as to how the case bank might target these groups. As before however the key problem rests in identifying these groups from within the bank’s database.

Further, the fact that face to face interaction did not appear at any stage in this analysis should be of concern to the case bank. One possible interpretation could be that the quality of such personal interaction is perceived of such limited added value that customers may be just as happy to conduct their business remotely. This is in some way
supported by the findings here for medium customers where as the perceived suitability of the Internet increases, the inhibiting factor of reduced face to face becomes less important. If the face to face service acted as a key differentiator then even though the Internet may be deemed increasingly suitable, there would still remain a role for such personal interaction. Both the literature and Stage 1 findings would propose that differentiation can and should be achieved on the quality of service and relationship management. Indeed, Ricard, Prefontaine and Sioufi (2001) warn that an over-emphasis on technology may well lead to a standardisation of products and services and a gradual robotization that may be poorly received by customers.

Issues of the role face to face interaction does play in the bank-customer relationship are explored more fully in Theme 3 below.

The key issues for Theme 2, identified from both research stages are illustrated in Figure 10.3.
10.9.3 Theme 3: Face to Face Interaction / Education

While the previous section discussed issues of product complexity and at what point, if at all, face to face interaction became important, this theme explored more fully the role of branch staff in e-enabled bank-customer relationships. Perceptions from the bank executives are considered and the Stage 2 research examined the customer perceived importance of referring to staff before the on-line purchase of products of varying complexity.
As the qualitative findings indicated, all the international respondents felt that bank staff had a key role to play in educating customers as to the benefits of e-banking. The key platform for this interaction to take place was felt to be the branch itself. However, relationship managers are usually only allocated to higher net worth clients in the hope of generating cross-sales and reducing customer attrition.

Hypothesis 2.4 explored the customer perceived importance of referring to a member of staff pre-purchase of a financial product. The multiple regression analysis, conducted on the data for sub-hypothesis 2.4, established the influence of key predictors on the importance of referring to a member of staff pre-purchase (DV2). This was an important piece of analysis because it identified predictors of whether customers with varying degrees of complex product holdings, will consider it important to refer to bank staff pre-purchase for various on-line products through the Internet.

The greatest amount of variability was explained at the levels of Simple Customers / Simple Products (94%) and Medium Customers / Simple Products (97.2%) and Medium Customers / Medium Products (71.9%).

At the level of simple customers, the key predictor as to the perceived importance of referring to a member of staff pre-purchase was the variable regarding reluctance to engage with the Internet in case credit card details became known (H2.4). Interestingly, the relationship here demonstrated that as the perceived importance of referring to a member of staff pre-purchase increases the extent to which credit card fears act as an inhibitor reduces. The second, most important predictor for simple customers in referring to a member of staff pre-purchase is the increasing importance of lower bank fees for Internet use. Those simple customers who are characterised by being convenience oriented also see referring to staff pre-purchase as important but only at the level of simple products.

For medium customers the inhibiting factor of product intangibility increased the importance of referring to staff pre-purchase of simple products (H2.4). For medium products 'Desire for Convenience' emerged as the greatest predictor of perceiving staff referral important. The direction of the relationship means that medium customers
characterised by being convenience oriented will decrease the importance of referring to staff pre-purchase. Complex customers with medium and complex needs cite the importance of referring to staff pre-purchase as increasing with the importance of a staff web demonstration in their home. Complex customers with complex products also demonstrate increased importance of referring to staff pre-purchase where the customers display decreasing characteristics of being convenience oriented.

10.9.3.1 Evaluation

In evaluating how the views of bankers and customers can be reconciled the following issues appear as important.

Stage I findings highlight an important role for face to face interaction in a branch context. This was deemed to be particularly useful for issues relating to customer education and is also evidenced in the academic literature. Filotto, Tanzi and Saita (1997) warn that the availability of information is a precondition for ‘educating’ customers to be more aware of the convenient alternatives open to them and the decision to embrace technology more fully and educate customers in its use “is a decision that cannot be postponed”. Falk et al (1994) offer a similar discussion and Parasuraman and Colby (2001) provide more recent perspectives on the importance of education in Internet marketing. Karjaluoto et al (2002) also support the importance of education in a recent study of on-line banking in Finland and in their exploration of service quality in on-line banking, Broderick and Vachirapornpuk (2002) cite the importance of “education of customers about their new roles and the appropriate service script for dealing with problems” (p334).

In Research Stage 2 (H2.4) for the levels of Simple and Medium Customers and Simple and Medium Products the $R_{adj}^2$ values are very high, indicating the high generalisability of the results back to the population as a whole and the fact that almost all of the variability in the dependent variable is explained by the independent variables.

As regards the influence of product complexity upon the perceived importance of referring to a member of staff pre-purchase, this analysis highlights an interesting issue.
Reassurance about security is again seen to be important given the relationship between fears over credit details becoming known and staff referral (H2.4). This relationship indicates that customers feel comfort and reassurance through staff referrals, which will serve to reduce anxieties over possible fraud on-line.

At the level of simple customers with medium products a key predictor of staff referral was when the customer was characterised as ‘convenience oriented’ (Q38). At the level of medium and complex customers however, this relationship between staff referral and convenience orientation was reversed. In the case of medium and complex customers and medium and complex products, there was an increasing importance placed on referring to a member of staff pre-purchase, when the customer was less convenience oriented. In other words customers who didn’t place a premium on action and time-saving convenience, would be more likely to see referral to staff for medium and complex products as increasingly important.

The finding that the importance of improved service through the Internet decreased as the need to refer to a member of staff increased was interesting. It may be implying that when simple customers are purchasing simple products, provided there are staff available who they can refer to, the perceived importance of on-line service quality decreases. This is important if the case bank was considering targeting these customers and to reduce the availability of staff referral pre-purchase of simple products.

Alternatively, the significance of the increasing importance of lower bank fees through Internet banking and the need to refer to a member of staff pre-purchase may indicate that for simple products customers are seeking out information about fee reductions through e-banking by asking staff.

Figure 10.4 summarises key issues from Theme 3 of research stages 1 and 2.
10.9.4 Theme 4: Customer Typology / Migration

The international bank executive respondents differed greatly in their views as to which market segments would first adopt e-banking. Indeed, the banks concerned took more of a product oriented rather than a marketing oriented perspective. This manifested itself in views from the UK/Ireland, and generally in the USA, that low net worth customers with high transaction volumes should be ‘encouraged’ to adopt the Internet for their banking needs. In Sweden however and in two USA banks the view was more marketing oriented because the Internet was perceived as an ‘added value’ dimension for relationship managed customers.
Given this lack of clarity as to which customers to target, the interviews also revealed a lack of clarity as to which customers the bankers thought would adopt the Internet innovation, and which financial products and interfaces would be appropriate.

As any findings based on conventional customer segmentation would not reveal answers to these sort of behavioural questions it was decided in Stage 2 of the research to use Michael Driver’s decision-making styles as a basis for grouping the customers into clusters based on decision-making / behavioural attributes.

Hypothesis 4 explored the extent to which Driver’s a priori decision-making classification matrix could be applied to the bank’s customer database. As explained in Chapter 9, problems of correlations between the various groupings rendered this initial approach unusable. Following a factor analysis on an adapted list of Driver’s decision-making style attributes, a cluster analysis revealed parallels between the characteristics of the four new cluster groupings and Driver’s Decisive, Hierarchic, Integrative and Flexible categories.

Each proposed match between Driver and the Cluster analysis output will now be discussed.

*Decisives – Cluster 3*

This cluster had the least number of respondents classified (39) but it had the greatest degree of commonality. The Decisive profile of individuals who prize action, make quick decisions and use minimum information is reflected in the ‘Desire for Speed, low ‘Desire for Information’ and no need for Face to Face orientation, characteristics which were all identified in the cluster.

*Hierarchics – Cluster 4*

This cluster had 103 respondents classified. Commonalities were found in the relatively high level of information required / desired, the absence of any focus on speed and a desire for face to face relationship building.
Flexibles – Cluster 2

This cluster had 174 respondents classified. Commonalities were found in the relatively low level of information required and the absence of any need to achieve a quick decision. The desire for face to face interaction and the propensity to refer to a third party in making the final decision were also mutually supporting.

Integratives – Cluster 1

This cluster had 129 respondents classified. Desire for information was a common feature together with a lack of focus on technology benefit or convenience. Decision processes were slow and all the options were considered. In addition, face to face relationships and decision by consensus were desired.

A further cluster analysis was attempted dividing the respondents by relationship classification but only 44 relationship-managed customers could be clustered and therefore it was insufficient to make any judgement.

10.9.4.1 Evaluation

The cluster analysis approach undertaken as regards decision styles, is new to the literature on e-banking. Emerging views are proposing that conventional segmentation approaches are lacking in any predictive power as regards consumer behaviour. Harrison (2003) argues that “in the academic literature there have been relatively few attempts to develop models that explain consumer decision processes specifically in the context of financial services” (p6). Smith (2004) proposes that an approach to segmentation that is not focused on clustering customers according to their motivations “is simply an approximation based on the assumption that descriptors and motivations are closely aligned (and) usually they are not” (p27). It is also the case that existing bank segmentation strategies and customer profiling do little to identify behavioural issues such as motivation and how customer decision styles impact on motivations to embrace varying delivery platforms. Indeed, Machauer and Morgner (2001) propose that the a priori (Green, 1982) and post hoc segmentation methods (Gwin and Lindgren, 1982) currently employed, reveal little of predictive use to bank marketers. Accordingly, the use
of cluster analysis by decision style was chosen in order to enhance our understanding of these motivations.

Threads of commonality were established between the research findings and Driver’s decision-style clusters. In exploring the demographic profile of the various clusters, cross tabulations revealed varying customer typologies across the clusters. Most interesting was Cluster 2 which was dominantly a younger segment (26 – 35 years) and which displayed a higher level of Internet usage at work than in other clusters.

10.10 Towards a General Model of Relationship-oriented Internet Adoption

The conceptual model outlined in Chapter 5 proposed key relationships and synergies between literature based themes in the areas of interaction preferences (Howcroft and Durkin, 2000; Durkin and Howcroft, 2003), diffusion of innovation (Rogers, 1983; Miles, 1988) and decision making styles (Driver et al, 1993, 1996, 1998). The model acted as an integrative mechanism for the research objectives proposed for this study, and allowed for a more appropriate and informed determination of what form the interview guide themes (for Stage 1) and survey questions (for Stage 2) should take.

In light of the Stage 1 and Stage 2 research findings this conceptual model is now elaborated (see Figure 10.5).

Where a mismatch of preferences is identified (boxes 2 and 3) between the customer and the bank it is of more interest in this research than where the interaction preferences have been matched.

Accordingly, in the model the mismatched boxes are deemed a ‘relationship disconnect’ and a goal has been stated for each disconnect. This is illustrated by factors emanating from the empirical study which may serve to explain the extent of such disconnections. Actions are also proposed as to how these disconnections could be minimised.

In box 2 where the mismatch occurs due to the bank’s desires for remote interaction and the customer’s desire for personal interaction, the Stage 2 findings allow for the identification of some managerial action points. It has been clearly established that there
is a key role for branch staff in educating customers, especially, as to the security of the Internet for banking. The need for customer education programmes on e-banking generally has been established by Filotto, Tanzi and Saita (1997) in their Italian study. Parasuraman and Colby (2001) also emphasise the importance of education for effective Internet adoption.

This research study has also highlighted the need for conveying the ease of using on-line banking systems and branch demonstrations where customers could engage in both personal ‘trial’ and also ‘observe’ other customers using the system. The issue of ‘trialability’ would help to improve customer education and this has been highlighted in the extant UK research (see Black et al, 2001) but more prominently in international studies; see for example Sathye’s (1999) Australia study; Gerrard and Cunningham’s (2003) Singapore study and Saaksjarvi’s (2003) Finland study.

In box 3 where the mismatch occurs due to the bank’s desire for personal interaction and the customer’s desire for remote interaction, there is a clear need for greater relationship management activity. Given that the customer is a remote interface user the bank could proactively monitor the customer’s web-based activities. Based on this knowledge the relationship manager would be better placed to cross sell to the customer.

While the model does help to integrate the research findings of Stage 1 and Stage 2 and proposes useful management action points, it seems overly simplistic. For example, it does not address the complex issue of customer decision-making styles and how they might be identified and used meaningfully by the bank.
Figure 10.5: A General Model of Internet Adoption Challenges and Actions

**Relationship Disconnect**

Goal: to encourage greater recognition of the benefits of relationship banking, on and off-line

Actions for Managers
- Ensure customer is relationship managed
- Monitor web-based banking activity and get Rel Mgr to follow-up

**BANK INTERACTION PREFERENCE**

<table>
<thead>
<tr>
<th>PERSONAL INTERACTION PREFERENCE</th>
<th>REMOTE INTERACTION PREFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.</strong> Personal Match</td>
<td><strong>2.</strong> Mismatch</td>
</tr>
<tr>
<td><strong>3.</strong> Mismatch</td>
<td><strong>4.</strong> Remote Match</td>
</tr>
</tbody>
</table>

**Relationship Disconnect**

Goal: to encourage greater adoption by these segments

Actions for Managers
- Branch staff to educate customers
- Emphasise and reassure about security of web
- Emphasise ease of the Internet banking interface
- Emphasise the time-saving and convenience benefits to be enjoyed
10.11 Assessing Contributions: Towards an Integrated and Specific Model of Internet Adoption

Building on the general model described in Figure 10.5, which in itself was developed from the literature review and from the core findings from the research, a revised, elaborated and more fully integrated model of Internet adoption in e-banking is now proposed (see Figure 10.6).

This 'bottom-up' model has four stages and concludes with an integrated set of influences which it is argued impact on the customers’ propensity to adopt Internet banking.

10.11.1 Influence Level 1

These influences represent the internal characteristics of the customers themselves in terms of their demographic profile, relationship worth, their experiential knowledge, motivations and levels of self-efficacy. The complexity of the customer’s own product ownership at any point in time will also be important at this level. Additionally, the characteristics of innovation adoption and use, such as the customer perceived levels of relative advantage, complexity and compatibility with Internet banking will all have a key influence here on level 1.

10.11.2 Influence Level 2

The second level of influence is a consequence of the first and builds upon the established customer profile. The decision-making style of the customer has been established as useful in determining the extent to which an individual may gather and consume information to aid in their decision-making and whether the decision making process will occur quickly or slowly. In addition to the speed of the decision-making process itself, it is also important to identify whether or not the customer will have more than one possible solution and how they will choose between these alternatives.
10.11.3 Influence Level 3:

Levels 1 and 2 combine in what has been labelled the ‘Customer Influence Triangle’ - at Level 3. Accordingly, the triangle captures all internally motivated customer influences which underpin and influence the interaction preferences matrix.

10.11.4 Influence Level 4:

Level 4 comprises the Bank generated influences (both personal and impersonal) that have been developed in light of the preceding Levels 1-3. These bank actions have been stimulated as a result of the Stage 2 customer findings the core of which are now outlined:
Figure 10.6: Towards an Integrated and Specific Model of Internet Adoption

Customer propensity to use the Internet for financial services

Level 4

BANK INFLUENCES: PERSONALISED
- FACE TO FACE / RM INITIATIVES
- REASSURANCE ABOUT SECURITY
- BRANCH STAFF PROMOTE E-BANKING
- IDENTIFY CONVENIENCE ORIENTED CUSTOMER FROM BASE
- SUPPORT E-BANKING RM BASE WITH PERSONAL BANKER

BANK INFLUENCES: IMPERSONAL
- ADVERTISING / COMMS INITIATIVES
- REASSURE ABOUT SECURITY OF E-BANKING
- CONVEY EASE OF ON-LINE INTERFACE IN E-BANKING
- PROMOTE IMPROVED SERVICE OF E-BANKING

Level 3

Driver's DECISIVE
- Bank's Cluster 3
  - Min information, one decision, low F-F, speedy decision.

Driver's HIERARCHIC
- Bank's Cluster 4
  - Max information, one decision, desire F-F, speed unimportant

Level 2

Driver's FLEXIBLE
- Bank's Cluster 2
  - Min information, many options, desire F-F, speed unimportant

Driver's INTEGRATIVE
- Bank's Cluster 1
  - Max information many options, slow decision, desire F-F

Level 1

Customer demographics, self-efficacy level, experiential knowledge of technology, perceptions of complexity, compatibility and relative advantage. Product holdership levels, complexity of need.

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10.12 Core Issues Emerging from the Model

1. Bank branch staff have a key role to play as ambassadors for the Internet banking proposition and accordingly as educators of customers.

2. The importance for customers of all types in being reassured about Internet security is central to the adoption of any Internet banking proposition.

3. Convenience oriented customers and those for whom seeking out a lot of information pre-purchase is unimportant are well disposed to Internet banking propositions at lower levels of product complexity.

4. The perceived ease of the on-line buying process by relationship managed customers is a factor in the perceived suitability of the Internet for banking.

5. The perceived importance of improved service by customers is a factor in the perceived suitability of the Internet for banking.

6. Those customers who do regard the Internet as being suitable for the purchase of more complex products (i.e. products of medium and complex status) will see the importance of face to face interaction decline.

7. Customers who are not convenience oriented will be more likely to refer to staff pre-purchase.

8. Complex customers who see the Internet as an appropriate medium through which to purchase complex products are technophiles.

On the left hand side of the matrix the bank influences which border these quadrants 1 and 3 are dominantly face to face led because this is where the bank desires a personal relationship with the customer. This would be the quadrants in which the bank would like to see relationship managed clients or those who may display increasing levels of relationship worth. Conversely, on the right hand side of the matrix the bank influences which border quadrants 2 and 4 are dominantly impersonal and above the line communications driven activity. This is not to say that in terms of consumption and impact these personal selling and advertising / communication activities are mutually exclusive. The model merely indicates where their emphasis is most appropriate.
10.13 Practical Implications of the Model: Key Management Implications by Theme

10.13.1 Relationship Management

Amongst the bank executive respondents a relationship marketing orientation was greatly in evidence. There was a clear recognition that the services offered, and the various platforms through which these were offered, would ideally change depending on the relationship worth of the customer involved. Managing customer relationships through the Internet was embraced as a concept by all international respondents but how this worked in practice differed by bank. UK / Ireland and USA banks mainly saw the Internet as a means to manage the low net worth transactor in a more cost effective way, while the Swedish counterparts attempted to add value to the experience of relationship managed clients through their Internet propositions.

The case bank wants relationship managed customers to use the Internet for their transactional business and route all sales / product enquires through the hi-touch channel of the personal banker.

The findings from the customer survey with the case bank indicate that there is potential for relationship managed customers to use the Internet provided they feel reassured about the security of the system and the on-line buying process is perceived as being easy to use. There are clear implications for bank management, particularly as regards the marketing and communications side of the business. Direct mail was employed by Swedish bankers to this end but this was not used by bankers in any of the other countries.

The case bank’s aspiration, however, to separate the transactional and relational elements of the high net worth customer’s interaction platform may be difficult to achieve. The findings from relationship managed customers showed that those who saw an importance in referring to staff pre-purchase (we can presume here this point of contact would be the personal banker) placed less importance in being reassured about Internet security. In addition, where such pre-purchase referral is desired, the findings suggested a customer preference that this be facilitated face to face.
While all bank executives acknowledged that customer behaviour will take time to change, the findings do indicate a group of relationship managed customers who are more disposed to Internet interaction. Those relationship managed customers who have the characteristic of being ‘convenience-oriented’ are more likely to see the Internet as being suitable for the purchase of simple products. Through the clusters identified in the Hypothesis 4 findings such individuals could be identified in the relationship managed customer base and targeted for Internet adoption (Decisives, case bank cluster 3). An important consideration for the case bank however is that the high net worth customer who adopts this remote interaction will still perceive a relative advantage in referring to his personal banker as product purchase needs become more complex. The value of being a relationship managed customer must be made clear to this convenience oriented individual.

10.13.1.1 Managerial Action Points:

- Profile the relationship-managed customer base to identify those customers who display characteristics of being ‘convenience-oriented’. Convenience orientation is very characteristic of the ‘Decisive cluster’ – cluster 3 in the case bank.
- Marketing communications need to target such convenience-oriented customers with a message reassuring them about the integrity of security, the ease of use and the improved timesaving provided by the Internet. Such convenience-oriented customers are likely to be found in boxes 3 and 4 of the elaborated Level 4 interaction preference matrix. As regards the customers in box 3 (customers who prefer remote interaction while the bank prefers face to face interaction) the communications message would seem to be best delivered through a member of staff. Where the customer is relationship managed, the personal banker would seem the sensible choice. As regards those customers in box 4 (who prefer remote interaction) above the line reassurance messages through advertising and merchandising activity seem appropriate.

10.13.2 Delivery Channels / Product Complexity

The concept of ‘product complexity’ was explored at all levels of analysis; literature review, the qualitative research of Stage 1 and the quantitative research of Stage 2. A
consensus was reached as to how various products could be classified according to complexity.

In keeping with the academic literature, the international banker respondents argued that as product complexity increased customers would be more inclined to seek face to face interaction. Accordingly, they believed that products of lower complexity would be more appropriate for Internet delivery.

The quantitative findings from the UK case bank certainly supported the contention that more simple products were better suited to Internet delivery. This is based on the fact that the greatest explanation for variability in the dependent variables could be explained at these lower levels. At medium and complex product levels there was an insufficient amount of variability explained regarding the suitability of the Internet for purchases of these products.

The key predictors of whether or not customers would perceive the Internet as suitable for the purchase of products of varying complexity mirrored to a large extent those identified with relationship managed customers. Convenience oriented customers again deemed the Internet a suitable medium through which to purchase simple products. So too, did those customers characterised by not seeking a lot of information to help in their decision-making. These are both key characteristics of Driver’s ‘Decisive’ group represented by cluster 3 in the case bank (see Level 2 of integrated model).

As before when the suitability of the Internet as a purchase medium for simple products increased so too did the customer’s perceived importance of being reassured about security and their perceived importance of seeing improved service through the virtual interaction.

While needing further research, the clear indication from the findings is that as the suitability of the Internet for the purchase of medium and complex products increases the perceived importance of face to face interaction decreases.
10.13.2.1 Managerial Action Points:

- Profile the customer base to identify those customers who display the characteristics of being 'convenience oriented' and 'non-information seeking'. These characteristics are very typical of the 'Decisive' cluster – cluster 3 in the case bank.
- Marketing communications need to target such convenience-oriented customers with a message reassuring them about the integrity of security, its ease of use and the improved timesaving service offered through the Internet.
- Engage in research with 'Decisive' customers who have medium and complex product holdings to establish the extent to which, as they become more familiar in using the Internet, they would use it to purchase and manage these more complex products. Preliminary evidence from the Stage 2 findings suggests that complex customers who use the Internet for complex product purchases are characteristically very comfortable with technology and this gives the idea credence.

10.13.3 Face to Face Interaction / Education

Respondents, especially those in Sweden and the USA, saw a key role for bank staff in educating customers in how to use the Internet for banking. In one US bank this extended to customer facing staff having to become 'e-certified' before talking to customers about the Internet proposition. This role for branch staff was however not identified by the UK / Irish banks.

While all respondents recognised the need for education of both staff and customers there was little agreement on how this should be completed. Very individual approaches were taken (characterised by the above) and the attitudes of all banks could be best described as 'experimental'.

The role of face to face interaction in bank-customer interactions was mainly perceived as being sales oriented, with telephone banking and Internet banking being the mechanisms by which transactions were completed. However, no bank had a strategy for managing those customers who wanted to have their transactional banking needs met through the branch interface when this was not desired by the bank.
From the customer perspective in the case bank, as the need to refer to a member of staff pre-purchase of a simple product increased so too did the perceived importance of convenience. By implication it could be proposed that where the branch interface was not convenient then the desire to refer to a member of staff may decrease. However, a definitive answer to this question would require specific research on the causality of this relationship.

Customers, especially older and female customers, saw an increased importance in referring to a member of staff pre-purchase when they felt that the intangibility of using the Internet for financial services products was a key inhibitor. As product complexity levels increased for non-convenience oriented customers, the importance of referring to staff increased also. Such characteristics would imply such customers fell within Hierarchics (case bank cluster 4) or Integratives (case bank cluster 1).

10.13.3.1 Managerial Action Points:

- Case bank to encourage / compel customer facing staff to use the Internet banking system.
- Case bank to better promote the Internet product through the branch network using these trained staff. At Level 4 of the integrated model this represents a key influencer by the bank.
- Profile the customer base to identify those customers who display characteristics of being 'convenience oriented' and 'non-information seeking'. These characteristics are very characteristic of the Decisive cluster – cluster 3 in the case bank.
- Promote the key benefits of Internet banking to these segments.
- Establish the profile of Driver’s Integratives and Hierarchics within the case bank database.
- Identify those customers who populate quadrant 2 i.e. where the bank would prefer remote interactions and the customer branch based interactions. Many banks have been thinking about customer migration strategies and penalising such customers visiting branches / incentivising them for not visiting branches. However, from the suggested bank influencing strategies identified at Level 4 of the model, there are alternative approaches that could be taken.
10.13.4 Customer Typology

A key area where the international bank respondents differed in opinion was in what the typology of customers who would adopt the Internet would look like. As was the case regarding 'how' the Internet would be used, i.e. either as a relationship enhancement or as a cost saving transactional platform, there was a lack of clarity here.

The fact that Internet banking represents a discontinuous innovation and as such presents customers with 'an entirely new way of doing things' the traditional segmentation criteria add little to our understanding of how customers will behave. This research has established that it is more logical to attempt to classify customers according to their behaviour rather than on the basis of conventional segmentation criteria.

The use of Driver's decision-making styles was the method chosen for this classification. The commonalities found between Driver's four main decision-making styles and the case bank dataset was encouraging. First, the existence of four key clusters was common to Driver and common to the case bank. Second, Driver's decision-making style characteristics showed great commonality with the four clusters found in the case bank customer base.

10.13.4.1 Managerial Action Points:

- Test the efficacy of the 4 identified case bank clusters through use of a larger dataset, followed by an examination of their responses to communications customised to their behavioural characteristics.
- Profile the customer base according to Driver's attitude statements and allocate all customers a decision-making style.
- Develop the integrated model and customise it for the case bank.

10.14 Contribution of this Research to Original Knowledge

The aim of this research was to identify, assess and evaluate the contribution of the Internet in relationship oriented retail banking.
Recent research specific to financial services states that "using electronic mediated networks (such as the Internet) to facilitate two-way communication with customers in order to establish a notion of a relationship is something that is still in its infancy" (p309) (Kapoulas et al, 2002). Similarly, Rexha, Kingshott and Aw (2003) state that "the literature appears to be uncertain about consumer preferences for self-service options, particularly those that are technologically based." Indeed, Aladwani (2001) proposes that on-line banking "is the least understood delivery channel for retail banking services" (p213). He highlights the weakness that most extant research on e-banking has suffered from one of more of the following drawbacks (p6):

- research mostly lends qualitative insights;
- research has mostly been very specific, dealing with best practice case studies;
- most of the research has been anecdotal with little theoretical background.

As detailed in Chapter 1, the research reported in this thesis overcomes these criticisms in the following ways:

- the research involved a two-stage study which utilised an international qualitative stage and a UK based quantitative stage. Both senior bank decision makers and customers were participants in this study. A theoretical conceptual model was developed from the international study and published (Durkin and Howcroft, 2003);
- the research did not use any 'best practice' case studies because they were found to be very context specific and therefore not generalisable. Rather both the literature findings and the Stage 1 international qualitative study informed and guided the development of the quantitative instrument for issue to personal retail bank customers in research Stage 2.
- the post-positivistic research encompassed both theory generation (from academic literature and qualitative Stage 1) and theory testing (from quantitative Stage 2).

The identification and assessment of issues deemed important in meeting the overall research aim of this study were established in Stage 1 (identification) and Stage 2 (identification and assessment) of the research process. In the light of these research stages the contribution of the Internet in relationship oriented retail banking was evaluated in line with the stated aim of the research.
While these issues related mainly to the conceptualisation of the research problem and the operationalisation of the attendant methodology it is important in this section to demonstrate how the research outcomes make a substantial, differentiated and relevant addition to the prevailing body of knowledge in the area.

It is argued that this thesis makes a key contribution to both theory and practice.

10.14.1 Contribution to Theory

Conceptual thinking around the area of Internet-enabled bank-customer relationships was in its infancy at the commencement of this research study in 1998. Through this research new contributions to theory were established in the area of conceptualising bank-customer interaction preferences and the impact of the Internet upon these preferences (Durkin and Stewart, 1999; Howcroft and Durkin, 2000; Durkin and Howcroft, 2003). This conceptual thinking transferred from this research project and was tested and validated through application to various banking contexts; including corporate banking (O'Donnell et al, 2002) and retail banking (Durkin et al, 2003).

The conceptual interaction preference model derived from the literature review in this study integrated three largely discrete literatures; that relating to banks' use of technology, customers' use of technology and literature relating to diffusion of innovation and decision-making styles. This allowed for a unique examination of not only the financial products customers would purchase on the Internet but also the ways in which they would make these purchases – the influencers and inhibitors to this behaviour as it relates to their decision style. This focus on attempting to understand motivations and behaviours for channel adoption (rather than the a priori and post hoc segmentation approaches) is very much in keeping with what is called for in the current academic debate (see Harrison, 2003; Smith, 2004). This again underlines the contribution of this study at a theoretical level. In the light of the two-stage empirical study undertaken, the conceptual model was augmented, and now offers a more instructive interpretation of the influences and barriers for customer adoption of Internet banking.
10.14.2 Contribution to Practice

A clear linkage is demonstrated in this study between theory and practice. The Interaction Preference Model was derived from the literature review and integrated themes relating to bank and customer use of technology and decision-making style. The research findings from this study make for a more informed interpretation of this model by enlarging it beyond its original scope of interaction preferences. The integrated and specific model of Internet adoption links personal customer characteristics with decision-making styles and combines these into a totality of influencers on customer interaction preference. This identifies the issues that are important in encouraging adoption for the practising bank marketing manager. The key issues are:

- the need for customer reassurance about e-banking security;
- the importance of branch staff as educators in e-banking adoption;
- the importance of banks better conveying the key benefits of e-banking: convenience and time-saving;
- the improved service offered through this channel.

The cluster analysis and the attendant logistic regression go some way in enabling banks to embrace a more behavioural approach to their segmentation strategies and targeting the e-banking proposition. The improved targeting, offered through the cluster analysis approach, would also facilitate more appropriate, effective and efficient marketing communications strategies.

10.15 Agenda for Future Research

As far as the author can ascertain, this is the only research to have examined, in an integrated study, customer and bank motivations for embracing the Internet in retail banking.

The majority of previous research in Internet banking has focused mainly on organisational perspectives (see Daniel and Storey, 1997; Morrison and Roberts, 1998).
In recognition of the criticisms that extant research in this field has been predominantly qualitative and very case specific, this research adopted a more pluralistic approach and embraced both qualitative and quantitative methodologies and explored motivations and barriers to Internet adoption.

While the integration of research Stages 1 and 2 illuminated the influencers and inhibitors for banks and customers in offering and adopting on-line services, the research also identifies many questions for future research.

The cluster analysis was an important and revealing stage of this study. While support is found in academic literature for cluster analysis (as opposed to a traditional demographic / economic data) approach (see Machauer and Morgner, 2001; Smith, 2004, Harrison, 2003) a key question for future research is the robustness of those clusters. Second, having tested for the relevance of these clusters across the wider relationship managed and non-relationship managed customer base the possibility of investigating how the case bank might use this approach in the strategic development of their e-banking platform is very interesting and would offer the potential for a longitudinal study.

The issue of product complexity and its influence upon Internet purchase behaviour in financial services underpinned this study. The findings do not indicate any important role for the case bank’s relationship management strategy and unlike the literature findings reported from other banks, an expected inhibitor for e-banking, which did not appear, was the presence of face to face interaction and relationship management. This raises an interesting question concerning the way in which high net worth relationship managed customers in particular perceive the relationship management service. The relationship manager currently offers added value through face to face interaction, and the potential for this as a differentiation point, is therefore another key area for future research.

Linked to this aspect of bank-customer relationships is the banks’ marketing communications strategy. While qualitative Stage 1 of the research showed divergence between different banks as to how they communicated the benefits afforded to customers through e-banking, there was a consensus that more needed to be done to educate customers and staff. How this can and should be achieved and the different cultural adaptations that might need to be undertaken in different countries also present a fertile
ground for future research. In particular the determination of a general ‘best practice model’, followed by various customisations at the level of specific countries / markets would present great research opportunities and add to the present level of debate. This approach would be very much in keeping with the aspirations of Sathye (1999) whose study of Internet banking adoption in Australia identified two key influencers namely reassurance about security and a general awareness of benefit.

It seems that banks are premature in considering incentivised or forced customer migration strategies and more focus should be given to customer education (Sathye, 1999). Related to this issue is the question of which customer segments are appropriate targets for e-banking. For simplicity this research has discussed the two extremes; the low net worth transactor and the high net worth relationship managed customer. In reality however, there will be different customer segments that, according to their behaviour, will interact with the Internet differently. How the communications messages are adapted and tailored for these different segments / clusters is also another research study.

10.16 Limitations of the Research

Consideration was given to the possibility of issuing a survey to the constituent customers from the international banks visited. This was explored while in the USA but it was not received very well by the bankers involved. In addition, resource constraints and issues of distance would have made administration and control of such a survey very difficult. Furthermore, where differences appeared between the different countries, it would have been difficult to establish the extent to which different cultures explained such differences. As was stated in the Agenda for Future Research, a more international study would perhaps be possible in future.
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