

VOLUME I

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**Title: “Towards Understanding Internet Loyalty through
Customer Preference Structures”**

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ABSTRACT

Towards Understanding Internet Loyalty through Customer Preference Structures

This research is an exploration of how the capabilities of the Internet may have influenced customer preference structures and how these influences may, in turn, have affected loyalty behaviours. These relationships are explored from both customers' and companies' perspectives.

A theoretical model is developed which comprises four main components. These are (1) pre-purchase preference structures; (2) post-purchase preference structures (3) the Internet channel and (4) loyalty behaviours. The Internet channel is shown as having a modifying effect on pre- and post-purchase preference structures, which in turn relate to influences in loyalty behaviours.

From the customer's perspective the theoretical model was quantitatively tested by developing pre- and post-purchase preference structures from a choice-based conjoint experiment on a sample of online and offline grocery shoppers. The results showed that these preference structures differed significantly on a number of attributes. The theoretical model was further tested by linking the utility values from the choice-based conjoint experiment to loyalty variables in a structural equation model. The results showed that the theoretical model

needed adjustment to fit the underlying data. The offline shoppers' group model had a better fit to the data than did the online group.

The company perspective was developed through a longitudinal study of four U.K. companies in different industries. The qualitative data collected in these studies was compared and contrasted with the theoretical model. The emergent pattern within this analysis showed that companies with a strong understanding of customer preference structures in a traditional marketing channel, was no guarantee that the capabilities of the Internet would be used to strengthen performance on those preferences. One common theme that emerged from interviews with companies was that those who rapidly developed new levels of performance on customer preferences using the capabilities of the Internet had made the Internet a major component of their business model. The qualitative data showed companies as either adopting a transactional or an informational approach to their Internet channel strategy with radically different implications for their business models.

DEDICATION

To my family who provided me with much love and support throughout this experience:

Jonathan my dearest husband and Sabrina and Philippe my two wonderful children.

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LIST OF ABBREVIATIONS

AIQ : All Items Quality

DOT : Delivery On Time

D10 : 10% Discount Online

D6H : Delivery in 6 Hours

HL : Help Line Number

NCD : No Cost Delivery

NP : New Products Section

NS : No Substitutes

OT20 : Ordering Time 20 Minutes

SO : Special Offer Section

INTRODUCTION

Structure of the Study

This research aims to provide modest insights into the dynamic nature of the interrelationships and dependencies that exist between Internet capabilities, customer preferences and online customer loyalty.

Part I of the thesis focuses on an exploration of Internet capabilities and their possible effects on customer preferences. It examines customer loyalty literature on the ways in which it is suggested these preferences may have changed as a result of the Internet. A richer model is then developed to link Internet capabilities, customer preferences and the effect on online customer loyalty.

In Part II, the implications of the research problem for an appropriate research methodology are discussed and research methods are chosen. A critical evaluation of the chosen research design is given.

Part III further explores the dynamic nature of this relationship from a customer's perspective. The fieldwork was divided into two phases. The first phase consists of a choice-based conjoint experiment to examine the preferences of customers who have not shopped online (acquisition) and those who have already shopped online (loyalty). The second phase aims at linking these customer preferences to acquisition and loyalty. To achieve this objective, competing structural equation models are built. The findings are critically evaluated in Part V.

Part IV is an examination of U.K. company interviews which explore company perspectives of how the Internet as a marketing channel may affect relationships with their customers over time. These are longitudinal interviews, important in defining the changing strategic role for the Internet in management's task. Part IV is exploratory in that it seeks through qualitative methods to identify the major dimensions (attributes) that are relevant to online shoppers. In-company interviews provided the initial research methodology. Companies (Sainsbury's, RAC, easyJet, and Mercedes Benz) with different approaches and experiences in online retailing were targeted with the intention of investigating the main development characteristics of their online shopping channel. This, it was expected, would shed light on the methods such firms employed in acquiring and retaining customers online. In effect the relationships between Internet capabilities, customer preferences and how these preferences may have changed customer acquisition and retention were viewed from the company point of view. Consequently this section makes a contribution by demonstrating how well (or poorly) a company's understanding of what the key preferences structures of their customers are, in comparison with what the customers actually say their preference structures are.

Part V relates the findings drawn from the qualitative company interviews to those of the quantitative survey. These findings are integrated with the literature and related to the research question. Emphasis is made on drawing conclusions which make an original contribution to the domain. As a result a revised version of the theoretical framework emerges that gives directions for future research.

The Research Domain and Focus

In some companies one of the main tasks facing managers is deciding in what ways, if any, the Internet should be considered as a channel through which to conduct business with current and potential customers. The early debates that addressed this task focussed mainly on the unique capabilities of the Internet and how these characteristics would result in a restructuring of traditional forms of business for certain industries. The debate then fragmented somewhat with some authors picking up on the technical aspects of website design as a means to encourage visits and length of stay. Others began to examine the processes by which customers made choices on the Internet. As a result the rational choice and constructivist views of Internet customer choice emerged. Recently more attention has been paid to the nature of Internet customer loyalty with comparisons made with views of customer loyalty through traditional channels. These themes describe the domain of this research as Internet marketing.

What has not been fully addressed in the literature is how the Internet channel itself is a modifier of customer choice. Certain aspects of the Internet channel have been examined in terms of customer choice e.g. relative low cost “global” connectivity. However what has not been studied to any great extent is how the Internet channel as a whole may influence customer preference structures. This is the focus of this research. This focus is operationalised in a number of ways. First the view of a number of firms on how they have approach the Internet channel in relation to modifying customer behaviour is investigated through the use of qualitative interviews. These interviews are conducted over a 3 to 5 year period to longitudinally examine changes in company perspectives. Secondly the focus of

this research is investigated through the development of specific customer preference structures (within the grocery industry) to examine how they influence the pre- and post-Internet purchase experience. These pre- and post-purchase preference structures are linked to changes in customer loyalty. The focus of this research is therefore an examination of the Internet channel as a modifier of customer preferences and loyalty behaviours.

Contribution and Originality

How has this research contributed to the development of understanding of Internet marketing? With regard to the focus of this research a contribution has been made by theorising that the Internet channel could itself be a modifier of customer preference structures and loyalty behaviours. A future research agenda would need to take into account the argument put forward here that increased understanding of customer loyalty behaviours on the Internet should consider a more comprehensive construction of customer preferences and the role of a more complete picture of the Internet channel as a modifier of those preference structures.

A further contribution has been made by highlighting the importance of seeing the Internet as a marketing channel that provides a marketing context with specific characteristics. The effectiveness of these contextual characteristics in marketing terms (customer acquisition and loyalty) is a function of a more complete understanding of the construction of customers' needs as expressed by preference structures. A contribution to the management task has therefore been made by bringing existing elements in the background theory together in a

way which provides a new framework for evaluating the business potential of the Internet channel for a specific business.

The empirical work provides for a degree of originality. For example the qualitative U.K. company interviews examine how their perspectives of the Internet channel and their customers' needs have changed over time. In addition the empirical work carried out in defining quantitatively customer preference structures in the U.K. grocery industry had not been done before in this way. This empirical work would need to be taken into consideration in future research.

The past and current debates in the literature have been along specific lines; for example the characteristics of the Internet, customer behaviour and loyalty. This research is original in that it attempts to synthesise customer preference structures, the Internet channel and loyalty in a way which has not been attempted before. The theoretical model provides a synthesis which could be included in the future development of the subject area.

Choice-based conjoint has not been applied before to the development of Internet related preference structures and from this perspective this study is original. The justification for using this approach is evident in the clear picture that emerges of the differences between pre- and post-purchase preference structures. This approach is demonstrated to have potential for future exploration of this domain.

In addition the use of utility values in the fitting of the theoretical model to the data and the examination of the relationships in a structural equation model is an original approach in this

domain. How well would utility values from a choice-based conjoint experiment fit a theoretical construct is a question which is uniquely addressed in this research. This approach is not without difficulties which could be taken into consideration in future research. The benefit of the approach is to be able to measure utility values, define preference structures, measure the degree of fit to a theoretical construct and measure the relationships between dependent and independent variables using data from a single source that realistically measures customers' choices between competing offerings.

PART I - ESTABLISHING THE THEORETICAL FRAMEWORK

INTRODUCTION TO PART I

Part I, the theoretical framework, is divided into four chapters. Chapter 1 explores the capabilities of the Internet. Chapter 2 links a discussion on customer preferences to the discussion on Internet capabilities to consider how customer preferences may be influenced by the capabilities of the Internet. Chapter 3 examines the effect of these potential preference changes on customer behaviour and in particular customer loyalty. Chapter 4 is a synthesis of Internet capabilities, preference structures and loyalty from which emerges a testable model.

In Chapter 1, the main capabilities of the Internet are explored. The chapter opens with a discussion of low cost global connectivity (Peterson et al., 1997; Reichheld and Schefter, 2000). The Internet is a technology delivered at a lower incremental cost than other marketing channels for customers and retailers (Betancourt and Gautschi, 1990; Sen and King, 2003). In this way the transaction surplus is potentially greater for both contracting parties than through traditional marketing channels and this could increase loyalty behaviour.

The discussion moves on to the separation of content, context and infrastructure via the Internet channel in comparison to these three elements being bundled together in the traditional market place (Rayport and Sviokla, 1994).

Based on its relative low cost global connectivity, Evans and Wurster (1997, 1999) introduced the perspective that the Internet increases both reach and richness (i.e., reaching more customers without compromising a rich/personalised experience).

Chapter 1 continues with a discussion on interactivity which includes a review of previous studies of the flow construct (Hoffman and Novak, 1996; Mathwick and Rigdon, 2004). From these discussions, a definition of interactivity emerges that compares and contrasts the Internet with traditional marketing channels.

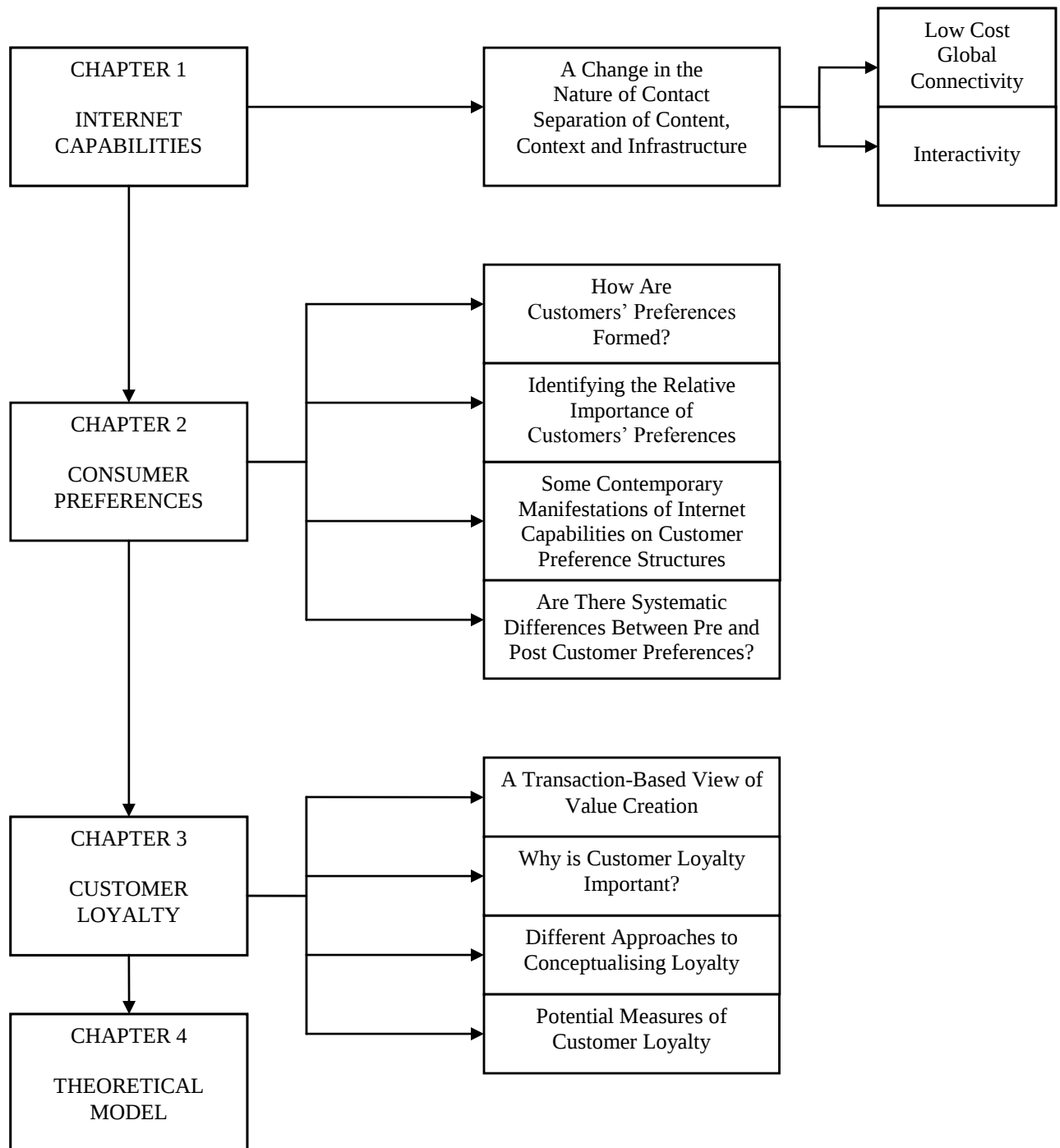
Chapter 2 examines the effects of these Internet capabilities on customer preferences. The chapter starts by addressing a debate in the existing literature that stresses two views on how customers form their preferences. These selected theories of customer preference are used as a platform to link customer preference structures to Internet capabilities. These linkages are made through a detailed examination of choice, convenience, price comparisons, perceived risk and trust. Having linked customer preference structures to the capabilities of the Internet, the chapter concludes with a refinement of this discussion by the examination of the potential differences between pre- and post-purchase preference structures.

Chapter 3 draws upon the customer loyalty literature to explore the degree to which Internet capabilities can be used by companies to match customer preferences and thereby increase customer loyalty (Reichheld and Schefter, 2000; Reibstein, 2002). The chapter compares, contrasts and synthesises the transaction based view of the firm, with behavioural and attitudinal views of loyalty. From this discussion, loyalty concepts are operationalised through an examination of various measures of loyalty.

Chapter 4 concludes Part 1 with a theoretical framework which links the concepts of customer preferences, Internet capabilities and customer loyalty in a way which allows for empirical examination of differences between online and offline customer loyalty behaviour.

The construction of the literature review is summarised in the following figure.

Figure 1: The Construction of the Literature Review



CHAPTER 1: UNDERSTANDING THE CAPABILITIES OF THE INTERNET CHANNEL

INTRODUCTION

The unique communication and commercial aspects of the Internet channel have altered and continue to change companies' marketing strategies. These changes seem to be derived from the distinctive capabilities presented by the Internet. Authors such as Willcocks and Sauer (2000) defined Internet infrastructure capabilities as a set of performance characteristics. An example of an Internet performance characteristic might be relatively high levels of global connectivity.

Examining Internet capabilities could provide managers with some insight into the ways in which customers might think differently about their product or service choices as a result of a new channel being available to them. It is by understanding these capabilities, in relation to customers' preferences, that companies may be able to develop value-adding strategies for their customers. Examining these capabilities represents the starting point from which the customer will evaluate the probability of making a purchase online and if these Internet capabilities help maximise their total utilities.

This chapter explores the insights offered by academics and practitioners regarding the characteristics of such an electronic environment in order to generate an appreciation of the capabilities which are used to deliver products and services to customers. The description of

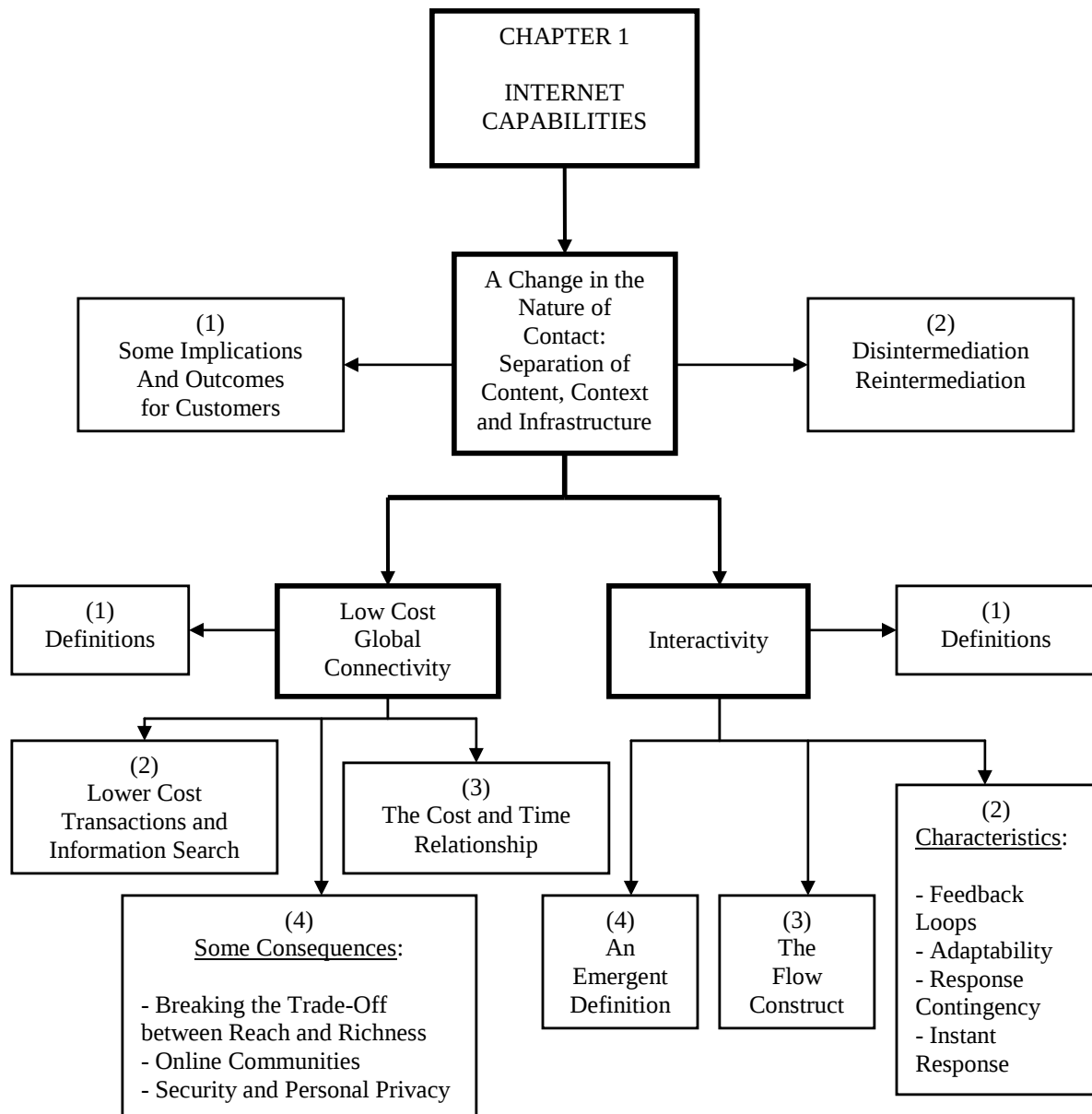
what the Internet channel comprises, will as a result, highlight what makes the Internet different to other marketing channels in respect to customer behavioural outcomes. The focus of the discussion of the Internet's characteristics, as they may apply to customer choice, will provide the necessary background for a discussion on how these capabilities relate to the preference structures of customers who do and do not shop online.

Chapter 1 begins by explaining how the Internet has changed the nature of the contact with the customer as a result of a new infrastructure. An initial implication is that the content of the information on products and services, the context in which these offerings are made and the Internet infrastructure are unbundled from each other (Rayport and Sviokla, 1994; Evans and Wurster, 1997). This in turn has the potential to transform the value chain to lead to new outcomes for customers.

The following sections are a discussion of two distinct capabilities of the Internet namely low cost global connectivity and interactivity. The implications of low cost global connectivity are discussed (Wellman et al., 1996; Reichheld and Schefter, 2000). However to increase the customer surplus of an Internet transaction, low cost global connectivity may not be sufficient, as a limitation could arise from the degree of interactivity that companies provide to customers. A definition of interactivity is derived from the discussions on previous studies to reveal various components of Internet interactivity.

The following figure summarises the construction of Chapter 1.

Figure 2: The Construction of Chapter 1



A CHANGE IN THE NATURE OF CONTACT: SEPARATION OF CONTENT, CONTEXT AND INFRASTRUCTURE

Introduction

The following section is a discussion of possible changes in the nature of the contact between companies using the Internet channel and their customers, when compared and contrasted with traditional marketing channels. In particular changes in contact are viewed through the lenses of changes in content and context. The outcomes and implications for customers arising from these changes are discussed.

Some Implications and Outcomes for Customers Arising from the Separation of Content, Context and Infrastructure

The first change that occurs with the Internet channel is a change in the nature of the contact between a company and its customers as the relationship develops via an electronic medium instead of face-to-face interaction (Rayport and Sviokla, 1994). The nature of the contact has changed as a result of a new infrastructure, in effect providing a new marketing channel. The infrastructure is different since computers and communication lines replace physical locations (Rayport and Sviokla, 1994, p.142). A dominant theme from previous research in the area of the Internet channel argued that this change of contact results in the separation of the content (products or services and their prices), from the context (how these offerings are made to customers) and from the infrastructure (the mechanisms which are used to deliver products and services to customers). This contrasts with the physical market place where

these three elements are bundled together (Rayport and Sviokla, 1994; Brännback, 1997; Evans and Wurster, 1997; Oliva, 1998; The Boston Consulting Group, 1998; Seybold, 1998; Lu and Lin, 2002). As Rayport and Sviokla (1994) pointed out:

“In the market space, [...], content, context, and infrastructure can be disaggregated to create new ways of adding value...”

By ‘new ways of adding value’ Rayport and Sviokla (1994) mean that the disaggregation of content, context, and infrastructure could lead to a set of perceived benefits for the customer. The first implication is that the separation of content, context and infrastructure could lead to a change in the information provided about the product or service and its price. Secondly the disaggregation could lead to a change in the nature of the communication between the customer and the company. Thirdly the separation of these three elements could lead to a change in the nature of the relationship between the company and its customers. For example in the online grocery industry, the nutritional information on a box of breakfast cereals is separated from the product and separated from the traditional store. In combination these changes could result in a different relationship for the grocery company between its traditional and online customers, where the role of convenience provided by the company changes. What is not fully explored however is how a set of potential benefits derived from the Internet capabilities relate to the existing preference structure of customers in comparison with alternative marketing channels.

For example do these benefits consist of increased performance on existing preferences or do they consist of creating new ways of meeting customers’ preferences that cannot be imitated by other marketing channels? Consider the case of convenience in the grocery industry,

where the performance on the attribute convenience has been improved with online grocery shopping in comparison with traditional means of providing convenience, namely store location. However for some companies such as a motoring service provider like the RAC, chat rooms provide an example of a new service to customers which could not have been provided through traditional channels.

A fourth implication of the separation of content, context and infrastructure is that a product or service does not need to be physically present for customers to buy (Evans and Wurster, 1997; Lu and Lin, 2002). For example buying books remotely on the Internet does not require physical presence at the bookstore because there has been an a priori separation of the content from the context and the infrastructure. However this is not entirely new. Other, longstanding, non-store channels, such as mail order, have some of the features of the Internet.

For example when ordering clothes in a catalogue by mail order or telephone, the content is information only. The product is separated from the context and from the infrastructure. However what is different with an online catalogue is that it can potentially access a greater range of customers more quickly. The online catalogue is more like a search engine than a list of products for sale. As a result the content is less restricted within the Internet channel than in the physical market place. Is this outcome (i.e., greater choice) oriented sufficiently from a customer's perspective? An effect of Internet capabilities on choice will be discussed in chapter 2.

Disintermediation or Reintermediation?

Some authors describe the distinctive capabilities of the Internet by focusing on how the buying environment has been deconstructed which makes way for disintermediation. For Evans and Wurster (1997) the dissociation of the physical flow of products to the related information offers opportunities for all participants in the value chain. Benjamin and Wigand (1995) also note an ongoing transformation of value chains. These authors imply that new ways (other than traditional middlemen) are now supporting transactions through technological innovations. This effect is labelled in the literature ‘disintermediation’ and is a potential consequence of particular capabilities of the Internet (Giaglis, Klein and O’Keefe, 2002; Sen and King, 2003; Shoniregun, 2004). Kling and Wigand (1997, p.4) defined disintermediation as follows:

“Disintermediation is the displacement or elimination of market intermediaries, enabling direct trade with buyers and consumers without agents”

Before the Internet, some buyers and customers could only transact through intermediaries such as wholesalers, retailers, agents, distributors and brokers. Today some of these mediating roles have been displaced or eliminated with the development of the Internet. An example of disintermediation is the direct electronic purchase of flight tickets from airlines. Another example is Dell Online that has created a value chain that did not originally require the middle man (the IT distributors). Customers can configure their own system, benefit from price discounts, diagnostics and fix breakdowns without Dell personnel (Jallat and Capek, 2001). This has resulted, in some cases, in an improved relationship between the company and its customers. However this improved relationship is with customers who are

comfortable in buying a computer online. The implication is that sales volumes are not maximised, because a group of customers who want a face-to-face interaction to buy a computer are being ignored. To overcome this issue, Dell is now including traditional sales by selling Dell computers through Wal-Mart (Lee, 2007). This re-intermediation is seen as a way to increase volume but it might also add new costs. Other recent studies show that disintermediation is rarely if ever a complete transformation of an industry because most industries contain two types of customers: those who wish to shop online and those who do not (Keough, 2007; Shunk et al. 2007).

Another example of re-intermediation is Autobytel (the Internet automobile distributor). Autobytel helps customers find a car by matching potential buyers with their nearest car dealers that meet their criteria. Autobytel by contrast with Dell Online, is itself a new middle man in the economy of the Internet channel as it adds itself to the system and changes the way value is added to the customer. More recently Autobytel has extended into the used car market as an aggregator of available cars for sale on a massive scale. Their Meta search engine could be considered to be a form of re-intermediation in cyberspace (WARD's Dealer Business, 2007).

The example of Dell Online illustrates that an implication of direct access to customers is that companies are able to adapt products and services more rapidly to demand (Zwiebach, 2007). This direct access could result in more efficient customer loyalty programs. For example Amazon.com (the Internet bookseller) uses information about customer preferences to develop programs that encourage customer loyalty (Jallat and Capek, 2001). Essentially these two examples stressed the point that an effect of disintermediation is an improved

responsiveness to customer needs. However, the Internet channel is seen as an anonymous world, defined by Reichheld and Schefter (2001) as a ‘global network of strangers’. As a result uncertainties could arise and trust needs to grow to assure customers confidence in the retailer. Intermediaries were providing these guarantees in the physical marketplace. Internet retailers implement some programs such as personalised services to add value and compensate the counsel provided by salespeople in traditional retail stores.

Conclusion

These examples provide a context for understanding the separation of content, context and infrastructure. Based on the arguments developed in the literature, it is concluded that customers are able to access more information and therefore benefit from more choice. In addition, customers may access sellers directly – the disintermediation effect - and may benefit from new intermediaries – the re-intermediation effect. The implication is that boundaries have changed and sellers are able to reach larger groups of customers (Benjamin and Wigand, 1995).

The effects of disintermediation and re-intermediation are leveraged by another Internet capability labelled low cost global connectivity as discussed in the next section. The conclusion to the question posed at the beginning of this section, disintermediation or re-intermediation, best finds its answer by looking at the structure of customer preferences and how these cluster for a particular industry. This leads to the next section which examines this distinct capability of the Internet namely low cost global connectivity.

LOW COST GLOBAL CONNECTIVITY

Introduction

In the previous section, the nature of the change of contact was explored in an attempt to expose the roots of the changing relationships between customers and retailers. This section focuses on the primary distinct capability of the Internet identified in the literature namely low cost global connectivity.

This section starts by exploring how the literature defines global connectivity. These definitions suggest that global connectivity exists in theory, but in practice, global connectivity is more patchy than global in some countries. The section continues by discussing the importance of the relative low cost aspect of global connectivity in adding value to customers and thereby influencing their behaviours. The section then examines some effects of low cost global connectivity such as the elimination of the trade-off between reach and richness. Other effects of low cost global connectivity such as the development of online communities, security and privacy are discussed.

Global Connectivity: Definitions

Berthon and Pitt (1996), Hoffman and Novak (1996) and Peterson et al (1997) defined global connectivity as a network of computer-based systems which are compatible with each other (i.e., they are all connected with each other). This argument is emphasised in early literature by Bauerfeld and Holleczech (1989, p300):

“Global connectivity, which is the capability of reaching and being reached by anybody in the world...”

From this citation, global connectivity could be defined as connectivity between nations whose populations and companies can effectively transact on the Internet. The Internet was viewed therefore, in theory at least, as being technically available to all. This accepted view soon came into question. Press, Burkhart, Foster, Goodman et al (1998) counter argued the point that whilst in theory global connectivity means that the Internet is accessible worldwide, however in some countries not all have computers with international IP connections. Today, whilst most countries can provide an Internet connection to their populations, there are still wide variations in the available bandwidth and level of service. This results in different levels of opportunities for using the capabilities of the Internet as a marketing channel (TeleGeography.com, 2006). These authors are arguing that global connectivity is not standard but patchy, with most of the volume between the US and Europe. McGoldrick (2007) has suggested that the use of DiTV may provide access for residents in economically deprived areas.

In the same vein, Main (2001) highlighted some countries such as Ethiopia, Bangladesh, Algeria, Bulgaria and Kenya where it takes a long time just to obtain a phone. In the cases where the network infrastructure needs improvement, access to the Internet is not a commodity for the majority of customers. These authors imply that a more comprehensive definition of global connectivity is needed which includes some constraints such as the performance and availability of local networks. The inclusion of constraints could perhaps go beyond the technical aspects of connectivity to include constraints such as ability to pay,

knowledge, culture and language, to arrive at a concept of effective connectivity that is more multi-national rather than global.

More recently, the literature moves on to address some effects of global connectivity on the economic and social development of different countries (Macleod, 2006). Authors have labelled this issue 'the digital divide'. A definition of the digital divide is that the world is divided into two: those who have access to the new digital information and those who do not (Baker, 2001; Macleod, 2006). For example these authors argued that global connectivity leverages the inequality between developed and developing countries in terms of learning and development. However the literature does not seem to have discussed the cause of the digital divide. For example would a government by encouraging foreign investment start to create local wealth and thereby reduce the digital divide? In other words, is the Internet a source of social and economic disparity or is the digital divide a broader reflection on the quality of national governance?

Other studies concluded that attempts to reduce the digital divide by using the Internet as an educational aid have failed. For example Warschauer (2003) conducted a case study in one of the poorest areas of New Delhi where children had access to computers with an Internet connection. The objective was for children to learn through educative games without adult supervision. The results were that the majority of children only played games and used paint programs as they did not understand English. Other results were that parents complained that homework was suffering because children preferred to play games at these kiosks. Could not the same be said about the effect of television on children and the role of parental guidance?

The literature on the social and economic consequences of the digital divide is still developing. In particular the literature has not yet discerned between causes of social and economic deprivation that arise from pre-existing contextual sources or directly from the digital divide. For example Reynolds (2007) lists the countries with the lowest ICT-Opportunity Index which is derived from ten indicators and “measures the overall ability of individuals in a country to access and use new ICTs” (ITU, 2007). These countries are African, some Asian countries, Haiti, Cuba, Honduras and Nicaragua. If these countries infant mortality rates, life expectancy, literacy, crime, corruption, per capita income growth, were similarly rated they would possibly have index ratings equivalent to the digital divide ratings. These low social and economic ratings pre-dated the digital divide and consequently it would be hard to defend a position which linked the digital divide as an initial cause of social and economic deprivation.

There is therefore a need to acknowledge that the digital divide exists and is an issue but the literature is still in its infancy in terms of debating its relative consequences on social and economic deprivation or progress. The preceding discussions suggest that there are evolving limits on the qualitative scope of low cost global connectivity. Some of these limits are an evolving consequence in terms of national economic growth, the distribution of economic wealth and the development of national infrastructure. Internet theories that rely on low cost global connectivity economics need to recognise these limits.

Lower Cost Transactions and Information Search

As discussed by Betancourt and Gautschi (1990), the larger online assortments provide customers with an opportunity to investigate various options and compare these options at a cost lower than in the physical market place where the search would have to be expended to a number of stores. This is in line with the findings by Alba et al. (1997) that online shopping lowers the cost of the information search. Customers therefore could benefit from more information with minimum search cost.

In addition the disintermediation effect, mentioned in the first section of this chapter, suggests that transaction costs are lower because traditional intermediaries are no longer needed (Jallat and Capek, 2001; Sen and King, 2003). For example, from a company point, of view loss of retail margins is avoided. From a customer point, of view it is often less expensive to order directly from a manufacturer.

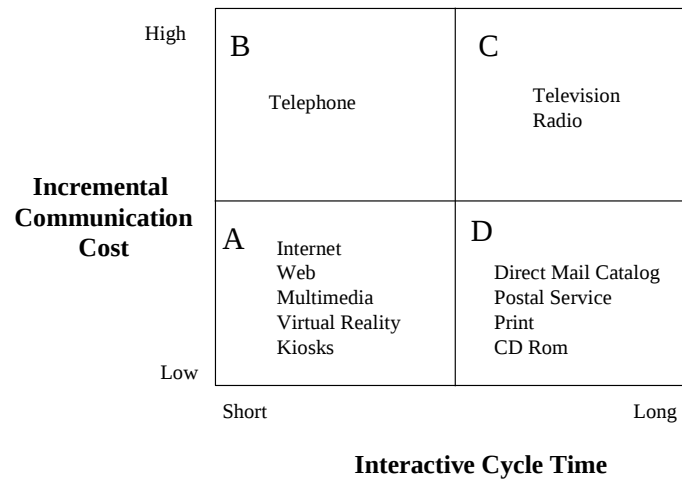
In contrast Iqbal, Verma and Baran (2003) found that both online and offline customers need traditional features and the access to local branches as a back up in sectors such as real-state brokerage, travel agencies, auction and groceries, where customers paid a fee per transaction and had access to a large assortments of products. Consequently maintaining traditional features such as - salespeople with specialised knowledge, the option of a customised account management by a professional - will probably cancel the cost benefit of online shopping and lead to higher prices for the customer.

It seems therefore relevant for companies to understand how customers make trade-offs between traditional features and online features by looking at the relative importance that customers attach to these features. This in turn depends upon the benefits that the customer associates with a particular feature or attribute. For example if the benefits of some online-only features are uncertain then the customer is more likely to assign low expectation weights to those features. Therefore to understand customer choice for a particular product or service for a specific channel, there is a need to assess how customers trade-off between different features to define their preference structure. Armed with this type of information, companies will be able to design online services that match customer preferences.

The Cost and Time Relationship

It could be argued that the Internet is a technology with low incremental cost in comparison with other technologies (Donegan 1996, Peterson et al. 1997). This is shown in the diagram presented below:

Figure 3: A Categorisation of Technologies Based on Cost and Time



Source: this study

The above diagram relates cost to time, classifying various technologies in order to compare the Internet with other technologies in terms of interactive cycle time and incremental communication cost.

The telephone was classified as having short interactive cycle times like the Internet but higher incremental communication cost. Low cost is relative to the anticipated benefits to be achieved from the communication. So if a technology like, for example, the telephone results in high communication costs (relative to benefits), it is possible to be theoretically interactive, but practically ineffective in facilitating the other characteristics of interactivity.

What seems the best from the company as well as the customer point of view is to find out which technologies have both short cycle times and low incremental cost? These technologies are listed in category A. Moreover it is argued that these technologies such as the Internet, in addition to being an interactive medium with both short interactive cycle times and low incremental communication cost, offer greater flexibility because the customer is free to interrupt and start the communication again without stopping the flow of the content. This is explained by Deighton (1996, p152):

“When the customer visits some time later, the dialogue can resume just where it left off”.

This demonstrates another benefit of the time and cost relationship in an Internet context which is not only the flexibility but also the efficiency of the communication between the customer and the company.

The other categories “B”, “C” and “D” are defined as information technology while category “A” technologies are seen as being more interactive.

The main outcome of this analysis is that for the technology to be real time i.e., a one-to-one dialogue with the customer and to be cost effective, it has to be based on multimedia electronic medium.

The uniqueness of the Internet context lies in the combined effect of a low cost structure, global connectivity and its capability for interaction. It is because global connectivity combines with low communication cost and interactivity that some benefits arise for the

customer. For example customers can get instant responses from companies located overseas (e.g., online problem diagnostics) at a lower cost than by telephone. Consider the (currently) theoretical case where customers are required to pay a fee per transaction (in addition to the price of the product or service and handling charges) and per email sent. By how much would online traffic decrease as a result of the Internet not being free but taxed in some ways such as per transaction, time spent online and domain registration. Customers come to an online transaction with expectations to pay for the product or service and for the connection fee but they do not expect to pay each time they browse. It is because the low cost structure is associated with global connectivity that the Internet is different from other marketing channels. Low cost global connectivity is therefore a pre-requisite to the distinct benefits of the Internet as a marketing channel. Some of these perceived benefits are discussed in the following sections.

Some Consequences Arising from Low Cost Global Connectivity

Breaking the Trade-Off between Reach and Richness

An effect of low cost global connectivity noted in the Internet literature is an increase in reach (Evans and Wurster 1997). These authors defined reach as “the number of people, at home or at work, exchanging information” on products and services. For example, a physical bookshop cannot reach customers in the U.K. if they are based in Boston (U.S.A.) while Amazon.com can reach customers both in Boston (U.S.A.) and in the U.K. Amazon.com can consequently reach more customers than a physical shop. Consider the case of mail and

catalogues. Retailers could reach more customers than in a physical store but the information on the products and services is still embedded in a physical format that is not interactive, less flexible to change, less efficient to deliver the information on the products or services and not customised. Even so a direct mail leaflet could be more customised than a catalogue, the costs would be higher than online and this customised direct mail would not reach the same number of customers and potential customers at home and at work. Consequently an increase in richness is a trade-off with an increase in reach. This traditional trade-off between reach and richness is shown in the diagram below.

Figure 4: The Traditional Economics of Information

The figure originally presented here cannot be made available via ORA for copyright reasons.

Source: Evans and Wurster (1997)

In this diagram richness is defined as follows (Evans and Wurster, 1997):

“Richness is defined by three aspects of the information itself. The first is bandwidth, or the amount of information that can be moved from sender to receiver in a given time... The second aspect is the degree to which the information can be customized... The third aspect is interactivity. Dialogue is possible for a small group, but to reach millions of people the message must be a monologue”.

The nature of the trade-off depends upon the marketing channel used. For example the newspaper is not customised and not interactive but reaches a lot of people. Conversely a call centre achieves greater richness in terms of customisation at the expense of reach. In addition the costs for the company are higher. As a result richness is low when reach is high. The technology seems therefore to dictate the trade-off between reach and richness. For example EDI offers a high level of customisation but is expensive.

Evans (1997) and a BCG study (1998) argued that the Internet is the only technology that can break this fundamental trade-off between reach and richness because it can combine a low cost structure with global connectivity and with interactivity. The implication is that retailers could reach many customers and simultaneously offer them a rich experience. For example a Credit Union (ECU) in Pennsylvania (U.S.A.) has segmented its database against certain criteria. If a member who asks for a report answers the criteria for an auto loan promotion, a window will pop up with the offer (Gilpatrick 2001). As a result breaking the trade-off between reach and richness has led to greater customisation. Gilpatrick (2001) argued that for this credit union company the Internet provided the opportunity for a one-to-one relationship with customers. Would this personalised service be seen as a benefit important enough for

the customer to decide to transact with the company? Most importantly is it the right benefit for the individuals with whom the company has decided to do business?

Answering these questions requires a priori understanding of customers' preference structures. Customers' preferences need to be prioritised in terms of their relative importance for a particular product or service. This could in turn prioritise the Internet channel capabilities. In this example greater customisation is a result of the Internet being able to break the trade-off between reach and richness. However where does customisation lie on the customer's preference structure is the question to be answered in order to determine the relative importance of customisation.

Online Communities

Another significant effect of low cost global connectivity is the emergence of social groups more commonly known as online communities. Wellman et al (1996, p.2) defined online communities as follows:

“When computer networks link people as well as machines, they become social networks...”

A more recent definition is given by Preece and Maloney-Krichmar (2005, p. 1):

“Community has become the ‘in-term’ for almost any group of people who use Internet technologies to communicate with each other.”

First the definition of a community was limited to a group of individuals that belong to a certain location (Jones, 1997). With an increase in mobility, community was then used to define the strength of the relationship within a group of people (Haythornthwaite and Wellman, 1998). With the Internet, the essence of the definition of a community remains identical but what has changed is that the physical boundaries have been moved even further with low cost global connectivity Internet capability. The implication is that customers and potential customers are able to talk to each other on a much broader basis (i.e., the number of individuals in a specific community has almost no limit). This is possible in the traditional marketplace (e.g., word of mouth communication) but on a smaller geographical scale.

Reichheld and Schefter (2000) emphasised the point that one of the results of low cost global connectivity is an increase in the number of referrals. The outcome for companies of this increase in referrals is a decrease in acquisition costs.

In addition their study goes a step further by arguing that an effect of online communities is an increase in trust. An increase in trust is seen as an important objective for companies as these authors view trust as a foundation stone for loyalty. Preece and Maloney-Krichmar (2005) noted that trust is an important component in the success of an online community for German cancer advice and counselling in Germany. It seems therefore that the presence of trust is at the heart of the success of any online community whether that community is distinct or not from an online retailer (Reichheld and Schefter, 2000).

Security and Personal Privacy

Harrison (2005), McKinnon and Tallam (2003), Burroughs and Sabherwal (2002), and as early as 1995, Widdifield and Grover (1995) raised the issue of security due to the low cost global connectivity capability of the Internet. Ten years later the debate on security does not seem to have been fully resolved despite some efforts from companies to reduce this concern.

There appear to be two main dimensions to Internet security, one is technical and the other relates to the ethics of the seller. This section will refer to 'security' for the technical issue and to 'personal privacy' and 'information privacy' for the ethical issues.

Having technical security of customers' data is a necessary but insufficient condition for Internet security. Technical security needs to be nested within a framework of ethical seller behaviour. Whilst progress is being made on technical security, customer's trust in the Internet is increasingly going to evolve around assurances of the seller's ethics (Phillips, 2002).

Personal privacy has also been raised as a concern for some customers (Oppliger 2005). Personal privacy mainly refers to the level of demand for personal information from business of customers (e.g., giving a personal shipping address and credit card information).

As noted by Rowley and Slack (2001) gathering information on customers could be perceived as an invasion and as an intrusion of privacy.

Phillips (2002) raises the question of whether achieving security is compatible with maintaining personal privacy. For example high security systems may require more individual data gathering. It seems controversial but a non-compromised security system leads to a better protection of personal privacy. Within this context, online companies tend to treat customers as individuals without considering if they act as individuals or if they are part of a family entity. For example a wife who queries a household electricity bill and cannot get any information because the account is on her husband's name might perceive this action as an offence and her next call will be to switch provider (Kirkby, 2005). Kirkby (2005) denounced companies that blame the data protection act (DPA) whilst some measures could be implemented such as making sure that the contract names all owners if this is the customers' expectation. Understanding how important it is for customers to be treated as a family or as an individual (i.e., understanding their preference structure) would help reduce dissatisfaction and thereby increase trust and loyalty.

Additionally, Phillips (2002) noted that customers have no choice but to trust the website operator they want to do business with not to abuse the privilege of receiving personal information as there is no auditing possible to ensure that these companies enforce their privacy policies. For Iyengar (2004, p.90) security on the Internet is more than just ensuring that individual data are kept confidential. As he explains:

“Information security is about protecting three things: the confidentiality, the integrity, and the availability of data”.

This author noted that this type of security has been and still is a major challenge for companies as the Internet is a very “open” network. In addition, to understand customer

preferences in this “open network”, companies tend to develop different websites for different countries as some empirical evidence has shown that customer preferences on issues such as national control, privacy cost and property rights vary per country (Sagi et al., 2004). These different websites are managed as a separate entity (e.g., Playmobil.com).

Willcocks and Sauer (2000) made the point that low cost global connectivity could be a major problem (damaging virus attacks and raising security alarms). Conversely Waldo (2001) argues that low cost global connectivity does not necessarily increase privacy issues as compared with the physical market place as there are many instances where personal data is collected without guarantees of security e.g. biographic information at airport immigration.

Conclusion

This section explored various consequences of low cost global connectivity. These consequences can lead to some unique outcomes for customers (e.g., greater choice, convenience and price comparisons which are discussed in chapter 2). These outcomes could be better seen as perceived benefits for the customer when leveraged by the second Internet capability namely the degree of interactivity which is discussed next.

DOES THE INTERNET OFFER GREATER INTERACTIVITY?

Introduction

A second Internet capability that is explored in this chapter is interactivity. For example various authors such as , Heid (1997), Chen and Wells (1999), Ghose and Wenyu (1998), Dellaert and Kahn (1999), Hoffman, Novak and Peralta (1999), Novak, Hoffman and Yung (2000), Weinberg (2000), Helme-Guizon (2001), Gilpatrick (2001), Liu and Shrum (2002), Chen and Chang (2003), Ballantine, (2005) consider interactivity to be a component that could influence customer behaviour intentions.

This section first examines how the literature defines interactivity. Definitions of interactivity incorporate discussions on communication theory. These discussions explore differences in terms of the degree of interactivity of the presented communication models and the effects on the relationships between the seller and the customer. The merits and demerits of each model will be discussed in terms of creating value for the customer. The purpose of these discussions is to have an appreciation of the characteristics of Internet interactivity and how they could have an impact on customer behaviours. Secondly, the characteristics of Internet interactivity that are discussed include feedback loops, adaptability, response contingency and instant response. Thirdly, this section sets out another perspective of interactivity that includes the flow construct. The effects of flow on creating value for customers in the communication process are discussed. Authors such as Hoffman and Novak, who in 1996 discussed the particularities of interactivity on the Internet, have evolved this idea over time by examining the effect of flow on customer behaviours (Novak, Hoffman and Yung, 2000; Novak, Hoffman and Duhachek, 2003). The flow construct has been discussed by various

other authors (Zeithaml, Parasuraman and Malhotra, 2002; Mathwick and Rigdon, 2004) in relation to the service quality concept. The importance of this integration is discussed later in relation to customer loyalty. Fourthly, this section concludes by attempting to provide a more comprehensive definition of Internet interactivity.

Exploring the Characteristics of Interactivity within the Internet Channel

Introduction

In the early literature, interactivity was defined as a “mutual action” between two sides participating in a communication exchange (Goffman, 1967). Within this context of mutual action, the degree of interactivity varies from passively receiving messages (advertisement) to actively participating by sending feedback (face-to-face interaction). The appearance of the Internet channel allows companies to better exploit these characteristics of interactivity. However, most companies have “failed to capitalise on the multifaceted properties of interactivity” (Johnson et al., 2006). One of the reasons could be found in the way companies define interactivity. For example consider Chen and Chang’s definition of interactivity (Chen and Chang, 2003, p.5).

“The first component, ‘interactivity’, includes those factors that link shopping with the online shopping site such as Internet connection, Web site design and appearance, and system capacity”.

This approach to interactivity focuses on the technology per se that is the Internet connection, bandwidth capacity and the website design that includes for example the ease of navigation

and the page layout. However it does not address the dynamic consequences for both customers and sellers such as opportunity for feedback loops, response contingency and greater adaptability towards customer expectations (Alba et al. 1997, Deighton 1996, Steuer 1992, Blattberg and Deighton 1991).

A more comprehensive definition should include other facets of interactivity besides the technology aspect. Johnson et al. (2006, p.12) proposed a definition of interactivity that “consists of the four facets, as well as the structure of interrelationships among these facets”. The four facets are reciprocity, responsiveness, nonverbal information and speed of response.

Some of these facets of interactivity are discussed in the next sub-sections through the examination of communication process models.

Feedback Loops

In the Johnson et al. (2006) study, it was found that out of the four facets that defined interactivity, only three were significantly related to perceived interactivity – responsiveness, nonverbal information and speed of response. Reciprocity was therefore not sufficient to add value to an exchange. Reciprocity occurs when there is a two-way communication where messages are being sent and received. There is therefore an action and a reaction. An example of reciprocity could be illustrated by a simplified mass communication model shown in the following figure (Hoffman and Novak 1996, p. 52).

Figure 5: Traditional One-to-Many Marketing Communications Model for Mass Media

The figure originally presented here cannot be made available via ORA for copyright reasons.

Source: Hoffman and Novak (1996, p. 52)

The primary characteristic of this model is the one-to-many communication process which indicates that the firm is conveying a message to potential or actual customers *through* a medium (Hoffman and Novak 1996). The significance of the word “through” is of central importance because it focuses attention on the medium as the vehicle. The medium is a vehicle to transmit a message from a company to various customers. The last characteristic noted in this model is the lack of feedback from the customers to the firm. Earlier reference to this communication model - where a message is transmitted to a receiver by a sender - is known as a ‘transmission’ model (Reddy, 1979).

Consequently the customer has a passive and uninvolved attitude. The company does not let the customer respond to its message in a free way. The company in turn has very little immediate evidence of the impact of the communication, because of the lack of feedback.

The implication is that the lack of feedback means that there is no adaptability from the marketer's side. Consequently the marketer has no opportunity to adapt to the customer's expectation(s) through dialogue. As a result, messages lack relevance for customers which mean that there is no responsiveness. This depicts the actual advertising strategy which is characterised by a one-way monologue (Crain, 2004) where the company talks but does not listen to customers (Peters and Hessian, 2003). Feedback loops seem therefore an essential component of interactivity in adding value to customers.

The next communication model shows an example of the opportunity for feedback loops. In Johnson's study (2006), feedback loops were labelled as responsiveness. Responsiveness occurs when the content reaches a higher level of relevance for customers. An illustration of responsiveness/feedback could be found in the traditional communication model as summarised by Kotler (1994, p. 597).

Figure 6: Elements in the Communication Process

The figure originally presented here cannot be made available via ORA for copyright reasons.

Source: P. Kotler, 1994 (Chapter 22, p. 597)

It is noted that the concept of coding and decoding appears before Kotler (1994) as the concept of coding was discussed in the literature as early as 1956 with Jakobson and Halle. In 1977 Hawkes refer to the creation and interpretation of texts as coding and decoding. However these models were based on sending a message to a receiver without a feedback loop.

The first feature to highlight is that the major parties involved in the communication process can be either the company and its potential and/or actual customers or several firms and their customers. The communication process can therefore be either a one-to-many or a many-to-many communication process.

The second characteristic which differs from the one-to-many communication model is the development of feedback channels to receive the response(s) of the customers targeted. The opportunity for feedback is therefore present in this model.

The last characteristic concerns the role of the media (that is the medium) used in the communication process. This media, called by Kotler the “communication tool”, is the vehicle which permits the transmission of the message to the customers. Like in a one-to-many communication process model, the medium is the vehicle.

Similar traditional communication process models with identical characteristics have been developed (Peter and Olson, 1990, p. 461; Wilcox, Ault and Agee, 1989, p. 187).

The marketing question is: “Does the opportunity for feedback in these models lead to adaptability of the behaviours of both the seller and the customer?” The answer lies in the medium that will be used and also the way the marketer will use the medium in question. To illustrate this comment, let’s take the example of mail order. When a customer receives a catalogue to order any items, there is an opportunity for feedback e.g., a phone number or an order form. However the offer from the marketer may not be adapted at all in the customer’s feedback. This is because the feedback that the customer can give is restrained in a closed transactional framework set up by the marketer.

As a result, the feedback characteristic is present in this model but does not allow for the other characteristic of interactivity, namely adaptability. Hoffman and Novak (1996, p. 52,

53) suggested that this feature which describes the communication between people through a medium i.e., when the medium is only a vehicle, might be known as “person interactivity”.

When the medium is a transmission vehicle only its role is to conduct the message sent. It is therefore not interactive by itself because its role is only to connect two or more parties in the communication process. However - even if the medium is not interactive by itself - it could still allow for an interactive communication if there is an opportunity for feedback. Later, degrees of interactivity will be discussed and each medium categorised as having high, medium or low degrees of interactivity.

Adaptability

The following communication model depicts the adaptability component that seems to be necessary to reach a higher level of interactivity.

Early authors of the Internet as a marketing channel considered it to be a new model which they labelled ‘hypermedia CMEs’ (Computer-Mediated Environments) (Hoffman and Novak, 1996, p.53) and defined as follows:

“ A dynamic distributed network, potentially global in scope, together with associated hardware and software for accessing the network, which enables customers and firms to (1) provide and interactively access hypermedia content (i.e., machine interactivity) and (2) communicate through the medium (i.e., person interactivity)”.

The following model has been developed by Hoffman and Novak (1996, p. 53) and represents an advance on Steuer's (1992) communication model which excluded the notion of a mediated environment.

Figure 7: A Model of Marketing Communications in a Hypermedia CME

The figure originally presented here cannot be made available via ORA for copyright reasons.

Source: Hoffman and Novak (1996, p. 53)

Back in 1996, the novelty of this approach lay in the perspective that the prime relationship of the company(s) and the customer(s) is with the mediated environment and not directly between themselves. This means that the communication is both through the medium (person interactivity) as well as with the medium (called machine interactivity). Consequently in this particular model, the medium is both a vehicle and a mediated environment. This model has advanced through its application to organisational contexts (Peters, 2006) and the semantic

web literature (Palopoli et al., 2006) and is the basis of later theorising on the nature of communication on the Internet.

In this model what is new is the introduction of the concept of machine interactivity. Hoffman and Novak (1996, p. 53) reported the definition of Steuer (1992, p. 84) as follows:

“...the extent to which users can participate in modifying the form and content of a mediated environment in real time”.

In effect the machine becomes the intermediary between buyer and seller. It is the characteristics of this new medium that enables a degree of disintermediation to occur. Both the company and the customer communicate in the first instance with the medium. The customer interacts with the medium because of his control over the content of the message sent. This is the case when the medium is a hypermedia CME. In the Steuer (1992) model of a mediated environment, where the sender and the receiver communicate in the first instance and primarily with the mediated environment with which they interact i.e., with communications technology - this feature of being able to modify the content and the form of the message is called “machine interactivity”.

As a result this machine interactivity can create value by allowing customers to participate in a more active way in working together with the marketer in meeting their own needs. Rowley and Slack (2001) refer to permission marketing whereby the customer agrees to share information about themselves for retailers to target their offer to their most relevant needs and wants. They also described this as a type of co-creation marketing in which both parties shape the marketing mix. Dell Online gives an example of this active participation from the

customer by providing the customer with the opportunity to configure their own system and diagnose breakdowns. This model introduces one of the main characteristics of interactivity, namely adaptability.

In addition in a many-to-many communication model, the attitude of the customer is active in the sense that his participation can happen through feedback loops. In this instance, a many-to-many communication process model such as the Internet is interactive because the customer is free to answer back to the company. As a result this type of model allows for an opportunity for feedback. By its design, for example, the opportunity for feedback loops also permits the company to be more adaptable towards customer expectations. Consequently many-to-many capabilities is a necessary characteristic of a communication model which is interactive.

Response Contingency

Response contingency requires a communication process that has the characteristics of a many-to-many communication model and to exchange information in real time. These characteristics facilitate the convergence of the conversation towards consensus. For example a convergence on consensus takes place when the parties understand each other and reach an agreement due to a mutual benefit. In this particular case the conversation converges. The parties have reached a certain intimacy in the dialogue. One of the characteristic of interactivity is that complex conversations may converge efficiently in comparison to other communication media.

An illustration of the importance of a convergent communication can be found in the marketing services literature. In services, customers are often active participants (Zeithaml, Parasuraman and Berry, 1985; Lovelock and Gummesson, 2004). As a result of this participation, the satisfaction of customers depends not only on the performance of the service provider but also on how customers perform (Bateson, 2002). However customers' performance will differ based on their degree of expertise (e.g., novice versus expert customers). To achieve customer satisfaction, the aim would be to understand customer behaviour during their experience to create marketing strategies that will maximise both customer benefits and the efficiency of the transaction for the seller. To that end, Bateson (2002) suggests a model of customer behaviour, which he calls script theory. The origin of the script theory is to be found in the definition of Smith and Houston (1985, p.214):

“Scripts are one type of the broad classification of memory structures... first, a script contains a set of component actions, and second, those actions are related in a causal temporal sequence”.

Examples of such scripts would be dining in a restaurant or making a bank deposit.

This script concept is based on the premise that customers use a set of premeditated actions that are related to an event. For example when buying online, the customer is mentally aware of what to do next. An Internet shopping script could be logging in, browsing, checking out and paying. This mental script could be different if the customer is buying online for the first time than if the customer is familiar with the technology. Marketing therefore needs to create a script adapted to different customer segments based on their level of expertise (Orsingher, 2006).

It could be possible to find out if within segments, some demographics and lifestyle behaviours are similar. Bateson (2002) argued that following a script increases predictability of the outcome of the service for the customer as well as a degree of control on the service outcome. Thus for both the seller and the customer, efficiency is achieved and satisfaction is increased. However for the communication to converge to that degree of efficiency and satisfaction, all the different functions of the service company i.e., operations, marketing and human capital management must converge on the same script.

In the same vein, Iqbal, Verma and Baran (2003) suggested that companies need to adopt different online marketing strategies for low, medium and high familiarity online customers because based on their level of expertise, their preferences vary. For example low-familiarity customers seem to attach more importance to the availability of traditional features when shopping online (brick and mortars back up, access to professional staff if needed). High-familiarity customers look for convenience – they want to access real-time information, anytime, anywhere and are less sensitive to price than the rest of the online shoppers group compared with offline customers. This is evidence for the notion that the starting point for companies and customers to converge towards the same “script” is for companies to understand the customer’s preference structures.

However the interactive capability of the Internet can also lead to an outcome of the conversation that can be divergent or even static. An example of a divergent communication is when one of the parties cannot fulfil the others needs or the other party does not wish to commit to the other. A second reason might be that the parties do not understand each other from the beginning of the conversation because there is a high level of perceived need

comprehension but low level of actual need comprehension. This can be called mistaken understanding. The outcome of the discussion is therefore divergent.

An example of a static communication is when the parties are not convinced of any mutual benefit and, they may adopt a neutral attitude. The outcome of the conversation may therefore be static.

Looking at these three examples, the marketer's objective would be to achieve convergence in an interactive dialogue relationship with customers. However all of these outcomes are of interest for both the marketer and the customer.

For the marketer because a convergent dialogue will provide opportunities for a relationship that allows for increased customer value and lower customer cost. The marketer can also improve on-going offerings and performance by defining customers' preferences in terms of the relative importance given to each attribute that form the customer preference structure for a particular need. With respect to a divergent dialogue, the marketer is given the opportunity to assess organisational competencies, find new ways of doing things, of advertising a product or service and of processing information about customers.

From the customer perspective this property is essential too because customers are offered the opportunity to assess the value they can get from a company. They are therefore more confident to make the choice of either committing themselves to the company or switching. This is important because switching from one company to another can be a costly experience which may involve a lot of the customers time.

One way of tying the various notions of interactivity together is demonstrated in the following matrix. This matrix suggests that one outcome of interactivity is whether the “conversation” between two or more parties results in a convergent or divergent transfer of knowledge and intent.

Figure 8 : Matrix to Categorise Relationships Based on Communication Frequency and Direction of Understanding

Level of Persistence / frequency	High	(4) Waster • High Cost • Antipathy • Unfruitful Relationship	(1) Partnership • Loyal ongoing relationship
	Low	(3) Deserter • Non-existent contact • Unwanted relationship	(2) Underperformer • High satisfaction but low
		Divergent	Convergent
		Level of mutual understanding	

Source: this study

- (1) The Partnership sector represents the ideal relationship between a company and its customers. Interactive technologies such as the Internet, as defined previously, could

be the means to achieve such an ongoing relationship with customers. So the question is for example – “does the Internet bring customers to the Partnership sector?” If the company consistently performs best in industry on the attributes that carry the highest utility values for the customer it may be more likely that the customer will engage in a loyal ongoing relationship.

- (2) Regarding the Under Performer category, the challenge for the company will be to find out if the interactivity capability of the Internet can increase the level of frequency of transactions with customers by adding more value to them. This category of customers may occur when the company is only looking at the level of expertise as opposed to defining customer preferences.
- (3) In the Deserter case, the company should probably just realise that it cannot be everything for everyone: one size does not fit all.
- (4) Looking at the Waster sector, the company may find that certain types of interactive technologies such as the Internet can help the conversation to converge. Otherwise it is probably a waste of money to continue communicating.

As will be theorised later, partnership is the most likely basis for customer retention.

The next marketing question is therefore to determine if effectively The Internet – considered as an interactive technology – has better opportunity to lead to effective convergence and how? Will companies hold their customers longer with the Internet technology? Does the

interactivity capability of the Internet add value to the customer at each stage of his overall experience?

An answer was suggested by Deighton (1996, p. 151) who viewed:

“... a shift from broadcast marketing to interactive marketing. Mass-marketing concepts and practices are taking advantage of new ways to become more customized, more responsive to the individual.”

If effectively the interactive capability of the Internet can achieve the result of being one-to-one with the customer, it may create additional value.

As the degree of interactivity of the Internet leads to a situation where the Internet context becomes similar to face-to-face communications, it is possible that the quantity and quality of information exchanged through an electronic communication such as the Internet can be more significant than through one person to another person. In more general terms the aim is to show how the Internet context has an impact on the marketers' relationship with the customer.

Instant Response

In addition, Deighton (1996, pp. 151-152) differentiated low-tech interactivity (e.g., broadcast advertising) and high-tech interactivity (such as the Web). His analysis was based on the dimension of time, which has to do with the speed of the communication. For example

a sequence of advertisements, followed by market research, followed by an amended advertisement, involves, according to Deighton (1996), low-tech interactivity. It is not an efficient interaction because the time to circle the loop is long, but a loop that allows this convergence to occur is interactive. In addition Alba et al (1997) defined the response time for interactive home shopping (IHS) as being immediate, like in a face-to-face communication. It is not unrealistic to consider Internet time as being effectively instantaneous. This is real time communication.

Conclusion

This discussion on the characteristics of interactivity has identified three main areas of difference between communication models implemented in the traditional marketplace and communication models as applied to the Internet with respect to the interactivity construct. These differences are (1) feedback loops that provide the seller with an opportunity to adapt its products or services to changing customer preferences; (2) adaptability, which is the ability for the customer to modify or to have modified a product or service based on their requirements; and (3) that these communications can happen in real time. From the discussion of these communication models, a definition of Internet interactivity is beginning to emerge.

The next section gives attention to another well discussed effect of Internet interactivity: the 'flow' construct. The usefulness of the following discussion lies in the possibility that the

flow construct could maximise the benefits of an interactive communication model on the Internet and in turn may influence online customer behaviours.

The Flow Construct

Introduction

The previous sections highlighted some characteristics that differentiate the Internet from traditional marketing channels such as low cost global connectivity and interactivity. For example the previous interactivity discussions demonstrate that the underlying characteristic of a many-to-many interactive communication model is that customers not only interact with companies and other customers but also with a computer enabled medium. In the context of these differences, customers seem to engage differently with online companies (Hoffman and Novak, 1996). Understanding how to engage customers effectively lies in being able to create a compelling online customer experience. One way of analysing this compelling experience is known as the flow construct. Consequently exploring the components of the flow construct could help reveal what is important to the online customers' experience (Hoffman and Novak 1996, Novak, Dholaki and Bagozzi 1999, Hoffman and Yung 2000).

This section starts by examining the set of components that define flow. The section continues by examining the main predictors of flow. The section also sets out the ground for a recurrent debate that exposes two views – experiential behaviour versus goal directed

behaviour. Which one of these views could generate higher loyalty rates? The section concludes by discussing various consequences of flow towards future purchase intentions.

Defining the Flow Construct

The flow construct has been studied for almost 30 years starting with Csikszentmihalyi (1977, 1990, and 1997) who is considered as a pioneer of the construct of flow. Flow is discussed in a variety of domains. For example Csikszentmihalyi (1997) explored the relationship between flow and happiness over time in relation to their activities and argued that flow does not always result in happiness. However in this section, the focus is on the flow experience during navigation of the Internet.

A comprehensive definition of flow is given by Csikszentmihalyi (1997). In his study flow is defined as a set of components that include clear goal, feedback, challenges, concentration and focus, control, loss of self-consciousness, transformation of time and the activity becomes auto telic. Hoffman and Novak (1996) used a broader concept of flow derived from the above definition of Csikszentmihalyi (1977, 1990) to develop a model of online network navigation. In their analysis flow is defined as the “process of optimal experience”. To complete this definition Trevino and Webster (1992) suggested that flow could be measured by four components namely control, attention focus, curiosity and intrinsic interest.

In addition Mathwick and Rigdon (2004) found that flow defined as a state of mind has an effect on the customer attitude formation process. This contrasts with findings from

Zeithaml, Parasuraman and Malhotra (2002) that argue that flow does not play a decisive role in online purchase context. This discussion of flow is relevant as “facilitating a state of flow” is seen as an important variable “to creating a commercially compelling website” (Hoffman and Novak, 1996) to ultimately attract and hold online shoppers. In a broader sense it helps understanding customer behaviour in an Internet channel.

Some Predictors of Flow

These previous definitions of the flow construct result in determining a set of variables that could affect the customers’ online experience and thereby influence their future purchase intentions.

Ghani and Deshpande (1994) and Novak, Hoffman and Yung (2000) have found that flow was related to challenges. For example, challenges were found to help focus online attention. The implication is that the more customers spend time online, the easier it becomes for online retailers to influence customers’ behaviours (Hoffman and Novak, 1996; Novak, Hoffman and Yung, 2000).

In addition to that, two other variables namely control and skill were proved to independently contribute to a positive flow experience (Ghani et al, 1991; Ghani and Deshpande, 1994). Other authors highlighted ease of use as a perceived benefit for customers when visiting a website (Trevino and Webster, 1992; Novak, Hoffman and Yung 2000).

Other models based on channels or segments narrowed the definition of the variables affecting the flow construct to two constructs – skill and challenge (Ellis et al. 1994, LeFevre 1988, Nakamura 1988, Wells 1988). These flow channel segmentation models are based on Csikszentmihalyi (1997) definition of flow. These models were extended by adding two intermediate segments namely control and arousal (Massimini and Carli 1988, Ellis et al. 1994). From these concepts Novak, Hoffman and Yung (2000) derived their model of the variables affecting the flow construct that make an online experience compelling. These variables include skill, control, challenge, and arousal, interactive speed, importance, focused attention, telepresence and time distortion.

Novak, Hoffman and Yung (2000) findings demonstrated that challenge (a certain degree of excitement) is needed in order to focus attention online. Online concentration and enjoyment are consequences of flow while greater challenge, skill and control are predictors of flow. In turn interactive speed (as opposed to attention) seems to have an impact on challenge.

In addition online product search has been described as a perceived benefit for online customers as the Internet allows them to search product information in a more efficient way than in the marketplace. However the Novak, Hoffman and Yung (2000) results showed that online product search does not necessarily offer the right level of challenge and arousal. Additionally, as a result of more information online, price competition may increase (Häubl and Trifts 2000, Lynch and Ariely 2000). Novak, Hoffman and Yung (2000) argued that providing a compelling online experience should reduce price sensitivity. However these findings need to be moderated as they may be different depending upon the intent of the

online customer experience – experiential oriented behaviour or task oriented behaviour (also known as goal directed behaviour).

Experimental versus Goal Directed Behaviour

Some authors argued that there is a positive relationship between experiential behaviour and time spent being connected versus goal-directed behaviour (Holbrook and Batra, 1991). These two observations result in the possibility that a potential customer with an experiential attitude will spend more time connected without the outcome being a resulting purchase. However Hoffman and Novak (1996) note that the more time a customer will spend enjoying their experience on the Internet, the more they are going to learn.

With regards to the learning process, Maes (1994) suggested that intelligent interface agents (e.g., Google, Alta Vista search engines) could provide an aid for decision making. Going further in explaining this point, the more familiarised this customer is going to be with the medium and find it easy to use, the more influence the marketer will have on their behaviour (Novak, Hoffman and Yung, 2000). Additionally, the more the customer is going to be efficient using this medium. This may all convert into higher levels of loyalty. Hoffman and Novak (1996) concluded that the consequence of this behaviour could lead to a purchase outcome in due course.

Conversely, customers with task oriented activities such as online search for both product information and purchase relate strongly to skill and control (Novak, Hoffman and Yung, 2000).

Although the above discussions tend to suggest that flow is more likely to occur during recreational activities than goal directed purposes (Novak et al. 2000; Holbrook and Batra, 1991), Hoffman and Novak (2003) findings suggest more evidence for flow when the site is more task-oriented rather experientially orientated. In the same vein, a study by Holbrook and Batra (1991) shows that goal-directed behaviour customers spend less time being connected, but buy more, versus experiential behaviour customers, who spend more time on the website but buy less.

Conversely, the Mathwick and Rigdon (2004) study seems to show the reverse by arguing that escapism and enjoyment have a positive effect on online purchase behaviour. However different research methods were employed. Holbrook and Batra (1991) measured customers' viewing responses to television ads. The effects of ads on customers were analysed across ads while Mathwick and Rigdon (2004) analysed the effects across different respondents' types. This area of research has not yet reached consensus.

One conclusion that could be drawn from this analysis is that companies should try to make the customer's flow experience challenging in terms of enjoyment, not extremely complicated, to attract different levels of skills to start with and give the customer a sense of control. Thus companies' Web sites could be interactive for the customer to be active and

enjoy themselves by offering games, richness of information, transparency (e.g., chat rooms), convenience and feedback.

Some Consequences of the Flow Construct

One of the consequences of flow is, as discussed above, customer learning. Another consequence of flow is perceived behavioural control (PBC). In other words, what features are important to the customer and the degree of control they have while navigating the website. Ajzen (2002) defined PBC as a construct composed of two elements: self-efficacy and controllability. What is relevant is that PBC directly affects behaviour.

Thus Hoffman and Novak (1996) concluded that customers using the Internet depend on their motivations and ability (i.e., behaviour control). This in turn is influenced by their confidence in using the medium. Therefore what is perceived is more important than what is really controlled (Ajzen, 1988). Consequently, companies could help the customer to feel a sense of control over their Web site that may result in a positive and gratifying state of mind for the customer. This enjoyment and positive attitude could in turn result in future usage intentions. This would be a positive consequence of flow.

The important point is that a customer (with experiential behaviour intentions), by experiencing a positive flow and positive perceived behavioural control will lead them to spend more time visiting the Web site to search for information. This in turn could lead to a

positive learning curve that in turn could lead to goal-directed behaviour (i.e., purchase outcome).

Another consequence of flow would be “perceived play”. Mathwick and Rigdon (2004) found that “perceived play” is a relevant factor that makes the online experience enjoyable. This in turn enhances the customer attitude towards the website and the brand. This experience is influenced by the navigational challenge (stretch the customer capability), the customer skills (knowledgeable enough to find what they are searching for) and the degree of decisional control perceived by customers (flexibility in the way they interact with the Internet and the degree of control over their own decisions).

As discussed above the literature seems to argue that achieving flow on the Internet leads to a high level of concentration and enjoyment that put the customer in a frame of mind where for example time and price may become less relevant. As a result of an extremely gratifying online experience customers may be willing to pay more, to search less for alternatives, to spread a positive word-of-mouth and ultimately to repeat purchase with the same online seller.

Moreover, Mathwick and Rigdon (2004) ask respondents about how involved they are in searching, how enjoyable it is and their attitude towards the company for example but they do not seem to investigate the relative importance of flow to the customer preference structure. They therefore do not compare the utility values of the perceived benefits of a product or service with the utility value of flow. For example it could be that for high priced products that involve an important decision, the flow process may not be as relevant as for

lower commitment products. It could however be argued that flow in terms of “perceived play” is relevant for a customer acquisition strategy as first time buyers expect an enjoyable online experience with a particular website or brand. However once the transaction is made and the goods are delivered or the service experienced, customer may consider other factors to be more important than flow. This is a transaction based view that these authors do not seem to take into full consideration. Flow can be viewed as simply one further attribute in the buyer’s preference structure. What relative weight flow has in the bigger picture formed by the preference structure seems to be an omission in the extant discussion of flow.

Could it be that the construct flow is leveraged by the interactivity characteristic of the Internet in the pre-purchase evaluation cycle? Flow could also be seen as a component of the exchange as it impacts on the benefit aspect by providing the customer with a high level of enjoyment and a sense of control that could lead to self-gratification. The literature does not seem to highlight that flow could also occur at the transaction stage and not only during the pre-purchase stage. It also impacts on the input cost (the price of a product or service) by making the customer less price sensitive. In addition flow could be seen as a component of the post-purchase customer evaluation cycles as it could impact on fulfilment because an easy return and a quick delivery are perceived as part of a compelling online experience (Novak, Hoffman and Yung, 2000).

The limitation of these previous studies is that flow is measured in a general context. For example Novak, Hoffman and Yung (2000) identified various attributes for Internet shopping ranging from easy payment, easy ordering, and easy returns, easy to cancel, to quality information for example. Their study showed the proportion of customers checking each of

these attributes against the constructs selected for measuring flow such as skill/control for example. The results highlighted easy ordering as a valued criterion for customers to have a compelling online experience while reliability, security and low price are not as important factors as the previous ones mentioned. Does it mean that easy ordering could be classified as the most important preference against which the company needs to perform best in its industry - while the other set of preferences (e.g., reliability, security and low price) are preferences against which the company only need to provide an adequate service? Not necessarily as the customer preferences may change across products and services. For example, the most important preferences for buying groceries online may not be the same as those for buying an airline ticket online.

Conclusion

The above discussions have sought to better understand the role of the flow construct in online environments. The flow construct seems to itself be related to other constructs such as involvement and playfulness. Some authors have identified and empirically measured a set of key constructs related to flow that include for example interactivity, involvement, focused attention, skill, control, challenge and arousal. Understanding which of these constructs could lead to flow experiences is a current marketing question. In addition there seems to be an ongoing debate in the literature in determining which one of goal directed or experiential processes could better lead to compelling online experiences. What is less clear from the current literature is how the benefits to the customer of a flow experience relate to the

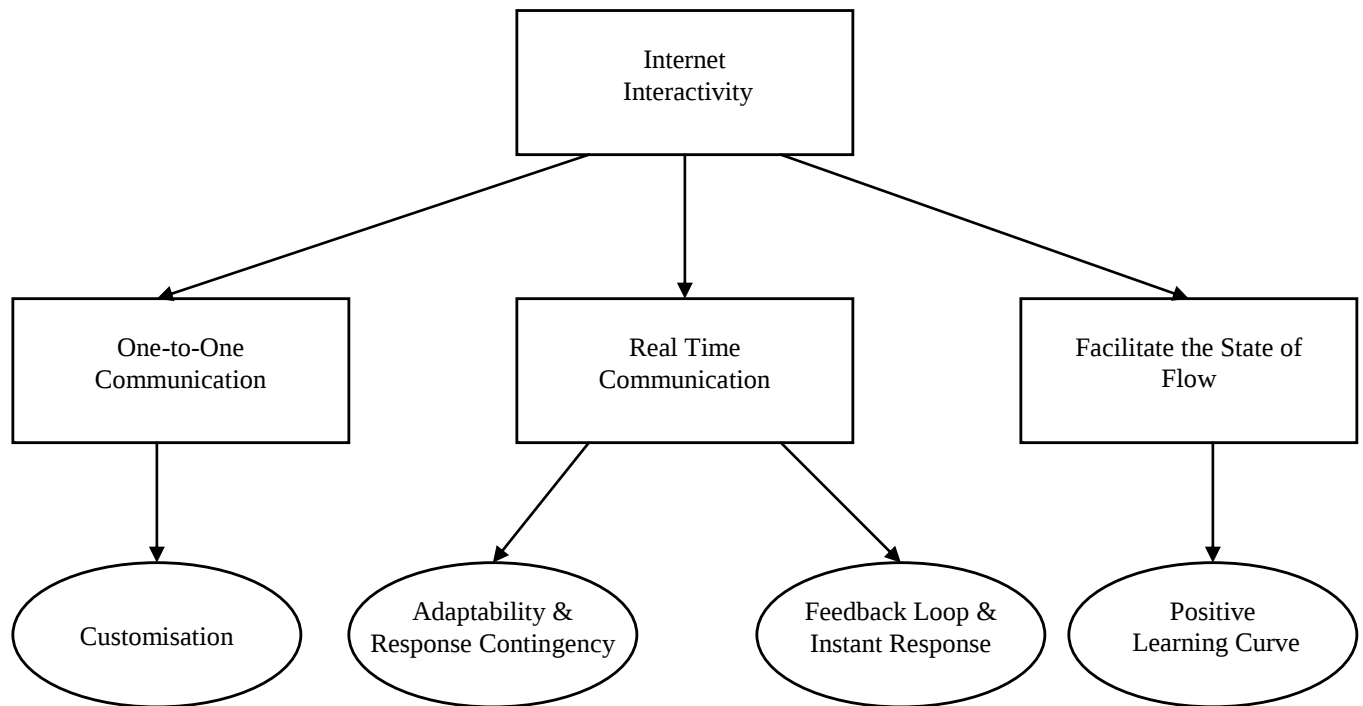
customer's overall preference structure – how relevant is it to a particular purchasing context?

Towards A More Comprehensive Definition of Internet Interactivity

This section embraces the various perspectives discussed previously to help identify the main characteristics of Internet interactivity. A diagram is developed to highlight the relationships between these dimensions and to summarise the discussions of Internet interactivity.

The definitions discussed in this section so far lead to outcomes of interactivity namely real time communication, response contingency, adaptability and feedback loop. These outcomes of interactivity are leveraged through the vast connectivity offered by the Internet. These outcomes of interactivity are shown in the following diagram.

Figure 9: An Interactivity Path Diagram



Source: this study

The above diagram suggests that there are three main components of Internet interactivity (e.g., real time communication) through which the combined sets of effects (e.g., response contingency) could result in an increase in value creation for customers.

The purpose of this path diagram is to suggest a model that highlights the primary position of interactivity as a distinct feature of the Internet channel. In this way it ties together the themes discussed so far in the literature.

SUMMARY

This chapter discussed two capabilities that characterise the Internet channel namely low cost global connectivity and interactivity.

It has been argued that the main characteristic of a change in the nature of contact between a company and its current and potential customers is a separation of the content, from the context, from the infrastructure. The outcomes of this separation were discussed.

The discussion emphasised the a priori conditions for the emergence of low cost global connectivity and then related low cost global connectivity to the separation of content, context and infrastructure.

The second main dimension - interactivity, was explored in detail because of its unique aspects in relation to the Internet. The attributes that characterise interactivity on the Internet emerged from a discussion of different types of communication models. This discussion highlighted the perspective that interactivity is an important component of the Internet context as it leads to a set of benefits for customers such as feedback loops and response contingency. However what is not fully discussed by the authors is the relationship between specific interactive attributes relevant to customer preference structures.

Another dimension of interactivity – the flow construct, was discussed as it may determine how some components such as feedback could influence online purchases. Some predictors of flow are examined through the study of prior empirical research. Predictors that seemed to

contribute to a positive flow experience include challenges, control, skill, arousal, and ease of use. However it is argued in the literature that these predictors of flow depend upon the intent of the online experience – experiential behaviour versus goal-directed behaviour. Next consequences of the flow construct such as, customer learning and perceived play, were discussed in relation to online customer behaviour. It was concluded that these previous studies do not seem to integrate their findings into the overall structure of customer preferences.

Finally by embracing these different perspectives on the characteristics of interactivity, a more comprehensive definition has emerged.

The aim of the discussion in chapter 1 was to combine some of these explanations of the capabilities of the Internet as a first step in developing a theoretical model that shows the relationships between these elements and customer preferences. It is from the combination of these Internet capabilities that unique benefits for the customer may emerge compared with other traditional marketing channels.

How can companies turn the unique capabilities of the Internet (facilitating as it does a change in the nature of contact, new kinds of interactivity and a lower cost global connectivity) into offerings relevant to the customers with whom they want to do business? To achieve this objective, customers' preferences need to be understood. The following chapter is a discussion of the importance of understanding customer preferences.

CHAPTER 2: HOW MIGHT INTERNET CAPABILITIES CHANGE CUSTOMER PREFERENCES?

INTRODUCTION

In chapter 1, some capabilities of the Internet channel were explored in an attempt to develop an understanding of the digital market place where an increasing proportion of customers are making their purchasing decisions. Based on the arguments developed by various authors, it was concluded that the Internet channel had two relevant capabilities namely low cost global connectivity and interactivity.

This chapter starts by examining two perspectives on how customers make decisions: revealed versus constructive preferences. This discussion provides a basis for better understanding the evolution of those preferences in relation to the Internet channel.

This overview of conventional customer preference formation is followed by a discussion on identifying the relative importance of those preferences.

The chapter continues by exploring some contemporary manifestations of Internet capabilities on customer preferences. These manifestations of Internet capabilities focus on price, choice and customisation through a discussion on the growth of comparison sites. Another manifestation of Internet capabilities discussed is convenience. These manifestations

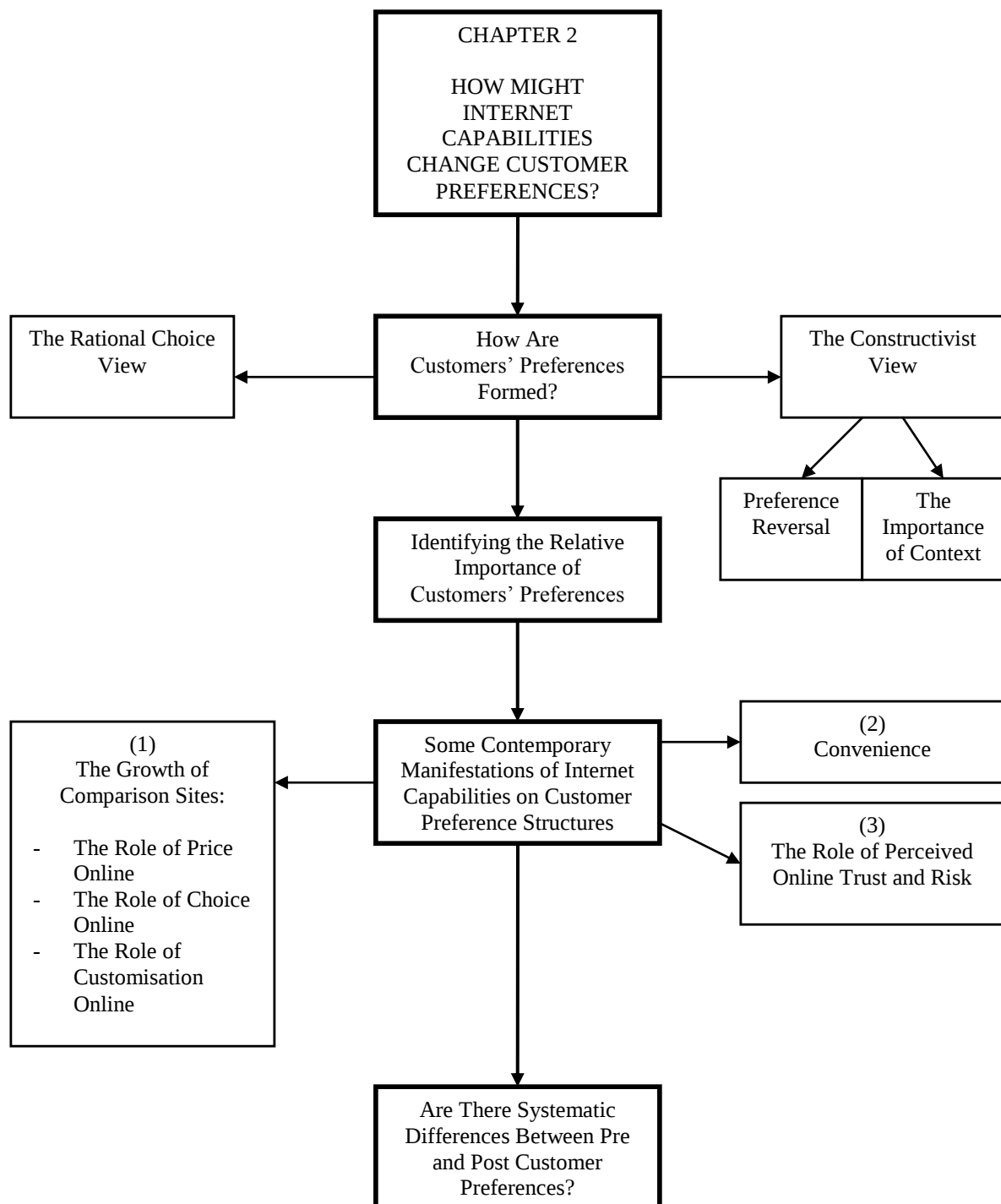
of Internet capabilities have been identified in the literature as being the main perceived benefits for customers that the Internet channel could offer.

Next the role of perceived online trust and risk are discussed as it is argued in the literature that these two concepts play a significant role in the creation of long-term relationships.

The chapter concludes by exploring if there are systematic differences between pre- and post-customer preferences.

The following figure summarises the construction of Chapter 2.

Figure 10: The Construction of Chapter 2



HOW ARE CUSTOMERS' PREFERENCES FORMED?

This section addresses a recurrent debate on customer decision making that resolves itself into two views. In the first view, authors tend to assume that customers have a set of preferences in their memory that they use to trade-off one preference against another when making a buying decision. In this scenario, customers' preferences are well defined and their search for alternatives is based on these pre-defined or revealed preferences. This first perspective is known as rational choice theory (Edward, 1954; Chu and Chu, 1990) which is a generally accepted economic view. However Abdellaoui, Barrios and Wakker (2007) demonstrated that revealed preferences could be reinforced by choiceless utility from direct judgements (non-revealed preferences).

The second view rests on the literature related to the constructive theory on customer's preferences. Authors belonging to this view argue that generally preferences are dependent on a particular context that is determined by a range of various factors which include the number of options and attributes, the competing offerings, inter-attribute correlation, time pressure and others that can affect customer preferences (Bettman and Park, 1980; Tversky, Sattath and Slovic, 1988; Payne, Bettman and Johnson, 1992; Simonson 1993; Slovic, 1995; Bettman, Luce and Payne, 1998). The next two sub-sections provide a brief discussion of the rational choice theory view and the constructivist view. The relative merits of these two views in relation to the Internet capabilities will be discussed.

The Rational Choice View

To introduce the rational choice perspective, examples of customer preferences such as convenience, price and choice are examined over time. In the early twentieth century, the appearance of department stores became increasingly popular as they provided customers with more choice and lower price. Later on the introduction of mail order catalogues also became popular as they increase convenience by allowing customers to shop remotely and at the same time customers were offered lower prices. The development of malls offered customers greater product choice and convenience by extension of the traditional shopping experience.

Later on in the 1960's the establishment of discount department stores were also successful as they provided the customer with low prices as compared with department stores (Christensen and Tedlow, 2000). It seems therefore that increasing convenience for customers and lowering price are winning factors in attracting and retaining customers (Alba et al. 1997).

The next revolution in technology was the appearance of the Internet. Customers have now access to a deeper selection and a greater convenience (Alba et al, 1997). It seems that customer preferences have not changed much since the opening of the first department store to the arrival of online shopping as their main preferences were and still are greater convenience, more choices and lower prices. These facts reflect well defined customer preferences that seem to remain the same over time. This approach is defined by Bettman and Luce (1998, p.187) as follows:

“One approach to studying customer decisions has been to assume a rational decision maker with well-defined preferences that do not depend on particular descriptions of the options or on the specific methods used to elicit those preferences. Each option in a choice set is assumed to have a utility or subjective value that depends only on the option. Finally, it is assumed that the customer has ability or skill in computation that enables the calculation of which option will maximize his or her received value and selects accordingly. This approach to studying customer decisions, often attributed to economists and called rational choice theory, has contributed greatly to the prediction of customer decisions.”

This statement assumes that people are aware of their own trade-offs and preferences and that they make decisions based on this knowledge with the aim of maximising their total utility values. Slovic (1995) criticised this rational approach and in particular the principle of maximisation of utility. This notion assumes that everyone has perfect knowledge of the market and their needs and therefore can maximise their utilities values. Slovic (1995, p.367) argued that “...one’s preferences cannot be represented as maximisation of utility as people’s choice is ultimately influenced by the context in which the choice is presented and by the way people can express this choice”. Other authors such as Fischhoff, Slovic and Lichtenstein (1980), Tversky and Kahneman, (1981) agreed with Slovic’s argument.

This view assumes that, for example, if context is defined as the channel used then the Internet context will draw the customer towards a choice that could be different if using another channel. The preference structure may therefore change according to the channel used. As a result the post preference structure of the customer is influenced by the channel used. However besides the channel used to buy a product or service, it seems that customers generally tend to try to maximise their total utility values based on their knowledge of the context. Even if the customer realises later on with added knowledge that the utility values

have not been maximised, decision makers try to maximise their utilities based on their more or less limited set of knowledge.

In addition Slovic (1995) denies the application of the principle of invariance that implies that customers' preferences are not influenced by any product description or procedure. If the customer has a certain preference structure for a particular product, then this preference structure is not subject to any type of influence (i.e., invariance). This view seems to reflect the way economists build up theories by creating an extreme scenario (e.g., perfect competition) and comparing the results with a scenario in which imperfections appear.

An implication of rational choice theory is that there is no difference between a customer's pre-purchase preferences and their post-purchase preferences. As customer preferences are well-defined in the mind of the customer before an exposure to various factors ranging from the description of options to the channel used, preferences are not influenced by changes of stimuli or by the customer's level of experience within a particular channel. For example Frambach, Roest and Krishnan (2007) argued that purchasing a home mortgage online or offline does not necessarily depend upon the customers' experience on the Internet. This view implies that customer preferences will not have changed with the appearance of the new Internet channel. For example the main benefit of the arrival of the first department store in the early twentieth century was similar to the Internet at the end of the century, more choice for customers. In this example, pre-customer preference is equal to post-customer preference.

The same example could be used for the price attribute seen as main preference for a group of customers. In the early 1960's the main benefit of the first discount department stores was

lower price. This preference might have changed in importance but has not been dropped with the Internet as some customers used this channel to search for lower priced products.

Another example is convenience. Convenience is a preference that existed before the Internet and has remained unchanged with the Internet. For some customers convenience is often one of their major preferences. Convenience, choice and lower price seem therefore to be a stable set of preferences for customers across time and technologies even if the relative importance of each may shift.

What may have changed, however, is what customers understand by convenience, choice and lower price. More particularly what seems to have changed with the online shopping is the level of performance on convenience. For example, by offering a wider selection of products or services, by facilitating price comparisons, by enabling choices to be made quicker and globally, the level of performance on convenience within an Internet context is potentially greater than in the physical market place. Consequently customers might become increasingly demanding as technologies evolve (Wikström, 2005), and the definition of their preferences changes. This suggests that what customers expect in terms of convenience performance has changed. The Internet channel has therefore altered the customers' performance expectations against these three 'stable' preferences. This discussion is an attempt to explore the different ways customers' expectations and preferences have changed when using the Internet channel. How these changes affect customer loyalty is discussed in chapter 3.

The Constructivist View

A radically opposite view to rational choice theory is expressed by some authors, in the psychology literature, who argue that preferences are constructed and not merely revealed (Bettman, 1979; Krantz, 1991; Payne, Bettman and Johnson, 1992; Slovic, 1995).

The roots of the constructivist view can be found in bounded rationality theory. For example Simon (1955) argued that decision making behaviour is better expressed in terms of bounded rationality whereby the decision maker is trying to reach a satisfactory level of achievement as opposed to attempting to reach a maximal level of the utility values. The implication of Simon's work is that the boundary of our rationality is limited and consequently it becomes impossible for someone to maximise their utilities. However when facing a set of options, customers tend to try to maximise their total utilities and when the transaction has occurred they may sense that they have succeeded in maximising utilities in their mind. It is a subjective measure and it could be only later on that customers may realise that they could have improved their utility values further by acting differently.

Later research adopted an information-processing perspective which followed the development of the notion of bounded rationality by producing studies that sought to demonstrate the inadequacy of utility maximisation theory (Fischhoff, Slovic and Lichtenstein, 1980; Tversky and Kahneman, 1981).

Preference Reversal

In line with the information-processing view, some studies have been conducted which demonstrate the preference reversals phenomenon (Lichtenstein and Slovic, 1971; Grether and Plott, 1979; Tversky, Sattath and Slovic, 1988). The preference reversal notion suggests that different methods lead to different responses from respondents and this in turn could change the relative ranking and weighting of the attributes considered. For example in their study, Tversky, Sattath and Slovic (1988) described a survey conducted in a small Middle Eastern country. Respondents were asked to choose between two programs that aim to reduce car accidents. The first program (A) showed a lower number of casualties at a certain price. The second program (B) reduced even more the number of casualties than the first program but at a much higher cost per individual saved.

The first method used was to ask respondents which program they liked best. The majority of respondents preferred program (B) that saved more lives besides the higher cost involved. The second method used was a matching procedure. This method consisted in asking respondents to price program (B) to make both programs equally attractive. The results showed a greater preference for program (A) because the price they chose for program (B) was much below the planned price. The preference structure was therefore different.

The same conclusion could be drawn when using pair-wise conjoint analysis as opposed to a full profile conjoint method. For example in the pair-wise method, respondents are asked to choose a product when only a few attributes describing the product are exposed. In the full profile method, all the attributes concerning the product are revealed. As a result by giving a

full description of the product as opposed to a partial description, respondents may make a different choice. Every time an attribute is added, the relative weighting of each attribute will probably change as well as their ordinal ranking. Another method of evaluating customer preference structures is a choice-based conjoint approach. It is considered as realistic and accurate as respondents make choices from a set of stimuli as opposed to rating or ranking each stimulus separately (Hair et al. 1998, p389). In the two scenarios of Tversky, Sattath and Slovic (1988) survey, respondents were asked to choose stimuli separately while it seems more realistic to assume that customers make their choice from a set of attributes simultaneously.

The characteristics of preference reversal could be summarised as follows (Tversky and Thaler, 1990, p.210):

“First, people do not possess a set of pre-defined preferences for every contingency. Rather, preferences are constructed in the process of making a choice or judgment. Second, the context and procedures involved in making choices or judgments influence the preferences that are implied by the elicited responses. In practical terms, this implies that behaviour is likely to vary across situations that economists consider identical.”

This statement implies that in contrast to rational choice theory, which argues that customer preferences exist before facing a set of options, the constructive view argues that customers form their preference “on the spot” when making a choice and especially if the situation is complex (Simonson 2005, Bettman and Luce 1998). Customer preferences are therefore constructed as opposed to already being there. However this view of constructive preferences does not deny the possibility that some preferences are stable in the mind of the customer. For example a customer that does not eat chocolate will not change his preference depending

on the channel used to buy chocolate or the descriptions of various chocolate brands. It is however arguing that some preferences may differ depending on a variety of factors (Bettman and Luce, 1998).

These general studies may be applied to the Internet channel. For example as the Internet provides customers with greater choice in sourcing for products or services, the perspective of Simonson (2005) and Bettman and Luce (1998) which suggests that in more complex situations customers make their decisions “on the spot” could be applied to the Internet channel. Customers’ purchasing behaviours have changed with the Internet channel (Michaelidou, Arnott and Dibb, 2005). For example their behaviours towards the Internet channel could include more extensive information seeking than in the traditional marketplace, accompanied by a perceived risk in the security of financial transactions.

The Importance of Context

Bettman and Luce (1998) and Tversky and Thaler (1990) point out that constructive preference is highly dependent upon a context. The implication is that the most important attributes in the customer’s mind could be different not only for different products or services but they may depend – for example - upon the seller’s website that represents the context in which the customer is making a decision. Consequently within the Internet channel can be found a multitude of different contexts represented by each company’s website and according to these contexts, customer preference structures may change.

Furthermore, the notion of context could be expanded to the personal present situation of the customer. In this case, preferences would be based on the way customer prioritised their needs and trade-offs and would be made against this holistic set of needs (Srivastava, Alpert and Shocker 1984). The implication is that not only do marketers need to learn about online preferences which are directly linked to an Internet context (i.e., the seller's website) but marketers also need to find out about the background of the customer to better understand the full context within which decisions are made.

Girard, Korgaonkar and Silverblatt (2003) found in their study that customer shopping orientations and demographics were related to the customer online purchase experience. For example a customer with a convenience shopping orientation may prefer online shopping for certain types of products as this customer values time and effort reduction. However the limitation of this approach is that the shopping orientation may change depending upon a context, such as buying occasion or category of purchase. For example a customer may have a convenience orientation approach for buying airline tickets online but in a jewellery shop the same customer will be less sensitive to time. The customer preferences that are determined by his approach depend upon a context and the nature of the product being purchased.

However, Simonson (2005, p.43) argues that learning customer preferences and using the information to tailor the offering is not sufficient.

“Instead, individual marketing means that a marketer provides the customer with cues that the provided offers fit the customer's preferences”.

This suggests that instead of companies fitting the product to the preference structure, they must also seek to influence the preference structure so that it fits the product. The success of this strategy would be dependent on the strength of the customer revealed preferences – are they subject to modifications? Revealed preferences may be strong enough for the customer to search for alternatives if the product currently offered does not provide sufficient utility value as determined by the revealed preference structure.

Some authors argue that either the customer makes a choice based on well articulated preferences or they make a choice based on preferences that emerge from the context (Tversky and Thaler, 1990; Bettman and Luce, 1998; Girard, Korgaonkar and Silverblatt, 2003; Simonson, 2005). However these authors do not seem to consider that the customer could in some circumstances make a choice based on a combination of existing preferences (based on their needs, experiences and likes and dislikes) and constructive preferences that emerge at one point in time. In this case, marketers need to understand existing preferences as a starting point for customising the offer. However existing preferences for a product or service in the physical market place could be different from preferences within an Internet context as the latter would be driven by the capabilities of the Internet context.

Srivastava, Alpert and Shocker (1984) expand the constructive view of preferences by suggesting that the attributes of certain contexts (which include product/service usage) can change customers' preference structures for products and services. They showed that in certain circumstances contextual attributes could provide a high level of predictability on customer choices. What these authors do not explain is that these contexts give rise to felt need(s) which could be the basis for preferences and desired benefits. In evaluating the

Internet as a marketing channel this view suggests that a combination of product and context attributes be used to construct an understanding of customer preferences. This underlines the importance of linking a comprehensive understanding of customer preferences to the Internet context to achieve a robust understanding of whether the Internet can be effectively used as a marketing channel for a particular set of felt needs.

Another form of customer constructive processing is described by Coupey (1994). She argues that when information is poorly organised and when the customer has little information on a product, the customer tends to change the original information displays of the offering to make a better decision. The author defines this constructive processing as restructuring. Customers will probably restructure information displays when about to make an important decision like 'buying a house or choosing a life or health insurance policy' because restructuring requires cognitive efforts (Coupey, 1994, p.97). She classifies restructuring as reproductive decision behaviour and argues that authors that support the constructive view have conducted studies where information displays were well-structured. Consequently according to the context (e.g., the way the information is displayed), customers not only may construct preferences based on the context but they may in addition restructure the information displays that could lead to a different preference structure than the preference structure if they make their decision with the presented information.

Summary

In summary, what is suggested by the literature in economics is that customers are rational when making a purchasing decision in ways where their intent is to maximise their total utilities values. This rational choice view argues that decisions are made based on stored pre-defined preferences.

Conversely the psychology literature argued that (1) customers make their decisions when facing the situation, (2) the way the information is displayed will influence those preferences and (3) that customer's behaviour is determined by the interaction between their ability to process information and the purchasing decision environment that they are facing.

IDENTIFYING THE RELATIVE IMPORTANCE OF CUSTOMERS' PREFERENCES

The purpose of the section above was to understand how preferences are formed in the mind of the customer. For example are they revealed, or rather formed "on the spot" depending upon a context? However an understanding of customer preferences formation does not reveal the relative importance of these preferences. This section looks at how preferences include both key attributes and less salient attributes. These different weightings of attributes make up the preference structure of the customer for a particular product or service.

Understanding the preference structure of customers is a fundamental issue in acquiring and retaining them because – in the context of this research - companies need to find out what will prompt the customer to choose for example the Internet as a buying channel over traditional channels in the first instance, and one company website over another website in the second instance. And those factors which will prompt the customer to make this decision are what Hill (2000) calls the order winning criteria.

These order-winning criteria reflect the potential customer's prioritised preferences. The purpose of identifying these criteria is that they provide a focused target for the company against which to align its resources and competencies. Hill (2000) argues that these criteria are in effect the key competitive dimensions that determine market success. Once the company has identified these order-winning criteria or the single order-winning criterion, managers will need to provide the best service on these order-winning criteria to secure the business of the customer. Therefore high performance on these criteria is assumed to have high explanatory power between companies having high or low customer loyalty.

In addition Hill (2000, p.37) has identified another type of criterion namely, the order-qualifying criterion. These order-qualifying criteria would comprise areas against which the company will need to provide an adequate performance, but not necessarily the best performance, to acquire and retain customers. They are defined as follows:

“Qualifiers are those criteria that a company must meet for a customer to even consider it as a possible supplier. However providing or attaining these criteria does not win orders.”

These order qualifying criteria therefore allow the company to be in the “purchasing frame”.

Moreover both order-winning and order-qualifying criteria may change over time. For example an order-winning criterion may become an order-qualifying criterion and vice versa. In addition the relative importance (their trade off weights) may change over time. These criteria are therefore dynamic external measures to the firm against which it competes for business. The order-winning criteria and the relative distance or weighting between other order-winning criteria and qualifying criteria is important because the larger the weighting the more potential there is for a company to strategically position itself in the long run around those dominant order-winning criteria. Strategic positioning and strategic choice can also be seen as a function of the firm's understanding of attractive order-winning criteria.

In addition it is interesting to note that both criteria (order-winners and order-qualifiers) are needed for the company to grow as further explained by Hill (2000, p.37):

“To provide qualifiers, companies need only to be as good as competitors; to provide order-winners, they need to be better than competitors. However, qualifiers are not less important than order-winners - they are different. Both are essential if companies are to maintain existing share and grow.”

This would suggest that a way for a company to increase online growth might for example lie in the first instance in understanding the relationships of the capabilities of the Internet to order-winning criteria and hence the consequences for customer acquisition and retention. Do the characteristics of the Internet channel allow for superior performance on order-winning criteria than the characteristics of traditional marketing channels?

A working definition of online customer preference structures is the prioritisation of the set of product and channel attributes that form the customer preferences offered within the online

context. The term prioritisation includes both the ranking of the attributes as well as the utility weighting of the attributes.

In conclusion, the customer could start with a set of pre-defined preferences (the pre-purchase preferences). This does not mean that preferences are always well-defined especially when the customer is facing a situation in which the product they are planning to buy has complex attributes which are unfamiliar. After experiencing the Internet channel the customer preference structure may remain identical to the pre-purchase preference structure (strong revealed preferences) or it may have either partially or totally changed as a result of the purchasing experience (constructive preferences). The post-purchase preference structure of the customer may therefore look different (the relative weighting and the ordering of the attributes may have been altered). It is the objective of the next section to explore these possible changes.

SOME CONTEMPORARY MANIFESTATIONS OF INTERNET CAPABILITIES ON CUSTOMER PREFERENCE STRUCTURES

Introduction

The rapid growth of Internet shopping reflects the compelling advantages that the Internet's capabilities offer over conventional brick-and-mortar stores as a sales medium, including greater flexibility, enhanced market outreach, lower cost structures, faster transactions, broader product lines, greater convenience, and customisation (Srinivasan, Anderson and

Ponnavolu, 2002). Some aspects of these implications of the Internet capabilities have been discussed previously. Earlier sections have also explored the nature of customer preferences and the importance of identifying the relative weighting of these preferences.

This section starts by exploring some concepts related to customer preference structures which are influenced by the Internet capabilities. These concepts include discussions on the role of price, choice and customisation online through the lens of the growth of comparison sites. Another manifestation of the Internet capabilities on customer preferences which is discussed is convenience. Finally the importance of trust and some issue regarding perceived risks online are examined in relation to customer choice. This selection is based on what emerges from discussion in the literature as the most relevant factors.

The Growth of Comparison Sites

The Role of Price Online

Various authors have demonstrated that searching for products and services information online is at a lower cost than in physical retail settings (Bakos, 1997; Häubl and Trifts, 2000). In addition to the reduced costs of information search, customers are able to easily access information on a multitude number of products or services, whilst in the traditional physical market place, this reach and rich search would have been more difficult to obtain if not impossible (Evans and Wurster, 1999). This difference between online shopping and the physical retail environment is primarily due to low cost global connectivity. This sub-section

starts by exploring one effect of low cost global connectivity: the emergence of sites that allow price comparisons. It continues by examining another effect of Internet capabilities – the opportunity to resell products amongst customers. This sub-section on the role of price online concludes by discussing customer price perceptions in the customer's choice set.

One aspect of convenient access to online information search is to provide global price comparisons for customers. Kuttner (1998, p.20) argues that “the result (of global connectivity) is fierce price competition, dwindling product differentiation, and vanishing brand loyalty”. Other authors believe that as online customers have greater access to product information, they will tend to shop more on the basis of price (Sinha, 2000). This view is in line with Iqbal, Verma and Baran (2003) who argue that online customers are more sensitive to price than offline customers. However within the online group there is a sub-group of customers – the high familiarity online customers that are the least price sensitive.

In the section on choice, the benefits for customers of search engines and intelligent agents will be discussed. One of the main benefits is the ability for customers to compare various products and/or services from various retailers. These comparisons include price comparisons that provide information on different competitors' prices. An example of a price comparisons search engine is Kelkoo (part of Yahoo). Findings from Trifts and Häubl (2003, p.150), drawn from a student population in Canada in relation to online book retailing, suggest that:

“...under certain circumstances, an online retailer may benefit from providing direct access to uncensored competitor price information within its own electronic store. In particular, doing so may influence a customer's trust in, and long-term preference for, the retailer.”

For an online retailer to provide information on competitor's price within its website could (1) enhance customers trust towards this particular retailer, (2) increase the long-term preference for this retailer and (3) this increase in trustworthiness might lead to an increase in the long-term preferences of customers for this retailer. In addition Trifts and Häubl (2003) findings highlight the influence of the role of the market position of the retailer. For example to maximise the benefits of including competitors' price comparison, the retailer needs to occupy a moderate position that is not significantly superior or inferior in comparison with other competitors (Trifts and Häubl, 2003).

For example if the retailer's prices are much higher than the competitors' price, this retailer is exposing the possibility that they are not competitive in terms of price. Therefore unless the retailer in question carries additional benefits, customers may tend to choose competitors with a better price. If the retailer is positioned in the upper level in terms of price, it could be more beneficial to differentiate its products by highlighting additional perceived benefits to customers rather than showing competitors' prices. On the other hand when the retailer is lower priced than competitors, customers may lose trust in the perceived benefits of the products on sale. Trifts and Häubl (2003) suggest that their findings are in conflict with the success of websites such as eBay where price competition is fierce and customers seem to trust the context (however the authors seem to ignore the peer to peer relationship of users of eBay).

Trifts and Häubl (2003) conclude that the inclusion of information on competitors positioning in terms of price does not seem to be beneficial for all retailers if their positioning is not in the middle relative to the competitors positioning within an industry. However it

could also be argued that a retailer that occupies a lower cost position may perceive some benefit in exposing its competitors' prices.

Trifts and Häubl's (2003) findings can be compared with Tesco's price comparison service which stresses the very aggressive position of Tesco on price in comparison with competitors (Tesco Price Check, 2007). Therefore the competitors' price comparisons are used to maximise customer benefits by adopting a significantly superior position compared with competitors in terms of price savings. In addition, Cooper (2006) described the success of a new comparison site - mysupermarket.co.uk - specialised in online grocery sales (comparing prices from Tesco, Asda, Sainsbury's and Ocado). In 2007, mysupermarket.co.uk evolved by allowing customers to shop with one of the four online supermarkets and at the same time, customers accept or not suggestions to save more by switching online supermarkets and decide where to send the trolley at the end once shopping is completed (mySupermarket, 2007). In this example, online retailers do not wish to be positioned as moderate but rather as the one offering a superior position in terms of overall savings. However it could be argued that this comparison strategy will be most attractive to those customers who are price driven by contrast to brand driven customers who may not be willing to choose alternative products on the basis of price. Moreover with this comparison price strategy, retailers might tend to adjust their prices to competitors and as Gatti and Rupert (1999) observed, sellers online tend to become 'deadlocked'. This suggests that the inclusion of price comparisons may positively influence customer preferences if price is one of the most relevant attributes in the purchasing decision.

Trifts and Häubl (2003) do not seem to place sufficient emphasis on the overall preference structure and the buying context in determining the relative advantages or disadvantages of allowing customers to compare various price levels.

In addition, Trifts and Häubl (2003) argue that when using the assistance of intelligent agents, customers will attribute the benefits of search effort to the Internet agents. Similarly they argue that if online retailers provide customers with the same kind of services as the electronic intelligent agents, then the benefits of such market price comparisons will tend to be attributed to them. This remark assumes that Internet intelligent agents and online retailers are viewed and trusted in the same way. This does not seem to be true as electronic agents do not sell their own products; the relationship between price comparisons, trust and long-term customer preferences is not moderated by the position of the retailer relative to its competitors in the industry. As a result the effect of price comparisons may only have a damaging effect on an online retailer as opposed to an Internet agent as the agent does not have any strategic position towards the products shown on its website.

Trifts and Häubl (2003) research proposes that the effect of the provision of access to competitors' price is long-term as they suggest that in the short-term, some sales could be lost. If the long-term goal is to build up lasting relationship with customers then the benefits of such price comparisons may lead to an increase in customer loyalty.

Another effect of Internet capability - low cost global connectivity – is that the cost of transferring products between customers may be lower online. The implication is that it is easier to resell products amongst customers. To that effect, Gopal et al. (2006) found that the

role of price online has changed the dynamics of retailers' sales promotion. For example, customers will buy a large quantity of products which are 'deeply discounted' to then resell them to an online auction like eBay. This is an effect that retailers might have not expected and that needs to be considered in their marketing strategy.

When comparing prices charged for books and CDs on the Internet with prices in conventional stores, Brynjolfsson and Smith (2000) found that prices online are lower than offline by 15.5% for books and 16.1% for CDs. These authors ran the same test by including tax, shipping and handling charges. The results were identical to the first series of test that is lower prices on the Internet. In addition, price adjustments are smaller online than offline.

The role of price online tends to depend upon customer price perceptions. For example Pingjun (2003) conducted empirical analysis and showed that customer price perceptions are more favourable for early entrants and as a result these online retailers can charge higher prices and maintain a good image. However it could be argued that as the market matures, customers' price perceptions will evolve and these new entrants might lose their advantages as customers learn to trust other retailers that charge lower prices.

Another effect of customers' price perceptions is discussed by Chiang and Jang (2006). These authors argue that for online hotel booking, if the price offered by a hotel is lower than competitors' price or their own expectations of price, then their perception of quality may be low. However they also find that price sensitive customers tend to have greater purchase intentions.

The Role of Choice Online

Alba et al. (1997) suggested that customers prefer retailers (catalogue or online) who offer “a vast selection or many alternatives to compare”. Biswas (2004) explained that one of the main effects of the Internet capabilities is the vast amount of information available to customers. Perhaps this could explain why online searching is a predominant activity as the Internet is an important source of information for customers (Ratchford, Lee and Talukdar, 2003; Klein and Ford, 2003). Even if a transaction is taking place offline, buyers may still undertake a pre-purchase search online. Therefore online search for product information could be considered as a relevant dimension of choice. The ‘Long Tail’ literature emphasises the importance of online choice as the Internet channel allows customers “to locate, evaluate and purchase a far wider variety of products than they can via traditional brick-and-mortar channels” (Brynjolfsson, Hu and Smith, 2006, p.67). For example, a typical large traditional store may carry 36 different types of digital cameras against 213 for a large online retailer. The numbers for books are even more impressive as a store can carry up to 100,000 books versus 3,000,000 for an online retailer. There are criticisms of the Long Tail particularly in the application to certain product and service categories and the practical problems of aggregating many small niche products on the Internet (Nussbaum, 2006).

Different groups of customers may prefer different features of online searching. For example Iqbal, Verma and Baran (2003) found that online customers as opposed to offline customers not only value the breadth of information but also the quality of information. In addition these authors found that within the online customers group, the high familiarity customers, value real time information most (rather than the availability of in-depth research and

analysis). It seems that segmenting groups of customers into sub-groups of customers in terms of their search preferences helps to refine the understanding of the importance of this function. Similarly Brynjolfsson, Hu and Smith (2006) concluded that the diversity of preferences online is greater than offline because online customers may be more inclined to search for niche products. However with the increasing number of customers on the Internet (a billion customers) there will always be “over a thousand like-minded customers who share your niche tastes”. Consequently the number of sub-groups on the Internet channel would be greater than offline.

The downside of a vast choice online is that customers could become overwhelmed when choices are poorly organised and as a result this may decrease their purchasing (Brynjolfsson, Hu and Smith, 2006). Therefore if the customer is faced with high search costs in terms of time and effort with uncertain benefits then it is likely that the customer will assign a low utility value to this feature (Ratchford, 1982). It is perhaps more accurate to say that the customer may assign a low expectation value rather than a low utility value to the search dimension of choice. In this case if the search attribute has a high utility value in the preference structure but there is a low expectation value from the search channel then the customer may switch channel or amend their preference structure. In this manner the search capability of the Internet could have an effect on the customer’s ex-ante and ex-post purchase preference structures.

As it was argued in the previous section that customers build up their preferences as they progress in their purchase decision making (the constructive view), it could be assumed that with the overwhelming amount of information provided by the Internet channel (Maes, 1994;

Dholakia and Bagozzi, 2001), the preference construction process will tend to consume more time and effort.

However the characteristics of the Internet allow for the design of sophisticated online decision aids (Häubl and Trifts, 2000) also called “search tools” (Brynjolfsson, Hu and Smith, 2006) and therefore cognitive effort is shifted away from customers (Bechwati and Xia, 2003) as it becomes easier to locate products. Internet technology has therefore made comparisons more feasible with the appearance of search tools.

Whilst the concept of search engines is not new as it was discussed by Negroponte (1970) and Kay (1984), the practical implementations are however more recent as they came with the Internet and were implemented by Internet-based companies such as Amazon.com. Amazon.com is an example of a ‘shopping bot’ or ‘buyer agent’ where a list of books is offered to customers on the basis of what they are buying and what they have bought (Wikipedia, 2007).

A definition of Internet intelligent agents is suggested by Ansari, Essegaiier and Kohli (2000, p.364):

“Using behavioural or preference information, they filter alternatives and make suggestions to a user.”

It could be useful to note that the term ‘intelligent agent’ is recently more specifically used in relation to software plug-ins or applications than web sites. For instance Wikipedia (2007) defined ‘intelligent agent’ (IA) as:

“A software agent that assists users and will act on their behalf, in performing non-repetitive computer related-tasks”

In addition this definition implies that the suggestions offered to the potential customer are based on their own preferences. The customer is therefore required to have stored preferences in its memory (pre-purchase preference). Consequently the better the pre-purchase preferences are defined by the customer, the more appropriate the suggestions of the Internet intelligent agents will be. The suggestions are therefore based on subjective definitions of the customer's perceived preferences. This remark is included in Häubl and Murray (2003, p.75) definition of an electronic recommendation agent:

“We conceptualize an electronic recommendation agent as a software tool that (a) attempts to understand a human decision maker's multi-attribute preference with respect to a particular domain or product category based on a learning (or 'calibration') phase during which the human reveals subjective preference information to the agent and (b) makes recommendations in the form of a sorted list of alternatives to the human based on its understanding of that individual's preference structure.”

This definition shows that online comparison sites are more useful in decreasing search effort rather than increasing the probability of maximising customers' total utility values. However customers may feel that the probability to maximise utility is greater by using an online comparison site because the offering may in effect be customised for them. In addition, as the online comparison sites select products or services based on customer's preferences, customers' efforts during this searching phase tend to decrease. As a result, the time and effort spent in searching for products and services to match their most relevant preferences is reduced.

Brynjolfsson, Hu and Smith (2006) differentiate between active search tools and passive tools. Active search tools help customers to locate and learn more about the products they are interested in or to identify new products. These active search tools would include (1) product search engines like Google Product Search which is by far the top search provider by searches (Nielsen/Net ratings, 2007); (2) sampling tools such as the samples of book pages of Amazon.com. Passive search tools would be any type of recommender system such as (1) electronic recommendation agents that look for a match to fit customers' profiles (Iacobucci, Arabie and Bodapati, 2000); (2) price comparison engines that focus on looking for the best price for a particular product (Betts, 2001; Smith, 2002) and (3) rating web sites that provide ratings for a product or service in a particular industry (Dabholkar, 2006). To that end, recommended systems also called online shopping comparison sites are a popular tool to use in a search activity. It seems therefore appropriate to explore how these various types of search agents may affect customer preference structures.

Su (2007) argues that when searching online, customers are either seeking for a known retailer or choosing the lowest price retailer. However when using online shopping comparison sites, Su (2007, p.145) found that for cameras and books, an increase in product information "leads to a dramatic increase in expected-value choices and a corresponding decrease in brand-seeking and price-aversion choices". In this example, the attribute product information seems to develop a greater weighting than price and brand in the customer preference structure when using comparison sites.

In this way electronic search agents affect the choice process which in turn could affect customer preference structures.

The discussions above suggest that the quantity of information available on the Internet is greater and at a theoretically lower search cost than offline (less effort and time are required). However the quantity of information could become overwhelming for customers and searching amongst various alternatives requires time and effort. A solution for customers has been the apparition of online intelligent agents that select options based on customers' preferences. This results in customised offers for customers and a decrease in search cost, time and effort.

The growing interest of these intelligent agents is directly derived from the separation of content, context and infrastructure Internet characteristic that enables retailers to carry an endless inventory. The consequence is an overload of information for the customer. One way to help the customer save time and effort in making a decision that fits their preferences is for some retailers to integrate Internet intelligent agents in their website (Aggarwal and Vaidyanathan, 2003). Coupey (1994) explores the concept of restructuring processing. The author suggested for example that managers could find ways to make comparisons between brands easier for customers, so customers will not have the need to restructure the information presented (Coupey, 1994, p.98). Might the appearance of Internet smart agents reduce the restructuring process?

Finally Kumar, Lang and Peng (2005) argue that to be effective search engines are required to find information with not much effort and at low search cost. To achieve this objective these authors demonstrated that Internet technology is not sufficient by itself to reduce search costs. But it will work best to reduce search costs in combination with customer information search behaviours. For example Yahoo has started to investigate the goal of potential buyers

when searching for products and services on the Internet. Similarly Lewandowski (2005) concluded that examining user behaviour needs to be at the heart of search engines quality studies and more especially the behaviour of specific groups.

Bellman, Lohse and Johnson (1999, p.34) argued that “looking for product information on the Internet is the most important predictor of online buying behaviour”. However these authors looked at the positive relationship between online search for information and online buying but they do not indicate if this buying behaviour could lead to repeat purchase with the same online retailer. It is not clear if the survey is only looking at the acquisition aspect of the transaction or if it includes the retention side. In addition it is not specified which attributes of the online search lead to a buying behaviour. For example would using intelligent agents facilitate the search activity and consequently incite the customer to buy online? Or would the level of customisation of a particular online retailer be a key benefit for the customer as to lead to online purchase and repeat purchase over time? Therefore these authors start to investigate what may influence the customer to buy online but they seem to only look at one attribute at a time to examine customer preferences rather than examining a set of attributes together.

As discussed earlier, global connectivity leads to a potential increase in the number of products and/or services that customers can compare to increase knowledge. As stated by Srinivasan, Anderson and Ponnnavolu (2002, p.44), “customers are able to compare and contrast competing products and services with minimal expenditure of personal time and effort”. This results in an increase in competition. Therefore understanding the most relevant preferences of customers online seems to be increasingly important. In addition exploring

any significant differences between offline and online shoppers could help design attractive websites.

The Role of Customisation Online

In the previous sections, the role of price and the role of product choice were discussed through the lens of online comparisons sites. This section explores the nature of customisation and its relative importance in the customers' preference structures.

As discussed previously, the objective of online comparison sites is to ease the comparison of products (Reibstein, 2002) - as customers could be overwhelmed with a vast variety of choice - thereby saving cost, effort and time by, perhaps, providing sufficient and relevant information for optimising choice. For example Bakos (1997) demonstrated the importance for customers of effort and time reduction. Similarly, Lederer et al. (2000) found that customers are more likely to use a website if it is easy to use (saving time and effort) and useful (contain sufficient and relevant information).

These two examples together highlight the key components of customisation that is – saving time, effort and cost by providing sufficient and relevant information. Saving time, effort and cost are considered as part of customisation as by matching some dimensions of the product or service to fit the profile of the customer, effort, time and cost would be saved during the information search and choice process. In the same vein, other authors such as Rowley and

Slack (2001) argued that customisation is perceived as a benefit as it (1) reduces search cost and (2) presents relevant products or services to customers.

The key is to identify what savings are required in order to change the customer's preference structure. To that end, an understanding of the customers' preference structures for a particular product is necessary.

The definitions of Häubl and Murray (2003) and Ansari, Essegai and Kohli (2000) assume that the suggestions made by online comparison sites are customised to individuals as the suggestions are based on their preferences. However other online comparison sites make recommendations based primarily on price (Rowley and Slack, 2001; Aggarwal and Vaidyanathan, 2003). This form of comparison has been criticised by Ansari, Essegai and Kohli (2000) who demonstrated in their study that:

“A higher level of customisation can be achieved if recommendations are based on personal preferences.”

Consequently online comparison sites need to look for customers with similar preferences to make recommendations based on their choice. This view implies customer preferences as a driver of value creation and ultimately to customer loyalty.

In addition Hesler (1999) suggested that companies that will succeed are ones that will focus on customisation using technologies that can integrate online customers' preferences with offline demographics to create a full demographic profile. This piece of information might only help develop a full understanding of customer preferences if the pre-purchase preference structure (before the online experience) is similar to the post-purchase preference structure

(after the online experience). Otherwise customers may have created a new set of preferences based on their online experience that does not necessarily match their pre-purchase preferences.

Another approach to customisation through online comparison sites is suggested by Häubl and Murray (2003). These authors demonstrate with an experiment that online comparison sites – in line with the constructive preferences theory –can influence customer preferences. Their findings show that the inclusion of an attribute changes the customer preference structure and renders this attribute more salient. This inclusion effect results in post-purchase preferences being different from the pre-purchase preference structure.

This finding is in line with Payne, Bettman and Johnson, 1992 who argued that preferences are constructed on the spot and with Slovic (1995) who suggested that preferences are influenced by the format in which the information is presented. However the second finding (that the attribute inclusion effect carries over to different purchasing decisions situations) contrasts with the constructive view as even in a different scenario (i.e., a different context), the preference structure formed with the online comparison sites is not altered.

This suggests that the customer might have a sense of having maximised his utility by adopting a particular preference structure for a certain product, consequently, when the context changes, the preference structure remains the same. How far over time is this statement true?

Not only do online comparison sites have the opportunity to customise an offer but so do companies. As the Internet has the ability to increase the information that the company has about customers and the information that customers have about the company and its products, it enables the company to build memory on customers that makes the offering relevant for them as customers differ in terms of their needs and wants (Burke, 1997). Internet companies have therefore an opportunity to customise the offering based on the most important preferences of the customer identified in the customers' preference structures. Rayport and Sviokla (1994, p.145) give an example of how companies customise the offerings. For instance America Online with the newspaper product allows subscribers to:

“Customize the information content they wish to consume.”

Customers are able to change the content of the information. This flexibility suggests that customers access relevant information that in turn allows them to save time, effort and cost.

However do customers wish for greater customisation? The findings of Lee and Lin (2005) showed that customisation (e.g., targeted email to customers, book recommendation based on customers' preferences) is not a significant predictor of online overall service quality and online customer satisfaction for the bookstore industry. These authors argued that this is a reflection of a concern regarding the use of personal information. These authors would imply that greater customisation does not have a major influence on choice.

By contrast, Rowley and Slack (2001) argue that customisation generates increased revenue, increased loyalty and reduced customer acquisition cost.

Additionally, Simonson (2005) looked at the effect of customised offers on preference development and concluded that customisation may result in customers trusting that they are making a better purchasing decision. Customisation could therefore be tightly linked with the notion of trust. They could be interrelated in the way that without trust, it will be less probable that the customer uses the customised offers (Wang and Benbasat, 2005).

These studies highlight some benefits for the customer derived from the capabilities of the Internet channel. However these studies do not provide a framework that helps in understanding how the various effects of these online comparison and customisation sites influence and predict choice behaviour. For example might customised offers via online comparison sites lead to online loyalty? And if yes, would this increase in online loyalty be with the online comparison sites or with the brand purchased? Therefore the examination of the effect of online customised offers on Internet loyalty does not seem to have been fully explored.

By linking the notion of customisation to the discussion of the Internet capabilities, it is possible to conclude that customisation seems to be another change of content that is derived from the change of content of the relationship. Customisation might be perceived as a benefit for customers when associated with trust (Reichheld and Schefter, 2000). The implication is that customisation is linked to other elements of the customer evaluation decision process. The aim of this discussion on customisation, and of other discussions in Part I, is to provide a platform to examine how the elements described are related to each other. The question for retailers is which type of customisation for which kind of customers?

The Role of Convenience

Introduction

This section starts by examining some definitions of convenience from the literature, followed by a discussion on the trade-off process used by customers when making a decision in relation to their use of time and effort. This provides a basis to understand an increasing need for convenience. Finally, the section explore if the nature of convenience has changed with the Internet.

What is Convenience?

The concept of convenience seems to have first appeared in the marketing literature in relation to classification of products. Copeland (1923) called “convenience goods” products that require minimal time and physical and mental effort to purchase. The definition of Copeland (1923) assumes that customers have full knowledge of the product they intent to buy. Conversely, Holton (1959) argued that convenience goods are goods for which the customer has such little preference that choice behaviour will be governed by availability. Bucklin (1963) justified the need for a new classification where convenience goods are defined as goods for which the customer has developed a “preference map that indicates a willingness to purchase any of a number of known substitutes rather than to make the additional effort required to buy a particular item”. This definition of convenience goods implies that customers have a degree of pre-purchase preference formation. Therefore convenience denoted the time and effort that customers used in buying a product or using a

service rather than an attribute of a product (Brown, 1990). In the same vein other studies proposed to define convenience as having two dimensions – time and effort (Anderson, 1972; Kelley, 1958; Berry, 1979; Nickols and Fox, 1983; Kinsey and Senauer 1996; Berry and Gresham, 2000; Szymanski and Hise, 2000; Berry, Seiders and Grewal, 2002; Rohm and Swaminathan, 2004; Xiaoni and Prybutok, 2005).

Some authors viewed convenience as an attribute that reduces the non-monetary aspect of a product (Kotler and Zaltman, 1971). Conversely, Murphy and Enis (1986) classified products as a function of two variables: effort and risk. For example convenience products will be perceived by the customer as low effort and subject to low risk in terms of price.

From these definitions, three dimensions of convenience are revealed: time, effort and risk. Convenience goods seem therefore to define goods that reduce mental and physical time and effort and are considered as low in terms of risk. This implies that customers who value convenience are “time poor” and that their efforts are concentrated on other activities. This trade-off is discussed next.

The Trade-Off Process

When making a decision to purchase a service or product, customers start to use their time and effort resources. However as time cannot be expanded and effort is limited, customers trade-off the time and effort they will spend on buying a product or service against other activities. As a result, the utility value of convenience could be important in some purchase situations.

For economists saving time means “relocating time across activities to achieve greater efficiency” (Feldman and Hornik, 1981). Customers therefore use the trade-off process to determine if the benefits generated by purchasing a product or a service are superior to the time spent online - to either search for a product or service and/or transact. Otherwise their time could be better used in another activity as the time lost cannot be recovered.

However customers differ in the degree to which they value time. Time can be considered as objective when measured with a clock and subjective when based on perceptions (Durrande-Moreau and Usunier, 1999). Waiting time can be viewed as both objective (time cost) and subjective time (stress, boredom, annoyance). Weinberg’s experiment (2000) demonstrated that the evaluation of the quality of an automobile homepage website is positively correlated to customers’ exposure to a smaller waiting time. The implication of the value of waiting time to customers is that customers who perceived a small waiting time were more inclined to carry on the search on the same website. However the implications of waiting time on loyalty seems to be lacking in the literature.

Before the use of the Internet as a marketing channel to sell products and services to customers, Bellenger and Korgaonkar (1980, p.78) defined convenience shoppers as shoppers who “dislike shopping or are neutral toward it, and thus approach retail store selection from a time point of view”. In other words are customers satisfied to spend time shopping in a physical book shop or supermarket or would they prefer having their books and groceries delivered at home. The marketing question is to find out how do customers prefer spending their time? How do they think that they could maximise the use of their time?

Jacoby et al. (1976) supported this definition of convenience by arguing that the orientation of people toward shopping is their view of alternative uses and expenditures of their time. These definitions of convenience based on the use of time were expressed within the context of traditional shopping but they could be applied to an Internet context. Instead of comparing alternative uses of their time between shops they now can in addition compare alternatives between the Internet channel and traditional shops and between different Internet web sites.

Has the Nature of Convenience Changed with the Internet?

The preference for convenience seems to have always been there. An example would be the success of the first supermarket in the UK in 1954. Customers enjoyed the one stop shopping experience. In this example convenience is measured by ease of choice. But as noted by Berry, Seiders and Grewal (2002), a continuous rise in customer demand for convenience is attributed to technological progress. For example low cost global connectivity seems to lead to ease of access and lower cost of access. Another example is online comparison sites whose main objective is ease of choice. From these examples, it seems that the constituents of convenience have changed with the Internet from the aspect of location to other aspects such as ease and cost of access and ease of choice. As a result the Internet has improved performance on measures of convenience and extended their range.

In addition to a change of ways to measure convenience, what have changed are the customers' expectations of convenience with the Internet. In this way convenience may affect customer's pre- and post-purchase preference structures.

Bellman, Lohse and Johnson (1999) surveyed 10 180 online customers in the United States. Their findings showed that these individuals tend to spend increasingly more time at work and have consequently less time to travel to physical stores. The phenomenon seems to be accentuated for dual income families. Therefore, these respondents use the convenience aspect of the Internet that is translated into time savings. These authors' survey highlighted the point that customers who shop or use online services are "time starved", online companies need to focus on the aspects of their websites related to convenience to make repeat purchase items as convenient as possible.

Bellman et al. (1999) in this particular paper seem to reduce the definition of convenience to time savings. In addition to a limited definition of convenience, the authors do not explicitly indicate the attributes that make up the concept of convenience in order to design a more convenient website. For example in the online grocery industry, convenience could be defined as 'the time to place an order online' and 'the time it takes to have the groceries delivered at home' as well as 'the number of substitutes per shopping basket'. The relative importance of each of these dimensions of convenience needs to be assessed to be able to list which attributes would be considered as key benefits in improving the convenience of a particular online retailer. Examining the most relevant attributes that lead to online convenience will provide insights for managers into their potential and current customers' preferences to increase their repeat purchase rate. Understanding customer preferences has therefore beneficial effects for both the customer and the retailer.

In addition Bellman, Lohse and Johnson (1999) demonstrated that online customers tend to value time over cost savings. Would this finding be consistent across products and services?

Comparing a set of attributes that would incorporate the time and cost savings constructs may help determining which one is perceived as a distinct benefit for the online company to focus its resources.

In the same vein, Farag et al., (2007, p.139) indicated that “time-pressure affects online buying indirectly via the home shopping experience: because time-pressured individuals often shop from home, they frequently buy online”. Consequently a segment of the researched population that is likely to buy online (for certain product categories) seems to be more task-oriented (minimising the time spend on shopping). The implication is that not only does convenience affect preference structures but that it does not do so equally for all customers.

When planning to purchase a product or service, the customer needs to collect information by visiting physical stores or by searching on the Internet. Gathering information offline or online is at a certain cost. The decision depends upon the perception of the customer of the value to be gained compared with the cost of obtaining the information. Bellenger and Korgaonkar (1980, p.80) argued that “the convenience shopper perceives the costs of shopping to exceed the value gained in terms of pleasure and/or information, and therefore tries to minimize the expenditure of time and effort in shopping for goods”. That could explain why online searching appeals to convenience shoppers and as a result studies showed convenience as a key benefit for shopping online (Bellman, Lohse and Johnson, 1999).

Srinivasan, Anderson and Ponnnavolu (2002) measure convenience by means of questions related to ease of use and short ordering time. Is the website friendly enough? Are the

transaction processes simple enough for first time online customers? As highlighted by Palmer and Griffith (1998, p.50), the company's website is the interface between buyer and seller and "the website is the complete shopping experience for the customer". Therefore these authors argue that if both the technical activities and the marketing functions work together this will place the company in a strong competitive position.

These technical characteristics increase in importance for a product that is information intensive. However the emphasis needs to remain on how convenient it is for customers to use the website in terms of how easy and how fast it is. For example Cameron (1999) explains that a website should be a place where visitors can navigate easily and quickly locate information that they need. The author argues that it is not always the case as some information is not presented in a meaningful format. Cameron (1999, p.87) suggests that companies could develop personalising content that "allows each user to view only the data that is relevant to him or her". This implies that convenience may be increased through customisation. This relates to the ability to search for information based on customer defined preferences and more especially the identification of key attributes within their preference structure.

Conclusion

In conclusion, the literature defines convenience as mainly a reduction of time and physical and mental effort. In this scenario, customers may accept to purchase substitutes as long as the two dimensions of time and effort savings are maximised. In addition, customers for

whom the relative importance of convenience is high, will have strong pre-purchase preference structures (revealed preferences seem to dominate the preference structures). The implication is that there is not much difference between the pre- and post-purchase customer's preference structure for this category of customer.

Another conclusion is that customers' value time differently and consequently will make different trade-offs to relocate time across their various activities. But convenience will only be achieved by the best outcome (total utility) of the customer's time and effort. Some alternatives may not save so much time but as the customer tries to maximise their benefits, they will in turn have maximised the use of their time. And as the Internet has different capabilities to traditional shopping, time savings could be maximised by providing ease of use and short ordering times for example.

However the main gap in the literature seems to lie in the limited understanding of the dimensions and the relative importance of these dimensions of convenience for a particular product or service for different customers' segments in order to maximise the benefits of these dimensions.

The Role of Perceived Online Trust and Risk

Introduction

This section turns to discuss the concepts of perceived risk and trust. It has been argued that companies need to build customer trust to create long-term relationships (Ganesan, 1994; Doney and Cannon, 1997). Some authors consider online trust as becoming increasingly important as more information searches and purchases are made via the Internet channel (Shankar, Smith and Rangaswamy, 2003). Other authors have justified the importance of the role of online trust because online word-of-mouth travels faster and on a larger scale than offline (Reichheld and Schefter, 2000). Therefore a greater understanding of the role of online trust seems necessary. In addition, the effect of an increase in trust may result in a decrease in customers' perceived risks (Reichheld and Schefter, 2000; Hoffman, Novak and Peralta, 1999). The higher customers' perceive risk, the higher they expect to experience some kind of loss. Therefore increasing trust could decrease uncertainties and may lead to an increase in online transactions.

This section begins by providing a brief overview of the literature in defining the trust concept in relation to customer choice. This overview is followed by an examination of the antecedents of trust in the context of the Internet channel. Discussions on trust include contributions from perceived risk.

Defining Trust

In the marketing literature, trust has been studied primarily in the context of relationship marketing (Doney and Cannon, 1997; Morgan and Hunt, 1994; Ganesan, 1994). Two dimensions are used to define trust: credibility and benevolence (Ganesan, 1994). Credibility is the buyer's perceptions of how a company is able to perform effectively, consistently and reliably. Benevolence is the degree to which the company is genuinely concerned about the buyer's interests to achieve mutual benefits.

In this definition of trust the focus is on the buyer's observation of the seller's honesty, reliability and consistency. Online trust is different because the object of trust is the website. This view is reflected in the definition of online trust by Bart et al. (2005, p.134):

“Online trust includes consumer perceptions of how the site would deliver on expectations, how believable the site's information is, and how much confidence the site commands.”

In this definition, the perceptions of trust are based on the interaction with the site as opposed to a sales representative.

But the dimensions that define trust may remain the same between online and offline channels. For example customers will tend to trust online comparison sites only if they provide objective information. Source credibility is therefore necessary to develop and maintain trust (Trifts and Häubl, 2003). Another example is given by Alba et al. (1997) who suggested that customers prefer online retailers that provide reliability.

Dabholkar (2006) study's showed that credibility is the most important attribute when selecting rating web sites. Rating websites provide critiques or ratings for offerings in a given industry. Similarly Klein and Ford (2003) concluded that credibility of the sources used for information search, influenced the customer's choice.

The empirical study of Wang and Benbasat (2005) suggested that the three trusting beliefs selected for the survey (competence, benevolence and integrity) had significant loadings that indicated the importance of trust in online comparison websites. The authors used qualitative interviews to identify the factors that form the trust construct to use in the survey. Their study focused on the customer's intentions to use online comparison websites. They acknowledge that they are only looking at pre-purchase customers' preferences. They do not measure the level of trust (in terms of competence, benevolence and integrity) after the purchase experience.

The implication is that if the loading for each variable after the transaction is higher than before the transaction, then the level of trust for the next transaction with the same online comparison website is likely to have increased. Therefore it seems relevant to investigate both the customer's intentions (i.e., the pre-purchase preference structure) and the customer's post-purchase preference structure (that is how well the online comparison website has performed on the three selected variables that form trust) to then predict future purchase intentions.

Antecedents of Online Trust

According to Hoffman, Novak and Peralta (1999), privacy is a key driver of online trust. Privacy is considered as being more important for website categories that involve high information risk such as buying online travel.

Bart et al. (2005) argued that the role of trust in the relationships between trust drivers and behavioural intent are significantly different for different website categories and customer groups. For example, for retail categories such as online grocery, companies may want to focus on security, absence of errors (e.g., no substitutes and quality products) and order fulfillment (e.g., reliability of order delivery) to build trust. Other authors have suggested that the inclusion of on-screen characters may also influence consumer trust (Luo, McGoldrick, Beatty and Keeling, 2006).

Bart et al. (2005) demonstrated that the mediation of online trust is stronger for sites with infrequently purchased, high involvement items such as computers and ‘conversely, it is weakest for sites that are oriented toward frequent transactions’. This implies that the mediation of online trust is weak for the online grocery industry. However, if, for example, customers experience problems in order fulfillment when buying groceries online, then their degree of trust toward the online supermarket might decrease as order fulfillment is considered a driver of trust for this particular industry. But if order fulfillment, security and absence of errors are met, then customers will rate trust as low in terms of its relative importance because trust will be less of an issue. Thus the mediation of trust in an ongoing

relationship may have less to do with product categories and more to do with individual company performance.

Another key antecedent of trust is perceived risk as ‘the issue of trust arises because economic transactions involve risk (Humphrey and Schmitz, 1998).

Lim (2003) defined customer perceived risk on the Internet in terms of sources and consequences of perceived risk. The author identified three sources of customer perceived risk: technology, vendor and product related perceived risk. Each of these sources is related to a set of consequences. For example the customer’s perception of vendor risk is related to six types of consequences of risk: financial, performance, physical, psychological, time and privacy.

These consequences are losses that customers expect to have. These consequences will in turn have an effect on online customer purchasing behaviour. Therefore understanding the consequences of customer perceived risk could help reduce customer uncertainties. For example, to decrease perception of vendor risk, the company could provide customers with more information on their privacy policies, the owners, the employees and their company history.

Bhatnagar and Ghose (2004) in their study across product categories investigate how customers’ perceptions of benefits and perceived risks affect their online shopping. They use convenience as a main benefit of Internet shopping. They define convenience as time and money savings for customers. Regarding perceived risks, the authors focus on two types of

perceived risks namely product risk (inability to examine the product) and security risk (fear of leaving credit card details online).

They found that perceived product risk is less for product categories high in search attributes as the more information the customer can collect about the product, the less the uncertainties would be. As a result it could be that products with high experience attributes generate higher perceived product risk as the customer will have to take a risk when buying online because satisfaction or dissatisfaction will only be known after the transaction has occurred.

However the counter argument could be that if the experience is positive, the customer's perceived product risks would have decreased and the customer will not only repeat purchase with the same retailer but more importantly make referrals to other potential customers. Reichheld and Schefter (2000) argued that the new buying context provided by the Internet has increased uncertainties (distance and no face-to-face) thereby increasing perceived risks. But at the same time the Internet channel has the capability of decreasing acquisition costs through an increase in the number of referrals. They argued that the Internet makes it easy to refer compared with the traditional marketplace.

For Reichheld and Schefter (2000), trust seems to be the answer to reduce perceived risks linked to the uncertainties of the Internet context. These authors argue that by avoiding price sensitive buyers and focusing on increasing trust through online communities and reliability is at the heart of achieving superior customer loyalty.

Perceived risks and trust seem therefore to be tightly linked and have an impact on customer loyalty. On one hand, it seems that the arguments of Bhatnagar and Ghose (2004) lead to

conclusions that it is by decreasing perceived risks that trust will increase in turn. On the other hand, Reichheld and Schefter (2000) argue that customer loyalty starts with trust and a decrease of perceived risk is a consequence of an increase in trust not the reverse. For example decreasing product perceived risk by opening a showroom may not necessarily generate an increase in trust.

Reichheld and Schefter (2000) suggested that a certain degree of trust leads the customer to share information with a particular company. The company can in turn use the information shared by the customer to tailor its offerings to the customer. The authors argued that this relation in turn leads to an increase in trust that will encourage the customer to share even more information that the company will use to better customise the offerings and that will generate an increase in trust. As a result trust seems to decrease perceived risks and uncertainties derived from the change of contact with the Internet channel which is made up of 'a global network of strangers' (Reichheld and Schefter, 2000). These authors concluded that trust within an online channel is a cornerstone in the foundations of loyalty.

This view is in line with Mukherjee and Nath's (2003) findings of online banking and Morgan and Hunt's (1994) findings of automobile tire retailers which demonstrated that trust led to relationship commitment i.e., as trust increases, commitment increases.

Hoffman, Novak and Peralta (1999) seem to consider a lack of trust as a consequence of customer concern over information privacy which is part of customer perceived risk. As stated by Hoffman, Novak and Peralta (1999, p.83) "the Internet threatens customer information privacy in new and extreme ways". Additionally according to these authors, this

lack of trust is a primary barrier to online purchase decision making. In the same vein as Reichheld and Schefter (2000), they conclude that the main objective of sellers should be to gain customer trust. To that end, they suggest that sellers could maximise the opportunity that the Internet offers to interact with customers. However to achieve that, customers in turn need to be willing to exchange information with sellers and unless sellers increase trust, the use of the Internet interactivity capability may not be maximised.

A solution suggested by Hoffman, Novak and Peralta (1999) is for customers to have control over the personal information that they provide to the company. The reward for sellers could be an increase in trust that, as suggested by the authors, will in turn increase customer retention and loyalty. This is consistent with previous studies that found that trust is the most significant predictor that affects online service quality and customer satisfaction (Gefen, 2000; Lee and Lin, 2005).

Conclusion

This section has briefly considered the role of trust and perceived risk in the development of customers' preferences in an online channel. The essential drivers of trust in a traditional channel do not appear to have changed with the advent of the online channel – customers' loyalty increases with evidence of credibility and benevolence. What have changed are the characteristics of the medium through which levels of credibility and benevolence are assessed by the customer (from salesperson to website in some cases). These changes in characteristics open the door to changed levels and type of company specific performance

which in turn may lead to changes in trust, perceived risk and customer preferences. Whether traditional or online channels have the potential to create the highest levels of trust and lowest perceived risks seems to be a function of customers' preference structures and changes in preference brought about by actual channel experiences.

Conclusion to Some Contemporary Manifestations of Internet Capabilities on Customer Preference Structures

This section looked at the effect of Internet capabilities on the role of price, choice, customisation, convenience and perceived trust and risk. It highlighted for example, how the properties of the Internet have changed the content of the information available to customers by offering them more comparisons both in terms of non-price attributes and price attributes. However studies looking at potential benefits for customers derived from the Internet channel (e.g., more choice, greater price comparisons, and customisation) do not seem to have explored as to whether these potential online benefits result in preferences that are systematically different from the preferences that customers have before experiencing the Internet channel.

The next section addresses the question of whether the experience of transacting through the online channel systematically mediates changes in customers' preferences.

ARE THERE SYSTEMATIC DIFFERENCES BETWEEN PRE- AND POST-CUSTOMER PREFERENCES?

Introduction

The purpose of this section is to explore if it is possible to discover from the literature whether there are systematic differences between customers' pre- and post-purchase preferences. This is achieved through an examination of the limitations in previous studies and their implications for the study of customer preferences and loyalty behaviour.

In this discussion, customer pre-purchase preferences have been defined as preferences that are included in the customer memory (known as revealed preferences) and attitudes towards the Internet channel – their view prior to shopping online for a particular product category. This forms an overall product or service preference structure that will influence the purchasing decision. Customer post-purchase preferences are defined as preferences that have incorporated the Internet channel shopping experience. Post-purchase preferences occur after the transaction and include for example the effects of fulfilment and after sales service. The applied managerial question is whether a difference between customer pre-purchase and post-purchase preference structures mediates customer choice behaviour.

This section covers five perspectives derived from previous studies on the differences between pre- and post- purchase preferences. The first perspective ignores pre-purchase structures and focuses on post-purchase preference structures. Secondly some studies have recognised these differences but do not seem to adopt a holistic approach as they only focus on a few elements of the customer preference structure. Thirdly, the need to differentiate

between customers segments in terms of their preferences is discussed. Fourthly, changes in brand preference are examined pre- and post-purchase. Fifthly, price is similarly reviewed. Finally the main points of the discussions that take place in this section are summarised.

A Post-Purchase Preference Perspective

Authors have tended to focus on post-purchase customer preferences. This immediately raises the problem of identifying systematic differences between pre- and post-purchase preferences. For example Alba et al. (1997) explored the potential benefits that online shopping could offer and concluded that the perceived benefits such as price and quality comparisons and customisation could in turn lead to an increase in customer acquisition. Would this preference for online price comparisons be a systematic difference between customer preferences before the use of the Internet and after experiencing price comparisons?

If there is a difference in preferences based on price comparison attributes and is not systematic, but random, then retailers may not have to include competitors' prices on their website to attract potential customers. In addition these authors did not examine if these perceived benefits would lead to loyal behaviour in the long run – a systematic relationship with time.

Another example is to be found in the Burke et al. study (1992) as the authors did not examine if two main differences found between pre- and post-purchase preferences (i.e., buying in larger quantity and adopting a routine behaviour towards brand) were systematic or

not. If these differences are not systematic then practitioners cannot build loyalty strategies on these relationships.

Understanding these differences between pre- and post-customer preference structures may help explain how preferences have evolved through using the Internet channel. This could be an important insight for practicing managers in fine tuning their Internet marketing strategies. Such systematic differences could be exploited to optimise acquisition and retention strategies.

A Limited Preference Structure Perspective

Authors have tended to explain online customer preferences based on one or two attributes rather than looking at a set of attributes that form the customer preference structure for a particular product or service. For example in 1992, Burke et al. conducted an experimental study where they compared shoppers' behaviour from two computer simulations with traditional purchase behaviour. One of their findings is that shoppers tended to buy larger quantities online. An explanation could be the lack of space constraints. As a result of not having to carry the products, shoppers may tend to buy them in larger quantities. How much does the preference to buy in larger quantities explain any variability in customer loyalty? Could it be that other variables may better explain increased volume purchase behaviour?

In another example Iqbal, Verma and Baran (2003) using a limited set of attributes, concluded that differences existed between online and traditional shoppers and these

differences were in turn modified by shopping frequency. The selection of attributes was not product specific as they were based on channel characteristics. Perhaps a selection of product attributes characteristics would have brought the study closer to the utilities which drive the transaction.

These are some of the limitations of single or limited attribute studies of pre- and post-preferences – they lack a holistic context of attributes that make up a realistic buying scenario.

Preference Based Segmentation

Authors do not seem to differentiate between different types of customers. Segmenting customers in terms of their preferences (as opposed to their demographics or lifestyles) may help managers focus their resources on attributes that are the most important for the group(s) with whom they choose to do business. Some retailers may wish to concentrate their marketing and logistics efforts on the group that represent the majority of customers. It seems therefore relevant to find out the most important preferences of this particular group to focus resources on them. Are there significant systematic differences between classes of customers defined in terms of preference structures? Are there systematic differences in preference based segments' pre and post preference structures?

Studies such as Burke et al. (1992), Alba et al. (1997) may also make the assumptions that shopping online and offline are substitutes for each other. The reality may however be more

complex, with shoppers using online and offline channels simultaneously in certain purchasing contexts. In these contexts the optimal satisfying of the preference structure is gained through a combination of online and offline channel capabilities (hybrid channel behaviour). How are hybrid preference structures modified by the shopping experience?

Does Brand Preference Change Systematically between Pre- and Post-Purchase?

Authors in the online customer behaviour literature rarely link customer preference structures to brand. For example a result of Burk et al. (1992) was what the authors called the time-compression factor. Shoppers using the laboratory for buying groceries tended to adopt a routine behaviour where they switch less from one brand to another as compared with traditional supermarkets.

In 2000, Degeratu, Rangaswamy and Wu looked at how brand names, price as well as sensory search attributes and non-sensory search attributes influence online and offline choices in a systematic way. Regarding brand names, they found that where more total information about product attributes (as it is the case online for product category with few sensory search attributes), then the effect of brand names decreases. Whilst in the traditional marketplace where total information could be less easy to access (e.g., comparing the fat content of all margarine products like in the Peapod website), the effect of brand names increases. This is in line with the Burke et al (1992) study that found that shoppers include

fewer brands in their choice set when shopping in the online laboratory than in traditional stores.

Do Pre- and Post- Pricing Preferences Vary Systematically?

With regard to price, Degeratu, Rangaswamy and Wu (2000) expected that for online grocery shopping, customers will tend to be less price-sensitive. Conversely as less attributes are available for sensory products online then the value of the brand may be enhanced and customers may be more price-sensitive. For example, in a physical store customers may be more willing to pay more for a perfume they can smell than online where the presence of this sensory attribute is absent.

However their findings did not fully support that price will have a smaller impact on online shopping as opposed to offline grocery shopping. Lastly they found that non-sensory attributes will have a larger impact online than offline and conversely sensory attributes will have a larger impact offline than online. A limitation of Degeratu, Rangaswamy and Wu's (2000) study is that their investigation is based on products that do not require a complex decision process as in an insurance product. The products used for the experiment were low involvement products.

This suggests that the degree of involvement towards products might affect the choice of the channel. However Michaelidou, Arnott and Dibb (2005) raise the possibility that purchasing

behaviours are not only influenced by product or brand involvement but also by channel involvement itself.

Conclusion on Systematic Differences

In conclusion, examining systematic differences in customer preferences allows practitioners to assess the degree to which customers are influenced by the Internet shopping experience. If the post-purchase preference structure is different from the pre-purchase preferences then managers can conclude that the capabilities of the Internet channel have influenced customer preferences. This implies that a proportion of the preferences are constructed during the interaction with a retailer's website. This in turn would mean that the capabilities of the Internet provide marketers the opportunity to influence customer preferences – a capability that could be used to acquire and retain customers. Conversely if there are no systematic differences, only random differences, the potential for proactive Internet marketing is limited.

CHAPTER CONCLUSIONS

This chapter discussed two perspectives developed in the literature on how customers form their preferences. The debate lies between revealed and constructed preferences. Some economists argue that most of customers' preferences are revealed and that customers make their purchasing decisions based on maximising their utilities. Whilst sociologists tend to take the view that customers build their preferences "on the spot". The marketing literature

is orientated towards the constructive view. This discussion concluded that a richer theory is gained by taking the view that purchasing decisions are based on a combination of revealed and constructive preferences depending on different factors such as product and channel involvement.

After exploring how customer preferences were formed, it seemed necessary to understand if each attribute that formed the preference structures for a particular product and channel carry the same weight. The preferences' attributes were classified into two categories: order-winning and order-qualifying criteria. One of the main findings was that companies need to provide a service well above competitors on the order-winning criteria in order to secure the business with the customer.

Next was a discussion on how Internet capabilities influence customers' preferences. Five areas of preferences were explored: price comparisons, choice, customisation, convenience, perceived trust and risk. One of the main conclusions was that customers' generic preferences have remained similar over time but what has changed with the Internet channel is the degree of performance possible on those preferences.

Finally the section examined if these customers' preferences vary systematically between the pre- and post-purchase experience. There appeared to be some evidence from prior studies that on certain dimensions such as price and brand that systematic change in preferences can occur.

The next chapter examines the literature available on customer loyalty and how some authors apply it to the Internet channel. The main objective of chapter 3 is to understand in which ways changes in customers' preferences could affect online customer loyalty.

CHAPTER 3: TOWARDS A RICHER UNDERSTANDING OF THE EFFECTS OF INTERNET CAPABILITIES ON CUSTOMER LOYALTY

INTRODUCTION

In chapter 1, the main capabilities of the Internet channel were explored in an attempt to understand the differences between the Internet channel as compared with traditional shopping environments. From this discussion a review was carried out to determine if the properties distinct to the Internet channel could create added value for customers. Chapter 2 focused on examining how these Internet capabilities might have changed customer preference structures and if the pre-purchase preference structure could differ from the post-purchase preference structure.

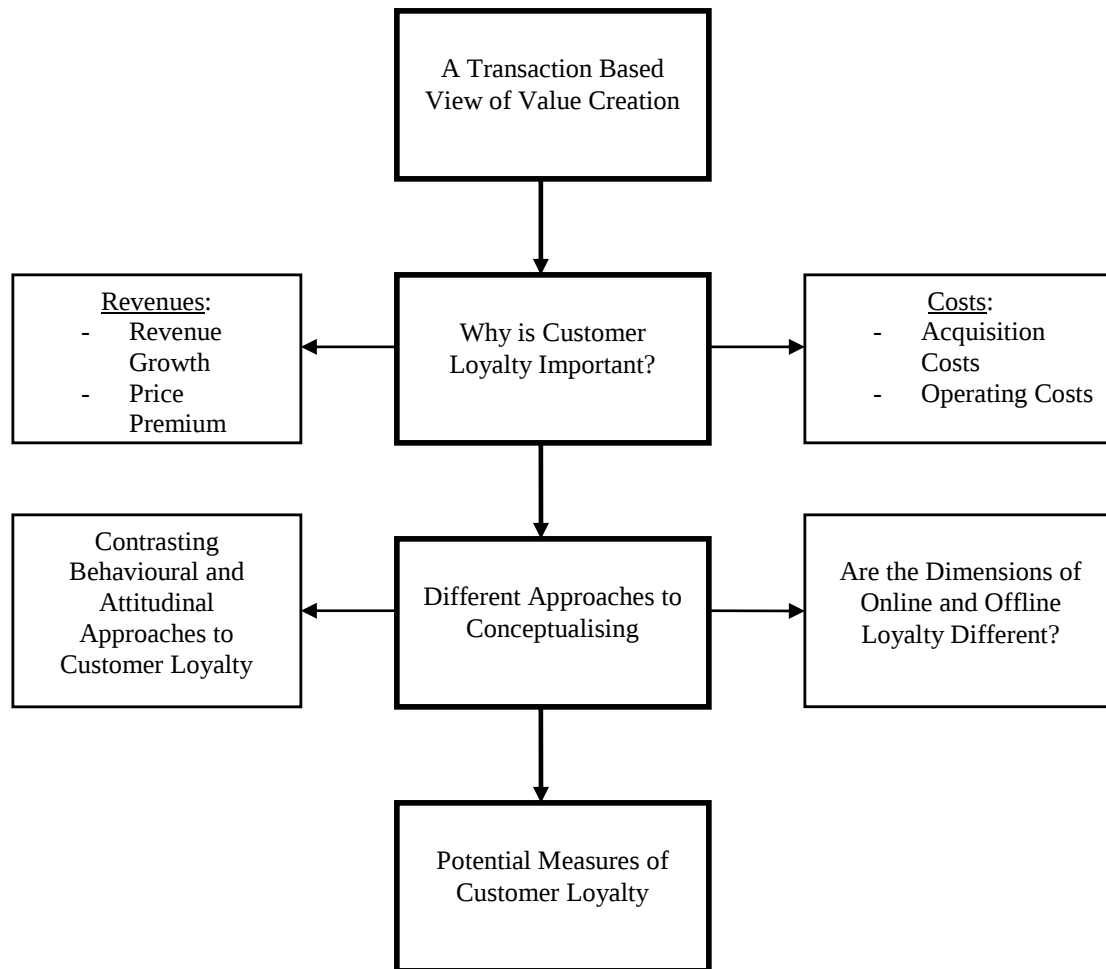
The purpose of chapter 3 is to explore the relationship between the pre- and post- purchase customer preference structures and customer loyalty.

The first section explores the relationship between the value created for customers during the transaction phase and preferences. The second section looks at the literature that discusses the importance of loyalty in both offline and online shopping contexts. In particular this section discusses the importance of loyalty in relation to transaction costs and revenues. The

third section introduces the different views adopted by various authors to conceptualise the customer loyalty construct. These different approaches lead to variations in measuring customer loyalty. The fourth section presents the theoretical model of this study that links the three main concepts discussed in the literature review namely the Internet capabilities, the pre-and post-customer preference structures and customer loyalty.

The following figure summarises the construction of Chapter 3.

Figure 11: The Construction of Chapter 3



This chapter concludes Part I by examining how online customer purchasing preference structures are linked to customer loyalty.

A general conceptual framework will be proposed at the end of Part I which seeks to link pre- and post-customer preferences to loyalty.

A TRANSACTION BASED VIEW OF VALUE CREATION

The Internet capabilities mentioned in chapter 1 obtain economic value if Internet marketers can answer the question, “How can these Internet capabilities be deployed to ensure that an exchange will take place through their Internet or traditional channel?” For example, besides the possibility that a company could provide the customer with multiple comparisons of products and services, the customer may still decide not to perform the transaction or to transact with a competitor. As a result no value is created between this particular seller and buyer in the Internet channel.

An exchange is therefore at the heart of the value creation process for both the seller and the buyer. An exchange will only take place when there is perceived to be sufficient incentive for both the seller and buyer to transact.

The incentive for the seller is a difference between the selling price and the input costs for creating the products and services. The incentive for the buyer is a function of the benefits that they expect to receive in the exchange and their input cost, which is largely the price paid to the seller. Rowley and Slack (2001, p.4) suggested that “in general, customer participation depends on the balance between expected benefit and expected costs”. This argument could be summarised in the following equation:

$$\text{Buyer Benefit} - \text{Buyer Input costs} = \text{Buyer incentive}$$

This equation argues that to win a customer's order, the company is required to increase buyer incentive to a level above their competitors.

It is the benefit to the buyer that is of real concern for the marketer, particularly in the Internet marketing channel where buyer choice is generally increased. The size of this buyer benefit appears to be important as it will answer three fundamental business questions:

- 1) Will the buyer transact with any seller on the Internet for that particular product or service?
- 2) If yes, which particular seller will the buyer choose to transact with?
- 3) What price is the buyer prepared to pay over the Internet, which will maximise the seller's incentive to transact?

It is the Internet marketer's objective to - not only get the buyer to transact over the Internet, but to transact in their specific favour at a price that maximises the seller incentive. This means that the Internet marketers job is all about maximising the buyer's benefit beyond that of other marketing channels and beyond that of other Internet sellers. Given the level of choice that the buyer has on the Internet, the marketer's role possibly has to be the most innovative in the company.

Maximising buyer benefits above those of competitors lies in the company understanding customer preference structures better than direct competitors. The transaction-based view focuses on best performance against preference structures as the main approach to secure customer loyalty and future transactions. The term "future transactions" is used to emphasise

that the present value of any asset is the discounted value of the future cash flows that the asset is able to generate from future transactions.

WHY IS CUSTOMER LOYALTY IMPORTANT?

Introduction

The section above stressed that the resources and competencies of a company as well as the technology (the Internet capabilities) and the attributes of a product or service are perceived as deriving value from their relationship to future transactions. A purpose of the firm is therefore to increase the number and quality of future transactions for any given product or service and set of resources. For that reason, the notion of building long-lasting relationships with customers, the notion of the lifetime value of a customer, is a much developed concept in the marketing literature as the aim of relationship marketing is to secure the future business of customers.

Thus the importance of customer loyalty as a component of long-term business success has been widely studied both in the traditional marketplace as well as in an Internet context (Jones and Sasser, 1995; Reichheld, 1990, 1996, Stewart, 1997; Peppers and Rogers, 1998; Newell, 2000; Lynch et al., 2001; Smith, 2001; Gommans, Krishnan and Scheffold, 2001; Reibstein, 2002; Johnson, Herrmann and Huber, 2006). However some authors have suggested that online customer loyalty is more difficult to achieve because customers have

more choice and can easily compare these choices i.e., there are lower switching costs (Reichheld and Schefter, 2000).

The importance of customer loyalty is viewed through the lenses of revenues and costs with distinction made between offline and online customer loyalty. The section concludes by noting that online loyalty differs with offline loyalty as the nature of the contact has changed (i.e., the effects of the Internet capabilities on customer loyalty).

Revenues

Revenue Growth

Per-customer revenue growth is measured by the average annual revenue per customer. The implication is that in most businesses, the spending of a customer tends to increase over time as it becomes routine to shop with a particular seller (Alba and Hutchinson, 1987) or at a particular site (Reibstein, 2002). As a result repeat customers are important and it is seen as an advantage to keep a customer longer. This contrasts with the findings of Fader and Hardy (2001) which conclude that over time purchase amounts and rates decrease. In their study these authors proposed to forecast buying behaviour for an online music retailer named CDNOW by focusing on customers who made their first purchase at a particular date and who repeated or not their purchase over the following three months. However this study does not explain why there was a decline in repeat purchases.

It is possible that customer preferences and their utilities change over time. Reichheld's (1996) view seems to assume that the company is capable of remaining in step and performing better than competitors on the changing key attributes of the customer preference structure in order to maintain the customer's 'routine'.

Another important revenue benefit of long-term retention is that satisfied customers recommend the business to others. For example Reichheld (1996) noted that good insurance agents acquire the majority of their new customers from recommendations. The same applies to the auto service industry. In addition according to the author, it seems that customers who are recruited through recommendations are of higher quality and therefore are more profitable as they tend to stay longer with the company.

Price Premium

For various reasons (e.g., introductory offers to new customers only) long-term customers tend to pay a premium price in most industries (Reichheld, 1996). This suggests that for some companies, short-term transactions are more valued than relationships. Companies should instead of overcharging their best customers, look at the true margins these customers generate. The price premium strategy on loyal customers is in line with the first section of this chapter "a transaction based view of value creation" which stressed that pricing options are only available when the marketing strategy has created wealth above the level of competitors. If customers remain loyal when paying a premium, it would mean that the company has some durable capability in delivering high levels of customer utility.

Costs

Acquisition Costs

In the physical marketplace, authors such as Reichheld and Sasser (1990, p.105) noted that, “Companies can boost profits by almost 100% by retaining just 5% more of their customers”.

In their paper, Reichheld and Sasser (1990, p.106) illustrate that the cost of acquiring customers is higher than the cost of retaining them for the auto-service industry:

“For one auto-service company, the expected profit from a fourth year customer is more than triple the profit that same customer generates in the first year. When customers defect, they take all that profit making potential with them”.

As noted by Reichheld (1996), the acquisition costs in an offline environment are considered high across industries. For example they include costs such as advertising, commissions on sales, sales force overhead, direct mail including distribution costs such as opening of a new store.

Another example is taken from the credit card industry (Reichheld and Sasser, 1990; Reichheld, 1996) where customers tend to spend less in their first year compared to the following years. After the first year, customers get familiarised with the use of their card and are inclined to spend more. This tends to result in increased purchases and lower operating costs as the company, by better understanding customers’ preferences, is able to serve them more efficiently.

Reichheld (1996) suggested that it is therefore better to adopt a loyalty-based strategy by acquiring the “right” customers as opposed to focussing on acquiring more and more customers.

When considering offline channels, Reichheld (1996) stressed the importance of customer loyalty as the cost of acquiring customers is high. However as mentioned by Reichheld and Schefter (2000), customer acquisition costs seem to be lower online because of the increased number of referrals (i.e., the Internet makes it easy to refer). Does this mean that online loyalty is of less importance than offline? Not necessarily as customers can more easily compare alternatives online than offline, competition has increased and the implication is that online retailers need to rapidly improve their products and services (Reichheld and Schefter, 2000). Switching online retailers (i.e., websites) seems easier and less expensive than offline (Reichheld and Schefter, 2000). These examples suggest that building online customer loyalty is not only an important strategy for retailers but a difficult one to achieve (Kabadayi and Gupta, 2005).

In addition, Reichheld (1996) argued that another way to increase profit through customer loyalty is via the company’s base profit. Base profit is derived by customers buying products at a price higher than the company’s costs. The longer the customer stays, the longer the company will earn an increased base profit because the acquisition costs would have been amortised.

Operating Costs

As customers become familiarised with a company, they tend to be more efficient and request less of the company's time (Chase, 1978; Lovelock and Young, 1979). There is an increase in productivity that is directly translated into lower costs.

Within an Internet context the various degrees of expertise of customers ranging from novice to expert is similar to offline. Online expert customers are more efficient in their performance of using the website and tend to be more loyal (Bateson, 2002).

Conclusion

The objective of gathering all these effects (revenue growth, price premium, acquisition costs, referrals, base profit and operating costs) provides the company with an accurate picture of the lifecycle profit pattern of its customers. As a result companies can assess the economic consequences of customer loyalty and can then make decisions regarding the investment required to improve productivity, profits and cash flow.

Customer loyalty can be considered as an important construct offline as some authors have shown that it costs more to acquire new customers than to retain them (Blattberg and Deighton, 1996; Reichheld, 1996, Pfeifer, 2005). More recently the notion of customer loyalty within an online shopping context has been studied. Both academics and practitioners

agree that online loyalty is as important as in an offline environment but perhaps more difficult to achieve as competitors are just a click away (Reichheld and Schefter, 2000).

DIFFERENT APPROACHES TO CONCEPTUALISING LOYALTY

Introduction

The section starts by defining customer loyalty. Definitions from the literature seem to fall into two views. The first view considers loyalty as mainly attitudinal whereby customers express a sense of commitment towards the company (Oliver 1999; Shankar et al, 2003). The second view suggests that loyalty has a behavioural dimension. This dimension of loyalty behaviour is expressed through repurchase behaviour and word-of-mouth communication (Heskett, 2002; Srinivasan et al., 2002).

From these definitions, it is concluded that there is a dynamic relationship between some dimensions of attitudinal loyalty and future loyalty behaviours. This perspective of attitudinal loyalty as a lever to behavioural loyalty is discussed next. The section continues by examining the importance of the commitment dimension of loyalty.

After defining and contrasting behavioural and attitudinal approaches to customer loyalty, this section focuses on the dimensional differences between online and offline loyalty. Are these dimensions different?

Contrasting Behavioural and Attitudinal Approaches to Customer Loyalty

Defining Attitudinal and Behavioural Loyalty

De Wulf et al. (2003, p.251) defined behavioural loyalty as:

“A composite measure based on a consumer’s purchasing frequency and amount spent at a retailer compared with the amount spent at other retailers from which the consumer buys.”

This definition highlights two dimensions of behavioural loyalty: frequency of purchase and expenditure. Various authors agree with this definition that the proportion of purchase is a reliable indicator of customer loyalty (Day, 1969; Amine, 1998; Pritchard et al. 1999).

Behavioural loyalty is measured by a combination of behavioural indicators. For example, Zeithaml et al. (1996) show that behavioural intentions manifest themselves through saying positive things, recommending the company, remaining loyal to the company, spending more with company and paying a price premium. Saying positive things and recommending the company is described as word-of-mouth communication in the loyalty behaviour literature (Amine, 1998; Ranaweera, 2007).

Shankar et al. (2003, p.155) defined attitudinal loyalty as follows:

“An attitudinally loyal customer, on the other hand, has some attachment or commitment to the organization and is not easily swayed by a slightly more attractive alternative. Attitudinal loyalty not only indicates higher repurchase intent, but also resistance to counter-persuasion, resistance to adverse expert opinion, willingness to pay a price premium, and willingness to recommend the service provider to others.”

This definition implies that according to Shankar et al. (2003), the main dimension of attitudinal loyalty is commitment. In addition this definition highlights the various behavioural intentions that are derived from commitment such as resistance to change, repurchase intent, price premium and referrals. It seems therefore that attitudinal loyalty is a pre-requisite to behavioural loyalty. If the attitudinal dimension of commitment is a priori necessary for behavioural loyalty then what are the antecedents of commitment? This question is not fully explored. From a transaction based view the antecedents of commitment would be derived from the level of post-purchase net utility felt by the customer. Besides some emotional aspects for example a degree of attachment to the company, customers are generally driven by offerings that could maximise what they perceived as benefits either functional (e.g., convenience) or non-functional benefits (e.g., peer opinions).

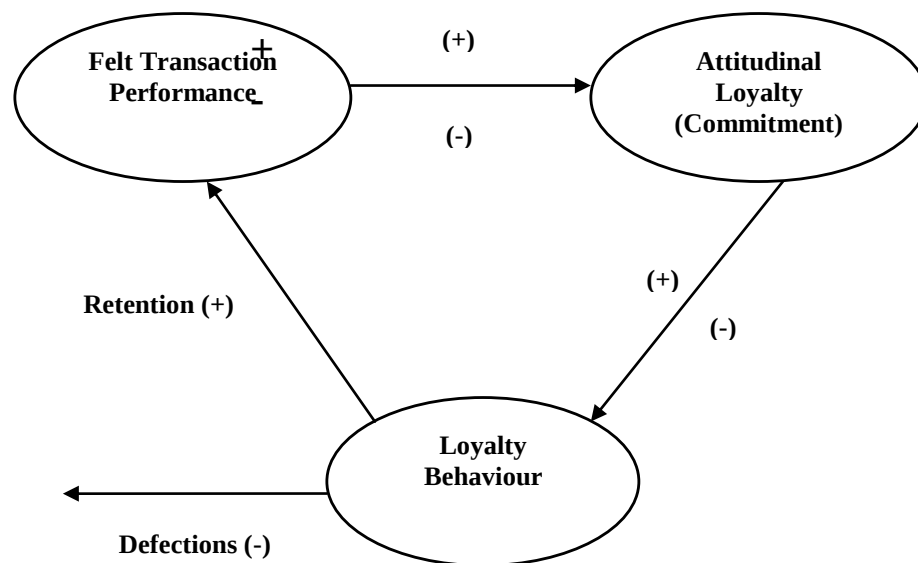
Reichheld (2003, p.48) takes an attitudinal approach by defining loyalty as follows:

“Loyalty is the willingness of someone – a customer, an employee, a friend – to make an investment or personal sacrifice in order to strengthen a relationship. For a customer, that can mean sticking with a supplier who treats him well and gives him good value in the long term even if the supplier does not offer the best price in a particular transaction”.

Thus Reichheld (2003, p.48) claims that, “to make an investment or personal sacrifice in order to strengthen a relationship”, denotes a strong commitment – a dimension of attitudinal loyalty.

The loyalty discussion at this point can be summarised in the following diagram.

Figure 12: A Dynamic Relationship between Attitudinal and Behavioural Loyalty



Source: this study

The diagram suggests that there is a circular relationship between the felt performance (experienced net utility) from a transaction, which results in a changed level of attitudinal loyalty (an increase or decrease in the level of commitment to future transactions) which in turn would modify the type and degree of future loyalty behaviours. Decreases in commitment could give rise to defections whilst increases in commitment could give rise to an increased willingness to engage in future transactions with the same supplier.

This dynamic relationship between attitudinal and behavioural loyalty is discussed in the following section.

Attitudinal Loyalty as a lever for Behavioural Loyalty

Baldinger and Rubinson (1996) in their study look simultaneously at attitudes and behaviour to measure loyalty, as they found that relying on behaviour alone is not reliable.

For example Ehrenberg, Goodhardt and Barwise (1990) based their perspective on a behavioural definition of loyalty that is the frequency of buying a product and a brand. They look at different theories regarding double jeopardy (DJ). For a smaller brand, buyers tend to buy less often and as a result be less loyal than with a larger brand. Consequently a large brand is likely to have more loyal customers. This is called the DJ effect.

However as demonstrated by Baldinger and Rubinson (1996, p.32) “a large-share brand is likely to have more loyal buyers but not necessarily to retain them at a higher rate over time”. For example according to these authors brand retailers that only rely on behavioural loyalty will find year after year that share and loyalty may decline because of a lack of attitudinal loyalty. The findings of Baldinger and Rubinson (1996) that explained the relationship between attitude and behavioural loyalty are summarised in the following matrix:

Figure 13: The Relationship between Attitudes and Loyalty Behaviour

		Attitudinal Loyalty	
		High	Low
Behavioural Loyalty	High	Real Loyal	Vulnerable
	Low	Prospects	Deserter

Source: Adapted from Baldinger and Rubinson (1996)

This matrix shows that high loyal buyers who have positive and consistent attitudes tend to stay loyal to the brand. The authors call them real loyal buyers as their behaviour reflects a relatively high degree of stability. Conversely high loyal buyers but with inconsistent attitudes tend to switch to another brand. They are called vulnerable as these kinds of customers could for example be vulnerable to lower price within competing products or services. Baldinger and Rubinson (1996, p.32) argue that “the kind of high loyal buyers you have (real loyal or vulnerable) is the most important leading indicator of retention.

Perhaps Baldinger and Rubinson’s (1996) perspective could be improved by looking more closely at the differences in the major influences behind similar looking behaviours. The difference in influences could be the perceived performance of the company on the

customers' order-winning criteria. Consequently customers may be classified as "vulnerable" when they perceive little difference in performance with the company's closest competitors. Conversely they may be seen as "real loyal" when they perceive a superior performance by the company in relation to its closest competitors.

In addition from the acquisition side, the authors found that low loyal buyers - or even non-buyers – but with favourable attitudes to the brand are more likely to switch to it. These low loyal customers with positive attitudes are a good indicator of trial (i.e., acquisition) or re-trial.

The low loyal customers with negative attitudes will desert. Reasons for the possibility that these customers are not interested in the offerings are diverse.

The main conclusion to these authors' findings is the importance of attitudinal loyalty. It seems that consistent and favourable attitudes play an important role in retaining customers. These findings are in line with Lam, Walker and Kam's (2005) approach that views loyalty as purely attitudinal. Companies need to focus their resources and marketing efforts on "real loyal" buyers and "prospects" rather than on the "vulnerable" types of customers.

To achieve this objective, Baldinger and Robinson (1996) suggest that managers look for improvement in key attributes ratings among current loyal buyers. They argue that if the key criterion for purchase is price, then customers can be classified as vulnerable and that these types of customers will buy for the brand that matches their low price preference. However what these authors do not identify are the complete customer preference structures that

include all the key attributes that drive purchasing behaviour and seem to be a pre-requisite to an increase in customer loyalty. What is the nature of the relationship between the key customers' attributes with the attitudinal and behavioural dimensions of customer loyalty?

Consistent with this view of differentiating between “real loyal” and “vulnerable” buyers amongst loyal customers, Amine (1998) produces a theoretical framework to conceptualise the concept of “true loyalty” behaviour by showing what are the causes and consequences of true brand loyalty. She distinguishes between “true loyalty” (the equivalent of “real loyalty”) and “spurious loyalty” (the equivalent of “vulnerable loyalty”). Amine (1998, p.308) defines true loyalty when “the consistent purchasing behaviour may be pursued further” and spurious loyalty when customers may stop to buy “when a change in the store assortment or the selling conditions occurs”.

A few points are discussed from her model. First, the author argued that managers should focus on brand specific attributes to stress the differences between the performance of the brand and its competitors to enhance “the loyalty status of customers”. However unless these specific attributes meet the most salient preferences of the customer, the customer may turn to competitors to maximise perceived benefits and minimise the perceived risk in making the wrong purchase decision. There is therefore a relationship between perceived differences among the brands and perceived risk as highlighted in the author's model, but what does not seem to be included is the customer preference structure as the antecedent of true brand loyalty.

Second, Amine's model shows "positive word-of-mouth communication" as being a consequence of true brand loyalty. Word-of-mouth communication also known as referrals is measured by Reichheld (2003) using his Net Promoter Score (NPS). Reichheld asked customers various satisfaction related questions and compared the results with subsequent repurchase and referral behaviour. The question that best predicted behaviour was: "how likely is it that you would recommend company X to a friend or colleague?" The NPS is calculated by subtracting the detractor percentage (scoring 0 to 6) from the promoter percentage (scoring 9 to 10). The percentage of promoters are represented by the company's referrals whilst the detractors are customers who constantly complained and do not like the company.

This suggests that Amine's model measures true loyalty through repurchasing behaviour. In this sense it is more customer retention that is measured as opposed to true brand loyalty. Amine looks at consistent purchasing behaviour that includes attitudinal loyalty but does not include the recommendation dimension of loyalty behaviour. By contrast, Reichheld (2003) demonstrated that measuring customer loyalty using satisfaction and retention measures is not as efficient as knowing what customers tell their friends about the company. Consistent purchasing behaviour should be the consequence of true loyalty while word of mouth seems to be both an antecedent and a consequence when the loyalty ripple effect is considered (Gremler and Brown, 1999).

Other authors differentiate loyalty behaviours that lead to different outcomes. As explained by Pritchard et al. (1999, p.344):

“Meaningful distinctions can be drawn between those who buy products and services strictly from habit or convenience and those whose repeat purchase behaviour is based on genuine attachment.”

It is argued that when buying behaviour is based on convenience, customers are more likely to switch. However it could also be argued that unless the perceived benefits outperform competing products; “truly loyal” customers (the equivalent of “real loyal”) may also switch over the long-term. “Vulnerable” customers may switch quicker than “truly loyal” customers as the latter tend to forgive some mistakes (La, Walker and Kam, 2005) but they may leave in the long run if the service based on the most important attributes is not the best available.

The Importance of the Commitment Dimension of Loyalty

Amine (1998) argues that positive attitude leads to true loyalty. Moreover, Heskett (2002) explains that the main dimension of a positive attitude that has the strongest effect on building up a database of “real loyal” is commitment.

Early definitions of the commitment construct are found within the social and psychological literature. On one hand sociologists suggested that social factors could constraint people to a consistent line of behaviour (Becker, 1960; Kanter, 1968). It could be argue that external constraints are not the only ones to lead to a resistance in change. For example some internal states of the individuals could also influence this resistance to change (Crosby and Taylor, 1983). On the other hand psychologists define commitment in terms of binding an individual to a behavioural disposition (Festinger, 1957; Kiesler, 1971). In this sense, not only do

people intend to remain but also intend to act. In the marketing literature a definition of commitment, derived from these earlier works in social psychology, is suggested by Crosby and Taylor (1983, p. 414):

“Psychological commitment refers to a tendency to resist change in preference in response to conflicting information or experience. Psychological commitment is maximised when (1) the individual is motivated by a need to maintain consistent relationships between preference and salient aspects of cognitive structure, and (2) important values and self-images are linked to the preference, leading to a state of position involvement.”

Commitment is mainly defined through the notion of resistance to change (Amine, 1998; Pritchard et al. 1999). However in the definition of Crosby and Taylor (1983) the notion of an attitude resistant to change is not fully consistent with the constructive view of preferences that argue that preferences will change “on the spot”. According to the constructive view, preferences tend to be altered when exposed to a context that provides competing alternatives.

In the same vein Shankar et al. (2003) argue that competing choices have an effect on customers’ commitment (commitment being an important dimension of attitudinal loyalty). This tends to imply that if a customer perceives a particular competing product or service being more attractive, then this customer’s commitment could decrease. This is in conflict with the definition of commitment which portrays the reluctance of the customer to change. In another vein, Reichheld and Sasser (1990, p.106) believe that “the only way to prevent defections is to outperform the competition continually”. In this way, companies build up a resistance to change that could last over time. This strategy may in turn lead to stronger beliefs in the reasons of re-purchasing from the same retailer. This is consistent with the first

point mentioned in Crosby and Taylor (1983) of what would maximise commitment. This commitment is then reinforced if there is a personal attachment that Crosby and Taylor (1983) define as “important values and self-images are linked to the preference”. These authors definition of commitment include the notion of customer preferences.

Other authors within the organisational behaviour literature differentiate two types of commitment. Amine (1998) described the first type of commitment as affective commitment where the individual maintains the relationship with a brand for example on the basis of his attachment to the brand. The other form of commitment is called calculative commitment and is defined by Amine (1998, p.310) as follows:

“Calculative commitment allows the customer to maintain their consistent purchasing behaviour as long as the benefits attached to this brand exceed the costs of switching to another brand.”

The main difference between both affective and calculative commitment is that the latter is based on the evaluation of the most salient attributes that makes up the preference structure of a customer, while the former is based on a judgement of the brand in terms of attachment. Affective commitment involves an emotional aspect that leads to a positive behaviour towards the brand and is based on non-functional motives. Calculative commitment involves an evaluation of the weighting of the levels of the attributes that make up the brand. It is based on cognitive efforts and involves functional motives.

Amine (1998) hypothesises that affective commitment leads to a more consistent behaviour that implies a greater resistance to change. Without denying the existence and the strength of

a personal attachment that influences customer behaviour, could it be that unless the customer perceives some benefits that match his preferences, the likelihood of a long term commitment is reduced? Affective commitment may not necessarily lead to consistent behaviour in terms of purchasing the same brand unless the company offers competitive alternatives.

This is, as mentioned previously, in line with Reichheld and Sasser (1990) who argue that companies need to outperform competing products and services to prevent customers from leaving in favour of competitors. For some customers it could be argued that commitment is a mixture of affective and calculative commitment. In this case, the company still needs to perform best in industry against the most salient preferences of customers to win their order (Hill, 1983).

Pritchard et al. (1999, p.344) chose to measure “truly loyal” customers through commitment. They suggest that commitment is defined as a resistance to change that can be maximised by:

- (1) *Identifying with important values and self-images associated with the preference,*
- (2) *Are motivated to seek informational complexity and consistency in the cognitive schema behind their preference, and*
- (3) *Are able to freely initiate choices that are meaningful*

The first point of this definition of commitment highlights a personal attachment that reflects a psychological commitment that could induce a resistance to change. The second point denotes a willingness to search even if it involves an increase in cognitive effort. This shows a distinct attitude that again reflects a resistance to change as customers will go through the process of extensive search. The third point seems to stress the importance of maximising

utilities by making meaningful choices. In addition the three points of this definition stress the link between commitment and preferences. Therefore it could be assumed that unless it is in ad equation with the customer preferences, the inclination of the customer to buy may decrease.

Pritchard et al. (1999) identify the relationship between three independent variables namely information complexity, position involvement and volitional choice and the loyalty dependent variable, resistance to change. Their findings show that the combination of the three independent variables could explain 60% of the variability in the resistance to change. In other words, information complexity, position involvement and volitional choice have an effect on resistance to change that in turn has an effect on customer loyalty. Therefore a customer's tendency to resist changing preferences (i.e., commitment) is a key precursor to loyalty.

Commitment is defined by various authors through the notion of resistance to change and personal attachment (Crosby and Taylor, 1983; Amine, 1998; Pritchard et al, 1999; Shankar et al (2003). Heskett (2002, p.356) argues that committed customers lead to two types of behaviours. They either adopt apostolic behaviour (they are convincing in telling others positive things about the product or service or brand) or they adopt ownership behaviour ("they take responsibility for the continuing success of a product or service offering"). The apostle would recruit other customers while the owner would provide ideas on how to improve a product or service.

The study of Crosby and Taylor (1983) differentiates between low commitment customers and high commitment customers. They found that high commitment customers tend to maintain stable preferences. Their study was done over a period of three years. The results for low commitment customers show unstable preferences. In addition low commitment customers were more difficult to model as they gave incomplete and uncertain answers. This would suggest that low commitment customers will tend not to give feedback to the company and as a result not willing to participate in giving information for product improvements.

In addition Gremler and Brown (1999) explored what they called the loyalty ripple effect. For example apostle customers can generate a ripple effect by recommending the product or service to potential customers who will in turn tell other potential customers and so on. This argument is based on research from various authors such as Brown and Reingen (1987) that suggest that customers who based their purchase decision on recommendations tend to in turn recommend the provider to other potential customers.

Conclusion

In conclusion, two main approaches are used to conceptualise loyalty: behavioural loyalty and attitudinal loyalty. Previous studies tend to highlight the importance of attitudinal loyalty - that includes dimensions such as customers' favourable attitude and commitment – to generate an increase in the number and quality of future transactions. However it seems that these various ways to conceptualise loyalty are interrelated as for example behavioural

loyalty is only sustainable when combined with attitudinal loyalty, which in turn is influenced by the felt performance of repeated transactions with a supplier.

The next section focuses on online loyalty models and compares and contrasts the differences in these models with offline loyalty behaviours.

Are the Dimensions of Online and Offline Loyalty Different?

Situational Conditions Affecting Loyalty

In the physical marketplace, customers are loyal to a specific physical store or to a brand. Within an Internet context, customers may be loyal to an online website, to a brand or even to software. For example Quicken ¹from Intuit held 60% market share in 1991 (Reichheld 1996). This view is reinforced by Evans and Wurster (1997, p. 79):

“Market research suggests that Quicken users are more likely to be loyal to their software than to their banks. In one study, half of them said that if they were changing banks anyway, they would require their new bank to support the software - that is, allow them to transact their business online using Quicken”.

In this example the situational context has changed with the Internet capabilities and is affecting customer loyalty.

¹ Quicken is a software that enables customers to write cheques and track their finances on their personal computer.

The benefits of developing loyalty at a situational level are explained by some authors. For example Rayport and Sviokla (1994, p.147) argued that “loyalty will pay off only if it is developed at the context level rather than at the content level”. They view loyalty as a sequential process where the customer has to first accept the context (e.g. Internet versus traditional) before there can be acceptance of the content.

For Dholakia and Bagozzi (2001) the decision to return to the same site is equivalent to the decision to buy the same brand. Their model shows that a site is associated with a set of perceived benefits as well as with a level of trust and perceived risks. Equally a particular brand is associated with some perceived benefits such as quality. This assessment will then determine the level of trust and perceived risk. In that sense loyalty to a site is equivalent to brand loyalty. The context (marketing channel) changes but the dimensions that determine loyalty remain the same. In this case customers are loyal towards a brand; this can be described as the brand context.

Lee and Sohn (2004, p.211) consider e-loyalty to be different from loyalty in traditional markets. Their justification lies in their assumption that “Internet markets are different from traditional markets in terms of non-existence of human beings and physical facilities”. The implication is that loyalty is towards a website instead of a physical store and towards the experience offered by the website as opposed to the experience provided by salespeople. If this is the case then the definition of attitudinal and behavioural loyalty remains the same between the offline and online context.

Finally, customers can also be loyal to the context of a purchase. Various authors by investigating what was most important to Internet shoppers started to compare the factors for attraction versus retention (Reibstein, 2002). One of their findings is that the attributes that cause a customer to select a site not only differs by customer segments but is also dependent upon the purpose of the purchase (Reibstein, 2002). For example if the purpose of the purchase is to buy a gift, then Reibstein shows that product representation is the attribute most frequently chosen, followed by on-time delivery for acquisition. Customers need to trust that what they bought is what they thought they will buy. The perceived service therefore needs to equal the desired/expected service (Zeithaml and Bitner, 2003).

The implication for companies is not only to understand the most important factors for customers to shop online that are linked to the capabilities of the Internet such as greater convenience, but also to examine their preferences in their situational context.

Some Dimensions of Online Loyalty

La, Walker and Kam (2005) have developed a conceptual model of e-loyalty. Their findings reveal strong and complex relationships between attitudinal and behavioural dimensions of customer loyalty that result in two levels of e-loyalty. The first level of e-loyalty (called loyalty 1) includes three types of behavioural loyalty – repurchase pattern, repurchase intention and referral, as well as one type of attitudinal loyalty – a sense of personal attachment and a positive perception of a particular retailer compared to competitors. This model relates to the offline model of loyalty of Baldinger and Robinson (1996) who argued

that buyers who already purchase will stay loyal if their attitudes towards the brand are positive.

The second level of e-loyalty (called e-loyalty 2) includes behavioural and attitudinal loyalty that goes beyond a buyer-seller relationship as the customer is looking for a partnership relationship where both parties will benefit over the longer-term. This model of e-loyalty emphasises the importance of customers' commitment. The object of this online commitment can be different to offline models of commitment as identified by Heskett (2002) who argued that commitment can lead to an attitude where customers act as owner of the brand or a website. However this may be no different from traditional marketing channels where high levels of commitment are possible, although the scope of expression of this commitment may be less e.g. less opportunity for referrals.

In this kind of relationship, the customer is willing to give feedback to the company so the company has an opportunity to customise its offer. This results in an increase in trust that encourages the customer to share even more information (Reichheld and Schefter, 2000). In addition the customer is therefore more willing to accept mistakes or higher price (La, Walker and Kam, 2005). This is in line with the results of the offline loyalty model of Baldinger and Robinson (1996) who argued that customers who make buying decisions based on price only are considered as "vulnerable" customers even if they are presently buying. This is because these customers will tend to switch easily to another retailer.

La, Walker and Kam (2005) consider e-loyalty (2) to be a higher level of loyalty but the most difficult to achieve. These authors imply that e-loyalty (2) tends to be more durable over time

than e-loyalty (1). However the authors have not linked loyalty behaviours to customer preferences and unless the loyalty questions are linked to a set of perceived benefits that will maximise utility values for customers and simultaneously reduce perceived risks and increase trust, the loyalty typologies could prove to be less meaningful. Both types of e-loyalty require customers to perceive some determinant benefits.

The above discussions broaden the scope of the understanding of customer e-loyalty. Durable customer loyalty can therefore be achieved by reinforcing the attitudinal dimension of loyalty and more specifically by focussing on the commitment aspect of the relationship. Thus even if a high market share brand is more likely to have more loyal customers than a small brand, its ability to keep loyal customers in the long run depends on its capability to convert them to either apostle or owner behaviour types (Heskett, 2002). These two kinds of loyalty (apostle or owner behaviour) relate to the offline loyalty model and they seem to be applicable for e-loyalty.

Heskett (2002) argues that the Internet facilitates these two types of behaviours. For example eBay (Internet auction services) have customers that provide word-of-mouth advertising that in effect lowers the acquisition cost for the company. They have also implemented a strategy that involves customers. These owner types of customers are like partners who can suggest ways of improving services and products.

Furthermore, the relationship between the customers and the company is a dynamic relationship that strengthens a sense of belonging also called personal attachment. Personal attachment leads to a positive or favourable attitudinal loyalty that in turn leads to a higher

percentage of real loyal buyers. Chapter 1 highlights the main Internet capabilities such as interactivity (the opportunity for instant feedback for example) that leverages this dynamic relationship and could generate committed customers when the company's strategy focuses on increasing true loyalty through commitment.

The Internet shopping channel has leveraged the recommendations ripple effect of the offline loyalty model (Gremler and Brown, 1999) as the capabilities of the Internet make it easier to refer (Reichheld and Schefter, 2000). However Gremler and Brown (1999) do not mention that the power of the loyalty ripple effect could only be maximised if there is a high degree of trust between the company and its customers. As trust influences the customer preference structure, it is necessary for a company to increase trust as part of their marketing strategy. The capabilities of the Internet as discussed in chapter 1 leverage trust by allowing customers to send feedback to companies so they can adjust their products or services according to these customers' feedback that ultimately are a reflection of their preferences.

How likely is it that customers will buy a certain brand, product or service online when it is recommended by peers? Would online communities play an important role in influencing potential customers? Would the influence of recommendations vary per product category? Therefore besides recommendations being seen as a dimension of loyalty, exploring how customers rate recommendations is a relevant step in determining the relative weighting of recommendations compared with the set of attributes that form the customer preference structure.

Srinivasan, Anderson and Ponnnavolu (2002) also argue that developing customer loyalty to an online business requires an understanding of the antecedents of loyalty. These authors define e-loyalty as “a customer’s favourable attitude toward the e-retailer that results in repeat buying behaviour.” They are in effect measuring customer retention which is a part of customer loyalty but they do not measure customer loyalty as a whole with all the dimensions that make up customer loyalty. This difference is relevant as the variables used to measure loyalty will affect the results.

Srinivasan et al (2002) identified eight factors that appear to influence e-loyalty. These factors are derived from in-depth interviews with 42 individuals. They are customisation, contact interactivity, cultivation, care, community, choice, convenience and character. Seven factors out of eight (all except convenience) were found to have a significant impact on loyalty. In addition the results demonstrated the highest elasticity with respect to character and care. These two dimensions (character and care) relate to the importance of attitudinal loyalty of the offline loyalty models (Crosby and Taylor, 1983; Baldinger and Rubinson, 1996; Amine, 1998).

Various authors argue the importance of focussing on fulfilment and after-sales customer service (Forrester, 2001). These two aspects of care are part of the post-purchase shopping experience. On one hand some authors argue that companies need to focus their resources on the pre-purchase shopping experience by providing customers with products/services information and price comparisons. On the other hand other authors debate that the focus needs to be on the post-purchase shopping experience.

By understanding what customers prefer the most could help in determining which aspect of the interface needs to be more developed. The questions they use to measure customisation, contact interactivity, choice and convenience are mainly derived from functional motives of customers (e.g., ease of use, short ordering time, search tool efficiency, purchase recommendations), whilst the character of the site involves an emotional aspect that is derived from non-functional motives (e.g., attractiveness).

However Srinivasan, Anderson and Ponnnavolu (2002) also acknowledge that other variables such as trust and satisfaction have an effect on loyalty. For example the effect of customisation could lead not only to an increase in efficiency, it could also result into an increase in trust as the customer feels that the company is matching their needs. Thus trust could be a latent variable in the sense that customisation has an impact on loyalty because it leverages the degree of trust. This is in line with the results of the loyalty model of Amine (1998) that noted a consequence of true loyalty defined as “customer’s confidence in the brand” which is the notion of trust as a measurement of loyalty. Trust may leverage the key brand attributes by providing information to the company so the company can in turn customise better its offerings. This is in line with Blackston (1992) who notes that trust can be gained by responding suitably to customers.

Moreover convenience is defined by Srinivasan, Anderson and Ponnnavolu (2002) as a site easy to use, easy to navigate and does not require a first time user to spend too long to make a purchase. Convenience is therefore seen as a pre-purchase experience. However convenience could also be defined as a post-purchase experience. For example the convenience of having goods delivered at home could also be seen as part of the convenience construct. It could be

the reason why their results are not in ad equation with the main body of the literature that rate convenience as a main online perceived benefit.

In addition, to measure online community, the authors use questions that reflect a sense of belonging to the site. La, Walker and Kam (2005) define this type of loyalty as attitudinal loyalty which includes the personal attachment dimension that reflects a sense of belonging. However Srinivasan, Anderson and Ponnayolu (2002) define loyalty as repeat buying behaviour which is in effect a dimension of behavioural loyalty. Could the findings be affected by a lack of precision in what is being measured? This would require a focus on measuring customer retention which is part of behavioural loyalty.

La, Walker and Kam (2005, p.239) in their paper state that Shankar et al. (2003) “view loyalty purely as an attitude”. However Shankar et al. (2003) do not deny the existence of behavioural loyalty but rather argue that attitudinal loyalty is stronger in the sense that it has a long-term effect.

It seems that authors on either side of the attitudinal versus behavioural debate view these two explanations of loyalty as mutually exclusive. If the debate is viewed from a preference structure perspective then attitude becomes an antecedent of behaviour.

In the same line as Shankar et al. (2003), Oliver (1999) defines loyalty as a deep commitment to purchase again a product or service besides any marketing and/or peer’s influence. The author refers to ultimate loyalty. Both definitions have the concept of commitment that

implies a long-lasting relationship that involves not only the customer's action (what he does) but also the psychological aspect of the relationship.

Lee and Sohn (2004) chose to define loyalty as attitudinal loyalty that incorporates customer preferences and dispositions towards specific Internet companies. Therefore, if customers show a strong preference towards an Internet company over its competitors but does not exhibit a repeat purchase pattern over time then the customer is still considered to be loyal. How well the online retailer is performing on those most important preferences seems to determine the re-buy rate. Therefore, defining loyalty only as attitudinal loyalty seems to be incomplete.

Javalgi and Moberg (1997) stated that attitudinal loyalty incorporates customer preferences. These authors defined customer preferences as a strong preference towards a company's brand over its competitors' brand. A concern with this perspective is that it is based on a single purchasing criterion by using brand as the only preference measure.

Another stream of authors argues that a definition of loyalty needs to include both attitudinal and behavioural components (Dick and Basu, 1994; Baldinger and Robinson, 1996). For example Kabadayi and Gupta (2005) have demonstrated empirically that the loyalty construct is made up of two main dimensions: revisit and stickiness. This definition of loyalty comprises both an attitudinal component: the desire to stay at a website longer and a behavioural component: coming back to the website again.

Conclusion

There seems to be no compelling reason to consider traditional customer loyalty to be different from customer e-loyalty, as the dimensions that define attitudinal and behavioural loyalty are the same (e.g., commitment and repeat buying behaviour). However what seems to be different is the performance on the factors influencing customer loyalty.

The discussion of online loyalty probably needs to include the effects of actual purchasing experiences as a modifier of expectations, which in turn acts as a modifier of loyalty behaviours. Such an approach may lead to a more dynamic understanding of the changes in online loyalty behaviour, rather than static categorisations of online loyalty.

POTENTIAL MEASURES OF CUSTOMER LOYALTY

The following discussion reviews how the various concepts of loyalty have been operationalised through a range of measures. The measures of loyalty discussed are, customer satisfaction, repeat purchase, trust and quality.

Change in Satisfaction

According to Reichheld (1996, p.235), customer satisfaction is the most common but the least dependable measure of customer retention. In addition it is not directly linked to the company's cash flow and customer database. Reichheld (1996) is not implying that

satisfaction is not important but the author is arguing that the problem lies in the way satisfaction scores are used. For example some managers use them as an end in themselves and as a goal higher than profits (Reichheld, 1996). This author argues that satisfaction scores have to be linked to loyalty and profits instead. The connection between satisfaction scores and cash flow needs to be made otherwise employees may improve satisfaction scores the easiest way and not the most profitable way.

This view contrasts with Oliver (1999) who argues that not all companies can pursue a customer loyalty strategy. Depending upon the nature of the product and the degree of interest of the customer, satisfaction remains the only suitable goal for companies. For example some services do not need to be re-consumed at all or in the long run but customers remain loyal. This is called passive loyalty. In this instance the author raises the question of the costs to invest in a loyalty program versus the benefits perceived by word-of-mouth recommendations. However would satisfied customers repeat purchase? If the answer is no, then Oliver (1999) would suggest that there seems to be little interest in investing resources to keep customers satisfied.

Some marketing literature which looks at customer loyalty in traditional markets has found a positive relationship between customers' satisfaction and loyalty to their stores (Rust and Zahorik, 1993; Bloemer and de Ruyter, 1998) In the same vein, the online customer loyalty literature has found that there is a positive relationship between customers' willingness to revisit a website and their level of satisfaction online (Anderson and Srinivasan, 2003).

Online satisfaction is described as an outcome of three antecedents: convenience of navigation within a website (i.e., website design), the offerings (i.e., quality of products and services) and their related information (Peterson et al. 1997; Szymanski and Hise, 2000; Anderson and Srinivasan, 2003). However these authors seem to approach online and offline satisfaction differently in that the information search activity plays an increasingly important role in online satisfaction.

The implication is that as preferences might have changed with the Internet (e.g., preferences on searching for information may have been altered by the experience of the Internet channel), the effect of satisfaction on customer loyalty may have also been modified with the Internet. This suggests that it may not be necessary to specifically measure customers' online satisfaction but rather the sources of online satisfaction could be investigated by examining customers' preference structures and firm performance measured on these antecedent dimensions of satisfaction.

Change in Repeat Purchase

Would measuring the difference between a prospective view and a past view of customers' behaviour be a valid and reliable measure of customer loyalty? Both are of equal interest but with a different purpose. For example on one hand, tracking down past behaviour helps identify customer defections (Reichheld and Sasser, 1990) which is useful to improve product design or service quality. On the other hand, looking at prospective behaviour could help in the design of new products or in advertising new services with a different approach.

Therefore asking questions that reflect past behaviours or asking questions to anticipate future behaviours depend upon the nature of the marketing problem.

Some authors looked at repurchase behaviour as a reliable indicator of customer loyalty (Day, 1969; Amine, 1998). For example in the automobile industry the only meaningful measure of satisfaction is repurchase loyalty (Reichheld, 1996, p.235).

However repeat purchase is in essence a dimension of behavioural loyalty compared with attitudinal loyalty. Pritchard et al (1999) used attitudinal variables to measure loyalty but mentioned various ways to measure behavioural loyalty ranging from duration, frequency of visits to proportion of purchase.

Change in Trust

Trust is difficult to discuss as a dimension on its own, as it is pervasive in other constructs relevant to this discussion, for example, global connectivity, choice and convenience. Nevertheless this section will attempt to focus on trust as a measure of loyalty.

Trust is seen as an element having a more or less important effect on customer retention depending on the authors' views. Hart and Johnson (1999) argue that trust is a better predictor of customer retention than satisfaction. For example it might be difficult to retain a customer even after a satisfactory recovery process (in the case of a service failure) because

the degree of trust has been reduced. These authors use this as evidence that trust has a stronger emotional component than satisfaction.

Conversely Ranaweera and Prabhu (2003) found that trust has a weaker effect on customer retention than satisfaction. However they also argue that in combination with satisfaction, trust leverages the effect of satisfaction on customer loyalty. Kabadayi and Gupta (2005) also argued that online customer satisfaction has more influence on online customer loyalty than online trust. As a result these authors suggest that online sellers should allocate their resources and marketing efforts on activities that will satisfy customers instead of emphasising “trustworthiness”.

Other authors highlight the importance of trust in making the decision to shop online (Lee and Turban, 2001) and conclude that trust is a salient attribute that has an effect on customer retention (Perea y Monsuwé, 2004). For example Lee and Sohn (2004) have empirically tested the belief that trust is a more important factor compared with switching costs in retaining customers. Their results suggest that online companies need to focus on building trust rather than setting high switching costs to increase e-loyalty.

Change in Quality

Zeithaml, Berry and Parasuraman (1996) demonstrated that improving service quality can increase favourable behavioural intentions and decrease unfavourable intentions which in turn will have financial consequences on the company’s revenue and costs. However they

found that the adjusted R-squared values for the quality-pay more relationship is weaker than in the quality-loyalty regression models across all companies. This implies that an increase in service quality does not explain why customers may pay more. Customers may therefore pay more for reasons other than an increase in service quality.

Conversely an increase in service quality seems to explain a lot of the variability in the loyalty dependent variables. These measurements do not include attitudinal intentions such as personal attachment to the company. This suggests that the relationship is more complex and that a company needs to consider various elements of the loyalty construct to measure the overall impact of the customer behaviour and attitudes on the loyalty variables, before the decision to allocate resources.

The purpose of this section was to explore how some authors measure customer loyalty. The choice of these predictors reflects different views on loyalty hence different priorities for managers. How they measure customer loyalty is a reflection of their loyalty strategy and the way resources could be allocated.

The chapter which follows seeks to provide a synthesis of the discussions on Internet capabilities, customer preferences and customer loyalty. From this synthesis is derived a testable theoretical model.

CHAPTER 4: CONCLUSION: TOWARDS A RICHER UNDERSTANDING OF THE RELATIONSHIP BETWEEN ONLINE CUSTOMER LOYALTY AND CUSTOMER PREFERENCE STRUCTURES

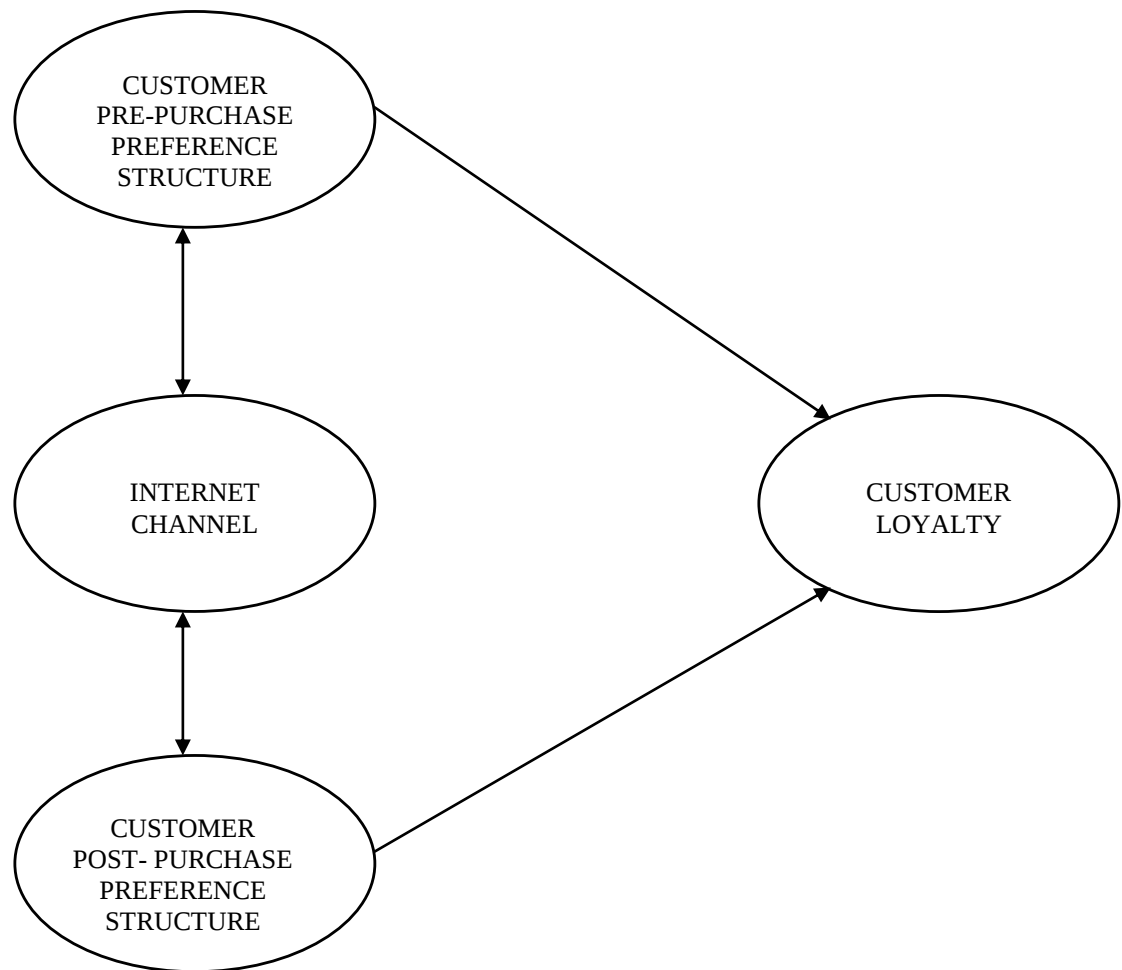
Chapter 1 discussed the capabilities of the Internet. The effect of these Internet capabilities on some of the perceived benefits, trust and perceived risks that form customer preference structures were reviewed in chapter 2. Chapter 3 examines definitions and measurement of customer loyalty. These prior theorising studies have provided the basis for an integrative, theoretical model presented below.

The model draws many of the concepts discussed together in a distinctive way and provides a basis for prioritising some Internet features by relating them to changes in customer preferences and changes in customer loyalty behaviours. It also forms the basis, in combination with the fieldwork conducted in this research, for the distinctive contribution of this dissertation.

This section describes the conceptual framework derived from the discussion of previous studies and represents an attempt to identify the relationship between customer preferences and customer loyalty by distinguishing between pre-purchase preference structures and post-purchase preference structures. It points to the crucial role of understanding customer preference structures for particular products and services and for a specific marketing

channel. Pre-purchase preferences are therefore viewed as preferences that occur before incorporation of the Internet channel whereas post-purchase preferences look at customer preferences once they have experienced the Internet channel. This conceptual framework is shown next.

Figure 14: A Framework of the Internet as a Modifier of Customer Preference Structures Including Loyalty Effects



Source: this study

The above theoretical model describes ex ante and ex post-purchase preference structures as modified by the Internet channel context and these preference structures' relationship to

online customer acquisition and retention. This model is a synthesis of the literature on the capabilities of the Internet and a prioritisation of those capabilities through customer preferences and conversely, how the capabilities of the Internet may change preference structures.

The model attempts to make a small contribution within the literature by tying together a number of technical perspectives of the capabilities of the Internet in terms of their logical hierarchy, what basic functionality allows for more complex simultaneous capabilities that will in turn have an effect on customer preferences and as a result influence customer decision making. Consequently it is by linking the factors that make up customer preferences to the capabilities of the Internet that insights into customer acquisition and loyalty behaviours can be examined. The model suggests that the potential change to customer loyalty behaviours are modified by the capabilities of the Internet.

The model shows customer pre-purchase preference structures as they are formed before they choose to use the Internet channel. The model suggests that potential customers have pre-conceptions of what the Internet can do in terms of performance against some of the preference structure attributes. These Internet perceptions could have been derived from various sources such as peer experience, personal technical skills, personal level of challenge and media. These perceptions are represented by the relationship from the customer pre-purchase preference structure to Internet channel capabilities. As a result of having shopped online, these perceptions of the Internet capabilities might be modified with a possible effect on the post-purchase preference structure. Understanding the pre-purchase preference structures of customers represents the starting point to the model.

A shopper may decide to use the Internet channel to shop online and as a result of their experience, their preference structures may have been modified. These are called post-purchase preference structures. The relationship from the customer's post-purchase preference structure to the Internet channel represents the modified perceptions of the level of performance the Internet can deliver.

For this reason the Internet context is positioned between the customer's pre- and post-purchase preference structure to represent it as a modifier of customer preferences.

For example, if the relative importance of global connectivity is greater than the relative importance of interactivity, it is a function of which attribute(s) comes first, second and third in the preference structure of the customer. In this way the customer's preference structure largely sets the utility values of each of the capabilities of the Internet. For example, the importance of global connectivity may be high if derived from a customer who is looking for comparisons in terms of products and prices. Conversely the relative importance of interactivity may be high with a group of customers that value customisation most.

This suggests that before customer loyalty behaviours can then be examined, the structure of pre- and post-customer preferences need to be understood first.

As discussed in chapter 1, authors such as Rayport and Sviokla (1994), Evans and Wurster (1997) looked at the effect of the separation of contact, content and infrastructure on the buying environment. Their findings highlight a set of perceived benefits for customers.

However they do not examine how these outcomes are oriented from a customer's perspective.

Lu and Lin (2002) start to fill the gap by looking at the impact of these three elements (content, context and infrastructure) on customer attitude and customer loyalty for electronic publishing. The Lu and Lin (2002) study is derived from a behavioural view of the Internet and customer loyalty. They found that context has a direct impact on loyalty. Another way to investigate this issue could be to determine the levels that make up the context's attributes, for example context could include a reduction of search effort and transaction cost. The relative importance of these two levels could then be measured in relation to their effect on customer preferences. Would the relative weighting of these two attributes be important enough so as to have a positive impact on the customer's loyalty rate?

The Internet literature suggests that the two main capabilities of the Internet channel namely low cost global connectivity and interactivity give rise to a variety of perceived benefits that are different to the ones experienced offline. For example Internet capabilities of separation of contact, content and infrastructure give rise to a choice greater online than offline in terms of total information on products and services as well as in terms of price comparisons.

Some authors have started to investigate which of these attributes may influence the customer to buy online (Alba et al., 1997; Srinivasan, Anderson and Ponnnavolu, 2002). First they seem to only look at one or two attributes at a time to determine customer preference structures rather than examining a set of attributes. In the theoretical model, the constructs pre- and post-purchase preference structures could be measured by a set of observable variables based

on perceived benefits derived from internet capabilities. These distinct attributes make up customer pre- and post-purchase preference structures.

As a result of combining Internet capabilities to customer preferences a series of questions arise. These questions ask for example, “What is the relative importance of interactivity to the company’s ability to compete on the most salient preferences of the customer?” The objective for the company is to improve its performance above industry average on the most important attributes that make up the customer preference structure. Reichheld and Sasser (1990, p106) believe that “the only way to prevent defections is to outperform the competition continually”. In this way, companies build up a resistance to change that could last over time.

Those authors who investigate the attributes that make customers buy online do not systematically compare the customer preference structures before the use of the Internet channel with the customer preference structures after experiencing online shopping (Sivadas and Prewitt, 2000; Lee and Lin, 2005). The theoretical model is an attempt to first study the preference structures of customers who have not shopped online and then to examine the preference structures of customers who have shopped online. Would these two groups of customers differ in their preference structures? If there is a systematic difference between pre- and post-customer preference structures, would this difference vary by product category or service type?

Understanding this difference would help practitioners assess the degree to which preferences are mostly revealed or constructive for a certain product or service. If they find out that the

difference is significant, this implies that the effect of Internet capabilities on customer preferences is important. As a result this leverages the control of managers on preferences, and websites can be designed to influence and meet these preferences.

Authors who differentiate between online and offline shoppers tend to look at what attributes will attract offline shoppers to buy online as opposed to studying their existing preference structures. For example Reibstein (2002) found that price is the most important attribute to attract customers online, while customer service support is strongly positively correlated with repeat purchase.

Therefore the attributes that attract customers seem to differ from the ones that may keep customers. However examining if there is a systematic difference between pre- and post-customer preference structures could help managers identify if their offline knowledge can be applicable online.

When customers shop online as well as offline, they are faced with a two stage evaluation process. The pre-purchase phase that includes information search, choice and price comparisons and the post-purchase phase that encompasses fulfilment and customer service support. Some authors argue that one phase may have more influenced on customer loyalty behaviour than the other (Crosby and Taylor, 1983). Another study conducted by Reibstein (2002) used the likelihood to purchase again as a measure indicative of customer retention. One of the findings was that the first two highest correlations were with “perceived service support”, “on-time delivery” and “likelihood to purchase again”.

This result is consistent with the observation by Ariely and Carmon (2002) who noted that the post purchase shopping experience has the greatest influence on the likelihood to repeat purchase. Another study of Ariely and Carmon (2000) also highlights the importance of the end of the purchase process by arguing that fulfilment plays a greater role than information and choice. However unless the customer accesses the right information and is given the opportunity to search amongst various alternatives before making a choice, no exchange may take place and the customer will have no experience of the level of service at the fulfilment phase.

The pre-purchase phase seems therefore to be as critical as the post-purchase phase. At what point in the purchase cycle could the pre-purchase phase be more important to loyalty than the post purchase phase? Insights into this question may be gained by defining pre- and post-purchase customer preferences structures.

The theoretical model reinforces the relationship between customer preference structures and loyalty as loyalty behaviours are derived from a set of preferences in the mind of the customers. When customers answered the questions designed by La, Walker and Kam (2005) as measures of loyalty, they derive their answer from a set of preferences that could change if they are presented with another offering, more attractive on their most relevant preferences. For example when answering on a seven-point Likert scale, the following question: “I believe that this website is better than its competitors”, customers have a set of preferences in their mind. As a result it seems useful to first understand why customers may positively rate this question. Consequently if a competitor matches the preference structure better, then the

rating of the answer for this question could also change. This implies that a change in the preference structure could lead to a change in customer loyalty.

The theoretical model suggests that Internet capabilities are a potential cause of change in customer preferences which in turn will have an impact on customer loyalty.

The theoretical model would suggest that the route to increasing online market share lies in knowing the relationship between what the Internet can offer and the most important attributes of the customer preference structure; hence the likely effects on customer acquisition and retention. The implication is that improving the relative rates of customer retention lead, over time, to relative increase in market share and volume.

The review of the literature related to the Internet shows an evolution in terms of the focus of previous studies. For example the early literature on the Internet seems to focus more on the performance of the capabilities of the Internet (Rayport and Sviokla, 1994; Hoffman and Novak, 1996; Deighton, 1996; Alba et al., 1997; Evans and Wurster, 1997; Peterson et al., 1997). More recent literature are discussions on the flow construct (Novak, Hoffman and Yung, 2000; Ajzen, 2002; Novak, Hoffman and Duhachek, 2003; Mathwick and Rigdon, 2004). The focus is on the main characteristics of the Internet compared with other marketing channels (see chapter 1).

Discussions then tend to move away from the Internet capabilities to the outcomes and distinctive benefits of these Internet capabilities such as choice, convenience, customisation, trust and perceived risks (Reichheld and Scheffer, 2000; Rowley and Slack, 2001; Srinivasan,

Anderson and Ponnnavolu, 2002; Häubl and Murray, 2003; Bhatnagar and Ghose, 2004). These benefits, that may serve the customers' preferences, are discussed in chapter 2.

The latest studies focus more on recognising that the Internet channel has not replaced other traditional marketing channels. Indeed online information search could lead to purchase in another channel. The focus has shifted to compare online shopping with in-store shopping (Michaelidou, Arnott and Dibb, 2005; Farag et al., 2007). In addition from around 2002, discussions tend to try to explain which attributes may influence online purchasing intentions (Reibstein, 2002; Anderson and Srinivasan, 2003; Lee and Lin, 2005; La, Walker and Kam, 2005).

In conclusion three major gaps were identified in the customer behaviour Internet related literature.

Gap one reveals a limited conceptualisation of how the Internet influences customer preference structures (Rayport and Sviokla, 1994; Evans and Wurster, 1997; Srinivasan, Anderson and Ponnnavolu, 2002; La, Walker and Kam, 2005). This gap exists because not all capabilities are simultaneously considered and limited preference structures considered. This gap can be resolved by using the model to better define capabilities and preferences for a given product category. This gap can be addressed through a research design which simultaneously relates capabilities to preferences.

Gap two suggests a limited theorising on the nature of how preference structures prioritise Internet channel capabilities (Alba et al., 1997; Gilpatrick, 2001, Lu and Lin, 2002; Häubl

and Murray, 2003). This gap exists because Internet capabilities are usually discussed before being related to a set of customer preferences. The model provides a systematic way of examining, for different products, the relative importance of the capabilities of the Internet. To test this gap the preference structure of interest needs to be defined in detail and then related to the performance capabilities of the Internet.

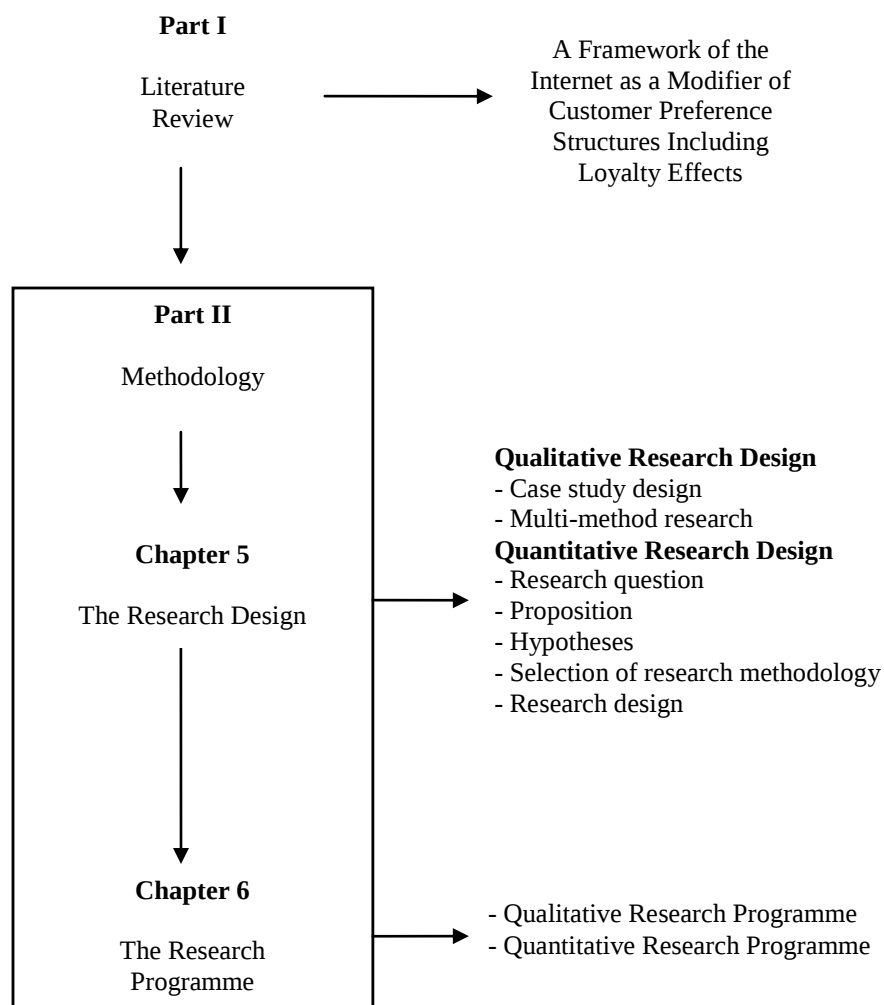
Gap three exposes a limited conceptualisation of the relationship between changing preference structures and loyalty behaviours in the Internet marketing context (Reichheld and Sasser, 1990; Burke and al., 1992; Baldinger and Robinson, 1996; Lu and Lin, 2002; Reibstein, 2002). This linkage seems largely unexplored territory. The model provides a way of structuring a study that (1) systematically develops preference structures for a given product, (2) identifies changes between pre- and post-preference structures and (3) links changes in those structures to changes in loyalty patterns.

PART II - METHODOLOGY

INTRODUCTION TO PART II

The purpose of Part II is to develop a methodological approach appropriate to the theoretical model and research question. The following diagram lays out how this is achieved through the chapter structure.

Figure 15: An Outline of Part II - Methodology



Part II progresses from the theoretical model developed in the literature review to a discussion of qualitative and quantitative research design.

Chapter 5 justifies why a joint methodological approach is deployed that results in both qualitative and quantitative research designs.

Chapter 6 discusses each research programme and how the results of both methodological approaches are to be synthesised.

CHAPTER 5: THE RESEARCH DESIGN

INTRODUCTION

In the previous chapter a theoretical model was developed based on theories from a body of past research in the fields of Internet capabilities, customer preferences and customer loyalty. That model at face value suggests a number of testable relationships. For example the relationship of preference structures to the capabilities of the Internet and the relationship to customer loyalty. However these relationships can exist within different contexts and are often dependent on subjective perceptions (Maylor and Blackmon, 2005).

The study therefore seemed to present itself methodologically at two different levels. One level is phenomenological to assess if the model emerged in different ways in different contexts and on a positivist level to determine if the relationships posited by the theory can be found to exist in the data. Given the recent emergence of the Internet as an increasingly important marketing channel it seemed appropriate that the research design should address both approaches. For that reason the following section describes the evolution of the research question for this study and demonstrates how these issues emerged.

FROM THREE PROPOSITIONS TO ONE: WHAT WAS THE EVOLUTION?

This research evolved from broad beginnings to a final narrower focus. There were initially three propositions which were condensed into one as the final focus of the research. This subsection is a discussion of how this evolution took place.

Whilst the propositions were refined, the research question remained the same throughout the process of this research. The initial propositions were expressed as follows:

P1: The capabilities of the Internet lead to a separation and change of content, context and contact of the relationship between the company and the customer.

The objective of this proposition was to find out, from a company point of view, how and why the capabilities of the Internet such as low cost global connectivity and interactivity have influenced the communication content, the transaction context and the contact type between themselves and the customer.

P2: The change of content, context and contact of the relationship lead to different service outcomes for the customer.

The objective of this proposition was to identify, from both a company and a customer point of view, what were the Internet service outcomes for the customer. This would allow a

comparison of the perception between the company and its customers. Were the two perceptions of service outcomes different, slightly similar or similar?

P3: The different service outcomes lead to variability in customer acquisition and retention rates.

The purpose of this proposition was to investigate how and why these service outcomes lead to a change in customer acquisition and retention. From a company point of view, it was interesting to find out which service outcome could lead to an increase in customer loyalty. From a customer point of view it was interesting to examine which service outcomes are most valued? Would these customers' perceptions vary by demographic type and preference classes? The investigation showed how these service outcomes have influenced the customer relationships with the company.

These were the initial propositions which were derived from the research question. Propositions 1 and 2 were considered exploratory as the development of theory related to these propositions was not descended from a long tradition in the literature. For example the relationship between some Internet capabilities and the effect of their outcomes to customers' preferences had only been partially tested in previous studies. For these reasons propositions 1 and 2 were considered to be qualitative in nature to validate the proposed theoretical model. It was therefore decided to conduct company interviews to help examine propositions 1 and 2. Conversely proposition 3 requires specification of the strength of the relationship between service outcomes and customer acquisition and retention. Quantitative research was more

appropriate when testing this particular proposition as discussed in the previous sections of this chapter.

Propositions 1 and 2 were in essence an examination of the Internet capabilities on customer preferences both from a company and a customer point of view. However as the literature review evolved it became clear that the focus should be more on identifying Internet induced influences in customer preference structures as Therefore Proposition 1 and 2 naturally merge into one comprehensive proposition as below:

The capabilities of the Internet modify consumer preferences.

The next objective was to link these concepts to customer loyalty. This is shown in the final form of the proposition below:

The capabilities of the Internet modify consumer preferences and loyalty behaviours.

The primary objective of this proposition was to identify customer preferences and to prioritise Internet capabilities based on these preferences rather than just on what the Internet could do technically. The second objective of this proposition was to find out if by focussing on the most important attributes, companies could increase their acquisition and retention rates. It was nevertheless decided to retain the company interviews as they could make a contribution by comparing the evolution of company thinking in using the Internet as a marketing channel. These company interviews were conducted across selected industries to explore if different dimensions might emerge from different types of industries. However for

the main survey, it was decided to select one industry, which showed progressive growth for online shopping.

The next section of the chapter discusses that part of the design which is phenomenological.

A JUSTIFICATION OF PHENOMENOLOGICAL DESIGN

The first phase in evaluating the theoretical model was seen to be phenomenological and this conclusion was arrived at as described in the following table adapted from Easterby-Smith (1991).

Table 1: Key Features of Positivist and Phenomenological Paradigms

	Positivist paradigm	Phenomenological paradigm	The aims of the research
<i>Basic beliefs:</i>	The world is external and objective	The world is socially constructed and subjective	Even though the Internet channel is an electronically mediated environment it is no less a social environment. How has the relationship of the company with their customers changed as a result of the capabilities of the Internet channel? Each participant acts based on their perceptions.
	Observer is	Observer is part of	The observer is part of what is

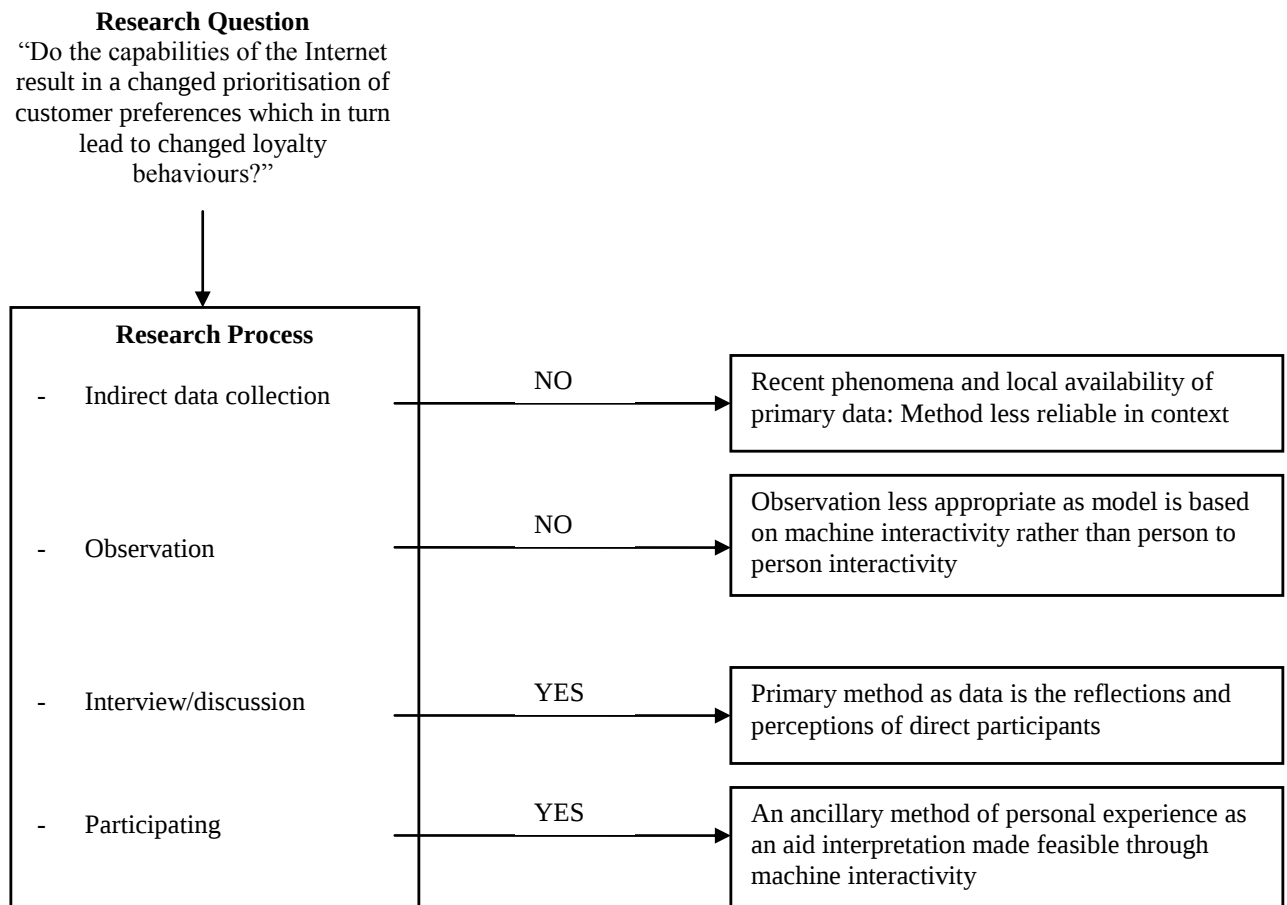
	independent	what is observed	being observed in the sense that the Internet channel is not an exclusive environment which cannot be entered into by the observer. In this way the observer can be informed through direct participation.
	Science is value-free	Science is driven by human interests	The existence of the Internet as a marketing channel is based solely on human interests in the form of potential buyers and sellers.
<i>Researcher should:</i>	Focus on facts	Focus on meanings	A richer understanding of the theoretical model could be gained by understanding why certain features of its environment had evolved rather than limiting it to what had evolved. This is a search for meaning.
	Look for causality and fundamental laws	Try to understand what is happening	By understanding the contextual setting of the model a broader understanding of what is happening may be possible.
	Reduce phenomena to simplest elements	Look at the totality of each situation	Understanding the context within which the model is studied provides for a more complete picture of the relationships within the model.
	Formulate hypotheses and	Develop ideas through induction	Would the theoretical model emerge through induction if the

	then test them	from data	data was collected on an open-ended basis?
<i>Preferred methods include:</i>	Operationalising concepts so that they can be measured	Using multiple methods to establish different views of phenomena	Would data collected from different companies establish a different view of the theoretical model? Would this model differ from that collected from customers?
	Taking large sample	Small samples investigated in depth or over time	Taking samples across time and industries may better help reveal how the relationship between preferences, Internet capabilities and loyalty form

Source: Adapted from Easterby-Smith et al. (1991)

In order to see the theoretical model in a variety of contexts and to observe whether the model inductively emerges (or some other model emerges) from these contexts the following diagram outlines the main research design decisions:

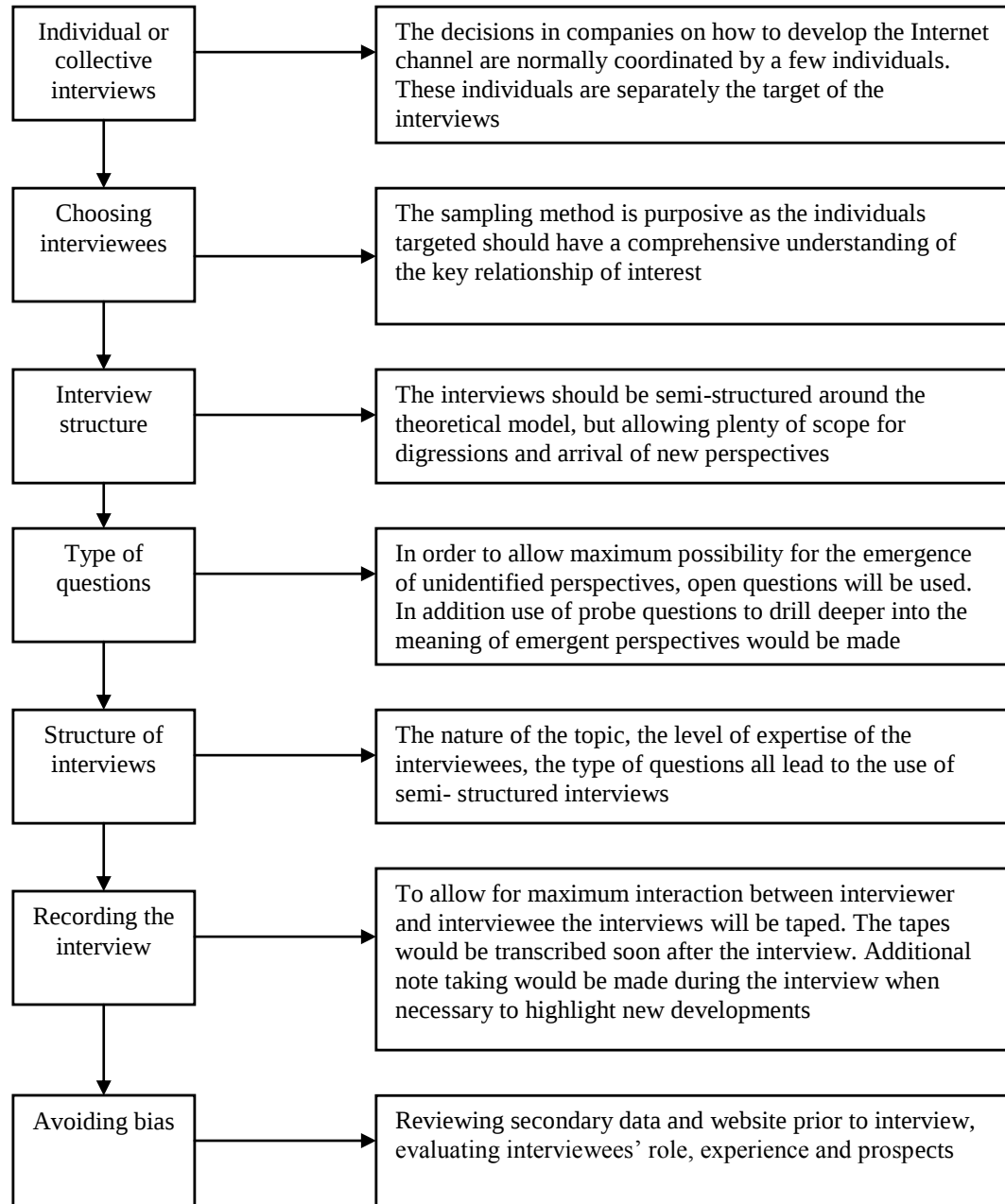
Figure 16: Decision Tree for Qualitative Research Design



Gathering data from a variety of contexts was possible and desirable through direct interviews of individuals who had been active participants in the development of the Internet marketing channel. These interviewees would have been responsible for the development of the Internet channel within their specific context. It is possible that companies' perception of their context and customers would have a marked bearing on how they formulated that design. By directly interviewing them it may be possible to understand how they perceived the relationship of their customers' preferences with the Internet capabilities and customer

loyalty within their industry and firm specific context. From these perceptions does a similar or different understanding of the theoretical model emerge? The following diagram sets out the decisions in relation to the development of the interviews.

Figure 17: Designing the Qualitative Interviews



The objective of the qualitative research is to observe whether the relationships posited in the theoretical model are subject to variations or indeed even exist as the model is examined in varying contexts. For this reason a multiple cross industry strategy is used in selecting which companies to interview. The characteristics of those industries should be sufficiently different in order to provide opportunity for the generation of divergent perspectives. These characteristics could include product versus service industries, established versus recent companies and price versus quality sensitive industries. The data would be analysed on a cross-case basis as the purpose of the analysis would be to induce dimensions that were similar or different between cases. The cases would be developed over time (longitudinally) to observe if the original perspectives had changed and if so why. This would provide a degree of triangulation as different interviewees are likely to be involved. This approach may reveal causes of change to perspectives.

The following section discusses the quantitative research design by (1) justifying the positivist methodology, (2) formulating the research proposition and hypotheses, (3) detailing the research design.

A JUSTIFICATION OF THE POSITIVIST METHODOLOGY

As referred to earlier, the theoretical model can be seen from two methodological perspectives, (1) how the model sits within a variety of contexts (2) what are the strengths of the relationships posited by the theory, can these relationships be shown to exist within the

data? The first approach could be considered as an external view of the theory and the second as an internal view of the theory.

As Easterby-Smith et al (1991) compare and contrast the features of the positivistic and phenomenological approach continued use is made of this approach in the following table. The table below adapts these features and comments on their applicability to the internal view of the theoretical model.

Table 2: Key Features of Positivist and Phenomenological Paradigms

	Positivist paradigm	Phenomenological paradigm	The aims of the research
<i>Basic beliefs:</i>	The world is external and objective	The world is socially constructed and subjective	The research methods used to investigate the internal view of the theoretical model requires an external and objective view of the world.
	Observer is independent	Observer is part of what is observed	The aim was to understand the relationships between selected Internet attributes and customer acquisition and loyalty. The observer was independent of what was being observed.
	Science is value-free	Science is driven by human interests	The variability of customer acquisition and loyalty were objective criteria rather than a belief.
<i>Researcher should:</i>	Focus on facts	Focus on meanings	An objective of the research question was to measure the relative importance of a set of

			attributes which requires a focus on facts.
	Look for causality and fundamental laws	Try to understand what is happening	One aim of the research question was to first understand if there was a change in customer purchase preferences with the use of the Internet as a marketing channel and to examine correlations between Internet attributes and customer acquisition and loyalty.
	Reduce phenomena to simplest elements	Look at the totality of each situation	The quantitative models of this study were a parsimonious selection of variables for testing.
	Formulate hypotheses and then test them	Develop ideas through induction from data	The proposition began with a theoretical model which a priori suggested the nature of the relationships within the data.
<i>Preferred methods include:</i>	Operationalising concepts so that they can be measured	Using multiple methods to establish different views of phenomena	The focus of this study was to operationalise the customer purchase preference structures concept into a set of attributes defined by their levels in order to measure their relative importance.
	Taking large sample	Small samples investigated in depth or over time	The research question can be assessed from a relatively large random sample of customers in one type of industry.

Source: Adapted from Easterby-Smith et al. (1991)

Overall there appeared to be a close match between one aim of the research question and the features of the positivist approach.

The theoretical model developed from the literature defined relationships between customer purchasing preference structures, Internet capabilities, and customer loyalty. These relationships had not been widely tested in the U.K. nor had these explanations been integrated into one research question. Given these aims, alternative methods were considered with respect to their ability to provide knowledge on these relationships. A number of steps and features of the positivistic approach were suggested by Robson (1993) and Easterby-Smith et al (1991). The tables below adapted these positivistic steps and features and then comments on their applicability to the proposition.

Table 3: Steps in the Positivistic Approach

Steps in the positivist approach	Aims of the project
Step 1: Deducting a testable proposition about the relationship between two or more events or concepts from the theory.	This study discussed the limitations of existing explanations of how customer purchasing preference structures changed with the Internet capabilities and the effect of these influences on customer acquisition and loyalty. A testable cohesive proposition can be deducted between the various concepts from the theory.
Step 2: Expressing the hypothesis in operational terms, which propose a relationship between two specific variables.	The hypotheses can be operationalised. For example one measure of customer loyalty was frequency of buying groceries online.
Step 3: Testing the operational hypothesis.	The operationalised hypothesis can be tested through survey.
Step 4: Examining the specific outcome	The aim is to develop a cohesive

of the enquiry.	explanation of the relative importance of Internet attributes to customer acquisition and loyalty.
Step 5: If necessary, modify the theory in the light of the findings.	The theoretical model can be modified in the light of the survey findings.

Source: Adapted from Robson, 1993

The steps in the positivistic approach suggested that a cohesive model of the Internet as a modifier of customer purchase preference structures, with loyalty effects, can be evaluated using the positivistic approach.

Table 4: Features of Positivism

Feature of Positivism	The aims of the project
Independence: the observer is independent of what is being observed.	The study aimed to understand the relationships between pre- and post-purchase preference structures and customer loyalty. The observer was independent of what was being observed.
Value-freedom: the choice of what to study and how to study it can be made on objective criteria rather than by human beliefs and interests.	The effect of Internet capabilities on customer behaviours were objective criteria rather than beliefs.
Causality: the aim of the social sciences should be to identify causal explanations and fundamental laws that explain regularities in human behaviour.	The aim was to identify patterns in the way customer preferences were influenced as a result of the Internet capabilities.
Hypothetico-deductive: science proceeds	The model was built upon previous works

through a process of hypothesising fundamental laws and then deducting what kinds of observations will demonstrate the truth or falsity of these hypotheses.	from which were induced the major concepts and their relationships. Deductions were made as to which kinds of observations will demonstrate the truth or falsity of the cohesive model.
Operationalisation: concepts need to be operationalised in a way, which enables facts to be measured quantitatively.	The variables in the model were actual occurrences and were measured quantitatively.
Reductionism: problems as a whole are better understood if they are reduced to the simplest possible elements.	The aim of the study was to evaluate a cohesive explanatory model, which was specified in simple terms.
Generalisation: in order to be able to generalise about regularities in human social behaviour, it is necessary to select samples of sufficient size.	The model was tested in one population of sufficient size.
Cross-sectional analysis: such regularities can most easily be identified by making comparisons of variations across samples.	The single sample was analysed across Latent Class and demographic variables.

Source: Adapted from Easterby-Smith et al. (1991)

The characteristics of the positivist approach seemed to provide a fit with the objective of the research question.

However the weaknesses of a positivist approach such as its inflexible nature are recognised. For example the direction of the research could not be changed once data collection started (Saunders et al, 1997). In addition the reasons why the relationships between variables

developed in the way they did might not be fully understood using the positivist approach on its own.

Decision on temporal nature of research

The next question addressed was: “should the study be cross-sectional or longitudinal?” A cross sectional study as defined by Hair, Babin, Money and Samouel (2003, p.61) is when:

“Data are collected at a single point in time and summarized statistically.”

Conversely longitudinal data describe events over time. Consequently data needs to be collected at multiple points in time where “the data represent a time series of observations” (Hair, Babin, Money and Samouel 2003, p.62).

To help clarify this question the following table was constructed.

Table 5: A Cross-Sectional Versus a Longitudinal Study

Cross sectional strategy	Longitudinal strategy	Aims of the study
Does not measure change in relationships over time but rather the incidence of a phenomenon	Appropriate for investigating changes in relationships	The positivist element of this study was to investigate the incidence of a phenomenon rather than the changes of these relationships over time.

Can identify correlational relationships but not causality	Can help in identifying causality	The aim of the positivist element was not causality but rather correlational.
Can compare factors across a range of settings which increase external validity but not internal validity	Is usually limited to one or a few settings, thereby increasing internal validity at the possible expense of external validity	The survey data was applied to a range of settings which is consistent with the external validity requirements of the research question.

Source: this study

A cross sectional approach was chosen for the positivist investigation of the research question, recognising that some internal validity may be lost as well as the potential for identifying causality. In particular any observed changes in preference structures would not imply causality rather an implication of association.

The next section discusses the research strategies that were considered for the positivist approach.

Research question

The theoretical model that emerged from the gaps in the literature led to the following research question:

Are the capabilities of the Internet associated with changes in the prioritisation of customer preferences which in turn are associated with changes to loyalty behaviours?

This research question could provide insights for managers into the relative importance of each Internet capability in terms of influencing customer purchasing preference structures that in turn might lead to changed loyalty behaviours. The research question does not assume that the capabilities of the Internet will necessarily have beneficial effects on customer loyalty behaviours. The expectation was that the relationships are inherently heterogeneous.

Proposition

The proposition as derived from the research question was formulated as follows:

The capabilities of the Internet are associated with consumer preferences and loyalty behaviours.

The objective of this proposition was to identify if Internet capabilities are associated with changes in customer preference structures and if these changes are associated with increases or decreases in customer loyalty behaviours.

As discussed in the literature review chapter, the Internet capabilities, such as low cost global connectivity and interactivity, have changed the communication content, the transaction

context and the contact type between retailers and customers. These changes manifest themselves through a set of attributes such as greater choice of products and services available online at lower search cost and effort, as compared with traditional stores. From an online retailer's point of view, it could be useful to identify which attribute or set of attributes lead to an increase in customer loyalty.

Hypotheses

The aim of operationalising the proposition into hypotheses was to measure the concepts that are contained in the proposition. The proposition was expressed by two main hypotheses.

Various authors argued that the Internet channel provides customers with greater choice of products and services that can be searched in a convenient way. As a result it is easier to locate different retailers online with less time and effort than in traditional marketplaces (Evans and Wurster, 1997; Cameron, 1999; Reichheld and Schefter, 2001; Srinivasan, Anderson and Ponnnavolu, 2002, Anderson and Ponnnavolu, 2002). Other authors argued that to create a compelling online experience depends upon the state of flow (Trevino and Webster, 1992; Hoffman and Novak, 1996; Novak et al., 2000; Hoffman and Yung, 2000; Ajzen, 2002; Hoffman and Novak, 2003; Mathwick and Rigdon, 2004). These distinct features of the Internet channel may lead to a change in customer purchase preference structures. It was therefore plausible to hypothesise that customer preference structures may be associated with the capabilities of the Internet:

H1: There is a significant difference between customer pre- and post-purchase preference structures in relation to the Internet channel.

Pre-purchase customer preferences are defined as preferences that shoppers have before experiencing the Internet channel. These pre-purchase preferences could be a combination of revealed and constructed preferences. In addition, pre-purchase preferences related to the Internet channel could be influenced by perceptions gained from a variety of sources. These are customers who have never shopped online but who might be acquired. Post-purchase preferences are those preferences resulting from the experience of using the Internet channel. Therefore, the difference between customer pre- and post-purchase preference structures was measured by dividing the research population into two groups of shoppers: online shoppers and offline shoppers for the purpose of testing the following hypothesis:

H1a: There is a significant difference in attribute utility values between online and offline shoppers.

In addition post-purchase preference structures are characterised by customers who have shopped online with varying frequency. The analysis was further carried out on two distinct groups: the low and high frequency online grocery customers to test the following hypothesis.

H1b: There is a significant difference in attribute utility values between high and low frequency online shoppers.

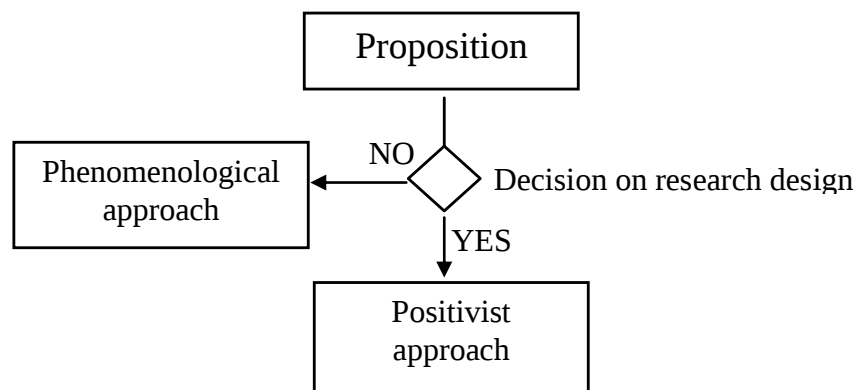
The literature suggests that the potential measures of customer loyalty range from satisfaction, repeat purchase, trust, quality to commitment. However the literature also suggested that these measures of customer loyalty have changed as a result of the Internet channel. It was therefore plausible to hypothesise that potential change to customer loyalty behaviours are associated with the capabilities of the Internet:

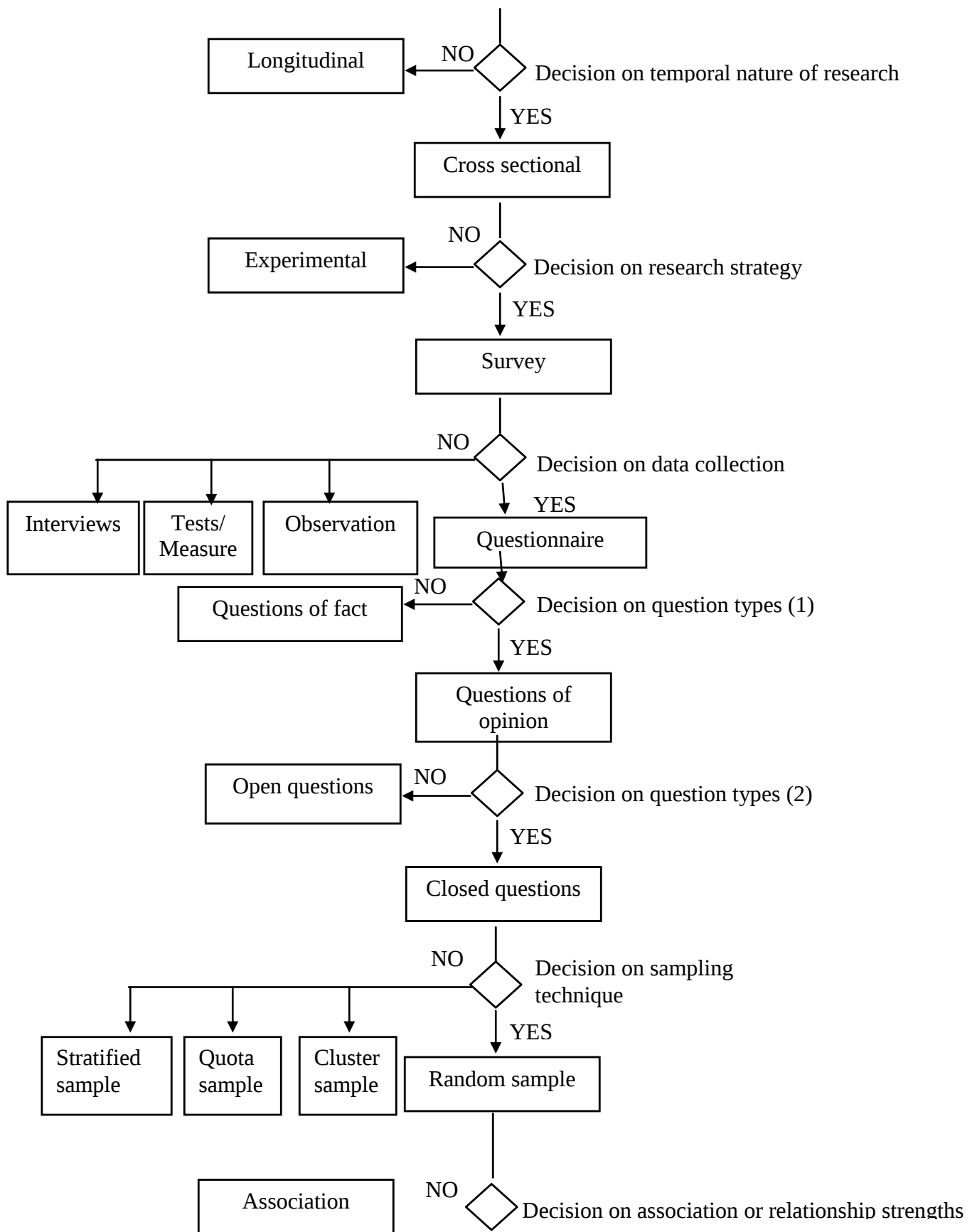
H2: Customer post-purchase and pre-purchase preference structures relate differently to loyalty behaviours in relation to the Internet channel.

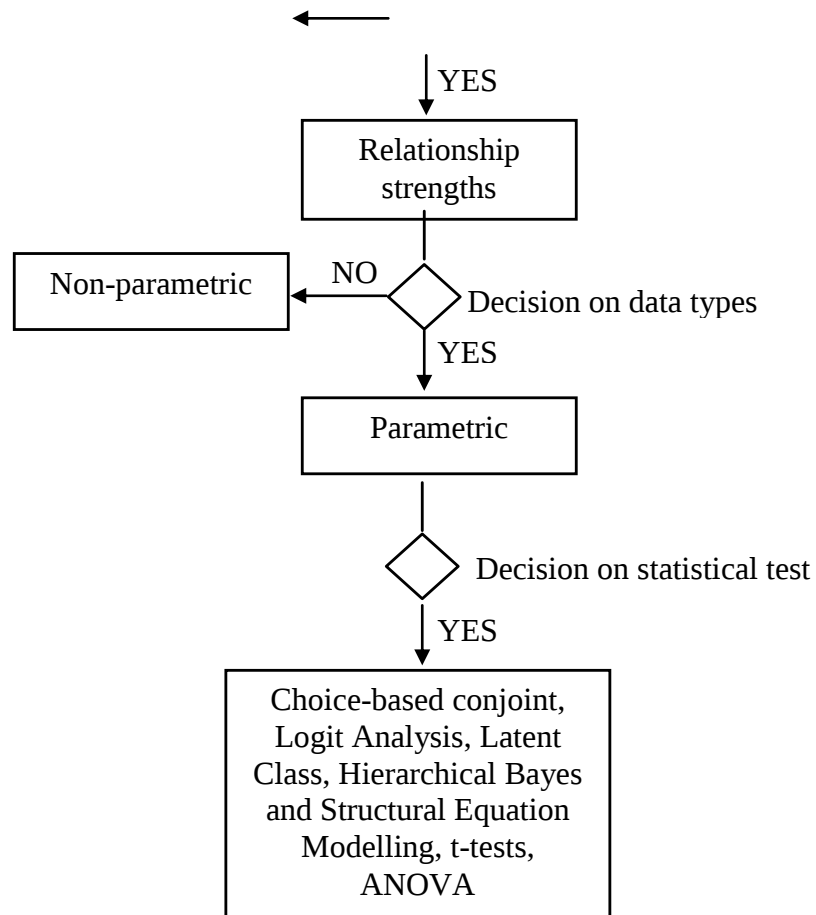
Selection of positivist research method

Having determined that the research question accommodates a positivistic approach and that the research strategy should deploy a cross-sectional survey, the next question to be answered was what statistical method should be employed? This section examines criteria for selecting the most appropriate research methods. The following decision tree summarises the research options and choices that were made in respect to the proposition under investigation.

Figure 18: Research Decision Tree for the Proposition under Investigation







Source: this study

The quantitative research process called for a series of decisions as illustrated in the preceding diagram. The following table is a summary of these decisions and a justification of each.

Table 6: A Summary of Key Design Choices and their Justification

DESCRIPTION OF RESEARCH DESIGN CHOICES	JUSTIFICATION OF RESEARCH DESIGN CHOICES
Decision on research design	The proposition requires the testing of relationships resulting in a positivist approach.
Decision on temporal nature of research	The proposition was seeking identification of an incident of the phenomenon and related correlations.
Decision on research strategy	The inputs to the model could be constructed as controlled stimuli (changing the nature of the offering) however the outputs (loyalty) were not easily related a priori to any particular set of controlled inputs. The design strategy was therefore considered to be a survey.
Decision on data collection	A questionnaire probably mediate in an online format would be appropriate.
Decision on question types (1)	The questions would be mainly collecting customers' opinions and perceptions.
Decision on question types (2)	The questions would be closed as the input stimuli would be closely controlled and the loyalty measures well established.
Decision on sampling technique	The sampling technique to be random based on a pre-defined population. The proposition was concerned with validating the model rather than making extended generalisations. Consequently the defined population of interest could be a small subset of the overall U.K. population.
Decision on association	The proposition was concerned about identifying relationship

or relationship strengths	strengths rather than identifying the presence of association only.
Decision on data types	Identifying relationship strengths meant that parametric data was required.
Decision on statistical test	A choice-based conjoint experiment approach would uniquely allow for the calculation of metric utility values which would allow for testing of relationships using normal statistical techniques.

Source: this study

Criteria for Selection

The statistical methods employed were guided by the structure of the theoretical model as well as the data types implied by the variables. The theoretical model was comprised of four main sections, namely customer pre-purchase preference structures, the Internet channel, customer post-purchase preference structures and their effects on loyalty. The Proposition attempts to relate these sections together. These sections needed consideration in relation to the type of data they were likely to generate. The components of the customer preference structures lent themselves to ratio data in the form of utility values. The variables for customer loyalty were interval in nature, given that loyalty is a relative concept.

One way to test the relative strength of the relationships between the variables implied in the proposition was to compare and contrast customer pre-purchase preference structures with customer post-purchase preference structures. Given the mix of interval and ratio data that a

survey can generate, the following table compares and contrasts different multivariate data analysis techniques considered.

Table 7: Criteria for Selected Research Methods

Statistical technique	Applicability to the proposition
Factor analysis	Factor analysis can be utilised to examine the underlying patterns or relationships for a large number of variables and to determine whether the information can be condensed or summarised in a small set of factors or components (Hair et al, 1998). Factor analysis requires variables to be collected as interval data, and does not necessarily require a prior theoretical model, and does not allow for the testing of relationship strength. For these reasons factor analysis was excluded as a statistical technique.
Multiple regression analysis	Multiple regression analysis is a general statistical technique used to analyse the relationship between a single dependent variable and several independent variables (Hair et al, 1998). Multiple regression analysis could be used in this study particularly when it comes to evaluating the relationship of the Internet attributes with customer loyalty. Two regression models could be created one for the online shoppers group compared with a corresponding regression model for the offline shoppers group. The major limitation was that this method does not allow for simultaneous comparisons of relationships between these two groups.
Multiple discriminant analysis	Multiple discriminant analysis and logistic regression have widespread application in situations in which the primary

	objective is to identify the group to which an object belongs. The dependent variable can be categorical but the independent variables are generally interval or ratio data. Using this technique for the proposition under investigation, it may be possible to predict whether a customer with a particular set of preferences would be more inclined to use the Internet marketing channel rather than the traditional marketing channel. This was not the objective of the proposition.
Multivariate analysis of variance	Multivariate analysis of variance is an extension of analysis of variance and accommodates more than one dependent variable. It is a dependence technique that measures the differences for two or more metric dependent variables based on a set of categorical variables acting as independent variables. Multivariate analysis of variance is used to assess group differences across multiple metric dependent variables simultaneously. MANOVA would fit the characteristics of the data, but would not allow for the development of models that explain differences in loyalty.
Conjoint analysis	Conjoint analysis is best suited for understanding customers' reactions to and evaluations of predetermined attribute combinations that represent potential products or services. While maintaining a high degree of realism, it provides the researcher with insight into the composition of customer preferences. This is a highly flexible technique arising from its ability to accommodate a metric or a non metric dependent variable, the use of categorical predictor variables, and the quite general assumptions about the relationships of independent variables with the dependent variable (Hair et al, 1998). In addition conjoint analysis creates estimates (part-worths) of the overall preference or utility associated with each level of each factor used to define the product or service.

	The part-worths, which are ratio data, may also be used in other statistical techniques such as cluster analysis, regression analysis and SEM. In this way conjoint analysis will allow the evaluation of the relative strength of customer preference structures with customer loyalty behaviours. This research method was considered appropriate to compare the preference structures of offline and online grocery shoppers.
Canonical correlation analysis	Canonical correlation analysis is a multivariate statistical model that facilitates the study of interrelationships among sets of multiple dependent variables and multiple independent variables (Hair et al, 1998). Canonical correlation requires that both the independent and dependent variables are metric. Given the mix of metric and non-metric data to be collected in the survey that this statistical process was considered inappropriate.
Cluster analysis	Cluster analysis classifies objects so that each object is similar to others in the cluster with respect to some predetermined selection criteria. A similar method was used with Latent Class analysis and allowed for testing of the proposition within different groups.
Multidimensional scaling	Multidimensional scaling, also known as perceptual mapping, is a procedure that allows a researcher to determine the perceived relative image of a set of objects. The purpose of multidimensional scaling is to transform customer judgements of similarity or preference into distances represented in multidimensional space (Hair et al, 1998). This method was limited in being able to calculate relative weightings between dimensions within a preference structure.
Structural equation modelling	Structural equation modelling provides a method of dealing with multiple relationships simultaneously and an ability to assess the relationships comprehensively. Structural equation

	modelling was an appropriate statistical procedure for testing the relationships of customer pre- and post-purchase preference structures with customer loyalty behaviours in the model.
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Source: this study

The above analysis concluded that the appropriate statistical technique for testing the proposition was conjoint analysis to test the relationship between customer pre- and post-purchase preference structures and structural equation modelling to test the relationship with loyalty. Conjoint analysis identified customer preferences for offline shoppers compared with online shoppers. This established the relative utility of each attribute within a preference structure. Structural equation modelling was performed (using the part worths of the attributes) to link loyalty effects to these utilities.

The following section contains three steps that examine both choice-based conjoint and structural equation modelling in more depth, since these will be the main methods of quantitatively evaluating the theoretical model. The section addresses a number of alternative conjoint methods and justifies the selection of choice-based conjoint. These three steps provide additional detail on the final element of Figure 18 as shown previously.

Step One: Choice-Based Conjoint as a Research Method

The purpose of this section is to compare and contrast alternative conjoint methodologies. The need for this exercise arose because there have been some significant recent statistical developments which deliver a range of important market research benefits which apply to the proposition.

The most common form of conjoint methodology is adaptive conjoint. Adaptive conjoint was developed in the 1980's to accommodate a larger number of attributes than what was possible with traditional pairwise conjoint. Pairwise conjoint was the original conjoint methodology which was developed in the 1970's.

Choice-based conjoint was developed in the late 1990's and represents the latest conjoint methodology. It was developed to overcome a number of serious limitations in adaptive conjoint. The choice-based approach presents the stimuli (specific levels of an attribute) in a unique form: in sets (scenarios) rather than one by one. This provides increased realism. In addition, it includes interaction effects. Choice-based conjoint allows an estimation of the data at both an aggregate and at an individual level.

The main differences between the types of conjoint are summarised in the table below:

Table 8: A Comparison of Alternative Conjoint Methodologies

Characteristic	Traditional Conjoint	Adaptive Conjoint	Choice-Based Conjoint
Market simulation	No	Limited	Yes
Latent class identification	No	No	Yes
Permit study of all interactions	No	No	Yes
Choice tasks	Choice tasks are less realistic	Choice tasks are less realistic	Increased realism in the choice tasks
Level of analysis	Individual	Individual	Aggregate + Individual
Model form	Additive	Additive	Additive + Interaction effects
Option of not choosing any of the stimuli presented	No	No	Yes
Heterogeneous attributes across product designs	No	No	Yes
Maximum number of attributes	9	30	10

Source: this study

Does the proposition require an interactive model (choice-based conjoint) versus an additive model (adaptive conjoint)? In an additive model (only for main effects as opposed to interaction effects), the respondent simply adds up the values for each attribute to get the

total value for a combination of attributes. Adding the interaction effects to the additive form allows for certain combinations of levels to be more or less than just their sum. As a result an interaction term can capture and reflect that synergy. Interaction terms can also reflect differences in price sensitivity for different brands. Adding interactive terms resulted in a significant improvement in the overall fit of the theoretical model.

The less the attributes are tangible (i.e., when aesthetic or emotional reactions play a large role) the more interaction effects will explain choice predictions accurately.

If an adaptive conjoint methodology is used when interactions exist there are consequences as the customer choice predictions will be less accurate.

Choice-based conjoint allows the respondent to choose from a full set of alternative stimuli namely, choice sets (scenarios). It is much more representative of the actual decision making process when making the final decision to purchase a product from a set of competing products.

With choice-based conjoint the respondent has the option of making no choice from amongst alternative choice sets. Providing the option of a no choice option is important as it allows the respondent to “walk away” if all the options displayed in a choice task are unattractive. It adds realism in that it represents more accurately the actual purchase decision making process.

Another advantage of the choice-based conjoint method is the availability of a market simulation tool. In the context of this study, market simulation could be used in validation

tests to recreate fixed tasks where share of preference was known as compared with simulated share of preference for the same product configuration. This would provide evidence that the underlying structure of the data was valid.

Choice-based conjoint analysis provides the opportunity to segment respondents in groups that share similar preferences. Latent class is a method of dividing the market under investigation into segments having similar preferences. Latent class simultaneously estimates utilities for each segment and the probability that each respondent belongs to each segment. The question: “In what ways do pre- and post-purchase preference structures vary by Latent Class?” was examined.

Step Two: Structural Equation Modelling

The aim of the structural equation modelling was to test hypothesis 2 that deals with the simultaneous relationship between customer utility values and measures of loyalty. With theoretical justification for each, a competing models strategy was employed. The results in terms of fit and explanatory power between the competing models was compared and contrasted. The aim was to identify the model with the best fit with the data and with the highest explanatory power. The differences between the competing models provided the basis for reviewing the underlying theory.

Step Three: Post-Survey Validation Interviews

The post-survey validation interviews were conducted with offline and online grocery shoppers. The aim of the post survey validation interviews with grocery shoppers was to reflect on the findings with a selection of online and offline customers in order to consider why, from their perspectives differences may have occurred between the results and the theory.

SUMMARY

This chapter on research design has set out a justification for both a phenomenological and a positivist approach to evaluate the theoretical model. A phenomenological approach was justified on the grounds that (1) the research domain is of fairly recent origins and (2) that the theoretical model may resolve itself differently when nested within different contexts. A richer understanding of the relationships could be found by allowing each of those contexts to inductively demonstrate how these relationships evolve, if at all. To achieve this end a research design was proposed that included semi-structured interviews across different industries and analysed on a cross case method.

On the other hand a positivist approach was justified on the grounds that the theoretical model contained a number of relationships which could be quantified and measured to determine their relative strength. Consequently a testable proposition and supporting hypotheses were developed. This would be a narrower internal examination of the structure of the theoretical model. To achieve this end a research design was proposed that concluded

with a choice-based conjoint experiment, together with structural equation modelling and supporting statistical methods.

The next chapter discusses a research programme in support of (1) the qualitative research and (2) the quantitative research.

CHAPTER 6: THE RESEARCH PROGRAMME

INTRODUCTION

This chapter starts by laying out the research programme for the qualitative research. It covers issue related to (1) managing the data, (2) analysing the data and (3) assessing the quality of the findings.

With regard to the quantitative research the chapter covers (1) the particular issues around designing and executing the pre-survey validation interviews, the pilot test and the main conjoint analysis experiment (2) how the utilities values of the choice-based conjoint analysis are used to design structural equation models (3) the creation and validation of stimuli for the choice-based experiment (4) a justification of the sample chosen (5) how the choice-based conjoint results are transferred to Amos software to develop structural equation models in order to link customers' preference structures to customer loyalty.

THE QUALITATIVE RESEARCH PROGRAMME

The management of qualitative data

The data was (1) recorded on tape (with permission) and (2) transcribed within 48 hours into a word processed transcript of the interview. The transcripts were then sent back to the

interviewee (typically by email) for proof reading and as an opportunity for additional material to be volunteered. In addition a file was opened to contain (1) hand written notes from the interview (2) the original tapes (3) any secondary materials such as brochures, annual reports (4) a copy of the pages of the company's website as of the date of the interview (5) any correspondence entered into.

Analysing the qualitative data

The data was initially sorted onto sections based on the structure of the theoretical model. The second phase of analysing the data was to restructure the data in relation to the major preference, Internet capability and loyalty themes from the literature. From this sorting and resorting of data, key concepts were extracted from the data and evaluated for (1) recurrence (2) the emergence of patterns and (3) the fit of these patterns with the theoretical model. This is a structured approach to the analysis of the data (as opposed to an unstructured approach). Concepts were extracted from the data by tabulating the data in categories showing their properties and dimensions. Finally the concepts were mapped into an influence diagram. The analysis was completed by describing (1) the extracted phenomenon, (2) discussing the interactions between phenomenon (3) providing explanations and (4) using the frameworks and explanations to suggest some applications for management.

Analysing the quality of the findings

Consideration was given to whether these qualitative findings were reliable, valid, credible and generalisable. For example were the changes noted over time a result of a lack of reliability or did they represent underlying changes? This was assessed by comparing and contrasting the nature of the changes in the other cases and whether real changes to their website triangulated on the changes reflected in the interview data. Validity was attempted by staying close to the data and avoiding impressionistic interpretations of the data. In addition, was there a degree of support between the cases to provide evidence of validity for the emergent concepts? The issue of credibility was judged by comparing and contrasting the evolution of the data over time – were initial interpretations plausible with later interpretations? The findings from the qualitative research and in particular the influence diagram may have some generalisability as it is formed from a cross case analysis.

The following section describes the quantitative research programme.

THE QUANTITATIVE RESEARCH PROGRAMME

The following section lays out the quantitative research programme by describing (1) the design of the choice-based conjoint experiment (2) the data analysis strategy and (3) post-survey validation interviews. The detailed topics covered in these sections include, selection of attributes and levels, pre-survey validation interviews, questionnaire design, pilot test, stimuli, demographic and loyalty variables, the main survey, and sampling.

STEP ONE: THE CHOICE-BASED CONJOINT EXPERIMENT

Discussion on Issues Regarding the Selection of the Attributes and their

Levels

An attribute is a variable that defines the different stimuli inherent to a product or service that may have utility value for the customer. In conjoint analysis the attributes (independent variables) are non-metric. They are represented by two or more values known as levels. A level “corresponds to different attribute values that are often totally discrete - e.g., if the attribute is colour, then the levels correspond to such discrete values as red, green, blue etc...” (Lattin, Carroll and Green, 2003, p.315)

The attribute levels determine the number of parameters that will be estimated. Consequently, they influence the number of stimuli to be evaluated by respondents. Some attributes naturally occur in binary form (2 levels). For example a supermarket’s website does or does not have a help line number. In other cases attributes may have at least 3 levels. For example the attribute levels of delivery price could be: £0, £5, £7. In this instance the utility for price may be nonlinear. This was the reason why more than 2 levels were used for a factor such as price.

Authors such as Hair et al (1998) and Malhotra (1996) regard the justification of the choice of attributes and their levels as being even more critical than the choice of the estimation technique because ‘they are pivotal in the actual judgement decision’. For example it was essential to describe a product in terms of attributes that will be used by customers to decide amongst different products.

As the attributes and their levels have an effect on customers' evaluations, they were selected carefully by considering what is dominant in the physical marketplace as well as by looking at the objectives of the study. For example if the delivery cost is £10 – which is outside the range reflected in the marketplace – the believability of the respondent's evaluation task could be decreased. It is recommended that the range of levels is not too extreme as it could reduce believability. It was preferable to eliminate unacceptable levels as they would have an impact on the results. As stated by Hair et al (1998, p.408):

“The researcher must apply the criteria of feasibility and practical relevance to all attribute levels to ensure that stimuli are not created that will be favourably viewed by the respondent but never have a realistic chance of occurring”.

In addition there was a need to balance the number of levels across attributes. For example if an attribute has a number of levels greater than others then respondents might tend to focus more on that attribute than on the others. However if an attribute is of greater importance then the number of levels for this particular attribute could be increased in order to find out more about this important attribute (Wittink, Krishnamurthi and Nutter, 1982; Wittink, Krishnamurthi and Reibstein, 1990).

Finally Hair et al., (1998) argued that it is essential for the attributes and their levels to be communicable and actionable. Some attributes may not be as easily communicable with written descriptions as others. Communicability problems could occur in describing online grocery shopping in the way information was displayed for respondents who have not shopped online before. For example early adopters may want the virtual store to look like a physical store.

The second characteristic of attributes and levels is that they need to be actionable measures. This means that concepts need to be capable of being implemented. For example in this study a concept such as convenience was precisely defined as the time of delivery (if the customer orders grocery online in the morning, would it be delivered later at a customer specified time on the same day?). Converting the concepts of this study into operational factors was not easy as it was necessary to determine what these concepts meant to customers. The solution adopted in this study, as suggested by Hair et al (1998), was a two stage process. This was achieved by conducting in-depth interviews with customers to determine initial customer judgements regarding these concepts. These pre-survey validation interviews helped in identifying some attributes as being important in decision making and defining them by finding their boundaries. The results were then included in the conjoint experiment.

The next step was to design a questionnaire for the pre-survey validation interviews.

The Pre-Survey Validation Interviews

Objective

The objectives of the pre-survey validation interviews were to understand the key attributes of online grocery shopping and to establish specific levels for each attribute that were deemed actionable and communicable through a small-scale pre-test and evaluation study (Ding, Grewal and Liechty, 2005). Selected attributes were included in the final list of attributes for the pilot test. To that end, this section explored the insights offered by both a

small sample of customers who were currently shopping online for groceries and those who were not, to generate an appreciation of which attributes were perceived as important to them.

Qualitative interviews were conducted with a random sample of customers from an independent school located in Surrey, U.K. A sample of these pre-survey validation interviews is shown in Appendix 5.

The names of the respondents were selected at random. As a result, it was not known a priori if these respondents had shopped online or not.

The following section discusses the pre-survey validation interview questionnaire.

Content of the Questionnaire

These qualitative interviews were based on three types of questions (Saunders et al., 1997). The first set was closed type questions. The objective of these closed questions was to identify the degree of relevance of selected attributes to find out if they were to be included in the pilot test. For example questions 1 to 5 were based on closed questions identified by Youngman (1986) as category questions where the respondent had to choose one response from three sets of categories. For example one of the three categories that the respondent had to complete was “irrelevant to the decision to shop online”. As a result respondents were able to identify which attributes detracted from the overall utility of the service.

The second set of questions aimed to establish the boundaries of customers' shopping online preferences. For example customers were asked what comprised 'normal' service as opposed to what might be just 'acceptable' and what would be 'beyond their expectations'. These comments guided the determination of the lower and upper boundaries of the attribute levels.

The last question provided an opportunity for customers to add attributes that they perceived as important and were not included in the previous set of questions.

The next section discusses the steps taken to create the stimuli for the pilot test.

The Pilot Test

The pilot conjoint test was set up to verify the relevance of the attributes identified in the pre-survey validation interviews and to test the design of the scenarios (the attribute combinations called stimuli). In addition the pilot test helped to understand how long the choice-based experiment might take and how difficult it may be for respondents to choose amongst the scenario cards presented. The pilot test was paper based. Testing the level of respondent's tolerance of extensive decision making was relevant as a choice-based experiment requires more effort from respondents compared with other questionnaire designs.

The next section focuses on creating initial stimuli for evaluation by respondents in the pilot test.

Creating Stimuli

The first implication of the number of attributes is that it increases the amount of effort asked to the respondents. As this could lead to incomplete questionnaires, there was a need to weigh the cost of increasing task effort for respondents, with the benefit of the additional information gained.

The second implication is that the number of attributes presented has a direct impact on the reliability of the results. As explained by Hair et al (1998, p. 406):

“As factors and levels are added, the increased number of parameters to be estimated requires either a large number of stimuli or a reduction in the reliability of parameters.”

The first step was therefore to calculate the minimum number of stimuli required for a conjoint experiment. With an analysis performed at an individual level, the minimum number of stimuli was calculated as follows:

Minimum number of stimuli = total number of levels across all attributes – number of attributes + 1

When creating stimuli, Hair et al. (1998) warned that not all stimuli are acceptable. For example some stimuli might be obvious and as a result provide little information and could create a sense of the unbelievable in the respondent. Other stimuli are considered as unbelievable stimuli due to inter-attribute correlation. Constraints may be placed on the combinations of attributes. In any case, it was important to eliminate any unrealistic choices.

Validation of the Stimuli

The stimuli were validated by using a holdout sample. The validation of the stimuli was achieved by preparing more stimuli cards than needed for estimation of the part-worths and respondents rated all of them at the same time. These additional cards comprised the holdout stimuli. In this way the results were validated internally. Internal validity is defined as follows by Malhotra (1996, p.710):

“Internal validity involves correlations of the predicted evaluations for the holdout or validation stimuli with those obtained from the respondents.”

In addition the results were validated externally. External validity involves sample representativeness. The sample representativeness of the population chosen is discussed later in this chapter.

Background Data on Respondents

In addition to the stimuli cards, demographic and loyalty data were collected from respondents. The aim was to use these variables in combination with respondents with similar part-worth utilities in order to derive respondent groupings which were similar in their preferences (Hair et al, 1998).

Demographic Variables

This section shows the demographic variables used to describe respondents (see Appendix 2).

These variables include:

- Gender
- Age
- Family size
- Value of the house
- Dual income
- Person responsible for buying groceries
- Cultural background

Loyalty Variables

This section describes the variables used to measure customer acquisition and loyalty (see Appendix 3).

For customer acquisition the variable was:

- Selection of a supermarket's website when buying for the first time

For customer loyalty these variables were:

- How satisfied are customers with buying groceries online
- List of stores to determine from which shop customers buy groceries in the physical marketplace
- List of supermarkets' websites to determine from which sites customers buy groceries online

- Purchase frequency for both the physical marketplace and online grocery shopping
- How likely are customers to switch from their existing grocery shopping channel or online supermarkets' websites?

In question 1 of Appendix 3, relating to customer acquisition, the dependent variable took the form of categorical data.

Regarding question 2.1 of Appendix 3 (customer retention), the data gathered were categorical. The objective was to find out what was important to customers of a particular store's brand compared to customers of another store's brand.

Data of question 2.2 and 2.4 were interval data. Structural equation modelling was used to predict the changes in customer retention in response to changes in preference structures.

Data of question 2.3 was ratio data. Structural equation modelling was applied to analyse the results of this question.

The next section describes the design of the main survey.

THE MAIN SURVEY

Discussion on the Sample Chosen

Once the attributes and attributes' levels were selected and defined with the use of pre-survey validation interviews and then refined with the pilot test, a field strategy was planned for the main survey. This section discusses the choice of the sample chosen.

Justification of the Sample Chosen

The objective of this section is to define the parameters of the sample.

This study was conducted in the U.K. and not across countries. It was decided to focus the sample on a group with a homogeneous social and cultural background in an attempt to control for effects from these sources. The proposition required a focus on Internet related variables.

The choice-based conjoint study, consistent with the pre-survey validation interviews and the pilot test, used respondents drawn from the parents of independent school pupils. The schools were located in Surrey and South West London. By limiting the sample in this way it was hoped that a homogeneous sample, where house prices, income profiles (high net worth) and cultural preferences could be similar between respondents. Respondents were primarily women.

The extant literature did not provide any evidence of a study having been conducted on the shopping preferences of high net worth grocery shoppers. This particular segment was considered to be of commercial interest because of the volumes, value and profit margin of the products purchased by families in this asset category. This population may be time constrained but technologically aware. In addition they were likely to be a homogenous group along the axis of similar life cycle stage, social activities, and in terms of attractiveness to grocery retailers. Their income profiles suggested that they buy a higher proportion of high margin products and services. By having a homogenous sample, a range of variables not immediately relevant to the proposition under investigation, are controlled for.

The choice-based conjoint study differentiated between low frequency shoppers and high frequency shoppers as their expectations could differ. For example non regular online shoppers may want the site to look like the physical store while it may not be such a relevant consideration for regular online shoppers. Another difference between low and high frequency shoppers was that intangible factors could have more weight for low frequency shoppers.

Random sampling was not used as each family in the population as defined was accessible and had an equal probability of being selected. Post-survey validation was included to follow up on none or partial respondents to establish whether there was any non- response bias.

Discussion on Sample Size

The objective of this section is to calculate the minimum sample size required for this study. The formula to achieve this objective presented by Saunders, Lewis and Thornhill (1997) is as follows:

$$n = p\% \times q\% \times (z/e \%)^2$$

Where:

- n is the minimum sample size required
- p% is the proportion belonging to the specified category
- q% is the proportion not belonging to the specified category
- z is the z value corresponding to the level of confidence required
- e% is the margin of error required

With respect to testing the null hypothesis an alpha of .05 was set. The level of confidence in the estimate was 95% which corresponds to a z score of 1.96. The margin of error that describes the accuracy required for any estimates made from the sample was 5%. Most research in management uses a margin error within 3 to 5% (Saunders et al, 1997).

Looking at the preliminary interviews conducted prior to the conjoint analysis experiment, 75% of the respondents had shopped online for groceries within the last 6 months and were regular online shoppers. This meant that 25% do not. These figures were confirmed by

evaluating a set of 14 typical respondents from a class list. Substituting these figures into the formula the minimum sample size was calculated as follows.

$$n = 75 \times 25 \times (1.96/5)^2 = 1875 \times 0.154 = 288.75$$

The minimum sample size was therefore 289 returns. However this assumes a response rate of 100% (Saunders et al, 1997). To achieve 289 usable responses and assuming a 25% response rate, this conjoint analysis experiment needed to administer 1156 questionnaires. This response rate could be achieved as this research was introduced by the headmistresses of the schools selected rather than the parents receiving a letter from an unknown source.

Once the conjoint analysis experiment was administered and the usable responses received, the response rate was calculated. Saunders et al (1997) pointed out three main reasons for non-response:

- refusal to respond
- ineligibility to respond
- non-contact

For this study, non-contact would be negligible as a letter was to be passed on to all parents of the selected schools. Refusal to response was reduced by paying careful attention to the method used to administer the conjoint analysis experiment. For example by sending the questionnaire and profile cards by email, respondents chose when to fill it in as opposed to setting up an personal interview. Personal interviews were more time-consuming for respondents as well as creating place and time constraints. Follow up emails were used to

improve the response rate. The other main consideration was to reduce the burden on respondents for the evaluation task. This issue was explored in different sections of this chapter.

Sample Size and Statistical Power

Cohen (1977) suggested as a guideline that the acceptable level of power is .80. To achieve this level of power, three elements were considered:

1. Alpha
2. Sample size
3. Effect size

For example based on the theoretical model of this study and on the pre-survey validation interviews with customers, it was anticipated that the correlation coefficient between the attribute of ordering time and customer loyalty would probably be high (high could mean around .8). The risk of a Type I error was therefore decreased with the effect size anticipated to be high. With an alpha equal to .05, according to Hair et al (1998) the sample size required was less than 80.

As the attributes for the conjoint analysis experiment were selected based on the anticipation of a high correlation coefficients, it was anticipated that with $\alpha = .05$ and to achieve a

suggested power of .80 (Cohen, 1977) a sample size greater than 130 was unlikely to be required (Hair et al, 1998, p. 13).

Based on these calculations it was decided to achieve a final usable number of questionnaires between 130 and 300.

Questionnaire Design

Design Efficiency

Correlations amongst levels and across attributes were examined to test whether the design was orthogonal. The design was balanced by equalising the number of levels across attributes with a few exceptions. In case of a design that was not optimal, it was assessed for design efficiency. Design efficiency was defined as a measure of the correspondence of the design in terms of orthogonality and balance (Hair et al, 1998; Kuhfeld, Tobias and Garrath, 1994).

Multicollinearity between factors – also called interattribute or environmental correlation - should be avoided as some factors cannot be paired realistically together. As a result, the attributes were defined to minimise inter-attribute correlation.

Using a priori estimates of standard errors for attribute levels and total choice tasks, allowed calculation of the efficiency of attribute levels. This test of design efficiency was calculated to show if the realised useable response rate posed limited scope for design threats to

validity. Hair et al, (1998) suggested that design validity problems only begin to emerge at a response level of less than 130 for designs with average numbers of choice tasks, attributes and levels. Conjoint designs are generally more robust than other multivariate techniques in terms of sample size effects on validity (Hair et al, 1998).

The pilot test showed that it would be more efficient to move from a paper based method for data collection to an online system. This was accomplished by using Sawtooth Software. The choice tasks were presented to respondents on the Internet. There were 5 response options per screen (choice task).

The first screen was an introduction to the project for potential respondents (see Appendix 4). The next screen had demographic questions such as income, number of children at home, how many times do you shop online for groceries per year etc... These questions were used as respondent filters when comparing groups.

The next screen introduced the choice based conjoint questions. Respondents needed to decide which choice set or scenario they preferred. Once they made their choice, the next screen with a different (randomised) product concept appeared. They completed 14 screens.

For validation purposes, two fixed holdout tasks were included (Hair et al, 1998). They were the only two choice tasks constant across all respondents as the other tasks were randomised. The fit between the holdout samples and the main survey data was computed for validity test (Hair et al, 1998). At this point the objective was to measure preferences for the different levels of the attributes and their impact on customer acquisition and retention.

STEP TWO: DATA ANALYSIS STRATEGY

The purpose of this section is to describe the data analysis strategy – how the conjoint data was analysed, how it was transferred to SPSS for examination for fitness of use in multivariate data analysis techniques, and how it was used in Amos for structural equation modelling.

The conjoint analysis began with the calculation of level utility values using Logit. The calculated utility values were at an aggregate level and were not attributed to individual respondents. The logit utility values were used for the development of pre- and post-purchase preference structures and the testing of hypothesis 1.

Hierarchical Bayes was used to calculate utility values at an individual respondent level. It was the individual respondent level utility values which were transferred to SPSS together with descriptive and loyalty variables.

With the utility values and descriptive variables transferred to SPSS, the second phase of the data analysis strategy was carried out which was to test the data for fitness for use in a multivariate data analysis technique such as structural equation modelling. This revealed the weaknesses of the data and helped describe the limits of interpretation of the results.

After the data were described in SPSS, a competing models strategy was used in the structural equation analysis. The software used was Amos. The process was to create a series of theoretically justifiable models and compare them to identify which ones fitted the data

best and provided the greatest level of explanation of the variability on the data. In this way hypothesis 2 was tested. Differences between the models were commented on from the perspective of the theory.

The data management process could be summarised as follows. Seven different software packages were used to collect the data and develop a statistical appreciation of the results. The data were first collected using Sawtooth Software online data collection software (SSIWeb). The completed data file was exported to the Sawtooth Software Hierarchical Bayes software module where utility values for each respondent for each attribute level were calculated. The HB output utility file was then in turn transferred to the Sawtooth Software SMaRT module from where the HB utility values were integrated with the demographic and other descriptive data collected in the survey. The HB utility values were integrated into the Sawtooth Conjoint Simulator where validation tests were performed. The HB utility values and selected descriptive variables were transferred to SPSS (version 14) where tests for normality and various t-tests between online and offline shoppers were performed. The Sawtooth Software Latent Class module was used to explore different dimensions within the HB utility values in order to generate competing structural equation models. Finally the data were transferred from SPSS to Amos 6, which was utilised to develop the structural equation models from the HB utility values and loyalty variables.

A confirmatory modelling strategy was developed to assess the statistical significance of the theoretical model. However as noted by Hair et al. (1998), other alternative models might provide an equal or better fit to the data than the proposed theoretical model. Therefore a

competing models strategy was developed in the second stage of the application of structural equation modelling.

The theoretical model derived from the literature review was used as a basis for the confirmatory model. Two confirmatory models were produced: one based on data sets for online shoppers and one for offline shoppers.

Amos 6 was used to estimate the measurement model. Once the confirmatory model was established, the results were examined for offending estimates. Constructs with negative error variances, non-significant error variances, standardised coefficients exceeding or close to 1.00 and large standard error were eliminated. The elimination of selected constructs was theoretically justified.

After eliminating the offending estimates, the overall model fit was assessed using the absolute, incremental and parsimonious fit measures. The overall fit model was assessed for both confirmatory models separately. The measurement model fit showed the regression weights for online and offline shoppers. The objective was to assess the statistical significance of the estimated loadings. The next measure used to assess the measurement model was the composite reliability of each construct and the variance extracted measure. An overall coefficient of determination (R^2) was calculated that provided a relative measure of fit for each confirmatory model.

Competing models were developed as the second stage of the structural equation process. To help develop the predictor constructs, factor and Latent Class analysis were used.

STEP THREE: POST SURVEY VALIDATION INTERVIEWS

The post survey validation interviews were conducted by telephone with grocery shoppers who had been interviewed prior to the main survey. The focus of these interviews was to explore the differences between the findings and views expressed before the main survey had taken place.

Part III which follows next describes the quantitative findings and tests the hypotheses and structural models against the data.

PART III - QUANTITATIVE FINDINGS

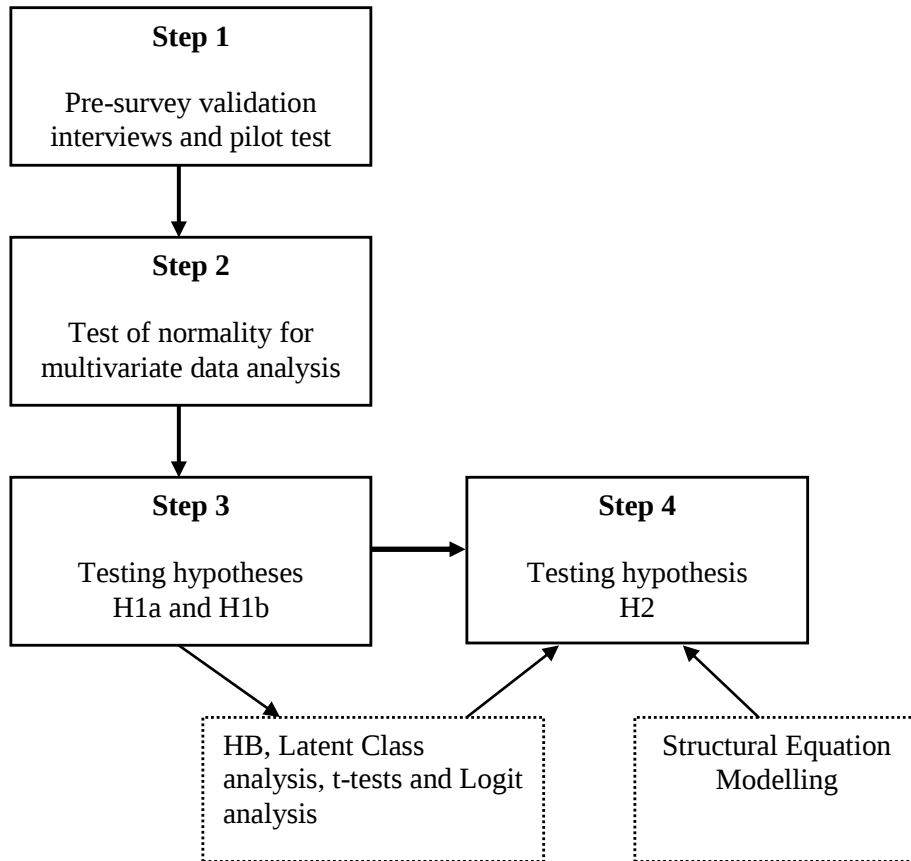
INTRODUCTION TO PART III

The focus of Part III is to test the proposition and provide evidence for validating the theoretical model.

The data analysis was carried out in four steps. The first step is a description of the results from the pre-survey validation interviews and the pilot conjoint study. The second step in describing the results deals with an examination of the normality of the data and its fitness for use in multivariate data analysis techniques. The third step is an analysis of the choice-based conjoint experiment as it relates to the proposition and hypotheses H1a and H1b. The fourth step describes the results of fitting the data to the structural equation model and testing hypothesis H2.

These analytical steps are summarised in the following diagram.

Figure 19: The Steps in the Analysis



CHAPTER 7: SELECTING ATTRIBUTES FOR THE MAIN SURVEY

In Part II, the issues around the selection of attributes and their levels for a conjoint experiment were discussed.

The aim of this chapter is to examine which attributes and their levels were found to be determinant (Alpert, 1971; Lambin, 1990; Malhotra, 1996) for the exercising of customer choice in the online grocery industry. What are the attributes that both create or detract from the overall utility of the service (Reibstein, Bateson and Boulding, 1988)?

The following sections describe the results regarding the selection of attributes and their levels for the main survey. The results were generated in two steps: the pre-survey validation interviews and the pilot conjoint experiment.

STEP 1: THE RESULTS OF THE PRE-SURVEY VALIDATION

INTERVIEWS

The objective and the design of the pre-survey validation interviews were discussed in Part II. This section focuses on the results of these interviews.

A total of ten in-home, forty-five minute qualitative interviews were conducted with a random sample of customers from an independent school located in Surrey, U.K. Ten interviews were found to be sufficient as no new categories of data emerged after the seventh interview. A sample of an interview is shown in Appendix 1. The names of the respondents were selected at random from the list of parents provided by the school.

The following sections discuss each attribute identified in the pre-survey validation interviews.

Attribute: ‘Virtual Store’

The first two questions focussed on a life-like virtual store experience where customers select a product and rotate it to look at the nutritional value as they would do in a traditional grocery store. These two questions helped with establishing the customer preference structure by investigating if potential customers require an online experience similar to the offline experience. These questions were based on a study conducted by Bradley and Nolan (1998). They argued that customers are driven by convenience and economy and that online grocery

shopping provides both. To test this argument, these authors conducted six focus groups to measure customers' reaction to the online grocery shopping concept. They presented to potential customers a virtual store that was designed to be as close as possible to a traditional store. This could reduce not only uncertainties but also improve ordering time and flow with the aim of increasing shopping efficiency. Efficiency is described by the authors as part of convenience and as one of the primary objectives when shopping for groceries.

All respondents gave the same answer to questions 1 and 2 regarding a virtual store experience as described by Bradley and Nolan (1998): desirable but not essential in deciding to shop online. A narrative description is sufficient because what was essential for respondents was to be able to read all the information regarding the products. For example, customers may want to look at the ingredients of a product or read the washing instructions for clothing. They are familiar with the products they buy every week and therefore do not have a need for pictures. However one respondent mentioned that it would be useful to have an image for new products that they have not bought before.

It seems that the preference of this sample of respondents lay in the content of the information provided rather than in a three-dimensional virtual store experience that is closer to a traditional store. The attribute 'virtual store' was therefore not included in the conjoint experiment of the pilot test.

Attribute: ‘Help Line Number’

The objective of question 3 was to weigh the level of importance of the presence of a help line number as opposed to online help only. The attribute ‘help line number’ was ranked as ‘decisive’. This implies that the majority of respondents placed a high value in being able to call the retailer. The reason being was that respondents found it reassuring to have the possibility of switching to human interaction if desired. It was therefore decided to include the attribute ‘help line number’ in the pilot conjoint experiment. The levels chosen were ‘help line number’ and ‘no help line number’.

Attribute: ‘Chat Room’

Question 4 asked about the importance of the presence of a chat room on the website. This was the only question where all respondents answered the same way i.e., the chat room was irrelevant to the decision to shop online. One of the reasons was that the respondents wanted to stay focussed on their task. Their objective was to save time - i.e., to do their shopping online as quickly as possible – and they perceived the chat room as a distraction that may slow them down in achieving their objective.

As the presence of a chat room was perceived as not falling into the relevant range of attributes, it was decided not to include this attribute in the pilot conjoint experiment.

Attribute: ‘One Stop Shopping’

Question 5 provided insights on the relevance to customers for additional services and products such as financial services and clothing.

The answers of the respondents varied across the spectrum i.e., from desirable to irrelevant.

Some respondents argued that the focus was on buying groceries and the rest is therefore a distraction. They all strongly differentiated the food section from the financial products. For example even in the physical world, they may not use the same stores for buying food and getting a quote for a mortgage. As a result it was decided not to include the attribute describing a one stop shopping experience in the pilot conjoint experiment.

Attribute: ‘Ordering Time’

The aim of question 6 was to examine the attribute ‘ordering time’ that is the amount of time required to complete an order for groceries.

One of the findings was that the objective of shopping online was to save time and provide convenience. For some respondents if shopping online exceeds 1 hour it may not be worth considering this marketing channel as they could use their car and do their shopping physically in the same time. It was however accepted that the initial online grocery shopping set up takes time. This question was answered as if it was not their first online shopping experience with the supermarket’s website.

Another point mentioned was that the time that may delight customers to shop online for groceries depended upon the size of the family and perhaps most importantly upon cooking habits. For example, customers who buy mainly ready-made meals the maximum ordering time could be less than for customers who buy groceries to cook from scratch meals. The customer in this case has to go to more rubrics than in the first scenario and they would expect to take more time.

It was noted that some stores were too big and as a result if the customer was at one end of the store and that an item which was located on the other end was forgotten, the customer would then have to walk all the way across the store. If this scenario is repeated more than once then the customer preferred shopping online as it would be more efficient.

The levels, set up for the attribute ‘ordering time’, are as indicated in the table below i.e., the lower level was set at 20 minutes, the average at 35 minutes and the upper level at 1 hour. The purpose of this analysis was to ensure that the levels were reasonable and yet at the same time stretched the range of possible performances for the attribute.

Table 9: The Levels for the Attribute ‘Ordering Time’

Question	Minimum	Average	Maximum
6.1	10 to 15 minutes	30 minutes	45mns to 1 hour
6.2	40 minutes	45 minutes	Beyond 1 hour
6.3	5 minutes	20 minutes	30 minutes
Level limits	20 minutes	35 minutes	1 hour

Attribute: ‘Delivery Time’

The objective of question 7 was to validate the attribute ‘delivery time’ which was the time to have groceries delivered at home.

On average respondents expect their groceries to be delivered the next day. Their definition of an excellent service was to have their groceries delivered within 24 hours. For example when groceries were ordered in the morning, they were expected to be delivered later the same day or if ordered in the evening, to be delivered the next morning. The importance of the speed of the delivery seemed to depend on how quickly the groceries were needed. For example some respondents mentioned that they preferred to plan their shopping in advance at the beginning of the week in anticipation of a guest dinner at the weekend. The speed of the delivery was in this case of no consequence but the total time spent shopping online was still relevant. This implied that the importance of the time it took to deliver groceries at home would depend on customers’ behaviours.

The levels set for the attribute ‘delivery time’ were ‘delivered in 6 hours’ for the minimum, the average was ‘delivered in 24 hours’ and the maximum was ‘delivered in 48 hours’. This is shown in the table below.

Table 10: The Levels for the Attribute ‘Delivery Time’

Question	Minimum	Average	Maximum
7.1	24 hours	24 hours	24 hours
7.2	2 days	beyond 2 days	4 days
7.3	2 hours	Later the same day	Overnight delivery
Level limits	6 hours	24 hours	48 hours

Another point that arose from the responses was, not so much the fact that customers could expect their groceries delivered the next day, but rather the time that it was delivered. For example some respondents mentioned that they never stayed at home more than two hours at a time during the day. In this case a two hour slot was fine. However there was a strong need to have the groceries delivered within these 2 hours as 10 minutes before or later would have been of no use. These respondents mentioned that they would probably switch to another supermarket’s website if the driver was late or too early on a regular basis. The exactitude of the delivery was therefore another factor that had an important weighting. In addition to the attribute ‘delivery time’, it was therefore decided to include the attribute ‘delivery time reliability’ in the pilot study.

Attribute: ‘Substitutes’

Question 8 aimed to examine the attribute ‘substitutes’ which was the number of items that could be changed at delivery time due to stock outs of the ordered item.

Respondents agreed on the fact that having no substitutes in a delivery would be extraordinarily good service. Although a few respondents thought that this should be considered normal service. If customers shopped online and some products were regularly out of stock, then there would be fewer advantages to shop online as customers would go elsewhere to buy the missing product(s). It was decided to select the attribute ‘substitutes’ for the pilot test conjoint experiment.

The levels set for the attribute ‘substitute’ were ‘0 substitutes’ for the minimum and ‘5 substitutes’ for the maximum. This attribute was set with 2 levels due to the closeness of the lower and upper limits. The maximum of 10 and 15 substitutes were outliers and considered to be beyond real experience. This is shown in the table below.

Table 11: The Levels for the Attribute ‘Substitutes’

Question	Minimum	Average	Maximum
8.1	2	3 to 5	10
8.2	2 to 3	10	15
8.3	0	1	5
Level limits	0		5

Attribute: ‘Quality’

Question 9 determined the relevance of the product quality attribute.

One of the reasons why some respondents had not used online shopping or shopped online just for bulk items, was because they believed that quality would be traded off with convenience. There was a concern that groceries would not be chosen the same way that customers would choose and as a result the quality of their overall shopping basket would be compromised.

On average, respondents did not accept products below expected quality for various reasons. The first reason depended upon the type of products, such as fresh food or for example a box of chocolate intended to be a present. The second reason was that the products should be checked before they were delivered to ensure good first time quality. This was considered by respondents as an important attribute if they were to repeat purchase with the same online retailer. The attribute ‘quality’ was therefore selected to be part of the pilot test.

The minimum level set for the attribute ‘quality’ was ‘0 items below quality’ and ‘5 items below quality’ for the maximum. No average was set because of the closeness of the minimum and maximum levels. This is shown in the table below.

Table 12: The Levels for the Attribute ‘Quality’

Question	Minimum	Average	Maximum
9.1	0	1	2
9.2	0	2	5
9.3	0	0	2
Level limit	0		5

Attribute: ‘Online Helpdesk’

The objective of question 10 was to investigate the attribute ‘online email helpdesk’.

Respondents stated that they expected an immediate or quick answer to their concerns, problems and queries as if they had called a help line number. However as some online complaints were not acknowledged and handled properly, customers felt that human contact was important.

The level limits given by respondents for this attribute are shown in the table below.

Table 13: The Levels for the Attribute ‘Help Line Number’

Question	Minimum	Average	Maximum
10.1	Immediate	30 minutes	24 hours
10.2	1 hour	1 hour	Over 24 hours
10.3	Immediate	10 minutes	2 to 3 hours
Level limit	Immediate	30 minutes	Less than 24 hours

It was decided not to include the attribute 'online helpdesk' in the pilot test. The reason was that during the course of evaluating question 10, it became apparent that the presence or not of a help line number was seen as more relevant than having an online help desk.

Attribute: 'Personalisation'

Question 11 examines the attribute 'personalisation' which is what customers expect in terms of matching the offering to their specific preferences.

The minimum respondents expected from the online retailer, was the saving of the last shopping basket in order to save time when ordering online again. As Bradley and Nolan (1998) noted, 75% of groceries bought every week are repeat purchases. As a result this feature seemed to be the minimum level of personalisation that online retailers needed to offer.

A good level of service for some respondents was to receive personalised emails on special offers for products customers bought regularly as well as recipes using products they had bought. Another example of good service for vegetarian respondents was to send emails on the availability of new vegetarian products.

Respondents did not want to have the feeling of missing out on something when compared to the physical store experience. Respondents felt that if quality and substitute performance was

acceptable, then personalisation was not a major criterion in their choice of service provider. They also noted that all grocery websites now offered to retain prior shopping list.

However respondents felt that relevant new products needed to be emailed to them: “I think that knowing about new products could be helpful. You are a vegetarian or you eat a lot of vegetarian food, you might be interested in this new sausage that they produced, that is the sort of things you do notice: Oh I might try those!” It was decided that the attribute ‘advisory emails’ should be included in the pilot test.

Other Relevant Attributes

The objective of this open question was to ensure that no attributes perceived as relevant by respondents were omitted in the pilot test and the main survey.

Additional criteria raised by respondents were as follows:

- The security of the system (including what the supermarket’s website does with the customer’s credit card details and address). Some respondents mentioned that this is not an issue with the main online grocery retailers as they have invested in reliable security systems.
- Ease of use (referred in the literature as the flow experience): e.g., changing categories easily, use of roll down rather than clicking.

- Delivery cost: free delivery when a certain amount was being spent. Delivery cost was a problem when the customer did not order much. Customers thought twice whether or not to use the service. For this reason it was decided to include ‘delivery cost’ as an attribute in the pilot test.
- Shop as customers do: choose products with maximum unexpired days, fresh food in good condition.
- Having online the full store product range and complete information

In addition, some respondents discussed why they shop online and how they would choose with whom to shop with. These points are listed below:

- There was no time constraint (can order late at night). It was therefore seen as a good use of time.
- It was an efficient service
- Quick check out (time savings)
- Choosing the right virtual store was not linked to a physical loyalty but rather to personal recommendation
- Location removal/no place constraint
- Convenience
- Reliability

Some respondents expressed the strong desire to deal with a polite and professional driver as it is the only human interaction that customers have in their online transaction. The attribute ‘doorstep presentation’ was therefore included in the pilot conjoint experiment.

Another example of a reason why respondents who have not shopped online are still unwilling to buy groceries online is that they cannot replicate their purchase making decision process in the online marketplace. In a physical store, these customers may be able to quickly identify a promotion. While online they have to click on the rubric and then the specific products to find out if a particular product is on promotion. There was interest in this attribute particularly amongst offline customers and on probing the underlying interest in promotion was gaining a product discount. For these reasons it was decided to include an attribute called ‘price discount’ in the pilot test.

The following table recaps the attributes and their levels selected for the pilot test.

Table 14: Attributes and their Levels Included in the Pilot Test

Attributes	Level 1	Level 2	Level 3
1. Help line number	Yes	No	
2. Ordering time	20 minutes	35 minutes	1 hour
3. Delivery time	6 hours	24 hours	48 hours
4. Delivery time reliability	On time	+/- 1 hour late or early	
5. Quality	0	5	
6. Substitutes	0	5	
7. Price discount	0%	10%	
8. Delivery cost	Free	£5	
9. Doorstep presentation	Good	Bad	
10. Advisory emails	Yes	No	

Conclusion

The ordering time, the reliability of the service, the delivery time, the content of the shopping basket (quality and substitutes), were the most regularly cited attributes for potential customers to decide whether or not they would shop online with a specific supermarket's website.

The next step was to conduct a pilot conjoint experiment with the attributes selected, to test the validity and reliability of the choice tasks and the time taken to complete the experiment.

STEP 2: RESULTS OF THE PILOT CONJOINT TEST

Introduction

The pilot conjoint test was set up to verify the relevance of the attributes identified in the pre-survey validation interviews and to test the design of the experiment.

For the pilot test, the conjoint study was administered manually. A card-based approach was used for the pilot test because at that time Sawtooth Software was not available and it was planned to use SPSS to analyse the results of the main conjoint experiment. It was uncertain that Sawtooth Software could be acquired in time for the main survey. After the pilot study, however, Sawtooth Software was available for the main survey and was run using a web-based approach. It may have been more accurate to use a web-based approach for the pilot study to assess the number of scenario cards that respondents would tolerate.

In addition to the data collection difference, the major difference between Sawtooth Software and SPSS was that the former utilises a choice based approach to conjoint analysis whilst the latter uses an adaptive approach (see discussion in Part II).

The adaptive conjoint pilot study was undertaken in two stages.

The first stage was to get 10 respondents - from the same independent school used for the pre-survey validation interviews - to complete the conjoint study in a manually administered questionnaire format. The questionnaire was in two parts. The first section had demographic and loyalty behaviour questions. The second section was the conjoint experiment where 22 profile cards that included 4 holdout cards were presented to respondents. Respondents were handed 22 cards (4 were validation sets) on which there were listed the 10 stimuli that made up that particular choice set (Appendix 6). They were timed and their comments were noted. On average they took twenty minutes to complete the experiment. The respondents were ladies from 27 years old to over 50 years old. It was a mixture of working and non-working mothers who have between 1 to 3 children. A number of modifications were carried out to increase the internal consistency of the questionnaire and its structure.

The second stage of the pilot conjoint experiment was to send the questionnaire and cards out to all the families of the same independent school. There were 258 families in that particular school. It was decided not to present the questionnaire and cards to respondents through personal interviews as it was not feasible or necessary to conduct 258 interviews for this pilot study. The procedure to conduct this experiment was to give to respondents both the questionnaire and the profile cards via the school. A letter introducing the researcher and explaining the study's objectives was given to all the parents of the school. The parents were then asked to give back the questionnaires through the school. In addition a letter to explain how to use the scenario cards was attached to the questionnaire. A response rate of 14.34% useable questionnaires was achieved for the pilot conjoint experiment (51 returned questionnaires of which 37 were useable).

Results of the Pilot Study

The table below shows how the 37 pilot conjoint experiment respondents ranked the 10 selected attributes drawn from the pre-survey validation interviews.

Table 15: Attribute Ranking

<i>Attribute Ranking for 37 Respondents</i>		
1.	Ordering time	24.64%
2.	Delivery time reliability	16.12%
3.	Quality	12.86%
4.	Delivering time	12.78%
5.	Substitutes	7.80%
6.	Internet price (% discount)	6.19%
7.	Help line number	5.54%
8.	Delivery cost	5.46%
9.	Doorstep presentation	5.09%
10.	Advisory emails	3.52%

These percentages represent the proportions of people who choose a particular attribute. They do not represent the utility weighting of each attribute but rather the count proportions. For example 24.64% represents the proportions of respondents who chose ‘ordering time’ as their most important criteria.

Delivery time reliability was ranked second. From the results of the preference structure of 37 families, one of the main reasons to shop online was to gain time. Both attributes: ‘ordering time’ and ‘delivery time reliability’ were included in the main survey. Quality

came next followed by delivery time. This means that quality had a relevant position in the overall ranking and that customers did not trade off quality with a time gain. Hence the 'quality' attribute was included in the main survey.

Help line number was considered as an important factor when the pre-survey validation interviews were conducted. However the pilot study showed that help line number was ranked 7th out of 10 attributes. It was therefore less relevant than was stated in the qualitative interviews. Help line number could be what Hill (2000) called an order losing criterion whereby it is not perceived as an important criterion in the customer's mind, but the order may be lost if this attribute is omitted. It was therefore proposed that the attribute 'help line number' be included in the main survey.

An advisory email was ranked at the end of the scale of customers' preferences with the lowest utility of 3.52%. As a result it was decided to eliminate the attribute 'advisory emails' from the list when designing the main conjoint experiment.

Similarly the attribute 'doorstep presentation' was positioned at the end of the scale with 5.09%. It was therefore omitted from the main conjoint survey.

Delivery cost did not seem to carry a strong preference with a percentage close to the attribute 'doorstep presentation'. It was however decided to keep 'delivery cost' in the main survey as it was seen as part of the price element. Price is considered as an attribute with a different relationship to other factors (Hair et al, 1998).

It was decided to keep the attribute ‘price’ (that is offering a discount online) even if the ranking was at the lower end of the scale, as price is considered important in conjoint experiments. Price is frequently seen as having a high degree of inter-attribute correlation with other factors (Hair et al, 1998).

Respondents in the preliminary interviews mentioned a desire to be aware of all the information that was in the store such as any special offers and new products. To replace the two attributes deleted from the pilot study list, it was decided to add the attribute ‘special offer section’ and the attribute ‘new products section’ for the main conjoint experiment as these two attributes were cited in the pre-survey validation interviews.

A range of preference structures were created from 10 respondents through to 37 respondents to see whether incremental increases in respondents significantly changed the preference structure. The preference structure remained stable across these different sets of respondents.

The following table shows the final selection of attributes and levels for the main conjoint experiment.

Table 16: Attributes and Levels Used for the Main Survey

Attributes	Level 1	Level 2	Level 3
Special offer section	Has a special offer section	No special offer section	
New products section	Has a new products section	No new products section	
Help line number	Help line number	No help line number	
Delivery time	Delivered in 6 hours	Delivered in 24 hours	Delivered in 48 hours
Delivery cost	No delivery cost	£5 delivery cost	
Delivery on time reliability	Delivery at agreed time	Delivered 1 hour early or late	
Items below quality expectations	No item below quality	5 items below quality	
Ordering time	20 minutes to place an order	35 minutes to place an order	1 hour to place an order
Number of substitutes	No substitutes	5 substitutes	
Internet grocery prices	0% discount on Internet prices	10% discount on Internet prices	

The pilot conjoint experiment helped to refine the list of attributes and their levels for the main experiment. The pilot test used adaptive conjoint which was considered inferior to choice-based conjoint as discussed in part II. To increase reliability it was decided to switch from an adaptive approach to a choice-based approach where respondents were asked to express their preferences by choosing online service from sets of online service offerings

rather than by ranking them (Appendix 7). The advantage was that it increased realism and thereby reliability (Sawtooth Software):

“In CBC experiments, respondents choose from a number of products described by varying levels of attributes. This task is natural for respondents, as it mimics the actual buying process. By observing how respondents choose products in response to changes in the underlying attribute levels, we can estimate the impact (utility) each attribute level has upon overall product preference. Once we learn respondents’ preferences for the various attribute levels, we can predict how buyers might respond to any potential combination of levels in our study, whether or not that actual product was ever displayed during the interview.”

The following chapter provides a descriptive analysis of the data in relation to its fitness for use in multivariate data techniques. The weaknesses in the data were identified and their implications on interpretation are discussed.

VOLUME II

DPhil in Management Studies

Saïd Business School

University of Oxford

**Title: “Towards Understanding Internet Loyalty through
Customer Preference Structures”**

Candidate:

Muriel Wilson-Jeanselme

Michaelmas 2007

CHAPTER 8: DATA DESCRIPTION

INTRODUCTION

The focus of this section is to understand the limitations of the quantitative data collected, in order to properly circumscribe the interpretation of the findings. Two multivariate methods were used in the analysis of the data, namely choice based conjoint (Logit, Latent Class and Hierarchical Bayes) and structural equation modelling. The data were first tested for normality. The section begins with an analysis of the online survey performance and then moves on to a graphical examination of Hierarchical Bayes utility calculations. What follows is a systematic treatment of missing data, outliers, and tests of normality, homoscedasticity, linearity, reliability and validation. The section concludes with a comment on the limits of interpretation arising from weaknesses in the data collection process and the data itself.

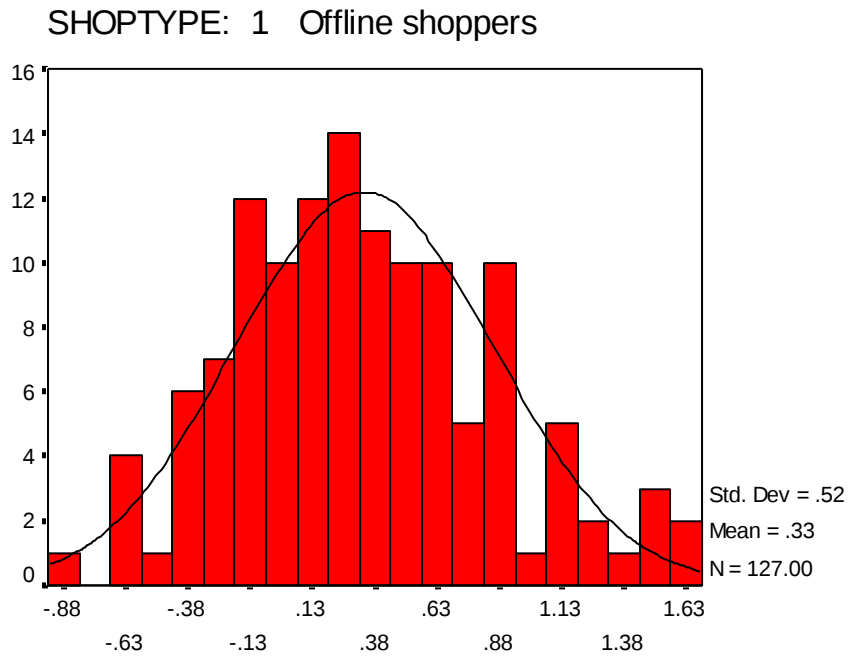
GRAPHICAL EXAMINATION OF THE DATA

In this section graphical univariate distribution of Hierarchical Bayes utility values on selected independent attributes are shown for both groups (offline and online customers) to examine normality for each group. Graphic representation of dependent loyalty variables is also provided. All variables for both groups were assessed for normality using the histogram representation (Appendix 8). The normal probability plot was not shown for all variables as the histogram accurately represented the visual interpretation. The variables expenditure and

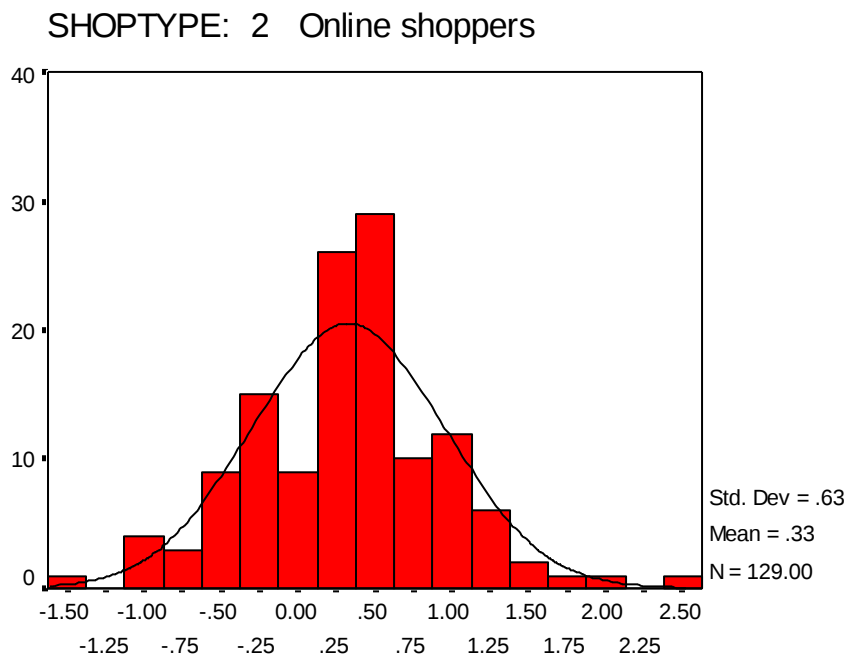
frequency showed a slight positive skewness. Other variables corresponded to the normal distribution.

The analysis of the variable special offer follows next.

Figure 20: Normal Curve of Special Offer Section HB Utility Values



SPEOFF

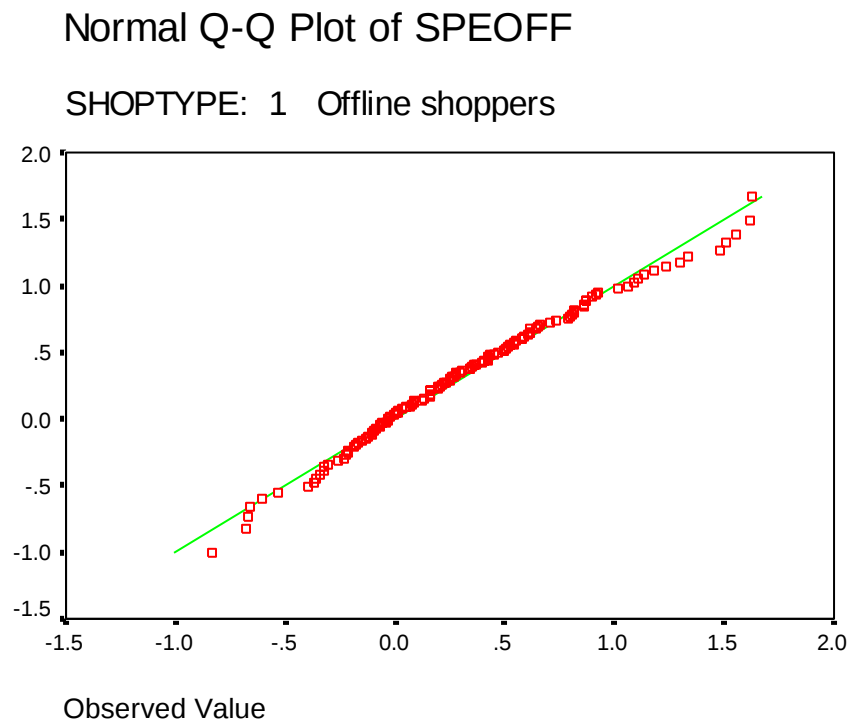


SPEOFF

This visual check of the histogram compared the observed utility values, for the variable labelled special offer, with a distribution approximating the normal distribution. For the offline customer group, the shape of the data distribution corresponded to the normal distribution curve. For the online customer group, the curve indicated normality.

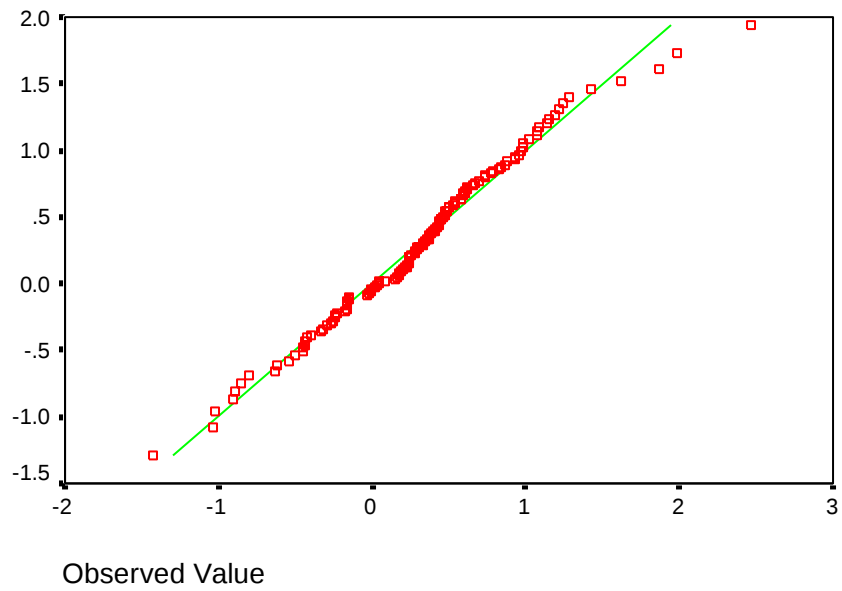
Next is a normal probability plot that compared the cumulative distribution of actual data values with a cumulative normal distribution.

Figure 21: Normal Q-Q Plot for Special Offer Section



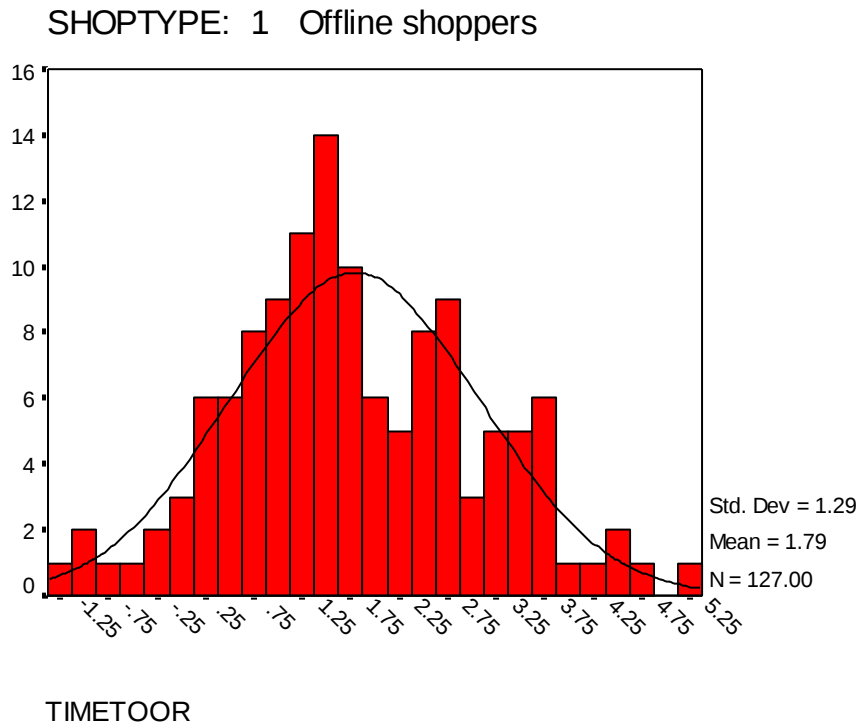
Normal Q-Q Plot of SPEOFF

SHOPTYPE: 2 Online shoppers

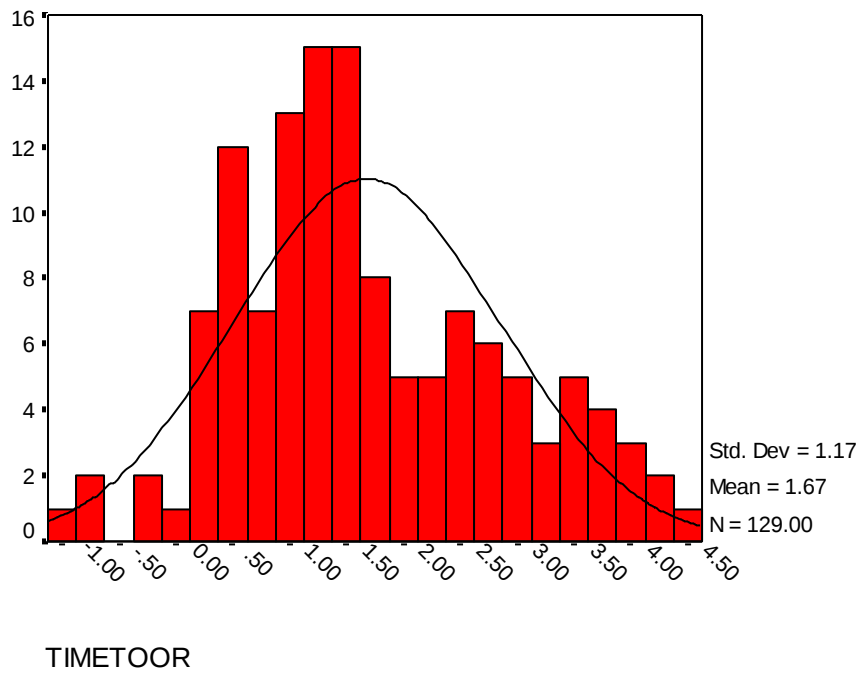


Next, the ordering time variable was assessed for normality for both groups.

Figure 22: Normal Curve of Ordering Time HB Utility Values



SHOPTYPE: 2 Online shoppers

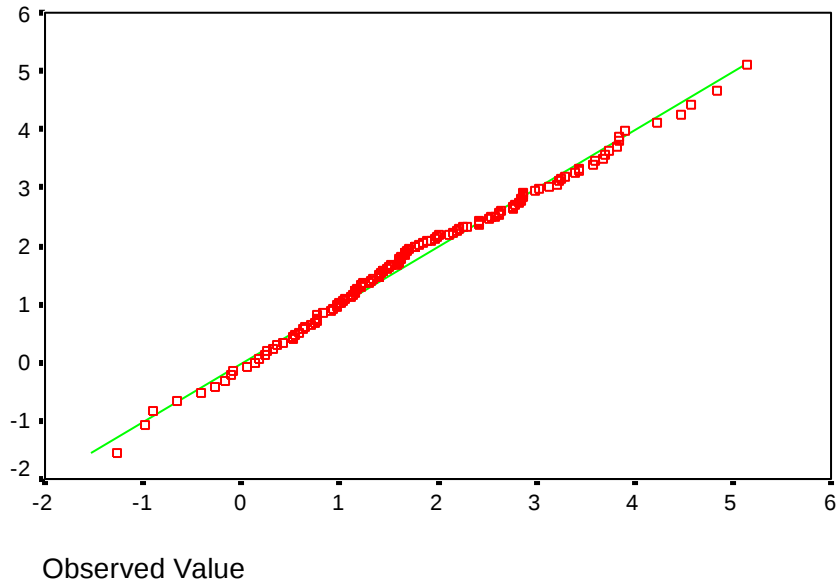


For both groups, the shape of the data distribution for the ordering time variable corresponded to the normal distribution.

Figure 23: Normal Q-Q Plot for Special Offer Section

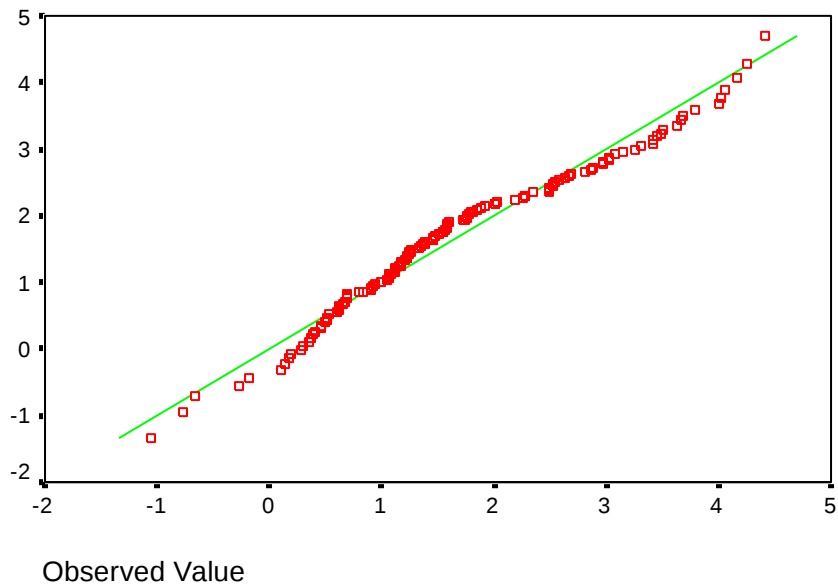
Normal Q-Q Plot of TIMETOOR

SHOPTYPE: 1 Offline shoppers



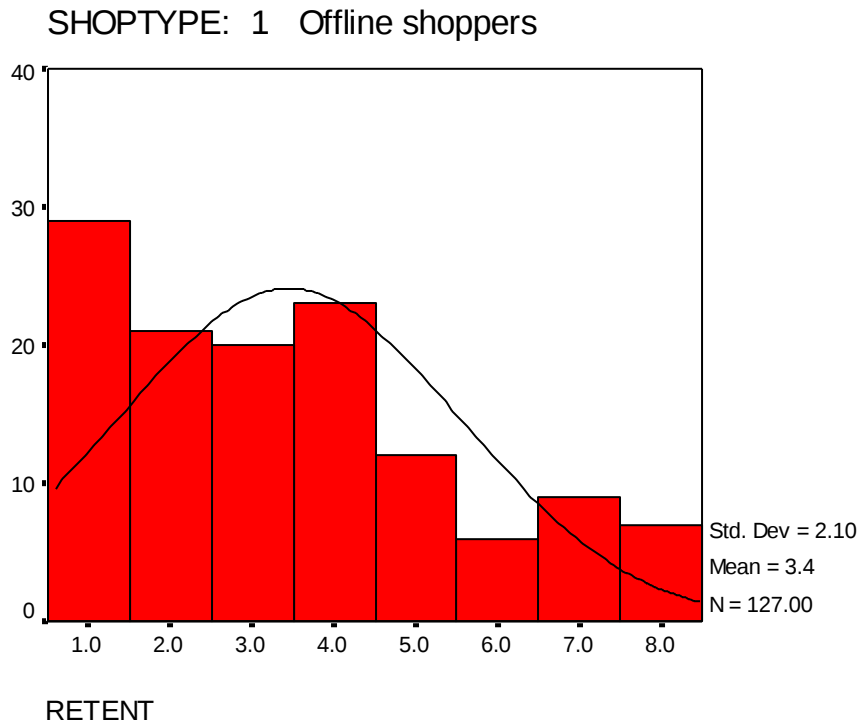
Normal Q-Q Plot of TIMETOOR

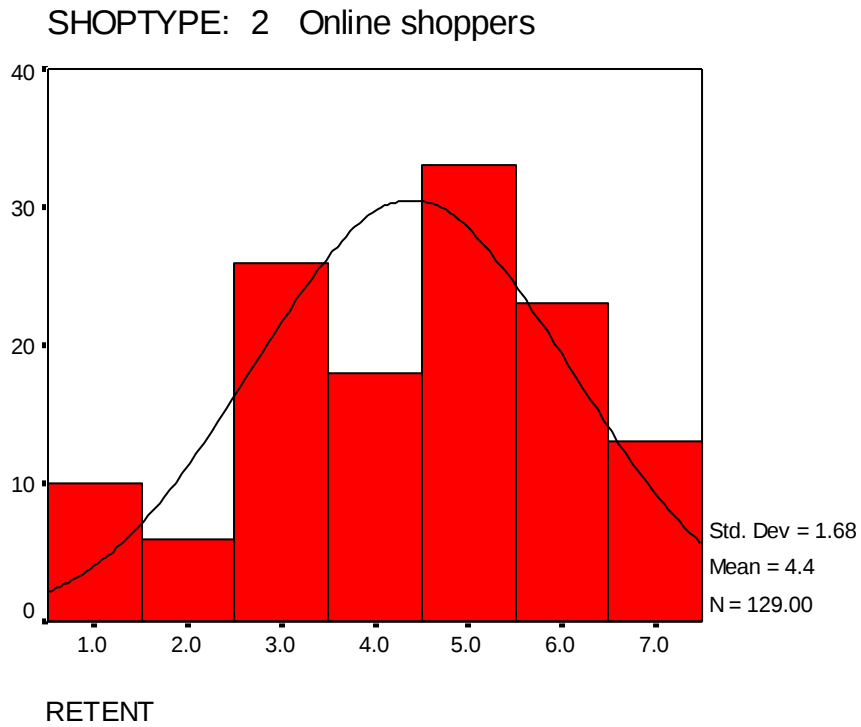
SHOPTYPE: 2 Online shoppers



Next is the graphical analysis of normality for the loyalty variable shopping frequency.

Figure 24: Normal Curve of Ordering Time HB Utility Values



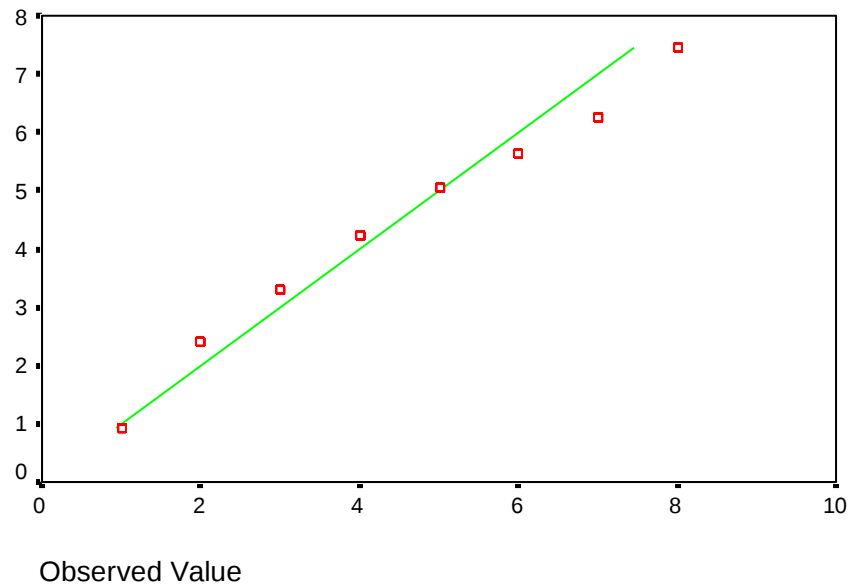


For the offline customers, the distribution curve indicated a slight positive skewness whilst for the online customers the shape of the curve was close to the normal distribution.

Figure 25: Normal Q-Q Plot for Retention

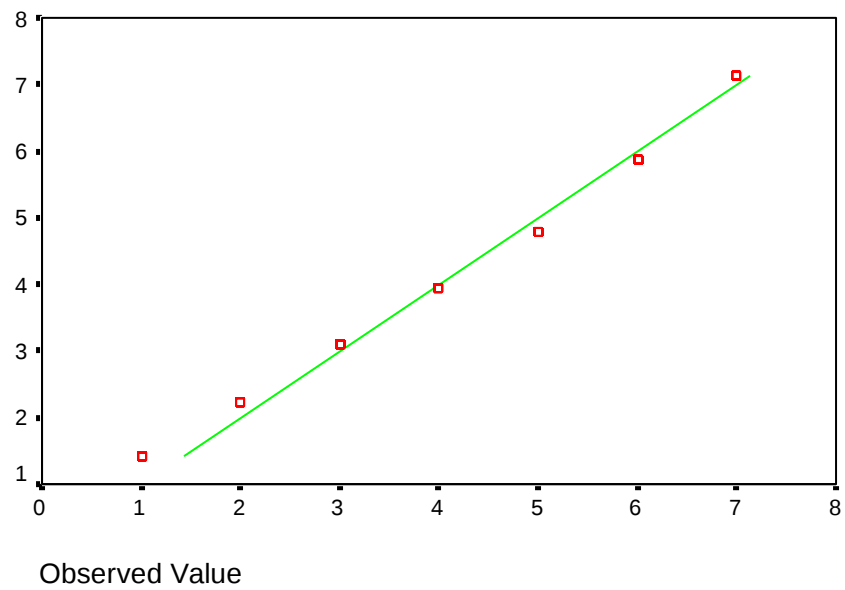
Normal Q-Q Plot of RETENT

SHOPTYPE: 1 Offline shoppers



Normal Q-Q Plot of RETENT

SHOPTYPE: 2 Online shoppers



The above univariate distributions and normal probability plots confirmed that the variables special offer, ordering time and retention conformed to the assumptions of normality. The observed values below the normal plot suggested a limited amount of positive skewness. This visual evidence of normality was tested in the next section using direct statistical methods.

STATISTICAL TESTS OF NORMALITY

Beyond a visual examination of the normal probability plots, Z values for skewness and kurtosis were computed. Where these values exceeded critical values of ± 2.58 assumptions of the normality of the distribution at the .01 probability were to be rejected. These values are shown in the following SPSS descriptive table and subsequent Z calculations.

Table 17: Descriptive Statistics of Skewness and Kurtosis

Descriptive Statistics										
SHOATYPE		N	Minimum	Maximum	Mean	Std.	Skewness		Kurtosis	
		Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Offline shoppers	SPEOFF	127	-.833	1.625	.33126	.519345	.348	.215	-.093	.427
	TIMETOOR	127	-1.277	5.143	1.78891	1.288873	.211	.215	-.225	.427
	RETENT	127	1.00	8.00	3.4488	2.09954	.627	.215	-.547	.427
	Valid N (listwise)	127								
Online shoppers	SPEOFF	129	-1.428	2.469	.32662	.626418	.151	.213	.948	.423
	TIMETOOR	129	-1.049	4.416	1.67421	1.165839	.373	.213	-.376	.423
	RETENT	129	1.00	7.00	4.3876	1.68314	-.341	.213	-.649	.423
	Valid N (listwise)	129								

The table above shows the skewness and kurtosis in the utility values. The probability that this was a random feature of the data was tested in the following table.

The statistical value (Z) for skewness was calculated as follows:

$$Z_{\text{skewness}} = \frac{\text{skewness}}{\sqrt{6/N}}$$

The kurtosis value was calculated as follows:

$$Z_{\text{kurtosis}} = \frac{\text{kurtosis}}{\sqrt{24/N}}$$

Table 18: Skewness and Kurtosis Calculations of Normality for Offline Customers

Variable name	Z values of Skewness	Z values of Kurtosis	Critical value
Special offer section	1.60	-0.21	+/- 2.58
Ordering time 20 minutes	0.97	-0.52	+/- 2.58
Retention	2.88	-1.26	+/- 2.58

The retention data were normal with respect to kurtosis but not normal with respect to skewness. The problem may lie in scale construction with lower retention intervals predominating. Lowering the maximum retention class and utilising smaller class intervals

could have solved the problem in scale construction. For the other two variables namely special offer and ordering time, the assumption about normality was accepted.

Table 19: Skewness and Kurtosis Calculations of Normality for Online Customers

Variable name	Z values of Skewness	Z values of Kurtosis	Critical value
Special offer section	0.70	2.20	+/- 2.58
Ordering time 20 minutes	1.73	-0.87	+/- 2.58
Retention	-1.58	-1.50	+/- 2.58

The selected variables shown in the table above indicated normality.

The skewness and kurtosis calculations for variables not shown here are to be found in Appendix 9.

In addition the Kolmogorov-Smirnov test was performed on the normality of the data (Hair, Anderson, Tatham and Black, 1998). The results are provided in the following table:

Table 20: One Sample Kolmogorov-Smirnov Test

Test Statistics ^a		SPEOFF	TIMETOOR	RETENT
Most Extreme	Absolute	.092	.109	.270
Differences	Positive	.085	.109	.055
	Negative	-.092	-.040	-.270
Kolmogorov-Smirnov Z		.734	.872	2.157
Asymp. Sig. (2-tailed)		.654	.433	.000

a. Grouping Variable: SHOATYPE

The Kolmogorov-Smirnov tests confirmed that the Hierarchical Bayes attribute utility values were normally distributed except for retention. The non-normality of this variable data arose from the skewness as previously identified. As the retention data were positively skewed a logarithm transformation of the frequency data was carried out (Hair, Anderson, Tatham and Black, 1998) but this showed no significant improvement over the original data. Consequently the original data were retained. In addition the skewness statistic on the original retention data was not greater than +1. In all other respects the data met the conditions for multivariate data analysis. The analysis of the remaining variables is found in Appendix 10.

HOMOSCEDASTICITY

The full data set was tested for the assumption of homoscedasticity using the Box's M because the comparison involved the equality of variance/covariance matrices. The result is shown below:

Table 21: Box's Test of Equality of Covariance Matrices (a)

Box's M	8.863
F	.702
df1	12
df2	23213.261
Sig.	.751

Box's M tested the null hypothesis that the observed covariance matrices of the dependent variables were equal across groups.

Design: Intercept+SO+OT20+NP+HL+D6H+NCD+DOT+AIQ+NS+D10

The Box's M test did not suggest that there was a high degree of heteroscedasticity in the data at $\alpha = .05$

LINEARITY

The assumption of linearity was tested through a multiple regression and then an examination of the residuals. The following sample partial regression plots were the result:

Figure 26: Partial Regression Plot - Special Offer Section

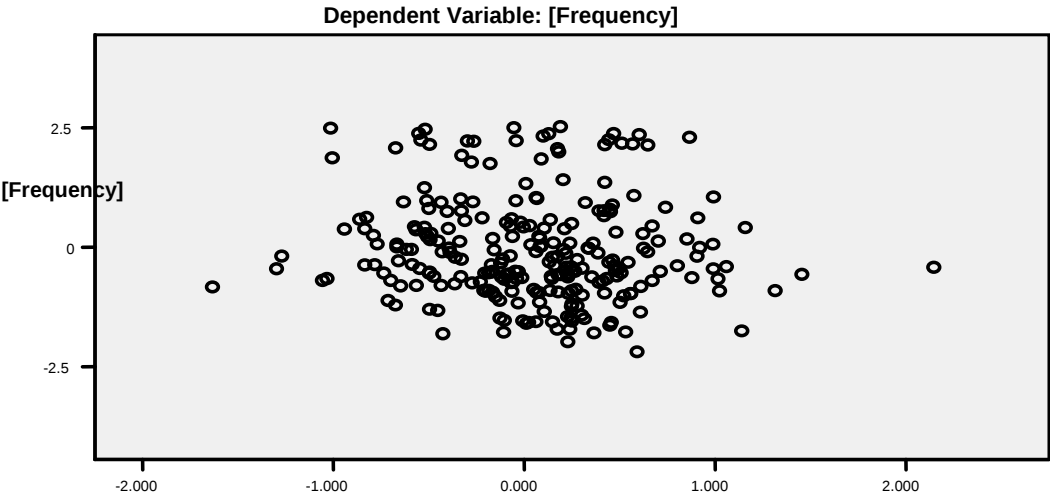
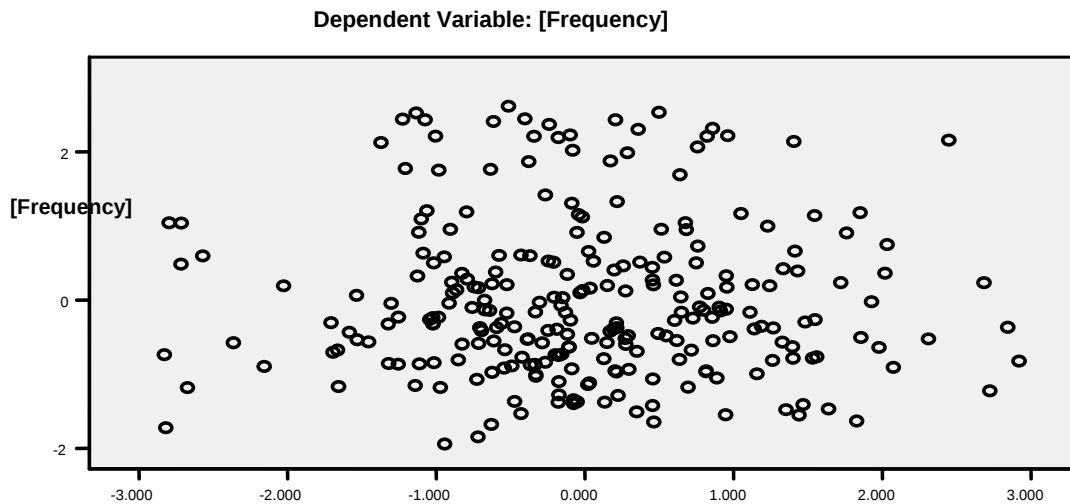


Figure 27: Partial Regression Plot - 20 Minute Ordering Time



The partial regression plots for the independent variables special offer section and 20 minute ordering time suggested that the relationships were linear.

COLLINEARITY

The assumption of non-collinearity was tested through performing a multiple regression with frequency as the dependent variable and each Hierarchical Bayes attribute as the independent value. The following table provides the collinearity diagnostics.

Table 22: Collinearity Diagnostics for the Dependent Variable Frequency

SHOPTYPE	Model	Dimension	Eigen value	Condition Index
Offline shoppers	1	1	5.395	1.000
		2	1.251	2.077
		3	1.078	2.238
		4	.942	2.393
		5	.730	2.718
		6	.522	3.213
		7	.379	3.775
		8	.367	3.835
		9	.212	5.040
		10	.088	7.851
		11	.036	12.244
Online shoppers	1	1	4.757	1.000
		2	1.284	1.925
		3	1.245	1.955
		4	1.074	2.104
		5	.753	2.514
		6	.599	2.817
		7	.512	3.049
		8	.435	3.307
		9	.190	5.008
		10	.114	6.469
		11	.039	11.041

Dependent Variable: FREQUENC

Table 23: Collinearity Diagnostics for the Dependent Variable Retention

SHOATYPE	Model	Dimension	Eigen value	Condition Index
Offline shoppers	1	1	5.395	1.000
		2	1.251	2.077
		3	1.078	2.238
		4	.942	2.393
		5	.730	2.718
		6	.522	3.213
		7	.379	3.775
		8	.367	3.835
		9	.212	5.040
		10	.088	7.851
		11	.036	12.244
Online shoppers	1	1	4.757	1.000
		2	1.284	1.925
		3	1.245	1.955
		4	1.074	2.104
		5	.753	2.514
		6	.599	2.817
		7	.512	3.049
		8	.435	3.307
		9	.190	5.008
		10	.114	6.469
		11	.039	11.041

Dependent Variable: RETENT

Table 24: Collinearity Diagnostics for the Dependent Variable Expenditure

SHOATYPE	Model	Dimension	Eigen value	Condition Index
Offline shoppers	1	1	5.395	1.000
		2	1.251	2.077
		3	1.078	2.238
		4	.942	2.393
		5	.730	2.718
		6	.522	3.213
		7	.379	3.775
		8	.367	3.835
		9	.212	5.040
		10	.088	7.851
		11	.036	12.244
Online shoppers	1	1	4.757	1.000
		2	1.284	1.925
		3	1.245	1.955
		4	1.074	2.104
		5	.753	2.514
		6	.599	2.817
		7	.512	3.049
		8	.435	3.307
		9	.190	5.008
		10	.114	6.469
		11	.039	11.041

Dependent Variable: EXPEND

There were no condition indexes greater than 15 which suggested that there was no problem of collinearity with the independent variables.

MISSING DATA

Only questionnaires where all choices had been made were processed. Consequently there were no missing count data and the Logit and Hierarchical Bayes computations did not require modification for missing data.

OUTLIERS

Mahalanobis D^2 (measures the distance of an observation from the mean centre) was used for the purpose of identifying variables with outliers. No significant outliers were found for independent variables.

VALIDATION TESTS

Holdout Sample

A random validation sample was extracted from the main conjoint data set in order to test whether there were significant differences in the mean utility values for each attribute. The results are provided in the following table:

Table 25: Independent Samples Test of Holdout Sample

		Levine's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
SO	Equal variances assumed	1.263	.262	.608	249	.543	.044382	.072949	-.099293	.188057
	Equal variances not assumed			.611	248.053	.542	.044382	.072694	-.098793	.187558
D6H	Equal variances assumed	.013	.911	.534	249	.594	.079709	.149312	-.214366	.373784
	Equal variances not assumed			.533	242.864	.595	.079709	.149661	-.215090	.374507
NP	Equal variances assumed	1.273	.260	-.215	249	.830	-.012803	.059477	-.129946	.104340
	Equal variances not assumed			-.217	248.965	.828	-.012803	.059011	-.129027	.103421
HL	Equal variances assumed	.738	.391	-.394	249	.694	-.029033	.073610	-.174011	.115945
	Equal variances not assumed			-.396	248.554	.692	-.029033	.073268	-.173338	.115272
NCD	Equal variances assumed	.029	.864	.860	249	.391	.114943	.133703	-.148390	.378275
	Equal variances not assumed			.860	245.939	.391	.114943	.133633	-.148269	.378154

DOT	Equal variances assumed	.003	.958	-.397	249	.692	-.055711	.140320	-.332078	.220655
	Equal variances not assumed			-.398	246.801	.691	-.055711	.140103	-.331662	.220239
AIQ	Equal variances assumed	.000	1.000	-.570	249	.569	-.095605	.167820	-.426132	.234922
	Equal variances not assumed			-.569	244.947	.570	-.095605	.167905	-.426326	.235116
D10	Equal variances assumed	.254	.615	.051	249	.959	.005398	.105465	-.202319	.213116
	Equal variances not assumed			.051	242.682	.959	.005398	.105727	-.202861	.213657

The table shows that there was no significant difference in attribute utility values between the holdout sample and the main survey where $\alpha = .05$

Fixed Holdout Task

The choice based conjoint attribute utility values were validated by use of a fixed holdout task which was designed into the experiment. The validation worked through the market simulation feature of the software which compared the predicted market share and the known market share of the holdout fixed task. The following table is a chi square evaluation of the difference between actual and predicted market shares for the three different products that comprised the fixed holdout task scenario.

Table 26: Chi Square Validation of Fixed Holdout Task

	Product	Product	Product	Total
	1	2	3	
Actual	27	46	26	99
Predicted	22	54	21	97
Total	49	100	47	196
	24.75	50.5102	23.7398	
	24.25	49.4898	23.2602	
	2.25	-4.5102	2.260204	
	-2.25	4.510204	-2.2602	
	0.204545	0.402729	0.215188	1.661884
	0.208763	0.411033	0.219625	

The chi square of 1.66 with 2 degrees of freedom led to the conclusion that there was no significant difference between actual and predicted utility values where $\alpha = .05$

Validation of the Levels Used to Measure Choice- Based Conjoint Attributes

The qualitative study that preceded the design of the conjoint experiment was the basis for defining and selecting the attributes and how they were to be operationalised (i.e. defining their levels). The question that the actual data could answer in terms of validation is “Were the utility values significantly different within each level?” If the utility values were

significantly different then this would be an indication that the levels within an attribute had discriminatory power. To test this validation hypothesis, the high and low performance measures within each level were compared using a paired samples t-test. For example the utility values for the 20 minute ordering time was compared to the utility values for the 60 minute ordering time. The results are shown in the following table:

Table 27: Paired T-Tests for Attribute Levels

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	SO - NSO	.657844	1.149343	.071834	.516380	.799307	9.158	255	.000
Pair 2	NP - NNP	-.008906	.953162	.059573	-.126223	.108411	-.150	255	.881
Pair 3	HL - NHL	.492914	1.117830	.069864	.355329	.630499	7.055	255	.000
Pair 4	D6H - D48H	2.030098	2.589114	.161820	1.711425	2.348771	12.545	255	.000
Pair 5	NCD - £5D	1.709891	2.057408	.128588	1.456661	1.963120	13.297	255	.000
Pair 6	DOT - D1H	1.781289	2.372792	.148300	1.489241	2.073337	12.011	255	.000
Pair 7	AIQ - BQ5	3.659734	2.719956	.169997	3.324957	3.994512	21.528	255	.000
Pair 8	OT20 - OT60	3.921066	2.879647	.179978	3.566634	4.275499	21.786	255	.000
Pair 9	NS - S5	1.994484	2.099911	.131244	1.736023	2.252945	15.197	255	.000
Pair 10	D0 - D10	-1.533453	1.676060	.104754	-1.739746	-1.327160	-14.639	255	.000

Ho: There is no significant difference between mean utility values within each level

Ha: There is a significant difference between mean utility values within each level

$\alpha = 0.05$

Decision rule: If $p \leq 0.05$ then reject H_0

The null hypothesis was rejected for all levels except for the attribute new product section where $p = 0.881$

This result would suggest that discriminatory attributes had been included in the study (except for the new product section where respondents were indifferent to having or not having a new product section). Nine out of the ten attributes discriminated between different product selections in the choice-based conjoint experiment.

The direction of the difference indicated that the utility demand curves for each attribute were downward sloping which accorded with what was expected intuitively.

Post Hoc Reliability Tests

Nine months after the main survey, twelve post survey interviews were undertaken with respondents, five of whom did not shop on line and seven of whom did. Each respondent was asked to comment on what they considered to be their grocery preference structure. Notes were made on the sequence by which attributes were raised and the performance measures on each attribute deemed satisfactory by the respondent. Once the interview was concluded the pattern of preferences described verbally was compared and contrasted to the preference structure for the individual respondent as calculated with the Hierarchical Bayes technique. There was no apparent systematic difference between the calculated and verbal descriptions of individual preference structures.

Summary of Validation and Reliability Tests

The validation and reliability tests gave support to the utility values used in this study. The data conformed to the requirements of normality and support the further use of the data in choice-based conjoint analysis and structural equation modelling. There was some evidence that the class intervals used for the measurement of the dependent variables could have been better constructed by using ratio data. The sampling method did not support generalisation of the findings across all U.K. online and offline customers. The findings were specific to the population of families of certain private schools in Surrey, U.K.

CHAPTER 9: CHOICE BASED CONJOINT RESULTS

INTRODUCTION

This section presents the choice based conjoint quantitative findings. Hypotheses relating to differences in preference structures between online and offline customers were tested using Logit utility calculations.

TESTING HYPOTHESIS H1a

The relevance of hypothesis H1a was discussed in chapter 6 of Part II (methodology) and was expressed as follows:

H1a: There is a significant difference in attribute utility values between online and offline customers.

To measure hypothesis H1a, customers' preferences were identified by calculating a set of customer utility values for online and offline customers.

Calculating Customer Utility Values

To identify customer utility values for online and offline customers, Logit analysis was used to analyse the choice results of customers. It estimated a utility for each level of each attribute.

The following section calculates the preference structure of offline grocery customers.

The Offline Customers' Preference Structure

The following table summarises the utility for each level of each attribute of the offline grocery customers group. The utilities sum to 0 within each attribute (zero-centred).

Table 28: Utilities for Offline Grocery Customers

Attribute Level	Utility
1. Has a special offer section	0.10
1. No special offer section	-0.10
2. Has a new product section	0.00
2. No new product section	-0.00
3. Help line number	0.01
3. No help line number	-0.01
4. Delivered in 6 hours	0.40
4. Delivered in 24 hours	0.00
4. Delivered in 48 hours	-0.40
5. No delivery cost	0.29
5. £5 delivery cost	-0.29
6. Delivery at agreed time	0.22
6. Delivery an hour early or late	-0.22
7. No items below quality	0.58
7. 5 items below quality	-0.58
8. 20 minutes to place an order	0.52
8. 35 minutes to place an order	0.15
8. 1 hour to place an order	-0.67
9. No substitutes	0.30
9. 5 substitutes	-0.30
10. 0% discount	-0.24
10. 10% discount	0.24

This table shows the utility for each attribute level. A utility is a measure of relative desirability. When computing utilities using Logit analysis, every attribute level is assigned a utility also referred to as a part-worth (Hair, Tatham, Anderson and Black, 1998). The higher the utility, the more desirable is the attribute level. For example the level '20 minutes to place an order' had a utility of 0.52. It had a high utility level which meant that it had a large positive impact on influencing respondents i.e., potential customers were more likely to choose this online offering compared to an offering with a low utility level such as '35 minutes to place an order' which had a utility of 0.15. Further transformations of the utility values were required to facilitate inter-attribute comparisons. These transformations are discussed next.

To develop a ranked preference structure the absolute utility value differences within each level were expressed as a proportion of the total absolute difference of all the levels. The result is shown in the following tables.

Table 29: Calculation of the Weighting of Each Attribute for Offline Grocery Customers

Attribute	Highest utility level	Lowest utility level	Difference	% Proportion
Special offer section	0.1	-0.1	0.2	3.56
New product section	0	0	0	0.00
Help line number	0.01	-0.01	0.02	0.36
Delivery time	0.4	-0.4	0.8	14.23
Delivery cost	0.29	-0.29	0.58	10.32
Delivery reliability	0.22	-0.22	0.44	7.83
Quality	0.58	-0.58	1.16	20.64
Ordering time	0.67	-0.67	1.34	23.84
Substitutes	0.3	-0.3	0.6	10.68
Discount	0.24	-0.24	0.48	8.54
Total			5.62	100.00

Table 30: The Weighted Preference Structure for Offline Grocery Customers

Attributes	Offline customers
Ordering time	23.84%
Quality	20.64%
Delivery time	14.23%
Substitutes	10.68%
Delivery cost	10.32%
Discount	8.54%
Delivery time reliability	7.83%
Special offer section	3.56%
Help line number	0.36%
New product section	0%

The top two attributes were ordering time followed by quality. These two attributes were separated from the remainder by a sizable utility gap of 6.41%. This was the largest utility gap in the preference structure. The last three attributes had low utility values and as a group were separated from the next highest attribute by a sizable utility gap of 4.27%. This was the second largest utility gap in the preference structure. This preference structure was made up of three distinct groups of attributes. The top group was characterised by time and quality attributes, the middle group by quality, time and cost and the bottom group by service related attributes.

The Online Customers' Preference Structure

To investigate the preference structure of online customers, the relative weighting of each attribute level was calculated. This is shown in the following table.

Table 31: The Weighted Preference Structure for Online Grocery Customers

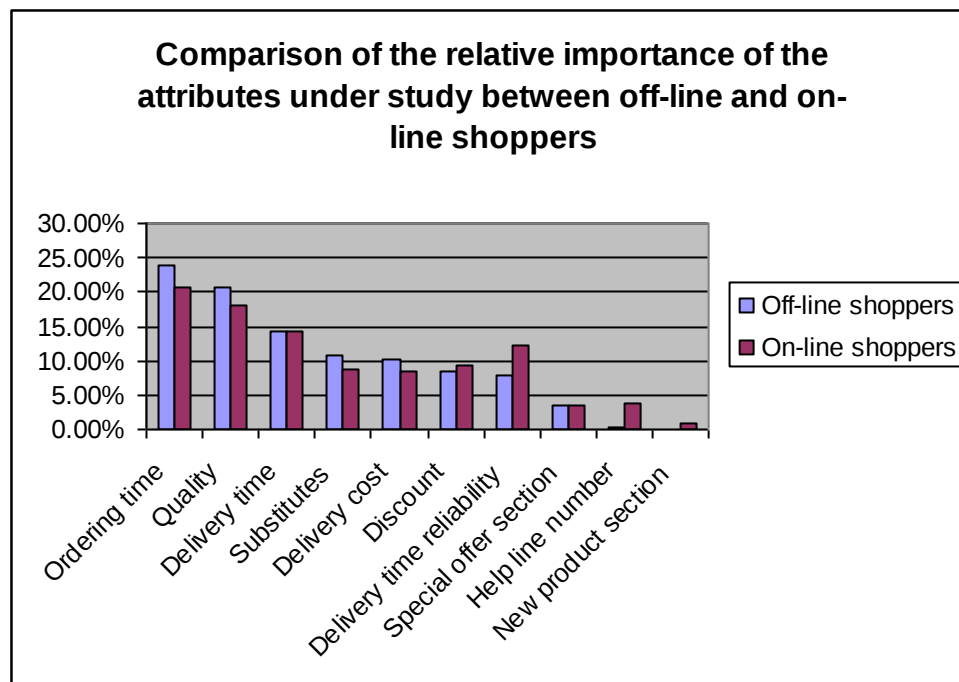
Attributes	Customers
Ordering time	20.77%
Quality	18.08%
Delivery time	14.23%
Delivery time reliability	12.31%
Discount	9.23%
Substitutes	8.85%
Delivery cost	8.46%
Help line number	3.85%
Special offer section	3.46%
New product section	0.77%

Ordering time and quality were the two top attributes. A utility gap of 3.85% separated this top group from the middle group which consisted of time, quality and cost attributes. The bottom group comprised service related attributes and was separated from the middle group by a utility gap of 4.61%. Time related attributes made up three of the top four attributes.

Comparing Offline and Online Customer Preference Structures

The graph below compares and contrasts the rank ordered preference structures of the offline and online customer groups.

Figure 28: Graph to Compare Offline and Online Customer Preference Structures



For both groups the three most important criteria by rank order - namely, ordering time, quality and delivery time - were identical but with differences in weighting. For example the weighting for the offline group was 3.07% higher for ordering time and 2.56% higher for quality.

Subsequent attributes were different between offline and online customers. For example, delivery time reliability was the attribute that differed the most between the two groups. The bottom three attributes were the same between both groups.

The middle group of attributes showed the greatest variation where delivery time reliability was ranked 4th for online customers and 7th for offline customers. This represented a utility value difference of 4.48%. Other ranking differences between online and offline customers occurred in the middle group of attributes for substitutes and delivery cost. The utility value differences were however less than 2%.

An independent sample t-test was used to compare attribute utility values (based on absolute level differences) between online and offline customers. The results are shown in the table following:

Table 32: Independent Sample T-Tests of Online and Offline Customers Attribute (see Appendix 14 for the full table)

<i>Attribute</i>	<i>2-Tailed significance</i>
Delivery cost	.000
Delivery reliability	.004
Time to Order	.039
Number of substitutes	.001

Ho: There is no significant difference in absolute utility values for each attribute between offline and online customers

Ha: There is a significant difference in absolute utility values for each attribute between offline and online customers

$$\alpha = 0.05$$

Decision rule: If $p < 0.05$ then reject H_0

The null hypothesis was rejected for 4 attributes and was failed to be rejected for 6 attributes. The attributes where the differences are significant were: delivery cost, delivery reliability, time to order and number of substitutes. The attribute of quality was marginally above alpha. These results suggested that there was some heterogeneity between the preference structures of online and offline customers, particularly when it was noted that these differences occurred in the top ranked attributes. Only delivery time, amongst the top ranked attributes,

showed similar utility values between online and offline customers. These findings are discussed at length in Part V.

TESTING HYPOTHESIS H1b

Hypothesis H1b was expressed as follows:

H1b: There is a significant difference in attribute utility values between high and low frequency online customers.

A t-test was computed by comparing the absolute utility values of high and low frequency online customers. Low frequency shoppers were defined as shopping online 5 or fewer times per year. High frequency shoppers were defined as shopping online 6 or more times per year. The hypothesis testing was set up as follows:

Ho: There is no significant difference in absolute utility values for each attribute between high and low frequency online customers

Ha: There is a significant difference in absolute utility values for each attribute between high and low frequency online customers

$\alpha = 0.05$

Decision rule: If $p \leq 0.05$ then reject H_0

The results are shown in the following table.

Table 33: Independent sample t-test of absolute utility values between high and low frequency online customers (Refer appendix 14 for full table)

<i>Attribute</i>	<i>2-Tailed Significance</i>
Special offer section	.764
New products section	.672
Help line	.221
On time delivery	.846
Delivery cost	.040
Delivery reliability	.198
Quality	.828
Ordering time	.456
Substitutes	.308
Discounts	.568

The null hypothesis was rejected for one attribute, namely delivery cost and was failed to be rejected for 9 attributes. This result suggested considerable homogeneity in attribute utility values between high and low frequency customers. The implications are discussed in Part V.

ADDITIONAL TESTS OF DIFFERENCES

This section explores a range of differences in preference structures between online and offline customers. The first test examined whether the rate of change in attribute utility values was significant between online and offline shoppers. The second series of test examined whether there were differences between online and offline preference structures when customers were categorised along demographic variables.

Calculating Differences in the Rate of Change in Attribute Utility Values between Online and Offline Customers

The testing of hypothesis 1 showed that there were differences between pre- and post-purchase preference structures for four out of ten attributes. This was a test of differences between average attribute utility values. This test did not revealed if there were differences in the rate of change in attribute utility values between pre- and post-purchase preference structures. To explore this question, the rate of change for each attribute for each respondent was calculated, by dividing the absolute level utility difference for each attribute by the absolute difference in level change. The results of the independent samples t-test are shown in the following table.

Table 34: t-Test to Examine Attribute Utility Rate of Change Coefficients between Online and Offline Customers

<i>Attribute rate of change coefficients</i>	<i>2-tailed significance</i>
Ordering time	.039
Delivery cost	.000
Delivery on time	.000
Substitutes	.004

The results show that four out of ten attributes were significantly different at the .05 level. In total six attributes were significant at .10. These results confirmed the prior hypothesis test that there were strong differences between online and offline customer preference structures.

In what ways do Pre- and Post-Preference Structures Vary by Demographics?

This section compares and contrasts pre- and post- preference structures by demographics such as age, number of children, source of income, house value, shopper type (who does the shopping?) and venue (where do families shop?). The objective of this analysis was to examine if a change in the demographic variables were associated with a change in the pre- and post- preference structures. If this was not the case then Internet capabilities were more likely to be modifies of customer preferences. For multiple demographic categories, ANOVA was used to compare attribute utility values between online and offline customers. For ratio and interval data, correlations were computed. An independent samples t-test was used when the demographic variable had two categories. These tests were based on the absolute level differences for each attribute (highest level minus lowest level). For these tests a significance level of .05 was used.

Demographic Variable: Age

ANOVA was used to determine the differences in means across the age groups for offline and online customers. Only one attribute showed a significant difference in the levels for offline shoppers. The over 53 years' old age group were more sensitive to delivery on time. No attributes were found to be significantly different in the levels for the online group. The following table shows these significant attributes.

Table 35: The Relationship of Delivery on Time to Age

OFFLINE CUSTOMERS

DELIVERY ON TIME	From 18 to 26 (inclusive)	From 27 to 35	1.0234
		From 36 to 44	.1835
		From 45 to 53	.6999
		Above 53 years old	1.4288(*)
	From 27 to 35 (inclusive)	From 18 to 26	-1.0234
		From 36 to 44	-.8399
		From 45 to 53	-.3235
		Above 53 years old	.4054
	From 36 to 44 (inclusive)	From 18 to 26	-.1835
		From 27 to 35	.8399
		From 45 to 53	.5164
		Above 53 years old	1.2453(*)
	From 45 to 53 (inclusive)	From 18 to 26	-.6999
		From 27 to 35	.3235
		From 36 to 44	-.5164

	Above 53 years old	.7289
Above 53 years old	From 18 to 26	-1.4288(*)
	(inclusive)	
	From 27 to 35	-.4054
	From 36 to 44	-1.2453(*)
	From 45 to 53	-.7289

As the variable age was measured as interval data, correlation coefficients were computed to examine if a change in age was associated with changes in attribute utility values. For the offline customer group, two attributes out of ten, namely special offer (-.188) and delivery on time (-.218) were significant but with small correlation coefficients. For the online customer group, one attribute out of ten, namely quality (.198) was found to be significant with a small correlation coefficient. The following table shows these correlation coefficient results.

Table 36: Correlations to show Differences between Online and Offline Customer Utility Values for Age

OFFLINE CUSTOMERS			ONLINE CUSTOMERS		
DELIVERY	Pearson	-.218(*)	QUALITY	Pearson	.198(*)
ON TIME	Correlation			Correlation	
	Sig. (2-tailed)			Sig. (2-tailed)	
	N	127		N	129
SPECIAL	Pearson	-.188(*)			
OFFER	Correlation				
	Sig. (2-tailed)				
	N	127			

The ANOVA and correlation tests indicated that the demographic variable age was considered to be a weak to moderate intervening variable in explaining the difference between online and offline preference structures.

Demographic Variable: Children

ANOVA showed that no attributes were significant with the demographic variable number of children for the offline group. Regarding the online group, multiple comparisons were not performed because at least one group had fewer than two cases.

When calculating correlation coefficients for the offline customer group, the attribute delivery cost was found to be negatively correlated with the number of children living at home (-.246). With regards to the online customer group, four attributes were correlated with the number of children namely, delivery cost (-.252), quality (-.213), ordering time (.188) and online discount (.253).

Table 37: Correlations to show Differences between Online and Offline Customer Utility Values for Number of Children

ONLINE CUSTOMERS			OFFLINE CUSTOMERS		
DELIVERY	Pearson	-.252(**)	DELIVERY	Pearson	-
COST	Correlation		COST	Correlation	.246(**)
	Sig. (2-tailed)			Sig. (2-tailed)	.005
	N			N	127
QUALITY	Pearson	-.213(*)			
	Correlation				
	Sig. (2-tailed)				
	N				
ORDERING	Pearson	.188(*)			
TIME	Correlation				
	Sig. (2-tailed)				
	N				
DISCOUNT	Pearson	.253(**)			
	Correlation				
	Sig. (2-tailed)				
	N				

Delivery cost was a significant but weakly correlated variable common to both online and offline customers. The attributes quality, ordering time and discount were uniquely significant to online customers. Number of children was considered to have a moderate intervening effect on differences between pre- and post-purchase preference structures.

Demographic Variable: Income Source

An independent samples t-test was used to compare dual with single income families on each attribute for online and offline customers. For offline customers, there was a significant difference between dual and single income families on the attribute delivery time. No attributes were found significant for the online group.

Table 38: t-Test of the Attribute Delivery Time for Offline Customers

OFFLINE CUSTOMERS

DELIVERY	Equal					
TIME	variances	3.159	.078	2.121	125	.036
	assumed					
	Equal					
	variances not			2.194	124.240	.030
	assumed					

The demographic variable, income source, was not considered as a major intervening variable to explain the difference between online and offline preference structures.

Demographic Variable: House Value

ANOVA showed that for online customers, there were significant differences between three categories of house price for the attribute delivery on time. The second attribute that showed a significant difference was online discount. Families that owned a house priced over £800,000 were more sensitive to online discount than those who lived in homes less than £200,000. Within offline customers, no attributes were found to be significant.

Table 39: Significant Differences in Delivery on Time for Online Customers

DELIVERY ON TIME FOR ONLINE CUSTOMERS

Between	Less than	
£400,000 and	£200,000	2.0253
£599,999		
	Between	
	£200,000 and	1.8477(*)
	£399,999	
	Between	
	£600,000 and	.2749
	£799,999	
	Above £800,000	2.0581(*)

Table 40: Significant Differences in Discount for Online Customers

10% DISCOUNT FOR ONLINE CUSTOMERS

Less than	Between	
£200,000	£200,000 and	-.7164
	£399,999	
	Between	
	£400,000 and	-.7323
	£599,999	
	Between	
	£600,000 and	-.5288
	£799,999	
	Above £800,000	-1.4779(*)

Correlation coefficients were tested between attribute utility values and the interval data provided by house values. For offline customers, house value was negatively correlated with the attribute delivery cost (-.237). For online customers, two attributes were positively associated with house value namely, discount (.243) and ordering time (.182).

Table 41: Correlations between Delivery Cost and House Value for Offline Customers

OFFLINE CUSTOMERS

DELIVERY	Pearson	-
COST	Correlation	.237(**)
	Sig. (2-tailed)	.007
	N	127

Table 42: Correlations between Ordering Time/Discount and House Value for Online Customers

ONLINE CUSTOMERS

ORDERING	Pearson	.182(*)
TIME	Correlation	
	Sig. (2-tailed)	
	N	129
DISCOUNT	Pearson	.243(**)
	Correlation	
	Sig. (2-tailed)	
	N	129

The correlation coefficients were small and different for both groups. The demographic variable, house value, was considered to be a weak to moderate intervening variable in explaining the difference between online and offline preference structures.

Demographic Variable: Shopper Type

The focus of this question was to investigate who did the shopping in the family as different individuals may have different preference structures. The buyer categories were wife, husband, grandparents, nanny and other. No ANOVA results were calculated for the online customers because at least one group had fewer than two cases. For the offline customers, no attributes were significant.

Shopper type was not considered to be a major intervening variable in explaining the differences between online and offline preference structures.

Demographic Variable: Venue

Venue described the shop brand which was most frequently used by the respondent. The ANOVA revealed only one attribute to be significant, which was help line number, for offline customers. This is shown in the following table.

Table 43: ANOVA Result for the Attribute Help Line for Offline Customers

OFFLINE CUSTOMERS

HELP LINE	Between	6.689	5	1.338	3.442	.006
	Groups					
	Within	47.028	121	.389		
	Groups					
	Total	53.716	126			

Venue was considered to be a weak intervening variable in explaining the differences between pre- and post-purchase customer preference structures.

Summary

As suggested by the theory, significant differences were found between online and offline customer's preference structures. Further support was provided from the result that showed only one attribute being different between high and low frequency online customers. Demographic factors may have been a source of variation between online and offline customers. The preceding demographic tests showed that demographic factors had a weak to moderate relationship with changes in preference structures between online and offline customers. For this reason it was considered not necessary to include demographic variables in the following structural equation models.

The next chapter examines the fit of the theoretical model to the data and the strength of the multivariate relationships implied in the model.

CHAPTER 10: RESULTS FROM STRUCTURAL EQUATION MODELLING

INTRODUCTION

The purpose of this section was to test hypothesis H2 which is stated as follows:

H2: Customer post-purchase and pre-purchase preference structures relate differently to loyalty behaviours.

A preliminary analysis of the differences between online and offline customers for the loyalty variables was undertaken by an independent samples t-test and by examining the correlations between attribute utility values and loyalty variables.

A two stage process was carried out to investigate the data using structural equation modelling. The first stage used a confirmatory modelling approach which looked at how well the pre-defined theoretical model fitted the data – a deductive approach. The limitation of this approach was that it did not provide any assurance that there was not a model which could have better fit the data. It did however provide insights directly into the key relationships as defined in the theoretical model.

The second stage was an attempt to rectify the weakness of the first stage. A structural model was developed through an examination of the underlying dimensions that naturally existed in

the data – an inductive approach. The underlying dimensions were revealed through principle components factor analysis. From this analysis and a latent class analysis, an alternative path diagram and structural equation model was developed. An alternative supporting theory was considered. This was a competing models strategy.

SOME PRELIMINARY OBSERVATIONS

The following table shows the results of the t-test.

Table 44: Loyalty Variables Compared between Online and Offline Customers

Group Statistics

	SHOATYPE	N	Mean	Std. Deviation	Std. Error Mean
EXPEND	Offline shoppers	127	2.0315	.99153	.08798
	Online shoppers	129	1.9845	1.44690	.12739
RETENT	Offline shoppers	127	3.4488	2.09954	.18630
	Online shoppers	129	4.3876	1.68314	.14819
FREQUENC	Offline shoppers	127	2.1890	.94055	.08346
	Online shoppers	129	2.8217	1.16893	.10292

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
EXPEND	Equal variances assumed	11.938	.001	.303	254	.762	.0470	.15526	-.25876	.35276
	Equal variances not assumed			.304	226.811	.762	.0470	.15482	-.25807	.35207
RETENT	Equal variances assumed	6.188	.014	-3.950	254	.000	-.9388	.23765	1.40679	-.47076
	Equal variances not assumed			-3.944	240.938	.000	-.9388	.23806	1.40771	-.46984
FREQUENC	Equal variances assumed	8.701	.003	-4.767	254	.000	-.6327	.13273	-.89412	-.37134
	Equal variances not assumed			-4.775	244.354	.000	-.6327	.13251	-.89373	-.37173

Retention and frequency were significantly different between online and offline customers at alpha equals .05. The mean of online customers was higher than offline customers in both

cases. Online customers were more likely to change supplier and also shopped more frequently. Reasons for these differences are reviewed in the discussion chapter.

The following table compares and contrasts the correlation coefficient between the loyalty variables and preference structure attributes for the online and offline customer groups.

Table 45: Correlations between Attributes and Loyalty for Online and Offline Customers (See appendix 14 for full table)

<i>Shopper type</i>	<i>Variable</i>	<i>Expenditure</i>	<i>Retention</i>	<i>Frequency</i>
Offline	Expenditure	1	.031	.691 (**)
	Retention	.031	1	.109
	Frequency	.691 (**)	.109	1
	Special Offer	-.107	-.056	-.020
	New Product	.024	.075	-.014
	Helpline	-.191(*)	-.009	-.093
	6 Hr delivery	-.123	.069	.032
	No cost delivery	-.151	-.066	-.213 (*)
	On time delivery	.273 (**)	-.057	.147
	All items quality	-.045	-.103	-.039
	Time to order	.046	.031	.007
	No substitutes	-.082	.021	-.086
	10% discount	.013	-.009	.049
Online	Expenditure	1	.051	.557**
	Retention	.051	1	.047
	Frequency	.557 (**)	.047	1
	Special Offer	.792	.412	.648
	New Product	.112	-.132	.021
	Helpline	-.070	-.053	.005
	6 Hr delivery	-.047	-.035	.005
	No cost delivery	-.183(*)	-.005	-.229 (**)
	On time delivery	.041	-.033	.101
	All items quality	.118	.136	.071
	Time to order	.081	-.027	.081
	No substitutes	-.021	.206 (*)	-.030
	10% discount	.047	-.103	.077

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

There were three significant variables in the offline customer group. These were help line number, delivery on time and delivery cost. There were three significant variables in the online customer group. These were delivery cost and no substitutes. Delivery cost was negatively related to frequency in both cases.

These results demonstrated weak association between changes in attribute utility values and changes in loyalty variables.

This concludes the preliminary review of the relationships central to the model. The following section examines these relationships in more detail within structural equation models.

THE CONFIRMATORY MODEL

Two confirmatory models were produced based on data sets for (1) online customers, and (2) offline customers.

These models were evaluated with regard to offending estimates, overall model fit, measurement model fit, and structural model fit. Where necessary the model was re-specified taking care to maintain the relationship essential to the underlying theory.

Summary tables are provided which enable comparisons between these models of goodness of fit measures and the primary relationship statistics.

A General Description of the Model

The attributes from the choice based conjoint experiment were used as indicators of four latent exogenous variables, namely, price, service, time and quality. These were titled “pre” for the offline customer group (n = 127) and “post” for the online customer group (n = 129). Defining a “pre” and “post” experience was important to the underlying theory which posited that the Internet context had a modifying effect on customers’ preference structures.

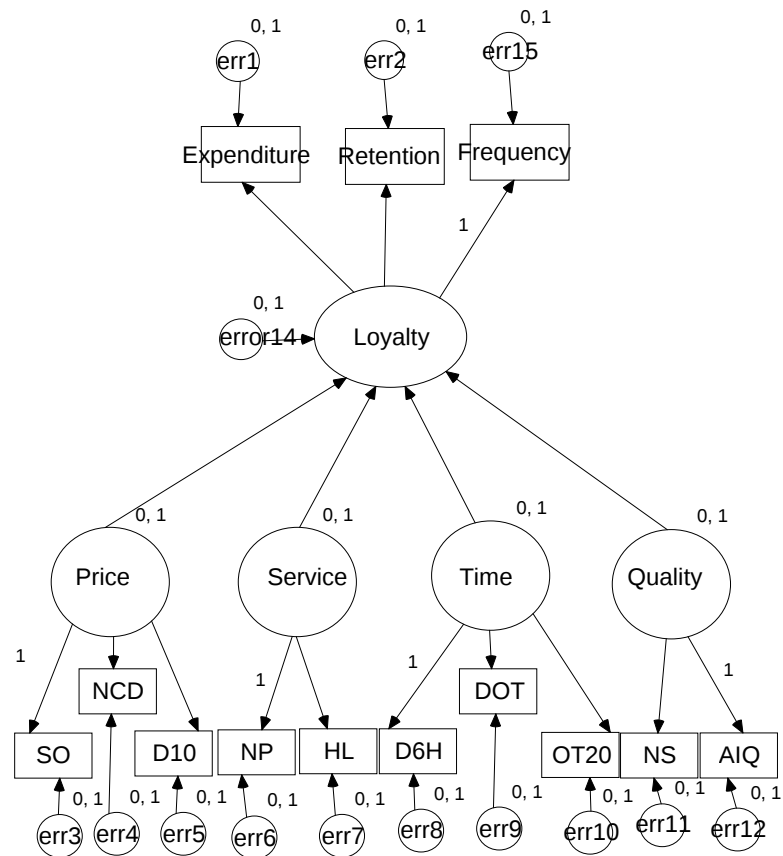
The confirmatory model comprised the following components:

- There were four predictor factors (exogenous constructs) labelled price, service, quality and time which acted as an indicator of one endogenous construct: loyalty.
- The observed variables loaded on the four exogenous constructs in the following pattern: special offer, no delivery cost and 10% discount loaded on the price factor; new product and help line number loaded on the service factor; all items quality and no substitutes loaded on the quality factor and 20 minutes ordering time, delivery on time and 6 hours delivery loaded on the time factor.
- The loyalty construct was measured by three observed variables, namely frequency, retention and expenditure.
- Each observed variable loaded on only one factor.
- Errors of measurement associated with each observed variable (err1 to err14) were uncorrelated

The relationships that were important to the underlying theory were between the latent preference constructs and loyalty. The minimum number of constraints was imposed on the

model in order to achieve identifiability. These constraints are shown in the following diagram.

Figure 29: Confirmatory Structural Equation Model



Legend:

SO: Special Offer

NCD: No Cost Delivery

D10: 10% Discount

NP: New Product

NS: No Substitutes

D6H: 6 Hours Delivery time

HL: Help Line number

DOT: Delivery On Time

OT20: 20 minutes Ordering Time

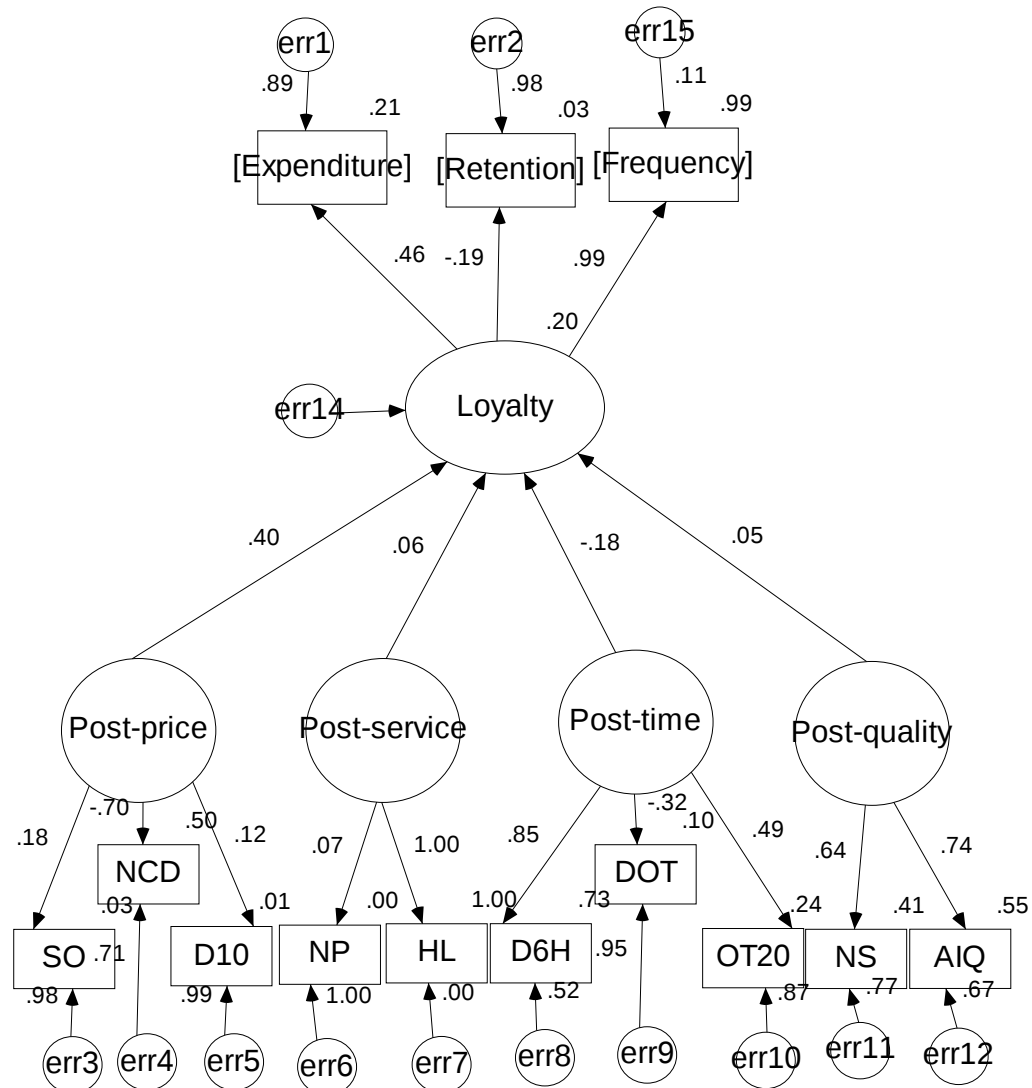
AIQ: All Items Quality

Model Assessment for Online Customers

The standardised version of the model follows.

Figure 30: Standardised Online Customers' Structural Equation Model

**Direct Estimation of On-line Shoppers'
Confirmatory Structural Equation Model**



Chi-Square = 258.425
 Degrees of freedom = 64
 p = .000
 Adjusted Goodness of Fit = .947
 Normed Fit Index = .921
 Comparative fit index = .937
 Parsimonious Normed Fit Index = .963
 Parsimonious Goodness of Fit Index = .967
 Akaike Information Criterion = 338.425

There were a number of offending estimates in the standardised model which required treatment before the measures of fit could be analysed. This is called an “adjustment” process.

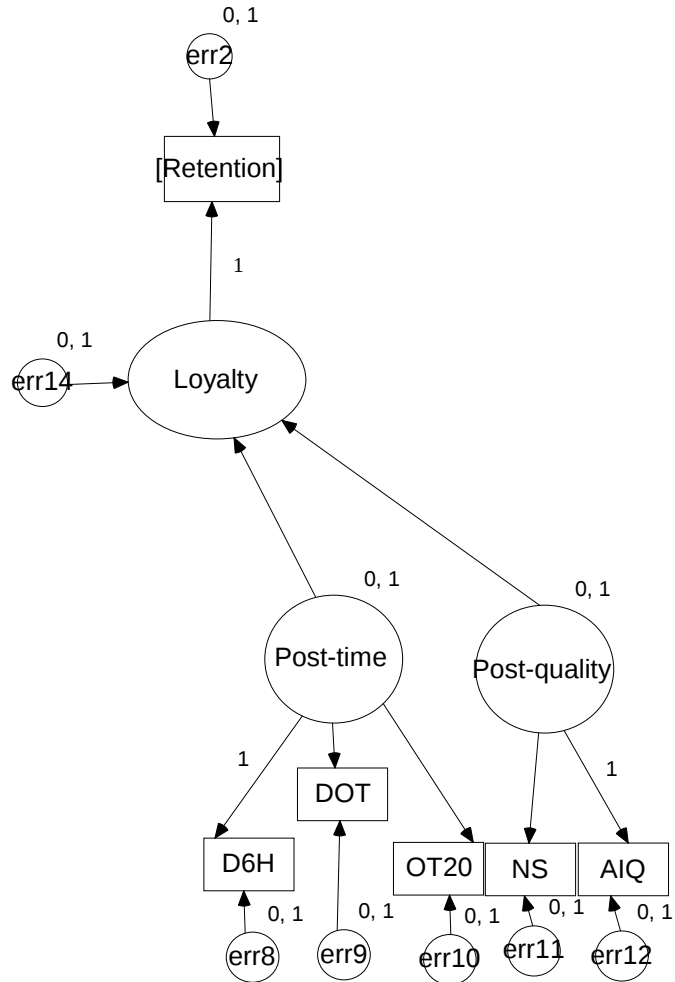
An Assessment of Offending Estimates

1. There were no negative error variances.
2. There was one non-significant error variance. This was error 7 ($p=0.0$) which was the indicator help line number.
3. There were large standard errors on 4 indicators. These were error 2 (Retention), error 3 (special offer section), error 5 (10% discount) and error 6 (new product section).
4. There were 2 standardised coefficients which exceeded or were very close to 1.0: help line number and frequency.

The “adjusted” model for online customers showing the constraints required to identify the model is as follows.

Figure 31: “Adjusted” Confirmatory Structural Equation Model for Online Customers

**Direct Estimation of On-line Shoppers’
Confirmatory Structural Equation Model
Adjusted for Offending Estimates**



It was necessary to eliminate the construct “post service” and “post-price” and the indicators “frequency” and “retention”. This model was unidentifiable with retention eliminated. The identifiable model is as shown with retention as the indicator of loyalty.

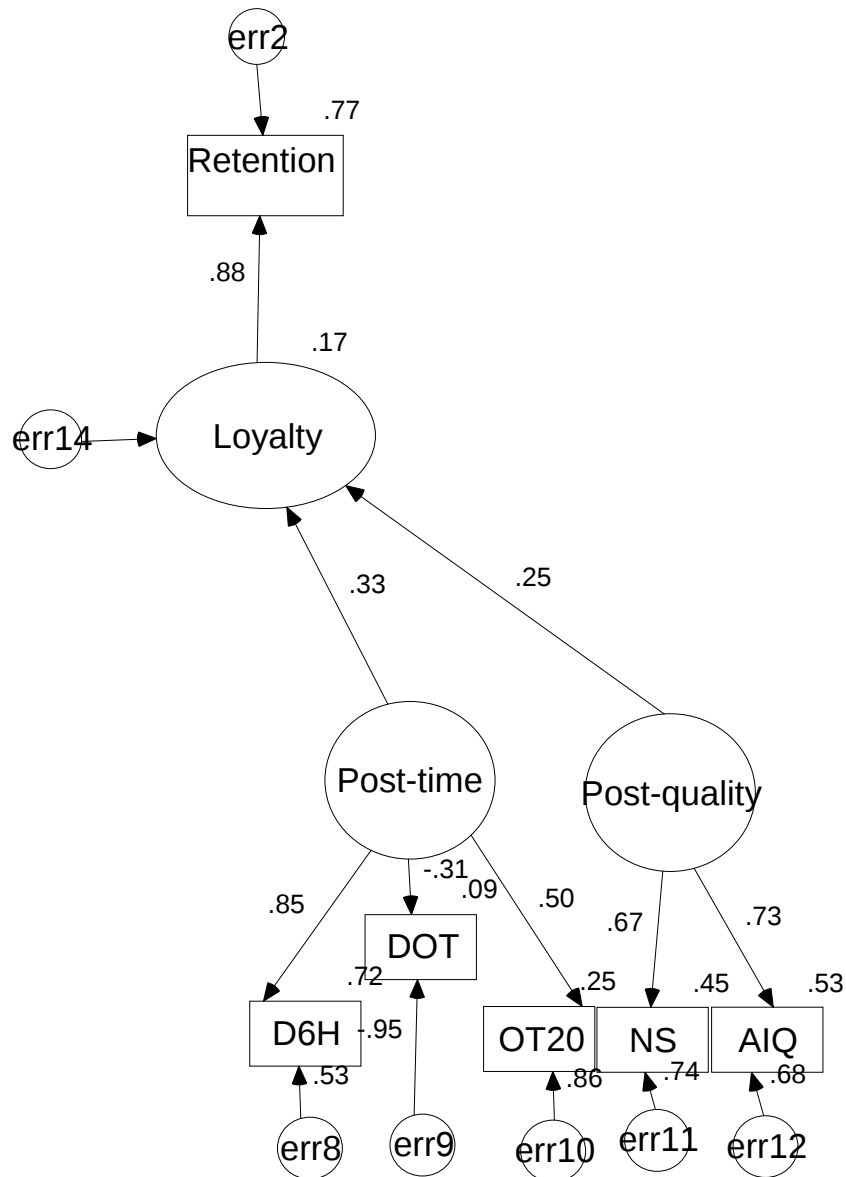
Can these changes be theoretically justified? The preliminary investigation of the preference structures and attribute utility values had identified the two indicators of “service” as being relatively unimportant within the online and offline customers’ preference structures. These indicators were identified as weak discriminators (i.e. relatively flat utility demand curves). This weakness was similarly identified by the structural equation model and therefore the model was improved by the elimination of the post service construct.

It was necessary to eliminate the post-price construct and the two loyalty indicators “Frequency” and “Expenditure” in order to adjust for offending estimates. Perhaps the elimination of the price construct was indicative of the lack of price sensitivity of online grocery customers. This view was confirmed when the mean utility values for delivery cost were compared between offline and online customers and it was discovered that offline customers had significantly higher utility values for “cost of delivery” than online customers ($p=.001$).

The following is the standardised and “adjusted” model.

Figure 32: Adjusted Standardised Structural Equation Model for Online Customers

**Direct Estimation of Online Shoppers'
Confirmatory Structural Equation Model
Adjusted for Offending Estimates**



Chi-Square = 61.075
 Degrees of freedom = 10
 p = .000
 Adjusted Goodness of Fit = \agfi
 Normed Fit Index = .579
 Comparative fit index = .607
 Parsimonious Normed Fit Index = .386
 Parsimonious Goodness of Fit Index = \pgfi
 Akaike Information Criterion = 95.075

The online customer confirmatory adjusted model was examined for fit. The exogenous post time and post quality constructs explained 17% of the variability of the endogenous construct loyalty. The post time construct was more important to this relationship than the post quality construct. This was in line with the greater utility values of the time based attributes in the online customer preference structures.

Overall Model Fit – Online customers

The fit indices will be compared and contrasted to those arising from the subsequent models. The fit indices chosen cover absolute, incremental and parsimonious fit measures.

Measurement Model Fit – Online customers

The regression weights are presented in the following table verifying that the posited relationships between indicators and constructs were significant.

Table 46: Table to Show the Regression Weights for Online Customers

Regression Weights: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
Loyalty <--- Post-time	.365	.134	2.726	.006	par_9
Loyalty <--- Post-quality	.269	.135	1.994	.046	par_10
DOT <--- Post-time	-.423	.141	-3.000	.003	par_1
D6H <--- Post-time	1.000				
OT20 <--- Post-time	.581	.123	4.737	***	par_2
NS <--- Post-quality	.623	.119	5.226	***	par_3
AIQ <--- Post-quality	1.000				
D6H <--- err8	.617	.128	4.832	***	par_4
DOT <--- err9	-1.311	.085	-15.420	***	par_5
OT20 <--- err10	.995	.073	13.663	***	par_6
NS <--- err11	.690	.085	8.147	***	par_7
AIQ <--- err12	.939	.119	7.870	***	par_8
retention <--- Loyalty	1.689	.152	11.143	***	par_11

The following table confirms the statistical significance of the intercepts.

Table 47: Table to Show Intercepts for Online Customers

Intercepts: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
Loyalty	1.441	.170	8.479	***	par_17
retention	1.000				
D6H	.835	.104	8.040	***	par_12
DOT	1.059	.122	8.694	***	par_13
OT20	1.674	.102	16.444	***	par_14
NS	.806	.082	9.805	***	par_15
AIQ	1.680	.121	13.859	***	par_16

These figures will be compared with offline customers later in the section.

Composite Reliability of the Post-Time and Post-Quality Constructs for

Online Customers

The following formulae (Hair, et al, 1998) were used to develop an internal measure of construct reliability. Do the indicators reliably measure the common endogenous construct?

These measures of construct reliability were not provided by Amos but were constructed from Amos output.

The formula for Composite Reliability is as follows:

$$\text{Composite reliability} = \frac{(\sum \text{standardised loadings})^2}{(\sum \text{standardised loadings})^2 + \sum \epsilon_j}$$

Where ϵ_j = measurement error of each indicator

The formula for variance extracted is as follows:

$$\text{Variance extracted} = \frac{\sum (\text{standardised loadings})^2}{(\sum \text{standardised loadings})^2 + \sum \epsilon_j}$$

Where ϵ_j = measurement error of each indicator

The construct reliability measures are given in the following table.

Table 48: Calculation of Construct Reliability Measures for Online Customers

Standardized Regression Weights: (Group number 1 - Default model)									
				Estimate					
Loyalty	<---	Post-time		0.33					
		Post-							
Loyalty	<---	quality		0.25					
DOT	<---	Post-time		-0.31					
D6H	<---	Post-time		0.85					
OT20	<---	Post-time		0.50					
		Post-							
NS	<---	quality		0.67					
		Post-							
AIQ	<---	quality		0.73					
D6H	<---	err8		0.53					
DOT	<---	err9		-0.95					
OT20	<---	err10		0.86					
NS	<---	err11		0.74					
AIQ	<---	err12		0.69					
retention	<---	Loyalty		0.88					

				<u>Variance extracted</u>				<u>Composite reliability</u>	
				0.09	0.91	1.10		1.10	
				0.72	0.28			<u>0.36</u>	
				0.25	1.07	0.75	1.93	<u>0.35</u>	
				0.45	0.55	1.96			
				0.53	0.98	0.47	1.02	<u>0.33</u>	1.96
									<u>0.49</u>

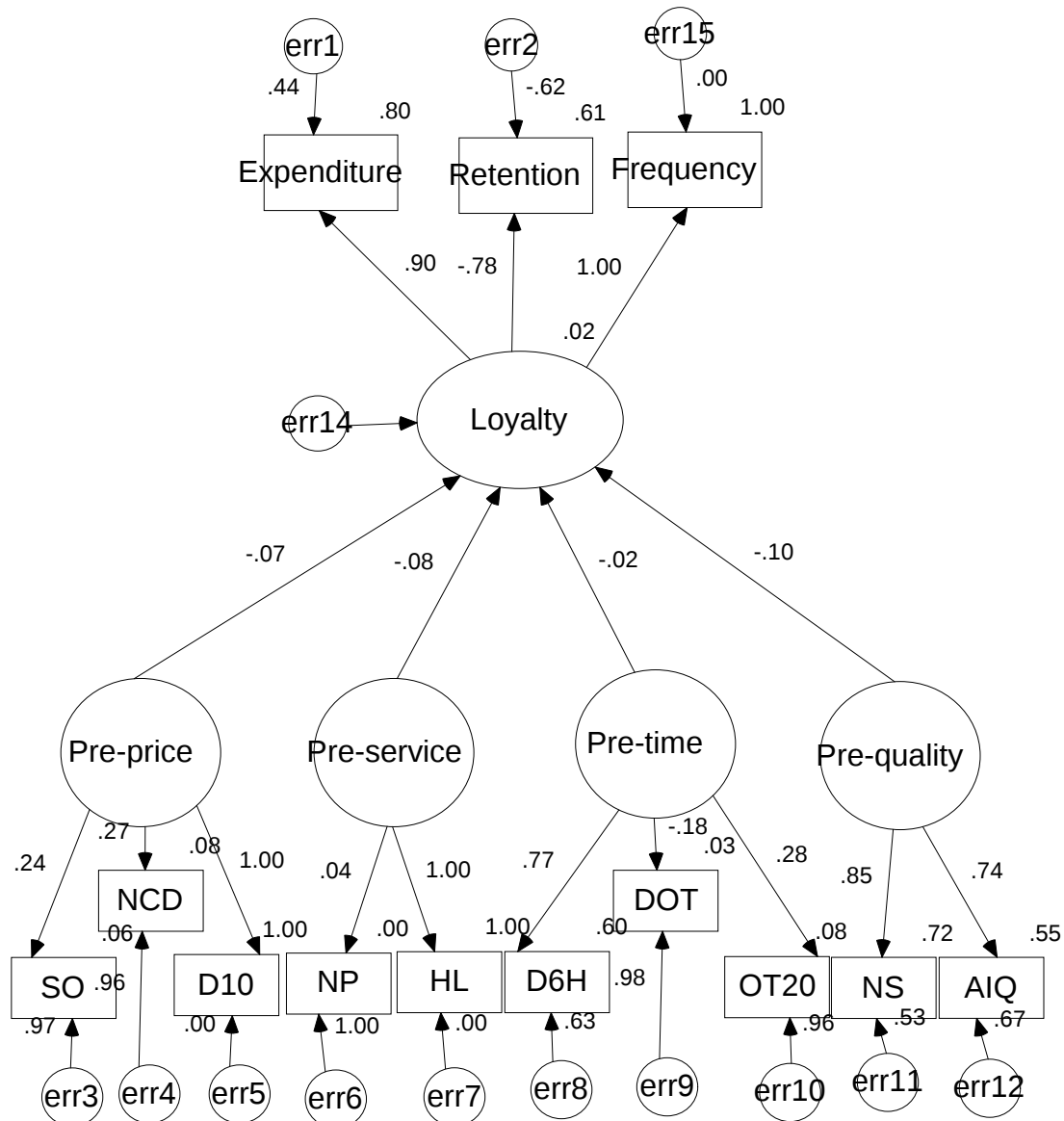
The two construct reliability measures were below the guidelines which suggest that the reliability level should exceed 0.50. The composite measures for the construct post-time were, variance extracted (0.35) and composite reliability (0.36). For the construct post-quality the same measures were (0.33) and (0.49) respectively.

Model Assessment for Offline Customers

The evaluation of the structural equation model for offline customers followed the same steps as for the online customers above.

Figure 33: Confirmatory Structural Equation Model for Offline Customers

Direct Estimation of Offline Shoppers' Confirmatory Structural Equation Model



Chi-Square = 261.978
 Degrees of freedom = 65
 p = .000
 Adjusted Goodness of Fit = \agfi
 Normed Fit Index = .587
 Comparative fit index = .646
 Parsimonious Normed Fit Index = .489
 Parsimonious Goodness of Fit Index = \pgfi
 Akaike Information Criterion = 339.978

An Assessment of Offending Estimates in the Offline Customers' Structural Equation Model

1. There was one negative error variance - retention (error 2)
2. There were non-significant error variances. These were 10% discount (error 5), help line (error 7) and frequency (error 15).
3. Help Line (HL), 10% Discount and Frequency have coefficients equal to or greater than 1.

The “adjusted” model for offline customers’ showing the constraints required to identify the model follows:

Figure 34: "Adjusted" Structural Equation Model for Offline Customers

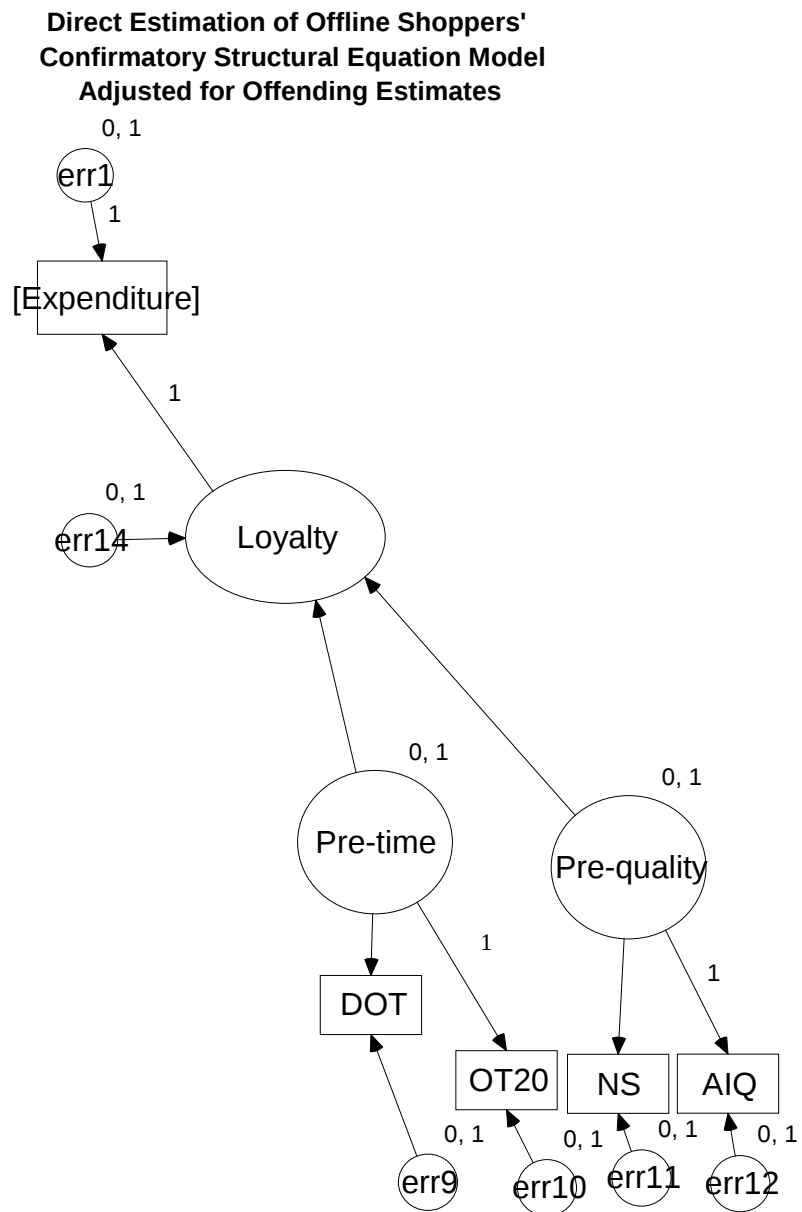
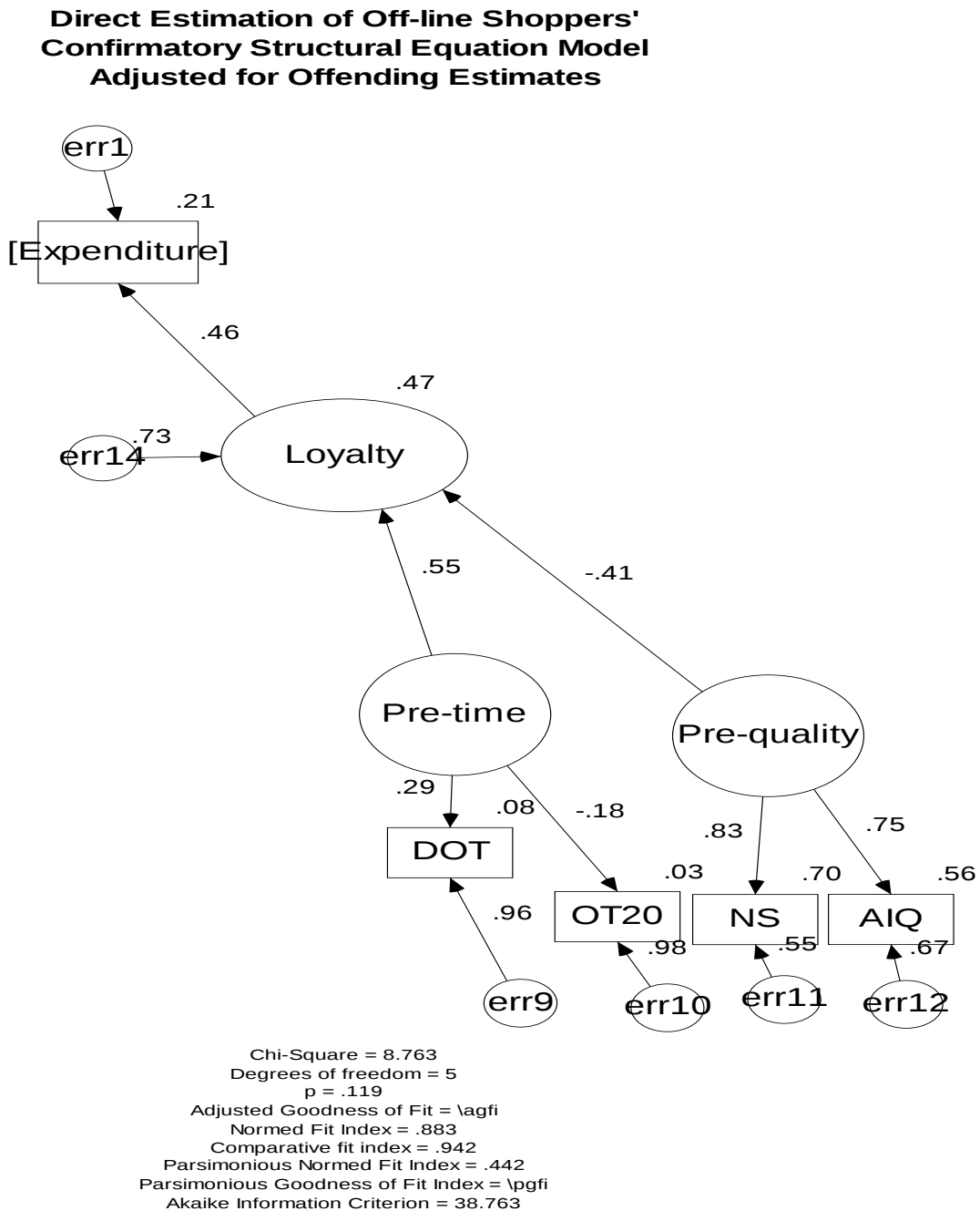


Figure 35: Standardised and Adjusted Structural Equation Model for Offline Customers



The offline customer confirmatory adjusted model was examined for fit. The exogenous pre time and pre quality constructs explained 47% of the variability of the endogenous construct loyalty. The post time construct was more important to this relationship than the post quality construct. This was in line with the greater utility values of the time based attributes in the offline customer preference structures. There was a negative correlation between the pre-quality construct and the loyalty construct.

Overall Model Fit – Offline customers

The fit indices will be compared and contrasted later in this section to those arising from the subsequent models. The fit indices chosen cover absolute, incremental and parsimonious fit measures.

Measurement Model Fit – Offline customers

The regression weights are presented in the following table verifying that about 50% of the posited relationships between indicators and constructs were significant.

Table 49: Table to Show Regression Weights for Offline Customers

Regression Weights: (Group number 2 - Default model)

		Estimate	S.E.	C.R.	P	Label
Loyalty	<--- err14	.378	.349	1.084	.278	par_8
Loyalty	<--- Pre-time	.283	.401	.706	.480	par_9
Loyalty	<--- Pre-quality	-.214	.112	-1.910	.056	par_10
DOT	<--- Pre-time	.272	.383	.711	.477	par_1
OT20	<--- Pre-time	-.226	.330	-.684	.494	par_2
NS	<--- Pre-quality	.939	.149	6.302	***	par_3
AIQ	<--- Pre-quality	1.000				
DOT	<--- err9	.902	.126	7.129	***	par_4
OT20	<--- err10	1.264	.097	13.025	***	par_5
NS	<--- err11	.619	.156	3.966	***	par_6
AIQ	<--- err12	.893	.120	7.460	***	par_7
expenditure	<--- Loyalty	1.000				

The following table shows that the posited intercepts are significant.

Table 50: Table to Show Intercepts for Offline Customers

Intercepts: (Group number 2 - Default model)

	Estimate	S.E.	C.R.	P	Label
Loyalty	1.709	.100	17.026	***	par_15
expenditure	1.000				
DOT	.711	.084	8.471	***	par_11
OT20	1.789	.114	15.642	***	par_12
NS	1.192	.100	11.899	***	par_13
AIQ	1.980	.119	16.579	***	par_14

Composite Reliability of the Post-Time and Post-Quality Constructs for Offline Customers

The construct reliability measures are given in the table below.

Table 51: Construct Reliability Measurements for Offline Customers

Standardized Regression Weights: (Group number 2 - Default model)

			Estimate						
Loyalty	<---	err14	0.729						
Loyalty	<---	Pre-time	0.546						
		Pre-							
Loyalty	<---	quality	-0.412					<u>Variance extracted</u>	<u>Composite reliability</u>
DOT	<---	Pre-time	0.289	0.08		0.92	0.01		
OT20	<---	Pre-time	-0.176	0.03	0.11	0.97	1.89	<u>0.06</u>	<u>0.01</u>
		Pre-							
NS	<---	quality	0.835	0.70		0.30	2.50		
		Pre-							
AIQ	<---	quality	0.746	0.56	1.25	0.44	0.75	<u>0.39</u>	<u>0.77</u>
DOT	<---	err9	0.957						
OT20	<---	err10	0.984						
NS	<---	err11	0.55						
AIQ	<---	err12	0.666						
expenditure	<---	Loyalty	0.46						

The two construct reliability measures were below the guidelines (for the construct pre-time) which suggest that the reliability level should exceed 0.50. The composite measures for the construct pre-time are, variance extracted (0.06) and composite reliability (0.01). For the construct pre-quality the same measures are (0.39) and (0.77) respectively. These results showed limited construct reliability for pre-time and some construct reliability for pre-quality.

The following table compares and contrasts the coefficients and intercepts between offline and online customers.

Table 52: Table to Compare and Contrast Offline and Online Customers Adjusted Structural Equation Models

	Online customers	Offline customers
Coefficients		
Loyalty to Pre/post-time	0.33	0.55
Loyalty to Pre/post-quality	0.25	-0.41
Delivery-on-time to Pre/post-time	-0.31	0.29
20 minute ordering time to Pre/post-time	0.50	-0.18
No substitutes to Pre/post-quality	0.67	0.83
All items quality to Pre/post-quality	0.73	0.75
Intercepts		
Loyalty	0.17	0.47
Delivery on time	0.09	0.08
20 minute ordering time	0.25	0.03
No substitutes	0.45	0.70
All items quality	0.53	0.56

Overall the offline customer structural equation model explained the greatest amount of variability in loyalty with a R^2 of 0.47. The time construct was the most important construct for loyalty in both offline and online customers.

Comparative Measures of Fit

The table of fit statistics below indicates that one of the preceding adjusted confirmatory models differed significantly from the data and the other did not. A discussion of which confirmatory model best fitted the data is as follows:

Table 53: Table to Show Measures of Fit for the Confirmatory Models Adjusted for Offending Estimates

Confirmatory model	Chi-square (p)	NFI	CFI	PNFI	AIC
Online customers	0.000	0.579	0.607	0.386	95.075
Offline customers	0.119	0.883	0.942	0.442	38.763

Chi-Squared

Chi-square is sensitive to large sample sizes, which is not the case here. Consequently this measure of absolute fit indicated that the adjusted confirmatory model did not adequately fit the data for online customers but it did so for offline customers.

Normed Fit Index (NFI)

This is an incremental fit index, where 1.0 is a perfect fit and 0.0 is no fit at all. The generally accepted rule of thumb suggests adequate fits are above 0.90. In this case none of the confirmatory models fit the data. Offline customers were the best fitting at 0.883.

Comparative Fit Index (CFI)

This is an incremental fit index and is interpreted similarly to the NFI. The offline customers' model met the requirements for acceptability with an index of 0.942

Parsimonious Normed Fit Index (PNFI)

This is a parsimonious fit index where differences of between 0.06 and 0.09 are considered indicators of substantial differences between models. Using this interpretation it would suggest that the fit of the models were not substantially different.

Akaike Information Criteria (AIC)

This index is useful for comparing models with different numbers of constructs. Lower indices indicate relatively better fitting models. The lowest value was found for offline customers.

Summary

The overall impression provided by these fit indices was that the proposed adjusted confirmatory model for online customers assessed against conjoint utility values did not fit the data well, but that for offline customers there was a reasonable fit. A theoretical justification as to why the offline model better fitted the data than the online model is provided in the discussion chapter.

AN EVALUATION OF COMPETING STRUCTURAL EQUATION MODELS

In order to generate competing models, both principle components factor analysis and latent class analysis was performed to examine underlying dimensions in the conjoint data.

Factor Analysis Results

The following table shows that with 5 components extracted 64.072% of the variability in the data was explained.

Table 54: Total Variance Explained

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.291	17.626	17.626	2.291	17.626	17.626
2	1.934	14.880	32.506	1.934	14.880	32.506
3	1.600	12.307	44.813	1.600	12.307	44.813
4	1.275	9.805	54.617	1.275	9.805	54.617
5	1.229	9.454	64.072	1.229	9.454	64.072
6	.905	6.959	71.031			
7	.780	5.997	77.028			
8	.746	5.738	82.766			
9	.612	4.708	87.474			
10	.530	4.080	91.555			
11	.432	3.325	94.879			
12	.345	2.653	97.532			
13	.321	2.468	100.000			

Extraction Method: Principal Component Analysis.

The following 4 components extraction table provides an inductive basis for identifying latent constructs which may comprise a competing structural equation model. The theoretical justification for this approach is suggested by Hill's (1992) definition of order winning criteria and their importance to acquiring and retaining customers. Competing structural equation models based on "order-winning" theory were developed by using the two highest loading indicators in each dimension. None of the resulting models could be adjusted sufficiently to improve on the original theory and remain within the limits of the "order-winning" theory.

Table 55: 4 Factor Component Matrix

	Component			
	1	2	3	4
SO	-.369	-.486	-.102	.432
NP	.043	.475	.151	.532
HL	.255	-.318	.417	.478
D6H	-.570	.497	.257	.275
NCD	.118	-.407	.640	-.214
DOT	-.098	-.411	-.751	.113
OT20	-.492	.530	-.159	-.213
NS	.757	.357	-.062	-.235
D10	-.345	-.208	.210	-.563
AIQ	.817	.112	-.136	.106

Extraction Method: Principal Component Analysis.

a. 4 components extracted.

Latent Class Analysis Results

Latent class analysis was performed on the conjoint attribute utility values to uncover how many significantly different preference structure types existed in the data. The theoretical justification was again “order-winning” criteria. The following table provides a summary of the results.

Table 56: A 5 Category Latent Class Solution

Attribute Importances					
Special Offer Section	5	2	1	7	0
New Product Section	1	1	4	1	2
Help Line Number	4	3	1	2	2
Delivery time	2	13	5	38	3
Delivery cost	6	12	39	4	2
Delivery reliability	16	6	11	10	11
Quality	36	26	11	5	8
Ordering time	10	16	6	27	42
Substitutes	16	15	6	1	7
Discount	3	8	15	6	23
% share of preference	30.9	27.0	8.2	19.5	14.5
for each class					
Results saved for 256 respondents.					
Average maximum membership probability = 0.94444					
The 3 highest value attributes for each class are indicated in bold					

The development of a competing structural equation model was based on the 5 latent class profiles above. Defining the independent unobserved constructs from the underlying pattern

of important attributes and relating these to the loyalty variables, could have provided a better fitting set of structural equation models.

The 5 latent classes were named as:

- On-time quality
- Quick quality
- Cost sensitive
- Time sensitive
- Quick costs

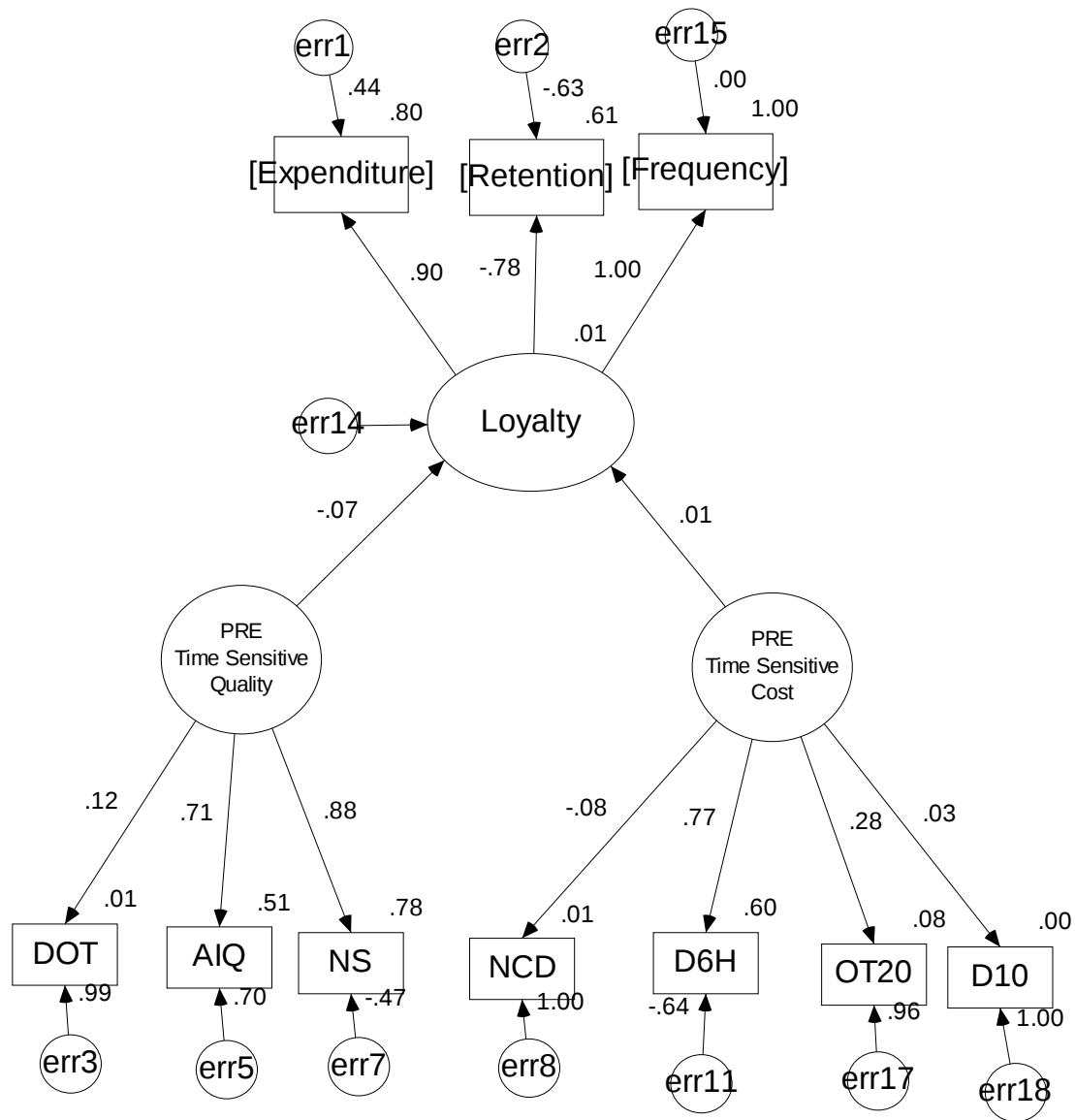
Due to the requirement that each construct had to be identified by unique indicators in an SEM, the overlap in important attributes between the 5 latent classes meant that the number of unobserved constructs was reduced to 2 after giving due consideration to their relative shares of preference. They were labelled as:

- Time sensitive quality (identified by “all items quality”, “no substitutes” and “delivery on time”)
- Time sensitive cost (identified by “no cost delivery” “10 % discount”, “delivery in 6 hours” and “20 minute ordering time”)

These 2 independent constructs were related to the loyalty construct in the following competing structural equation model.

Figure 36: Latent Class “Order-Winning” Structural Equation Model for Offline Customers

**Direct Estimation of Latent Class Defined
Competing Structural Equation Model with Off Line Shoppers**



Chi-Square = 143.231
 Degrees of freedom = 36
 p = .000
 Adjusted Goodness of Fit = \agfi
 Normed Fit Index = .720
 Comparative fit index = .770
 Parsimonious Normed Fit Index = .576
 Parsimonious Goodness of Fit Index = \pgfi
 Akaike Information Criterion = 201.231

The following adjustment steps were then applied to the preceding standardised model

An Assessment of Offending Estimates

1. The retention, no substitute and 6 hour delivery time error variances were negative and therefore these indicators were eliminated
2. There was a non-significant error variance which was the frequency error.

The “adjusted” competing model for offline customers’ could not be improved within the bounds of the underlying “order-winning” theory. For example when offending estimates were removed the model tended to revert to the original theory. I.e. indicators of quality did not combine with indicators of time. These results suggest that the structural equation model which best fitted the data was the original model based on the theory developed from the literature review.

Summary

Whilst the conjoint results provided reasonable evidence for the difference pre- and post-purchase preference structures, the structural equation models which linked the conjoint utility values to loyalty variables provided limited support for the underlying theory. The reasons for this outcome are discussed in the chapter dealing with the weaknesses of this study and in the discussion chapter. Next, Part IV describes the qualitative findings.

PART IV – QUALITATIVE FINDINGS

INTRODUCTION TO PART IV

Part IV uses qualitative interviews with a range of companies to identify the relationships between Internet capabilities, customer preferences and loyalty. How these preferences might influence customer acquisition and retention behaviours were viewed from a company point of view. How well had companies linked their understanding of customers' preferences to the performance capabilities of the Internet? Was this linkage a central strategy or simply of peripheral concern in relation to the traditional ways of marketing their products and services?

The range of companies included some outside of the grocery industry. This was an attempt to see if it was possible to differentiate between preference, Internet capability or loyalty dimensions which were not modified by industry setting or contingent on the industry setting. It was hoped that qualitative insights on the theoretical model when combined with the quantitative findings might result in a richer interpretation of the research question.

This section made a contribution by demonstrating the company's perspective of the key preference structures of their customers. In the discussion chapter these case findings are compared and contrasted with the quantitative data. In particular Sainsbury's internal perspectives were compared with grocery customers' actual preference structures in order to define a "preference gap" between the company and its customers. The implications of such a gap are discussed.

The following chapters discuss the different approaches and experiences in online retailing for the selected U.K. companies: Sainsbury's, RAC, easyJet and Mercedes Benz. The reader is referred to Part II for a justification of the selection of these companies. Each case is analysed in relation to the theoretical model and the research question. At the end of each case the model is reproduced and labelled with the emergent points of interest.

At the conclusion of Part IV a table is provided which compares and contrasts the cases in relation to the theoretical model. A concluding discussion of this qualitative material is provided around this table.

CHAPTER 11: SAINSBURY'S.CO.UK - OLD HABITS DIE

HARD

INTRODUCTION

The qualitative material that follows is based on 3 longitudinal interviews from 2001 to 2007 that covered Sainsbury's understanding of customer preferences (quality and location), their use of Internet capabilities (connectivity, interactivity, low cost, reach), the strategic marketing context, and benefits (time savings, efficiency, flexibility), and loyalty. Some comparisons are made with Sainsbury's main competitor Tesco.

Data was collected within the head office of Sainsbury's in London from three interviewees namely Sue Jackson, Simon Miller and Elizabeth Glasse. An interview was conducted with Miss Sue Jackson, project manager of Sainsbury's Supermarkets Limited in London in 2001 (refer to Appendix 11 for the questionnaire). The interview lasted for exactly two hours. Sue Jackson was in charge of their website at the time of the first interview. Two years later another questionnaire was sent to Simon Miller, brand manager of Sainsbury's Supermarkets Limited via the Internet (refer to Appendix 12 for the questionnaire). Simon Miller was given a tight budget to improve their website. The third interview was conducted over the phone in 2007 with Elizabeth Glasse to examine how the company's perspectives of the Internet context and their customers' preferences had evolved over time (refer to Appendix 13). In addition, information on Sainsbury's main competitor namely Tesco was collected from an

interview, publications and their website to compare the online strategies of two retailers from the same industry.

SAINSBURY'S PERSPECTIVE ON CUSTOMER PRE-PURCHASE PREFERENCES

The purpose of the initial part of the interview was to establish Sainsbury's understanding of their customers pre-purchase preferences.

Quality

Miss Jackson believed that the most important element of Sainsbury's relationship with its customers was the quality of the products sold. However she decided not to expand on this point as the quality of products sold in-store would not change as a result of the Internet. Therefore Miss Jackson chose to discuss location in more depth which she considered to be the next most important dimension of the customer relationship.

Location

Miss Jackson stressed the importance of location as it was viewed as the second most important element of Sainsbury's relationship with its customers.

“Location is very, very, very important and that element often makes you wonder about loyalty because there are so many people for whom the only way they choose a supermarket is by going to the closest one”.

The assumption could be that if location was important, convenience would be important for customers. Given that the Internet had changed the infrastructure (computers as opposed to stores); customers experienced an increase in convenience by shopping online for groceries. If location was, according to Miss Jackson, the second most important dimension of the relationship with their customers, then the Internet capability, ‘no space constraint’, would have a positive impact on customer relationships and would be a priority in their website design.

SAINSBURY’S USE OF INTERNET CAPABILITIES

This section analyses the qualitative data along the dimensions of Internet capabilities. The purpose is to reveal Sainsbury’s level of understanding of the Internet capabilities.

No Strategic Marketing Context

Sue Jackson (Winter 2001) remembered that when Sainsbury's launched its website in February 1995 it was not a specific project. The decision to implement a website came from the IT division rather than the marketing department. Consequently, Sainsbury's online had no specific strategic marketing objectives. This was shown in the way that they designed the website. Miss Jackson recalled:

“It was one of the classic early kind of unimaginative websites with a little bit about our history on it, a little bit about the number of stores we had, where they were, something about available graduate jobs. So it was very much a corporate rather than the customer supermarket kind of content”.

Just another Communication Channel

The move to the marketing department was made by considering Sainsbury’s online as primarily another communication channel to please customers who were connected to the Internet and who wanted to be communicated with via the Internet. This use of the Internet was seen as primarily defensive to prevent customers switching to a competitor.

“There are customers out there who regularly use the Internet and when they ask themselves the question or they think: ‘I wonder if that store is open at this time, I wonder if my local Sainsbury’s store is open’. In the past they may have said: ‘I will give them a call to see if it will be open when I come out from work’. Now a lot of people are thinking: ‘I am going to just look at the website, I will be able to find out that kind of information’. We want to be able to provide that information to those kinds of customers.”

In this context, the Internet was providing an extra choice for customers in terms of communication channels but the intent was more to have a website like competitors than to explore the distinct Internet capabilities to meet customer preferences.

It was however recognised that the Internet context was different from traditional stores as customers were not directly dealing with employees anymore. However the Internet was not viewed as being different when compared with the telephone and the fax. In Miss Jackson’s opinion:

“The Internet isn’t a complete solution. So when it comes to home shopping, the problem is: I am too busy to shop so I’ve just got a new baby and it’s difficult because I need to shop when my husband comes home from work or whatever at 6 o’clock but the baby is sleeping then, so wouldn’t it be brilliant if at 6:30pm my groceries are dropped at my doorstep. So you’ve got a problem there which is nothing to do with technology so you don’t care really, you are not thinking Internet instantly, you are thinking how do I get my groceries dropped at my doorstep. So it’s just so happens that the Internet is one way, one way of ordering those groceries. I mean there are other ways, so in our particular department we’ve got phone, fax and Internet ordering and if we could actually just do Internet ordering we would be very happy because it’s a very cheap way of taking orders. A lot of people haven’t got the Internet but also have the problem of being too busy. They also have children or are very time pressured and they never get home in time to go to the shops. They haven’t got Internet so we allow them to phone and fax.”

The Internet was viewed as ‘one way of ordering groceries’ that met the needs of ‘busy customers’ who were previously shopping using the phone or fax. However no research was done at that time (2001) to assess if customers using the phone or fax were the same group of customers using online shopping. If dealing with two different segments then there could be some likelihood that customers used the Internet for different reasons than customers who used the phone or fax.

In 2001 Sainsbury’s predominant perspective of the Internet was as an additional communication channel for traditional shopping rather than a channel with its own distinct capabilities. Sainsbury’s assumption here was that there were no significant differences for the customer in using the Internet or the telephone or the fax.

“We want to be able to provide that information to those kinds of customers. But there are some people who will never want to do that. Or they will always want to use the phone or a leaflet.”

In 2001, Sainsbury's started to acknowledge that the nature of the Internet was different but had not yet developed a specific strategy to use these differences to better perform on each element of the customer preference structure.

"The technology is there and the nature of the Internet is providing more and more useful information."

Sainsbury's segmented their customer base into two groups: in-store shoppers and remote shoppers. The latter segment included online customers and customers who used the phone or the fax. By 2003 Sainsbury's had not investigated whether there were differences between customers who shopped traditionally and those whom they labelled as remote shoppers. Nor had they investigated whether there were differences between customers who used either, the Internet, the phone or the fax.

In contrast (2003), Tesco.com offered over 40,000 grocery products, as well as electronic entertainment and baby products. Tesco.com claimed to be profitable in its main Internet grocery category and expected the later developed non-food categories to become profitable in 2004. According to Tesco.com they had around 1 million customers who place on average 7,000 orders a day or 4.3 million items a week. Tesco's strategy was to rapidly increase customer registrations leading to increased future online purchase transactions. At this point in time the equivalent Sainsbury's online strategy was to offer their existing customers another way to communicate with the company (Reynolds, 2005).

A lack of Interactivity

Miss Jackson seemed to reduce likely Internet users to the category of customers who were busy and required efficiency. This approach could result in minimising the potential benefits of the Internet capability, interactivity. As suggested by Spalter (1996), the Internet was also a place to socialise (chat rooms) and to have fun (games). Therefore it might be reasonable to conclude that the more interactive a website is, the wider the range of customers the online retailer could attract. Miss Jackson's perspective would suggest that interactivity was not a major consideration in the development of Sainsbury's website. This reinforced the orientation of Sainsbury's online marketing strategy which was to view the Internet as another communication channel at the same level as the fax and catalogue ordering.

At the time of the second interview with Simon Miller (2003), the Internet was still viewed as a channel for busy customers and traditional stores for customers who were searching for social interaction:

"We suspect however, that there will always be people who want to visit the store themselves, as they enjoy the stimulus of the store environment, and the social aspect too. This obviously, is lacking from our Internet store."

By 2003, the Sainsbury's website was not considered as a basis for creating a flow experience but rather a way for busy customers to focus on their tasks. Sainsbury's had not yet considered using the Internet to achieve both goals: the task orientated customers' goal and the entertainment goal directed behaviour. Sainsbury's had not considered serving more than one Internet segment to increase customer acquisition and retention.

In 2003, the model used to communicate with customers was still a one-to-many communication model where Sainsbury's was sending information without expecting any feedback from their customers. As Miller reflected:

"The Internet has not yet dramatically changed the way we interact with our customers, although it does open up another channel of communication. However, we do now have a substantial database of e-mail addresses, which we will soon start mailing on a regular basis. These customers have asked to receive e-mails from Sainsbury's, and we will look to not only mail them about what is happening in our stores, but also to provide them with relevant food content, such as recipes, offers and tips and hints. In the future, it may be possible to use e-mail to replace direct mail, but this is probably some way off yet, as the numbers involved are still relatively small. Customers will also probably always want to receive at least some information (i.e. their club magazines) on paper."

When sending recipes through the Internet, Sainsbury's had no opportunity to adapt to the customer's expectations through a dialogue. In the scenario described above by Miller, the Internet interactivity capability was limited because the role of the Internet was to pass the message to the customer as opposed to connecting two or more parties in a communication process.

There was an attempt by Sainsbury's to engage in a general feedback loop type of communication by allowing customers to send email messages that reflect their queries and concerns. As explained by Miller:

"We also allow customers to e-mail us with any queries they may have, or to check and change their Reward Card details online. We have developed these services to encourage more customers to contact us, and also because we know that they expect these services to be available on the Net. We are looking to introduce more innovative features in the future, as we try to make it as easy as possible for customers to communicate with us."

These quotes (2003) were an indicator of Sainsbury's view of the Internet and online customer relationship. At that time Tesco had launched its iVillage forum as a platform for discussion between customers. Conversations were free as opposed to being based on some selected topic.

By 2007, Sainsbury's had included a forum where customers shared their ideas on pre-selected topics such as "What to cook", "Food and health" and "Kids and family". Sainsbury's had increased the use of the Internet capability interactivity within selected topics. This compares and contrasts with Tesco's approach which was to allow customer interactivity on a non-restricted basis.

No Low Cost Benefits

In the literature review chapters, the low cost Internet capability was discussed. However in 2001 neither for Sainsbury's nor for its customers was low cost transactions achieved. Miss Jackson explained:

"Item prices are exactly the same. Per order charges are £5. The economics are horrendous because we are physically doing somebody's shopping for them. A professional picker has got to do your job. There is no other way to get it into the trolley and then into bags. So if you spend 1 hour doing that, the picker is going to spend 1 hour."

In 2001 the customer had to set up an online catalogue by visiting a store. This cost, plus the per order charge, would have reduced the net benefit of shopping online with Sainsbury's. For Sainsbury's costs were increased by hiring professional pickers and logistics activities.

By 2003 Sainsbury's perceived the Internet as replacing direct mail and thereby reducing communication costs but this was not yet fully exploited, as Miller explained:

"The Internet is a more effective way to communicate with customers, as it is very cheap compared to direct mail. Currently, it is not a more effective way to sell products - after 125 year's experience, we are very efficient at selling products through stores. As most companies are however, we are still on a learning curve with home shopping, and expect to make great strides in efficiency soon."

Were competitors who have also been successful through stores using the Internet more aggressively to sell their products? Simon Miller made no reference to competitors even when asked this question. The emphasis was on what Sainsbury's perceived as the best online strategy for their current customers.

Conversely Tesco decided to limit their costs by infiltrating the existing store network, maximising capacity utilisation and benefiting from the sunk costs of an established infrastructure (Reynolds, 2005). Orders were picked (and priced) at local stores, using a paperless picking system, which enabled Tesco to reach over 90% of the U.K. population.

An Increase in Reach?

From Sainsbury's perspective, the Internet had helped to reach more customers as explained by Ms. Jackson (2001):

"I think that one of the most powerful elements is the removal of location is that you can actually reach addresses that you couldn't reach before. If the delivery van can drive 20 minutes, home shopping, you will probably reach households that wouldn't drive 20 minutes to this supermarket; they would probably head to a supermarket in 10 minutes or 5 minutes."

20 minutes is quite a long way to drive to a supermarket whereas the nature of home shopping means that you may not get planning permission to build the store close enough to reach those 20 minutes people but they don't care where you are because they are ordering on the Internet and you may be running a warehouse somewhere and its reach may be half an hour."

At the time of the interview (2001), Sainsbury's was not operating out of warehouses but out of stores. Sainsbury's was therefore cost constrained by the fact that employees were doing the shopping for online customers. This constraint was time consuming and increased variable costs that were not covered by the £5 delivery cost charged to the customer. As this business model was not sustainable, Sainsbury's decided to build a picking centre in Croydon. The process to change the business model took about 7 years from the launch of the website in 1995.

Once operating from dedicated warehouses, Miss Jackson predicted that the reach of customers online will be greater than the reach of customers by operating the online business model from local supermarkets. Miss Jackson did not stress the importance of less location constraint as a means to acquiring more customers. What was mentioned as essential throughout the interview was that the Internet was offering another way to communicate with customers for those who wanted to be reached this way.

"The location element does not just relate to the Internet. What I just want to clarify here is what I referred to earlier, is that these advantages are not all about Internet, some are just about home shopping whether they are by phone or fax."

Miss Jackson did not appear to consider the distinct capabilities of the Internet channel as a different way to shop. From her perspective, shopping online would not add value as compared to a catalogue. For example an increase in convenience due to the removal of

location constraints could not only be achieved by the Internet but also by other channels. From Sainsbury's perspective the degree of convenience achieved by the Internet was not the attribute which was going to impact the most on customer relationships.

CUSTOMER POST-PURCHASE PREFERENCES

The following section considers the interview data from Sainsbury's perspective of the key attributes of their online customers.

Time Related Benefits

Saving Time

There was evidence in 2001 that Sainsbury's understood that saving time was an essential dimension of online customer preferences.

"Time, you are taking about not having to go to the shop, although to be honest because of the problems we have with some customers have said that it takes longer to go online than to go shopping, but you can't do your shopping within 20 minutes."

In both interviews with Jackson (2001) and Miller (2003), the theme of providing a website to answer the need of busy customers was recurrent. As Miller stated:

"Our home shopping service is valued by people who do not have as much time as they would like to complete all their weekly chores. This is a growing part of the population."

Nevertheless certain practices within Sainsbury's were not consistent with a real effort to save time for their customers. For example customers were required to go into Sainsbury's shops in order to set up a catalogue. The requirement to do this was based on a view that placed an emphasis on ensuring that Sainsbury's shop staff maintained face-to-face contact with customers. It would seem that this contact was viewed as more important than saving time for customers.

Efficiency

Decreasing the time to order would be made available by having a rubric that allowed customers to save their last shopping list. This was mentioned by Miss Jackson in 2001 as increasing efficiency. It would now be considered the minimum to have on the website.

"In terms of time for ordering, being able to see what you ordered last week so you can actually reorder again if you saved it as a list. If you saved it as a list, you could reorder again and just take out these you don't need this week. People buy 70% of things they bought last week again this week."

Sainsbury's used the Internet to make the experience of shopping online efficient by creating themes:

"We have got lists where you can make a regular weekly list, monthly list, barbecue list, picnic list etc...Also have the categories in a particular order. It's the bakery, confectionery from A to Z and there is a lot of work that we have done in those areas that's related to the previous question of efficiency."

Flexibility

Miss Jackson argued that the Internet had changed the context as customers were not dealing with employees anymore for their grocery shopping. As a result customers could order their groceries online anytime (after their first in-store visit to build their online catalogue).

"So the Internet is definitively more flexible".

The flexibility characteristic of the Internet was only briefly mentioned in the 2001 interview and not at all in the 2003 interview even though there were direct questions relating to Sainsbury's view of increased flexibility. This would suggest that flexibility had not been fully considered by Sainsbury's as delivering significant benefit to online customers.

Efficiency

There appeared to be some thinking in Sainsbury's that the no space constraint Internet capability led to more efficiency. However as Miss Jackson (2001) pointed out that within Sainsbury's this view was not shared.

"If you think about the staff element, in terms of the relationship, there has been a lot of talking in our team as we develop the business as to whether the Internet actually removes personal contact. There are some people that believe that is a bad thing where we've got a chance we introduce the personal face of Sainsbury's. For example at the moment with our service, you don't just go onto the Internet and start ordering you actually go into the store and build catalogue. Now there are all sort of reasons behind that, there are fundamental reasons behind why we've got that in there and it may change but the sort of pros we've attached to that has been that the customer has got a relationship with the store. But my belief is that people who use the Internet haven't really got time for a relationship, they don't want that kind of relationship, they don't need in it their life, and they don't need to have a relationship with the staff in the store."

It seemed that these divergent views split along functional lines with stores' functions fighting to maintain their relevance to the customer and the Marketing function trying to take the customers' perspective. It would appear that in 2001 the stores' function was winning the argument. Building a catalogue in-store to shop online did not meet the expectations of customers with a busy lifestyle as it decreased convenience. More effort was required in spending an hour with an employee to build the online catalogue and thereby raising the barriers to creating the first online order. The results were more time consumed for the customer and internal inefficiency for Sainsbury's that led to a switch of some customers to the competition and an increase in costs.

In 2001 Sainsbury's was divided between managers who believed that the Internet was an innovative marketing channel and as a result should not be treated like a traditional channel but rather its distinctive capabilities should be exploited. Other managers acted more conservatively by keeping a face-to-face partnership with their customers, thinking that this was the customer's expectation. This group of managers did not believe that the partnership could be maintained online. They defined this partnership as including the elements of being pleasant and providing advice to customers. As explained by Miss Jackson:

"The reason was to keep the personal contact. They come to the store; they meet a nice pleasant customer service representative who helps them to start off."

Opinions differed:

“Some of us are questioning some of them because a lot of people are saying why do I have to go through that when I’ve got the Internet here. I am saying some people don’t want that personal contact but most people in research who said you want a very pleasant meeting, somebody in store, very pleasant staff but it’s too long. Building a catalogue is too long.”

LOYALTY

At the time of the first interview, Sainsbury’s did not perceived the Internet channel as a new way to attract more customers. The Internet was rather a marketing channel to keep the existing customers satisfied by offering them another way to communicate and shop with Sainsbury’s.

“There are customers out there who regularly use the Internet and when they ask themselves the question or they think, “I wonder if that store is open at this time, I wonder if my local Sainsbury’s store is open”. In the past they may have said: “I will give them a call to see if it will be open when I come out from work”. Now a lot of people are thinking: “I am going to just look at the website, I will be able to find out that kind of information. We want to be able to provide that information to those kinds of customers.”

What Impact on Customer Loyalty?

Would an outcome derived from the Internet capabilities such as flexibility for example have an impact on customer relationships? The answer was yes.

“We are going to be reinforcing loyalty because we are providing people with the information where and when they want it. So if they want to get it on screen, on line, they can. And we are also providing them with another way of ordering their groceries and if they

want to talk to somebody at the call centre, if they don't want to fax and if they want to browse the full store they can go and browse 20,000 lines".

At the beginning the strategy was therefore not to encourage online shopping but rather to provide 'another way of ordering groceries'. There were no incentives to purchase groceries online such as a discount on the first order. Their main competitors Tesco.com during the same period delivered 120,000 customer orders per week as their Internet strategy was to maximise online transactions. For Tesco both channels (stores and Internet) were serving different purposes and customers were either using one of them as their main channel but some customers were also switching from one channel to the other depending upon specific needs.

In addition the importance of time came back in the conversation when discussing loyalty. Some customers were getting busier:

"It is still the question of what is the customer demanding and the customer is demanding this because of changing social lifestyles and people are busier than ever so we know that through having an Internet site that attracts a lot of people".

The Internet was a replacement channel for busy customers but no research explored which aspects of time were important to that group of customers. Would the time to place an order more important than the time to deliver the goods? Would flexible delivery slots help attract more customers? Sainsbury's believed that the Internet was the right channel for these types of customers and that consequently, customer acquisition may increase. However the question was that if a competitor displayed a higher degree of innovation online by offering a website with more features, would this website attract some of Sainsbury's customers?.

Old Habits Die Hard

Two years later (2003) efforts were still not focused on making changes on their website to improve their relationship with customers. The Internet was considered as another channel of communication and distribution but not the main one. As Simon Miller observed:

“The most important tool we have to develop relationships with our customers lies with our loyalty card, the Reward Card. Before we had this card, it was a lot more difficult to identify customer purchasing habits, as we had to rely on sales information and market data. The Reward Card allows us to track individual buying habits, and identify different segments within our customer base. These could be based on spend and frequency of visits or demographic data, but we also place great emphasis on segmenting our customer base along behavioural lines.”

The Internet was not viewed as a Marketing channel that could improve customer loyalty. For example buying online was not rewarded by sending coupons on what customers purchase most. Or after a certain number of purchases, customers could receive an extra two free apples for example if this item was identified as part of the customer buying habit.

Tesco’s view was different as they decided to integrate the benefit of a loyalty card for both channels. As part of their focus on customer loyalty across all channels, the same loyalty card was used in both Tesco and Tesco.com, allowing customer points to be accrued regardless of the channel chosen. Head Office also logged all customer feedback and interviewed 1,000 Tesco.com shoppers every three months. Carolyn Fowler (Customer Relationship Manager at Tesco.com) explained:

“The success of our Internet shopping service is reflected by the results of our most recent customer surveys, in which 98% of customers stated that they would re-use the service. Now

we have to collect and analyse information online, and that is imperative in continuing to serve the customer effectively in the future”.

But the objective of Sainsbury’s was rather to increase loyalty through a segmentation strategy as described by Simon Miller:

“Perhaps a good example of how Sainsbury's are putting Relationship Marketing to use is with the development of our clubs. Sainsbury's have two clubs open to customers now - our Pet Club and 0-5 club, for the parents of young children. These clubs were developed after we identified that pet owners and young families are especially valuable customers. By beginning a relationship with these segments, we hope to maintain their loyalty to Sainsbury's. Members receive regular high quality magazines, and a large number of special offers and coupons.”

It therefore did not matter which channels of distribution the customer was buying from. They were considered as equal in terms of importance to acquire and retain customers.

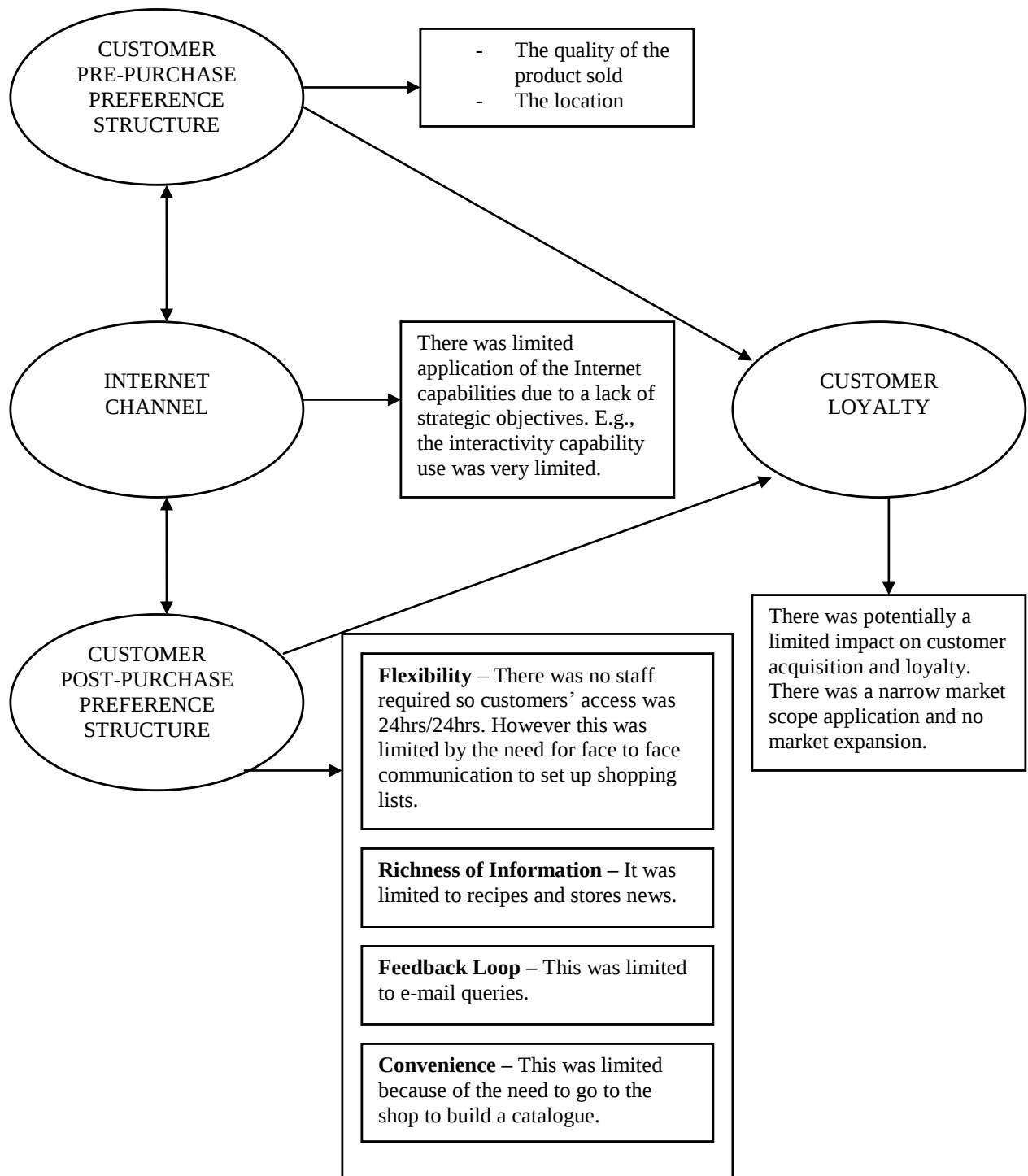
SUMMARY

The main thread during the first few years was that Sainsbury’s viewed their online shopping as a complementary channel of communication rather than a complete shopping experience for the customer. It was there to avoid being left behind and to add value in the communication with customers by sending them messages such as a selection of recipes.

The following 2 diagrams are an attempt to provide a visual depiction of some salient features of the interview data against the theoretical model. The first diagram relates to 2001 and the second to 2007. The same data is also provided in tabular form. These diagrams and

table are used to help with a summary interpretation of the data. These findings are compared and contrasted with the conjoint and structural equation results in the discussion chapter.

Figure 37: A Comparison of Sainsbury's Website Implementation against themes from the literature in 2001



The Internet had changed the context and the infrastructure but not so much the content of the information since the objective of the website was to reach customers who wanted to communicate via that channel. It did not seem to create much value in terms of information provided to the customer and in terms of the degree of interactivity between the customer and Sainsbury's. One of the outcomes mentioned by Miss Jackson was flexibility derived from the no space and time constraint Internet capabilities. However this benefit namely flexibility was not considered as being different from what a catalogue could provide. Flexibility was limited because customers still had to build their catalogue in store the first couple of years after the development of the website.

Sainsbury's argued that the impact of the Internet on customer loyalty was for a particular segment of customers: the 'busy' customers. As a result their website brought to the customer some convenience.

The gap appeared to be that Sainsbury's had not tried to use the capabilities that the Internet can offer to change the content of their total offering for example by using the interactive side of the Internet such as providing more information, and by designing chat rooms. They did not attempt to create substantial value for customers and offer them a valuable substitute to traditional shopping. The Internet was not viewed as a new way to do shopping where both parties could benefit but rather a way no different than the ones that already existed.

It seemed that a change of content may have had a greater effect on customer relationships. However, Miss Jackson did mention that in future Sainsbury's will operate from a warehouse and then may offer more products by including their partner stores such as Homebase. She

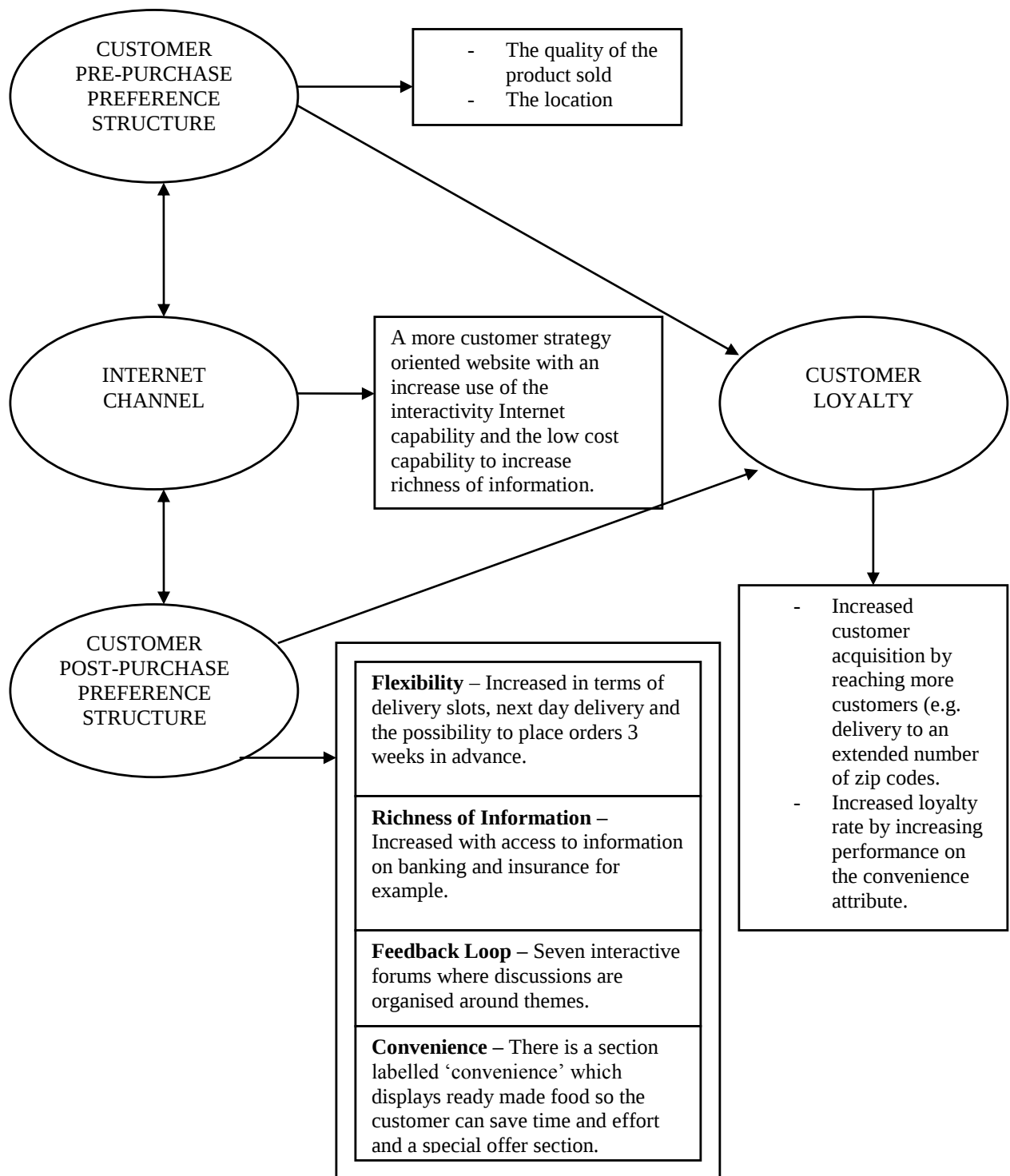
also mentioned that the relationship could be much more tailored and cheaper than anything that can be achieved through traditional channels. It was interesting to note that they had only started to talk about that in 2001. This could perhaps be due to the fact that they started their website with no strategic objectives. Implementing a website by thinking about creating value for the customer could lead to profitability quicker. However they tried to add value through richness of information (resulting from a change of content) by allowing customers to select recipes. This could be considered as the beginning in taking into consideration customer preferences.

A case like Sainsbury's showed a company that only used a part of the capabilities of the Internet without a full analysis of the whole capabilities as an alternative marketing channel.

Why did Sainsbury's take a limited view of the Internet during the first half of the Internet's existence? An element of the answer could be that they assume that customers' preference structures would not change in the face of the capabilities of the Internet. In addition the assumption was made that Sainsbury's current traditional performance was not under any threat from the performance capabilities of the Internet: "after 125 year's experience, we are very efficient at selling products through stores". This was proven to be costly for Sainsbury's as competitor Tesco.com achieved UK sales online of £577m in 2003-04 (at the time of the second interview with Sainsbury's). Tesco.com had a first-mover advantage within the U.K. online grocery by adopting a focused Internet marketing strategy from the beginning.

The following diagram relates the data from 2007 to the theoretical model.

Figure 38: A Comparison of Sainsbury's Website Implementation against themes from the literature in 2007



The following table combines the longitudinal data presented in the previous 2 diagrams. The purpose of the discussion is to examine changes in how Sainsbury's perceived pre- and post-transaction preferences structures relate to Sainsbury's perception of loyalty.

Table 57: A longitudinal comparison of Sainsbury's Internet channel in relation to the theoretical model

Sainsbury's							
Pre-Purchase Preference Structure		Internet Capabilities		Post-Purchase Preference Structure		Loyalty	
2001	2007	2001	2007	2001	2007	2001	2007
The quality of the product sold The location	The quality of the product sold The location	There was limited application of the Internet capabilities due to a lack of strategic objectives. E.g., the interactivity capability use was very limited. Distribution of information content prevails.	A more customer oriented website with an increase use of the interactivity Internet capability and the low cost capability to increase richness of information.	Flexibility – There was no staff required so customers' access was 24hrs/24hrs. However this was limited by the need for face to face communication to set up shopping lists. Richness of Information – It was limited to recipes and stores news. Feedback Loop – This was limited to e-mail queries. Convenience – This was limited because of the need to go to the shop to build a catalogue.	Flexibility – Increased in terms of delivery slots, next day delivery and the possibility to place orders 3 weeks in advance. Richness of Information – Increased with access to information on banking and insurance for example. Feedback Loop – Seven interactive forums where discussions are organised around themes. Convenience – There is a section labelled 'convenience' which	There was potentially a limited impact on customer acquisition and loyalty. There was a narrow market scope application and no market expansion.	Increased customer acquisition by reaching more customers (e.g. delivery to an extended number of postal codes). Increased loyalty rate by increasing performance on the convenience attribute.

					displays ready made food so the customer can save time and effort and a special offer section.		
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The evidence seems to suggest that there is very little change in Sainsbury's orientation to customers' pre-purchase preference structure. It remains quality and location (convenience) throughout. Given this enduring corporate perception of customers' preferences it seems rather incongruent that the Internet capabilities, that can potentially create a superior performance on the convenience attribute, do not seem to form the centre of the Internet marketing strategy by 2007. Why is this? It could be related to a dominant organisational culture which was borne out of 150 years operating a traditional marketing channel. On examination of the changes in Sainsbury's understanding of their customers' post-purchase preference structures between 2001 and 2007, it would seem that ordering and delivery flexibility (components of convenience) have some recognition as significant customer preferences. The ability of the Internet to reach more people with increased information seems to underscore the Sainsbury's perception that their customers' preference structures have availability of information as a key preference. This would suggest that Sainsbury's has an attitudinal approach to the development of customer loyalty – influencing loyalty attitudes through information and forums. With regards to behavioural loyalty, customer acquisition through increased convenience and global connectivity are the objectives.

CHAPTER 12: MERCEDES-BENZ

CASE: USING THE INTERNET TO CREATE AWARENESS AND PROVIDE CUSTOMERS WITH RICH INFORMATION

INTRODUCTION

The case was made possible by the co-operation of Mercedes-Benz DaimlerChrysler U.K. Limited, Tongwell, Milton Keynes, MK15 8BA and more especially by the kind help of Ms. Nancy Marks - Retail Environment Executive for Mercedes-Benz.

The case was compiled from in-depth interviews conducted in 2001 and 2007 to show the evolution of Mercedes-Benz online marketing strategy. In addition published sources and the Mercedes-Benz website were used to complement the face-to-face interviews.

MERCEDES-BENZ PERSPECTIVE ON CUSTOMER PRE-PURCHASE PREFERENCES

The purpose of the initial part of the interview was to establish Mercedes-Benz understanding of their customers' pre-purchase preferences.

Quality and Prestige

The evidence suggested that in 2001, the two criteria by which Mercedes had strategically positioned itself were reliability (quality) and prestige. The attributes reliability (quality) and prestige had substantial weighting over other non-price criteria. For example customers were not likely to trade off a Mercedes A-Class against a less expensive car or the same price but different brand because they were looking forward to buying their first Mercedes for the image it represented both in terms of prestige and quality and reliability.

MERCEDES-BENZ USE OF INTERNET CAPABILITIES

This section analyses the qualitative data along the dimensions of Internet capabilities. The purpose is to reveal Mercedes-Benz's level of understanding of the Internet capabilities.

No Strategic Marketing Context

During the interview held at the end of the winter of 2001, Nancy Marks had a kind laugh remembering how the Mercedes website was first designed:

"It was eight years ago I think and it was a man retired... Actually it was a kind of funny story because when I first saw the website we actually won an award for it and it was a man who was retired graphic designer and he was paid like £5 per page which is just so beyond cheap, which is so funny. But it was quite a while ago."

Back to 1993, two people within the Corporate Communications department were responsible for this early website. There was no specific budget and limited resources

allocated towards the development of the site. The role of the website was therefore merely for Mercedes to have a presence on the Internet.

In 1999, there was still no specific strategy as to what the content of the website should be. Consequently the website turned out to be an incomplete display of product information. As Marks stated:

“In the past though it seems to promote it just had basic general product information so it says, this car is available, that car is available. It never had pricing of the car. It had very specific oh sorry very generic standard specifications. It really didn't offer much at all. It was just...It really just paid lip service to having a website. It wasn't a true website in terms of offering all the information that's there. So that it was kind of because other people are doing it so we should. But I don't think in any way it probably accounts for the customers' experience at that time. It was just so basic and from a dealership you could get 10 times the amount of information that was on there. It wouldn't empower the customer to go to the showroom with more information than the dealer. So it is really just to pay lip service.”

As a result, it was a defensive website with the aim to do like others. The truly revolutionary capabilities of the Internet such as global connectivity and interactivity were still not used in 1999 because they were considered as unnecessary to achieve the sole objective of the site, which was to exist, and have an Internet address. Subsequently, the fact that the information could travel by itself and did not stop where the salesman stops was again of no consideration for the time being. The service outcomes, that a website could offer the customer, did not seem to be a critical element yet in 1999. This could be because Mercedes felt no pressure to provide its customers with an interactive and attractive site because of the power of their brand and the fact that this website was not going to suddenly have an impact on customer loyalty. Indeed Mercedes enjoyed a high rate of customer loyalty, which seemed to strongly depend upon factors such as for example the quality of the products and the image carried by

the brand. And it seemed also that the Internet would not alter these factors in the near future. It appeared that the site was therefore not intended to impact on customer acquisition and/or loyalty but rather to impact on customer relationships by identifying Mercedes with an advanced technology namely the Internet with the objective to be associated with the future i.e. with progress.

Towards a Marketing Strategy Led Website

In 2001, the design of the company's website was now part of the passenger car department which dealt with a business to customer context as opposed to trucks and vans which was part of a business to business context. As stated by Marks, the fact that it was the B to C environment that decided the design for the B to B department was a vivid internal issue within Mercedes:

“We have an interesting issue on it is that we have cars which include new cars news, truck and vans and then after sales, accessories which fit onto cars. The problem is that the car department has the largest budget so we lead the way on everything. Currently we are redesigning the site. It's the car people who actually said we need to redesign the site, we need to do this, this and this. And we kind of dictated what the site will look like. And the trucks and vans all of the sudden go: "oh we didn't budget for this!" But you can't have your website cars, trucks and vans looking separate because it's all one-brand experience even though trucks and vans customers are customers business to business while we are business to customers we still have to have the same look and feel. So that's the biggest issue, which is the most, talked about is who has control and power over it.”

It was only in 2001 that the responsibility, investment and budget switched to a person fully responsible for the Internet. As Marks recalled:

“So it's in the past two years that it's happened and last year it was still only part of somebody's role. It was about 20% of somebody's role to look at it from a new car's perspective and the same thing for trucks, vans and new cars. It was always somebody's, part of somebody's role to do it. It wasn't a specific Internet person. So now we have that responsibility and ideas generation arises within the marketing department and the budget control is there as well.”

Now the responsibility of the Mercedes website became part of each Marketing function. In technology terms this meant that the back end processes were the responsibility of V10, a U.K. owned company, while the front end was the responsibility of the designers:

“Then how we've evolved from there is we've actually determined V10 which is a DC U.K. owned ecommerce enabling company and that actually does all the brands for DaimlerChrysler. So they are responsible for the back end processes and increasing the functionality of the site. Then we worked with the designers to put the front end on the site. But all the ideas, all the generation (hum) we want to do this, we want to do that will come from the specific marketing department. It's the Marketing and V10, which is the Web enabling. I am more responsible for; the Marketing department is more responsible for the customer experience and the brand. And then V10 tend will be trying to make the process look seamless to the customer, like if they wanted to buy a car online, which we don't offer for Mercedes, but it's getting the back end processes in place.”

However as the responsibility of developing the website lay in the marketing function, it was therefore not discussed at a strategic level. A limitation of not having the Internet responsibility at a strategic level but rather at a functional level could be that the website content might not fully answer the needs of the markets served (that was decided at a strategic level).

A lack of Interactivity

In 2001, Mercedes had not fully explored the interactivity side of the Internet. For example by looking into two elements of the Internet capabilities namely real time communication and response contingency, Mercedes website could personalise the offering for each customer. The lack of use of interactivity reflected a conservative internal strategic context which was reluctant to engage a real time communication with the public as reflected in Marks' statement below:

"But we again want to create a community and a discussion group on our own website. We will then put the resources in to man it properly and as a manufacturer we couldn't allow it to go live as is because you could get someone on who is just willing to bash us and say bad things. It can't be real time."

The second point noted by Marks was that creating a community could perhaps increase stickiness to the website.

"The information and ease that Carview can give them, or Autobytel or Autopit, it's absolutely amazing and they will always come to see what Mercedes has to say about their car but our site isn't that sticky for them. They are not going to spend a lot of time on our site. They would rather go and play on you know Carview and go on to communities and have a chit chat with somebody or go view what people have said about that like Amazon's book review. They like looking at that. Because there is Amazon out there doing it that people has become accustomed doing things like that on products and services so these other companies are setting up sites that mimic it, reflect it and it creates stickiness."

In 2001, Mercedes seemed to have opted for a non-interactive web site. The presence of a chat room on the website was considered but the dialogue will not happen in real time to avoid losing control of the content of the messages. However Mercedes mentioned that people like chat rooms, communities and entertainment on a website. Mercedes had therefore

thought about a controlled discussion group as a trade off of what was acceptable to secure their brand image. In 2007, Mercedes website still did not include a forum even controlled.

Even though it was a step forward in developing an interactive web site, it might simply not be enough when considering what customers expect from a website. A new website could offer live, interactive traffic and travel information for more people to visit the site and as a result strengthen the brand. Weather advisories, accident reports for example could be added to make the travelling persons experience as seamless as possible.

In 2001, the Mercedes website had a section labelled “interacting with Mercedes-Benz”. If customers had a question or a suggestion, they were invited to drop a line on the website. The “interacting with Mercedes-Benz” became a “contact us” section with telephone numbers and email addresses.

In 2001, entertainment to ensure stickiness to the website was achieved by showing a beautiful image of a mountain and highlighting that only your four-wheel drive Mercedes could access such a place. Other features to encourage customers to spend more time online included a short film starting on a mountain tour at the river bank and ending the tour at the summit. The objective of the movie was to demonstrate that only an offroader like the Mercedes one could handle this kind of challenge. In 2007, the focus switched to a more personalised service. For example the feature “configure your car” allowed customers to build their own car by choosing amongst various options step by step. Compared to 2001, the 2007 website presenting the different car models included the option “personalise your Mercedes-Benz” with a range of accessories.

The use of the interactivity Internet capability had therefore evolved from 1993 where only information was presented to 2001 where in addition to information, entertainment was provided through a short film and music to 2007 where the focus turned to customisation. However no systematic approach to understanding customer preferences was evident.

Low Cost Benefits for Mercedes-Benz

One of the main benefits, Marks highlighted, was the fact that it was easy to update any information for example the price list:

“And the best thing about the Website is how easy it could be updated. So we are moving towards a database driven site this year and... for instance I say this now because you are not going to be using this information too soon. We are doing a price increase next week by like £100 per car and that means I have to redo all the price lists, everything like that which takes about 6 weeks turnover time. I can sit and do this in 6 hours and like approve and like implement the change and approve the change all in 6 hours. It's a completely different way to work.”

Another benefit for Mercedes was the decrease in customer acquisition costs:

“But I think you'll more likely to...you know the expression "the cold lead to a hot lead, hot prospect" I think the web is for attracting new customers bit is an amazing way of decreasing your expenditure on cold customers. Because if you can get them to your website to take a look they'll drop out a lot quicker than a mail piece and so you don't bother with them and they are not going to leave their details for a brochure if all of a sudden they go: "Oh dear I can't afford 12 grand or I hate the A-class, I am not buying it, the one I am interested in is the CLK but that's 30 grand, I can't buy it, I can't afford it". So they drop out a lot quicker. So I will send you more relevant new customers. So it's quite...It helps you as a company to do it a lot cheaper of weeding out who is really going to buy your car and who is not? I think that's probably the biggest thing that's attracting people to the site and then weed them out while you're there. There is a process you just have got to keep thinking customer, journey, and money, do things like this so.”

It appeared that the website was considered to be an efficient administration and communication channel from the company point of view compared to others channels. A consequence of that was that the costs were kept down for Mercedes. For example, Mercedes did not have to advertise too much for people to come and visit the site. This was probably due to the power of their brand. Visitors were becoming increasingly familiar with the site hence with the Mercedes brand and as a result, customer acquisition looked more efficient and less costly. However no proactive strategy was apparent in using the channel to acquire customers.

Using the Internet to Enter New Markets: An Increase in Reach?

Through their web site, the main objective of Mercedes-Benz was in 2001 to create awareness:

“Yes I think from a Mercedes point of view we are raising awareness and allowing them to do it remotely and not into the showroom and I think that is quite important to point out especially women and younger people.”

The Mercedes Web site allowed, Marks believed, more people to touch and therefore access the Mercedes brand like women and younger people than through the dealers. Women may lack confidence when facing a dealer. Marks continued:

“Over the past two to three years had just about doubled (their new sales volume). So what happened was that the website was trying to bring a lot of new people to the brand including women and younger people. And you look at the research (hum) that age group and that segment of the market don't like dealership. Some of them will want as much information as possible to feel empowered and given the confidence to walk into the dealership just in the

first place to look at the test drive. And other people would want to know in a distance way that they could actually afford the car, things like that.”

In 2001, young people seemed to be much more into exploring the Web, and consequently Mercedes had a unique opportunity to capture this present and future market even before they drove a car. The young seemed to identify the Internet with the future and could become with the introduction of computers at school, eager Internet browsers. What was important was that by visiting the Mercedes Website, they were touching the Mercedes brand, and customer relationships between them and Mercedes could start developing. Mercedes were considering them as customers in a broader sense even if they were not making any purchase yet. So Mercedes defined customers as anyone in contact with the brand who could as a result potentially make a purchase in the future. These new market segments needed to be transformed into Mercedes buyers with a long time life value. As a result, the Mercedes Website may influence customer acquisition by increasing reach.

The marketing question was to find out if new customer segments had a direct impact on the important attributes of the customer preference structures? Mercedes did not measure this relationship.

As discussed above, the Mercedes website was attracting new market segments such as women and young people. However the dealer did not know if this person visited the Mercedes website and whether this person had already made any queries via another channel like the Internet. As a result a customer driven computer system that held all the information on each customer who called and/or visited the website was tied into all parts of the organisation. Still the dealer did not know if the customer, who came to visit him, went on

the web site first and for what type of information. The system and therefore the customer's experience were not seamless.

In 2007, the Mercedes website was attempting to increase the customer acquisition rate by entering a market segment of customers whom in addition to prestige were more price sensitive. To achieve this objective, Mercedes developed their website to include a new section labelled "current offers". This development was probably not the result of a systematic approach to market segmentation based on differences in customer preference structures. How large was the price sensitive segment in relation to their traditional customers?

CUSTOMER POST-PURCHASE PREFERENCES

The following section considers the interview data from Mercedes-Benz perspective of the key attributes of their online customers.

Richness of Information as the Main Benefit for Customers

The Mercedes Website increased richness of information, as the main objective of the website was to inform customers and unify the Mercedes brand image. The reason for that was that some dealers were not aware or did not take the time to explain for example all the offers that went with the purchase of a certain car or the accessories available for a specific car. For example buying an A-Class Mercedes in 2001 allowed a customer to go for a day out

or a weekend in a special place or to a special event. Those customers who bought an A-Class were often first-time customers and they wanted to experience Mercedes and tell their friends about this Mercedes event. It was therefore important that all customers who bought this A-Class type Mercedes were treated the same way irrespective of the dealer they went to. Mercedes thought that the Internet was there to provide customers with the same information worldwide so when they went to a dealer they could ask for all that they were entitled to. Mercedes created a uniform brand image by increasing richness of information worldwide to more customers than they would reach with traditional advertising methods. As Marks explained:

“At the moment for Mercedes-Benz the most important thing that I see is to say that we have such a wide dealer network: 165 different dealers and with such a high turnover of staff in the dealerships that they don't all know everything about everything. And they don't promote things we want them to promote like accessories on a vehicle. In the actual dealership, accessories sit within the service department, which is something people don't visit until months after they had their car. But if they are going to buy an accessory, they are going to buy it within the 6 weeks of owning the car. But it's way over there. And there are also things like personal collection where you go and collect the car at the factory which dealers don't promote. And with an M-Class experience, which is completely unique. If you buy this 4X4 you get this off roaming day. You will be amazed how many customers actually don't get that day because the dealers didn't tell them.”

The content of the Mercedes website, by focusing on enhancing the selection of accessories, for example, was providing the customers with more choices than when going to a dealer. This richness of information that customers get by visiting the Mercedes Website was improving the customer online experience by presenting customers with more ideas and information about the products and services offered. Marks argued that this could have the effect of increasing customer acquisition by increasing selection which in turn increased numbers of visitors and increased visit conversion to sales at the dealer. Marks explained:

“So what happen is that my goal, current goal for this year is to have the website have everything so that the customer is completely empowered and enabled to go into the dealership going: ‘actually I really like that roof rack can I have that?’ ‘Oh this M-Class I want that. What’s that driving day all about?’ just they know to ask about it. And so the dealer is kind of forced to tell them everything about the car and increase the brand experience and loyalty and everything like that. The M-class experience is really, it hatches into the acquisition, the purchasing of the car. It actually has a significant loyalty impact. People say: ‘Oh I really like that. They treated us so well’; it makes it a tangible experience with the brand.”

The first objective was therefore for Mercedes website to increase richness of information by offering a complete product and service selection on their website. Looking at this element with reference to the two main attributes that form customers’ preferences namely the importance of reliability, quality and prestige, the marketing question is: “does richness of information increase Mercedes performance on these two important attributes of namely, reliability (quality) and prestige?” If richness of information in marketing terms were translated into a plain catalogue, it would probably have a limited effect on these two attributes. However, Mercedes designed their website to display information in a very elegant way with background music that reflected all the luxury of the Mercedes brand. The site had also been designed with a touch of entertainment again targeting a certain level of the social class to reveal the prestige of the brand. For example, looking at the G-Class (the cross-country Mercedes), the visitor had the possibility to click on the G-Class special button. This took him for a G-Class nature tour, starting with a mountain tour. The tour was divided into different stages showing motion pictures like the movements of the wheel on the rocks. On the right of each picture a text comments of the tour. In support of this discussion, the following was an example from the Mercedes website (www.mercedes-benz.com):

“We're moving into really inhospitable, rocky country now. Only a consummate offroader can handle this kind of challenge. We'll have to proceed at walking pace with the differential locks engaged but there's no doubt that the G-Class will get us through.”

This initial stage was followed by 'the climb', then 'at the summit' to finally reach the 'mountain hut'. Here appeared a picture of a mountain hut with a text telling the visitor:

“What superb view! Now, is there anywhere you can buy postcards up here?”

The visitor then had the opportunity to share this experience with a friend by selecting an e-card design and sending the card with a message to a chosen email address.

In the same way customers could go to a 'city tour' with your G-Class or to an 'overland tour'.

The answer to the marketing question: “did richness of information increase Mercedes performance on two most important attributes namely, reliability (quality) and prestige?” seemed to be positive. Thus the way the richness of information was displayed to the visitor satisfied directly the two attributes of reliability (quality) and prestige in the mind of the customer.

The Convenience Call

In 2001, the Smart car was the only car sold over the Internet and Mercedes was selling the Smart car only on the Internet. It was actually under the DaimlerChrysler brand. Marks said:

“They went live in October, it's under thesmart.co.uk.”

As mentioned by Evans and Wurster (1997), the revolutionary aspect of the Internet was that with the Internet the information travelled by itself. In other words the information was unbundled from its physical carrier which occurred by selling the Smart car online. However since customers were not used to buying cars online like books, a help line was available for those who needed a front desk contact. It seemed that DaimlerChrysler costs were not as low as they could have been if they traded off line help costs for Internet costs. Consequently low cost for companies was only achievable to a certain degree when launching a new product on the Internet. As Marks confirmed:

“We do have dealers, retail outlets, 5 or 6 in the country but you can also buy online. I believe so oh no sorry I believe the other one is Vauxhall, which offers a range online. But Smart was the first one. So anyway, they still require the use of their help line basically because some people get confused with their questions and we would know that even for Mercedes-Benz brand when it gets down to a certain level of purchasing decision. We'll have to back up the web experience with the help phone line and walk the person through the purchase or walk the person through configuring or ordering their car. It's just going to be required. And it's one of those things that will be an industry standard because there are already few other manufacturers and dealers groups out there with it. [But over time is it something that you expect the help line to decrease because customers will get more and more familiarized?] Eventually but I would say that you are probably a decade off. That you are 10 to 15 years off of having a wide enough customer base that intelligent because the one thing we've all learned I think most web users is that you always planned to the least experienced web users. You always add some gimmicks and stuff that you always plan for the worst user like you actually have to say "click here" on a lot of your links because a lot of people don't know you could click there. So you always have to really be descriptive in your instructions and things like that. So I think you always will need the help line, sorry not always but for the next 15 years or an email contact or something like that, some type of quick feedback.”

Mercedes recorded a constant increase in online visits for the Smart car that did not necessarily mean an increase of online sales at this stage. As explained by Marks:

“For the Smartcar not because it's only been launched since October and it usually takes two years for people to turn you see 2 years and half and 3 years is the repurchasing cycle in the UK so we don't really have anything. I can tell you on just on website use in general for Mercedes hum it's getting quite significant on how many people are coming back. I think before it was 1 to 2 times a month and now I think it is about 3 to 4 times a month no sorry we are about 2 to 3 times a month. So they are using it more as a resource and it is one of those things, it is not grocery shopping and it is not books, it is not a daily purchase. It's a 3-year purchase. So for automotive it is quite different.”

This could be a reason why by 2003, Mercedes-Benz stopped selling the Smart car online.

When asked the reasons over the phone, the reason given was that there was no demand and that customers expressed the need to revert to dealers. Was there another reason? In 2007, no cars were sold online. Stopping the sale of the Smart car online seemed to be a reversal of intent. Marks (2001) mentioned that they were planning at a later stage to sell their S-Class on the Internet because customers who bought this type of car wanted an efficient service and used the Internet for convenience. They knew exactly what they want, had bought the type of car before and just wanted to renew their car with the same type. If there were new features on the new model, the Internet would notify them.

As Marks explained:

“I think it is trying to target, like the Smart cars are very urban cars so it's kind of set to two little segments because it is either the young hip person who is totally happy to buy everything over the Internet because they grew up with the Internet. You know they are 20 to 25 years old. Or they are a businessperson, who does not have the time and goes, and this is a really bad attitude but it's true, it's only 6 grand. So buy it over, its 6 grand to them it's enough: "Oh I'll get it for my daughter for her birthday". So they go via the Internet for ease so like they do for... it's almost, it's not a big enough commodity, it's still like a book or CD which you would go to Amazon to buy. It really depends on how big the purchase is for them and how used to it they are. It's almost a novelty item in the way it looks but it's really a functional car. It's very convenient.”

For the Smartcar online sales, Mercedes had identified their customers as being wealthy, for example buying the Smart car as a birthday present for their children. They did not have time to shop around, they knew what they wanted and considered this purchase as a low risk investment. In the example given by Mercedes, customers were looking for a convenient, efficient and reliable service. Consequently in this example, convenience only increased retention because these customers were already Mercedes customers. Marks (2001) mentioned that customers who bought Mercedes for the first time wanted the Mercedes experience and consequently would not buy a car online. In this case, convenience did not lead to customer acquisition.

Internet Customer Benefits by Product Type

In 2001, Marks mentioned that the segmentation was by customer base. This was still the case in 2007. The table below summarises Mercedes segmentation by product type.

Table 58: Customer Segmentation by Product

Car type	Customer type	Internet customer benefits
Smartcar	Not expensive and for some customers it is in the commodity category	• Convenience
A-Class	Search for the Mercedes experience	• Possibility to get rational information • Comparing specifications
S-Class or CL	Search for the emotion	• Did not improve customer loyalty but: • Improved customer relationships • Added value to existing customer base
E-Class	High loyalty rate repeat purchase	• Did not improve customer loyalty but: • Improved customer relationships by giving convenience • No need for dealer • Total low cost for the customer - only talked to a retailer for very specific questions

The benefits of using the Internet as a marketing channel varied across segments defined by product type. A different marketing strategy was therefore required for each type of car. For example Mercedes decided to sell the Smart car online as this purchase did not require the full Mercedes experience (already Mercedes customers) as compared with the A-Class model (first time customers).

LOYALTY

Competitive Moves

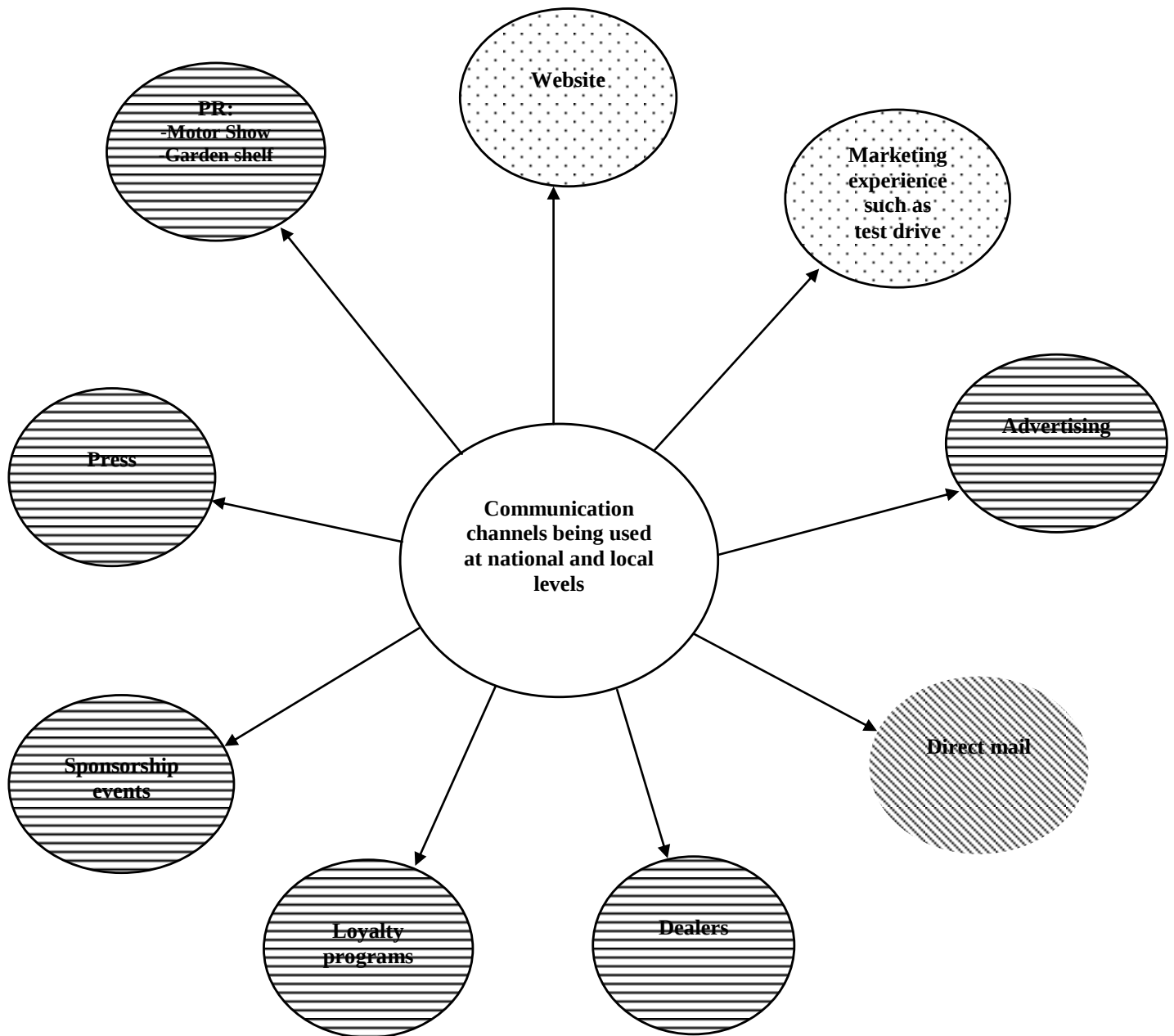
Like their competitors, Mercedes seemed to develop the content of their website by doing a little bit more here, a little less there. They did not fundamentally change the way they did business on the Internet, the way they dealt with customers on their website. They tended to check themselves against the traditional rules set up by others and weighed themselves as being a bit behind for some parts or being ahead for other things. As Marks said:

“It would be anything from Audi, Jaguar, BMW even Porsche, Lexus, even like top end Ford Mondeos, Ford Focus when you get into A and C-class. It is usually that kind of range. I think I haven't yet figured out how we can have a unique experience. Maybe the unique experience is that Mercedes branded website. Maybe we do eventually offer something in terms of competitions and things like that or access to McLaren but at the moment I really think that for the next year or two maybe... BMW might, BMW and Jaguar seems to be taking a bit of a lead in that we all offer the same things because we are still trying to get what should have been in place a year or two ago. We are all still playing catch up. So I think we are all going to mimic each other for the next little while. And the only type of differences might be campaigns like the Sports Coupé coming out, which I might try and do something funky, neat with that and that might differentiate it but it is the actual functionality of the site, every site is going to have a configurator. Every site is going to have part information like pick your colour, take you to a dealer, ask for a brochure, and ask for a test drive, all of those things are going to be there.”

The Internet: Just Another Communication Channel?

The diagram below represents the various channels employed by Mercedes in 2001 to ensure an ongoing relation with their actual and potential customers. The channels in dots were the ones, which were now given priority. Usage of the channels in straight lines remained constant while the channel in diagonal line would be used less.

Figure 39: Mercedes-Benz Communication Channels - an Orientation for the Website



Source: this study

In 2001, the Website was, as Marks believed, only part of the process. It was one channel out of three or four different channels that customers used to buy a car and seek information:

“But the problem is that we actually think Internet is only part of the process of buying a car, it's only one channel. We don't see it as being the dominant channel and so how many people used the Internet to buy a car in the UK last year, I think it's 60%? But how many people used a car magazine to buy a car last year, it's probably 80%? And it's like they all use different, probably 3 or 4 different channels to buy a car and seek information out.”

However the Mercedes Website was given more and more priority. There was an increasing emphasis on it, which was showed by the development of an advertising strategy in May 2001 to encourage people to visit the Website. Consequently, traditional channels like advertising were being used to attract people onto the Mercedes Website. Marks explained:

“Our immediate budget stays the same in terms of national advertising and press but our direct mail actually came down a little bit. So we had a little more budget to work with this year but, the Internet and experience marketing, were the two places that are getting more priority.”

Focus on Customer Acquisition

In 2001, Mercedes recorded a high customer retention rate and did not specifically see their website as playing an important role in increasing customer loyalty. The website therefore focused on customer acquisition. This was reflected in the interview with Marks:

“But within the car world, the actual biggest thing, it's not really a feature of the website but it is massive to the website, is actual space. That home page, the car home page: who gets what's space where. Who gets priority, who gets to say who gets priority? Because what's happen is that we have a director of passenger car and we have a director of after sales and after sales is all your servicing, parts maintenance and accessories. So you have the two departments and you can get a little bit of squabbling as to why after sales only has 1 button

on the homepage and why cars have 5 buttons on the thing. And actually that's the really interesting point is the why. It shows how our site is focused quite a bit more currently on the acquisition side of things because if we would really focused on loyalty that servicing and maintenance you know that's the next stage of the ownership for a new purchase. But if we actually gave them more space our goals would be more equal between loyalty and acquisition."

By 2007, the focus had switched from being customer acquisition oriented to giving more weight to the loyalty side, by now having a full section on "ownership" that includes option such as the maintenance of a vehicle which in turn encompasses a range of other options such as "body repair", "service contracts" and "rescue guide".

SUMMARY

In 1993, the Mercedes website was set up with no strategic marketing intent. The objective was to have a presence on the Internet as did the competition. Keeping the image of an innovator was perceived as being important because Mercedes customers expected Mercedes cars to display innovative features.

In 2001, the decision to use the website for marketing purposes was made. The first main objective was to inform customers as some dealers were not always providing all information. This resulted in unifying the brand worldwide as every customer now had the opportunity to access the same information. In addition to this richness of information for the customer, Mercedes was able to reach more segments. In addition to an informative website, Mercedes sold the Smart car online as it was considered to be a commodity product.

Mercedes was also planning to sell their most expensive model as a high percentage of customers for this model were repeat purchasing.

In 2003, the sale of the Smart car online was cancelled but the website continued to follow the same product information based acquisition strategy.

By 2007, the Mercedes website had increased convenience by adding interactive features such as booking a test drive online. In addition Mercedes started to focus on customisation by offering the customer the opportunity to configure their own vehicle. This Mercedes website was similar to the previous versions by trying to acquire more customers. This was achieved through an offer section to appeal to price sensitive customers. Finally the Mercedes website in addition to targeting new customers attempted to increase value for their existing customers by offering an “ownership” section that contained maintenance issues.

The figures below compare and contrast how the Mercedes website has evolved over 6 years in relation to the major themes discussed in the literature.

Figure 40: A Comparison of Mercedes Website Implementation against Themes from the Literature in 2001

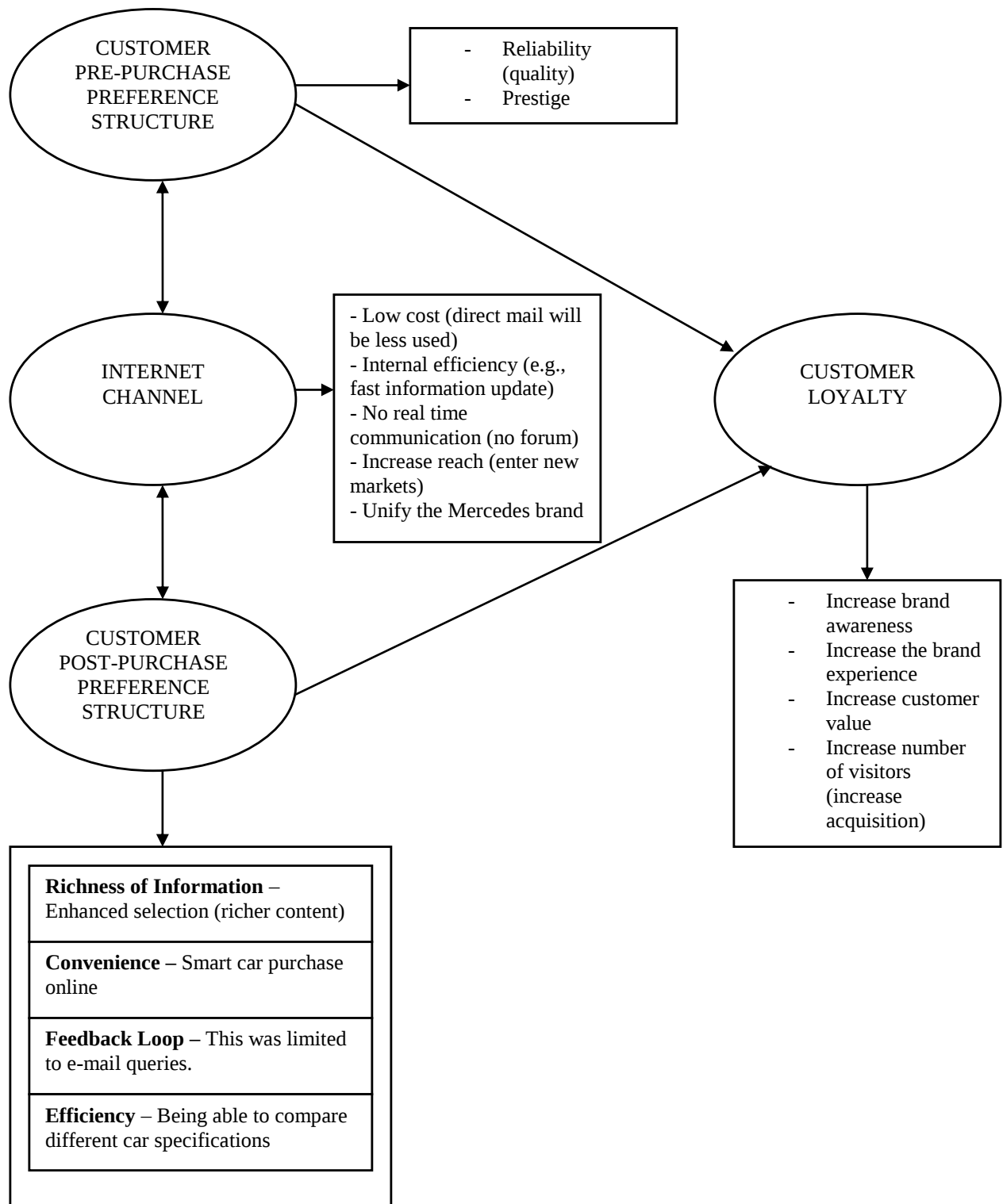
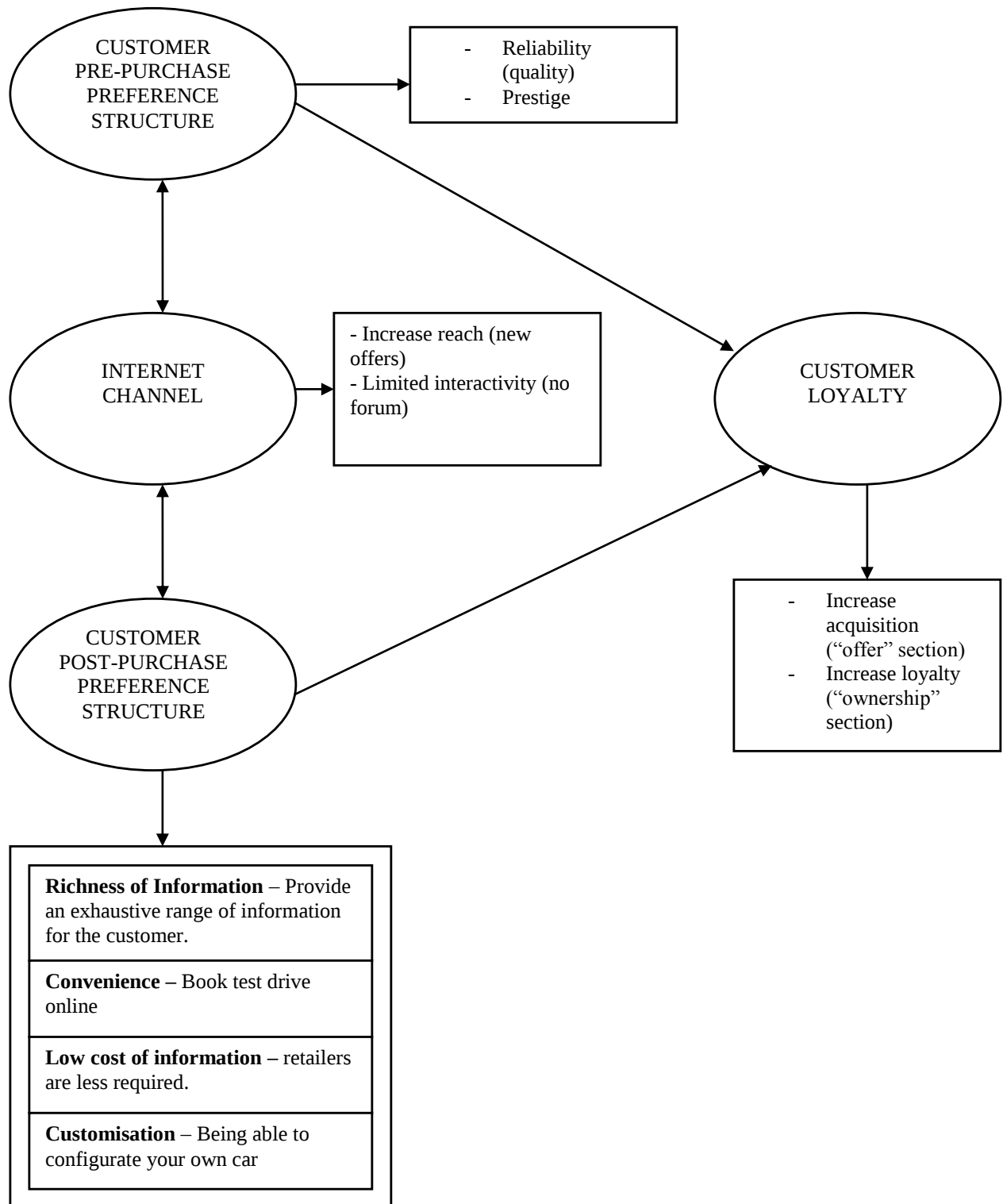


Figure 41: A Comparison of Mercedes Website Implementation against Themes from the Literature in 2007



The preceding figures show that Mercedes had not fully explored what Evans and Wurster (1997) argued was new with the Internet:

“What is truly revolutionary about the explosion in connectivity is the possibility it offers to unbundle information from its physical carrier.”

According to Evans and Wurster (1997) the Internet led to a separation of content of the information from its context (e.g., shops) and its contact (e.g., salesperson). The literature showed that this change in the economics of information required the company to fundamentally redefine its strategy which naturally led to a transformation of some functions or to the creation of new functions. This was what Evans and Wurster called “deconstruction of the value chain”.

However customers visited the Mercedes website to get information on a certain car (the information did travel by itself) but they then went to the dealer to buy it. In this case the separation of content from context was only partial and occurred at a certain stage of the buying process. Another example was the use of a help line number when buying the Smart car online. The separation of content from contact was partial with the use of the help line.

As the strategic emphasis was not on a total separation of the content from context and contact, the trade off between richness and reach was not totally broken. In 2001, Mercedes had achieved reach but as the richness element was not fully exploited this resulted in a lack of personalisation of the offering. In 2007, personalisation became the focus to increase both customer acquisition and loyalty.

However both modes above (2001 and 2007) suggested reluctance from Mercedes to engage with the Internet characteristic of interactivity. The risks associated with real time interactivity would appear to be viewed as greater than any benefits.

The Mercedes data suggested that the Internet was used for customer acquisition in 2001 and not in any major way for customer retention. Was this a reflection of their strong pre-existing brand image? Was this a reflection of an internal strategic context which is sales rather than marketing orientated? However by 2007, Mercedes website focussed on both the acquisition and the loyalty aspect by adding a new rubric that added value to existing customers. Nevertheless no systematic approach to customer preference structures in relation to the Internet as a marketing channel was evident.

So what can be assessed as being Mercedes Benz's view of customer preference structures? The following table assists in answering this question.

Table 59: A longitudinal comparison of Mercedes Benz Internet channel in relation to the theoretical model

Mercedes Benz							
Pre-Purchase Preference Structure		Internet Capabilities		Post-Purchase Preference Structure		Loyalty	
2001	2007	2001	2007	2001	2007	2001	2007
Quality as reliability Quality as excellence (Prestige)	Quality as reliability Quality as excellence (Prestige)	- Low cost (direct mail will be less used) - Internal efficiency (e.g., fast information update) - No real time communication (no forum) - Increase reach (enter new markets) - Unify the Mercedes brand	Increase reach (new offers) Limited interactivity (no forum)	Richness of Information – Enhanced selection (richer content) Feedback Loop – This was limited to e-mail queries. Efficiency – Being able to compare different car specifications Convenience – Smart car purchase online	Richness of Information Provide an exhaustive range of information for the customer. Convenience Book test drive online Low cost of information – retailers are less required (brand uniformity). Customisation – Being able to configure your own car	Increase brand awareness Increase the brand experience Increase customer value Increase number of visitors (increase acquisition)	Increase acquisition (“offer” section) Increase loyalty (“ownership” section)

Quality as reliability and excellence would appear to be the enduring perception that Mercedes Benz has of their customers' preference structures. Does this perception feed through to their use of the capabilities of the Internet channel and the structure of the Internet experience? The low cost global connectivity has been used to make product information available on a wider basis. The quality and quantity of that information presentation has been improved between 2001 and 2007. Transaction interactivity has not featured. This suggests that Mercedes Benz is orientated around developing an attitudinal approach to loyalty rather than a behavioural approach. This approach has been reinforced over time by the further segmentation of the information available into pre- (offer section) and post-purchase (ownership section) brand experience types.

CHAPTER 13: EASYJET

CASE: A STRATEGIC PERSPECTIVE ON THE CAPABILITIES OF THE INTERNET

INTRODUCTION

EasyJet is a European low cost airline that began operations in 1995, before the Internet achieved widespread penetration as a legitimate commercial marketing channel.

Case data on easyJet were collected in November 1999 from Rachel Dawson (Marketing Communications). Another interview (2007) was conducted over the telephone to provide an understanding of the evolution of the online marketing strategy for easyJet. An open-ended questionnaire based on the theoretical model was used. The transcripts are found in Appendix X.

EASYJET PERSPECTIVE ON CUSTOMER PRE-PURCHASE

PREFERENCES

The purpose of the initial part of the interview was to establish easyJet's understanding of their customers' pre-purchase preferences.

Low Cost

The attribute by which the chairman and founder of easyJet had explicitly positioned the company in 1995 was low price airfares for customers, relative to competitors. The evidence suggested that during the first interview in 1999, the low cost attribute was far more important for customers than any of the other broad range of service attributes on which the founder could have made strategic choices when positioning the company.

The order-winning criterion of price had substantial weighting over other non-price criteria. For example in 1999, evidence from the company showed that customers, if offered a choice of a £30 ticket for a flight from Luton to Nice on the basis that there could be up to an half hour delay on the departure time, were not likely to trade that off for a £60 ticket if easyJet guaranteed that the plane would leave Luton at exactly the right time.

EASYJET USE OF INTERNET CAPABILITIES

This section analyses the qualitative data along the dimensions of Internet capabilities. The purpose is to reveal easyJet's level of understanding and use of the Internet capabilities.

Early Recognition of the Potential of the Internet Capabilities

Already in 1999, there was an early indication that easyJet's perspective of the Internet was strategic. As discussed by Dawson:

“We are increasingly getting into how we actually use this incredibly useful tool and how we start developing the picture in marketing views. To be honest in many ways it is still in its infancy and although we are considered being one the pioneers of e-commerce, we still haven't exploited all the capabilities. It is such a huge potential and we haven't really tucked in yet. So that's really what my role is all about.”

Low Cost Benefit for easyJet

Clear strategic intent in the use of the low cost capability

At that time of the company's foundation in 1995, all bookings were made through a telephone call centre. As the company grew, it became apparent to management that by expanding the call centre capability at the same rate as rapidly growing sales, easyJet would incur disproportionate increases in both fixed and variable costs. After investigating ways to handle bookings through another medium, easyJet management found that the Internet was the most cost-effective way to achieve the objective of reducing costs (e.g., sales staff wages and building rental).

The strategic importance of the low cost potential benefit of the Internet for easyJet was emphasised in the 1999 interview:

“For EasyJet the Internet is more than just a marketing communication tool. It is a fundamental part of our business model because as a low cost airline in order for us to sell seats at a competitive price and still make a profit, we have to investigate every single means that we can, to reduce cost. This room that you see in front of you now is when the airline first started four years ago, we didn't have the Internet, and we didn't take any bookings online. And as the company has grown and we have grown hugely in the last four years, it is obviously impossible for us to keep expanding the sales centre at the same rate. Or else we will be a huge sales centre somewhere and we will be paying much higher cost and rent that we are now. So we had to try to investigate way to handling booking through another medium and that's why the Internet came in. Obviously the Internet is a very cost-effective way for us to take booking because we don't have to pay sales staff; we can reduce the rent

we pay on this building for example. We hopefully reduce any customer queries that we may have; they go through to the customer service”.

Since 1999, the primary aim of easyJet was to encourage customers to book online in order to gradually eliminate their call centre. To achieve this objective easyJet's marketing strategy was to adopt different pricing for different marketing channels. For example a return to Nice from London Gatwick booked on the easyJet website represents a saving of £5 (£2.50 each way) for the customer if booked on the Internet, rather than through the call centre. There is therefore a price incentive to use the easyJet website. Consequently easyJet looked at the Internet capabilities with reference to the most important attribute in the customer preference structures that was purchasing low cost flights. For example the ability to reduce ticketing cost and thereby reduce prices via a discount on Internet purchases would directly satisfy the attribute of lower price in the mind of the customer. By 2001 the majority of easyJet sales were performed via the Internet and there was no need for easyJet to offer a discount online. In 2007, the strategy was then to advertise via email with special offers to generate demand. EasyJet's strategic management choice was still to focus on Internet sales, to be more cost effective as those sales continue to grow.

The separation of content, context and infrastructure causes internal problems

The effect of a separation of content, context and infrastructure is clearly seen in transitional tensions caused by Internet sales.

“Yes and that can be a real issue because obviously the way this sales centre is structured: all the reservation agents work on commission only; they don't get paid a salary. They get a certain amount for every fee that they sell. So it's an issue because the people calling in here with a query about the seat they bought on the Internet obviously they have to take that call but they are not going to make any money out of that call. So we have some internal issues as well..... When a call comes through to reservation agents they're all sort of like channelled through a very sophisticated system. They don't know if it's going to be someone directly wanting to book a seat which for them it's great because it's means right that's my commission; or whether it's going to be “do you fly to Canada?” product queries. Or whether it's going to be “I just booked my seat on the Internet, I have a problem, and can you sort it out for me?” which can be very time consuming but has to be done. Obviously, there is tension because during that period of time they are not earning any money.”

Since 2005, the change of content, context and contact of the relationship had not only an effect on direct ticket prices but it also provided opportunities for cross selling products such as hotel booking and renting cars at a lower rate through partnerships.

The role of leadership in realising the benefits

The rapid exploitation of the Internet is linked to both the advocacy of the Chairman and the centrality of the capabilities of the Internet to the strategy of the firm. As explained by Dawson in 1999:

“So as to who is the strongest advocate of the website I would say Stalios himself. Obviously it is a privately owned company and Stalios as the chairman owner is very much involved on a day to day basis. And he has been one of the prime advocates of the website again due to the all issue of being an integral part of the business model and how the whole concept actually works. You know it's one of the corner stones of the business now. And we are increasingly selling more and more seats on the Internet. It's definitively something that people are becoming more and more accustomed to. The Web now is very acceptable. It's not that scary thing that it used to be. And one point, few weeks ago when we were running a sale - an Internet only sale where you can get such a deal by booking online - we sold over 60% of all our seats over the Internet which we believe is a world record in the aviation industry to sell that number of seats on line”

Interactivity

In 1999, interactivity was seen as part of the future in line with the low cost strategy.

The search for further cost savings is seen in the potential of interactivity to reduce sales service costs.

“Yes, it is something we just started to do. We obviously have a huge database of email addresses from people who booked online. And the Internet sale that I was telling you about that we run a few weeks ago, that was the first time we actually emailed all those people to advise them that the sale is happening, these are the offers you know do go ahead and book. There was a very crude blanket mechanism used but it did generate a lot of interest and a lot of sales, so it did work. So I think the feeling is once we've got a descent database that's clean and active, we will do more of that activity. So that's an important development for us to make it more interactive. One thing we have very recently done is that if you have flown before you would receive a confirmatory letter through the post. That is something that with Internet bookers we have literally stopped this week because sending a piece of paper through the post is really a part of the whole concept of booking online. So we now have started e-mailing confirmation and back to customers or people whom are booking online and that's really the first kind of interactivity of any kind of on going effort that we've done. Again, one of the reasons we've done that, apart from us being more consistent with the whole concept of booking online, is also that it saves a huge amount of money in terms of cost. And again by keeping costs down, we are able to maintain low fares and operate as a low cost carrier”

Low cost direct marketing to increase interactivity

Additional benefits are derived from the low cost capability of the Internet in the communications strategy.

“Also again from a low cost perspective obviously direct mail is a very expensive way of communicating and typically your response rate will be 1 to 5%. 5% is very good. So if you think of all the mail cost and the print cost etc. in traditional direct mail it's phenomenal whereas on the Internet an email will cost nothing, very, very little. So it means that

traditional marketing communications loops can be replicated in a low cost way and also in a way that's much more technically up to date using the technology that's available and people can quickly have access to. It's a much clever and more efficient way of doing things and we recognise that”.

An Increase in Reach

The ability to reach across a number of market segments using global connectivity was a key aspect of EasyJet’s profitability back in 1999:

“Therefore business traffic is a very important part of our profitability because they typically well book late, they tend not to be paying for themselves because their companies pay, so there isn't the issue of people feeling they've been ripped off in any way. And having said that even the most expensive fare that you've booked you know a couple of hours before the flight leaves is still going to get a awful lot cheaper than let's say a BA flight. So you still get the economy, the cost saving, but that means through our flight booking management system we maximise the profit for each flight”.

CUSTOMER POST-PURCHASE PREFERENCES

The following section considers the interview data from easyJet perspective of the key attributes of their online customers.

Its is not just about cost it is also about time

The strategic use of the Internet was not simply one dimensional. It was concerned about saving time: the customer’s time.

“Hum, well there are quite a number of things. Time is the bottom line. We are not interested in just having a website that's pretty and informational. It's there as a commercial site. Obviously there are other important things that we use it for. We use it to support the brand. We use it to express corporate messages. We use it to give customer information and add value; for example to tell them about the airport, to tell them about the destinations. All these kind of interesting things that you know as a customer you may want to know about. But it's the time reason and the way the site is structured is very simple, very easy to navigate and we make the facility of booking online as easy as possible and from home page you can click straight into the booking engine which is unlike a lot of them, e-commerce sites where you have to actually browse through several pages before you get to the bit you want. We want to make it as clean and as clear as possible. So that's why if I look so much no thrills because that's a reflection of the brand and the brand value as a whole that the airline has. So as I said, it's useful but selling seats is the main reason”.

Efficiency

Flexibility and Convenience

The flexibility capability of the Internet has a role to play. The benefit to the customer of booking convenience was recognised in 1999.

“You won't have to fit with traditional office hours and more and more people are working you know different hours. People are living much more flexible lives and sometimes you want to book a flight at 3 o'clock in the morning, you can't get out to your travel agent to do that. So it's much more geared to the way that people are beginning to live their lives in flexibility that people want to have now. It's good from that perspective”.

Since 1999, customers' preferences for searching for low price fares did not seem to have changed. However customers became more familiar with the Internet and other websites with similar offers and therefore were becoming more demanding in terms of relative perceived benefits such as the convenience of having more than one service under the same website. As a result, easyJet strategy was to increase benefits for customers by enhancing the convenience aspects of organising a journey. For example, easyJet offered customers the

possibility to book a car, a hotel, the car park and travel insurance from their website. EasyJet had not only increased the degree of convenience for its customers but, had also diversified its core business by launching sites such as easyJet gifts, easyMoney and easyValue. The synergy on the website between easyJet and easyCar for example added convenience which in turn led to efficiency for customers. EasyCar was a separate company with a separate identity. However all the companies which were part of the easyGroup (easyJet, easyCar, easyValue and easyMoney) explicitly seek to increase customers' perceived online transaction benefit relative to other marketing channels. The company also applied lower prices for website sales over other channels as a way of encouraging customers to buy not only airline tickets but also other services online.

In 2005, easyJet moved towards an online marketing strategy where alliances with partners were established. For example the partnership between Europcar and easyJet allowed easyJet customers to rent cars at a special discount when flying with easyJet. The same type of partnership was established in 2006 with Mondial Assistance for travel insurance.

Ease of Use

In 1999, Dawson argued that one of the main benefit offered by the easyJet website was ease of use for customers. Therefore another of easyJet's objectives was to design their website to be less reliant upon sophisticated technical design, in order to provide their customers with an easy to navigate website. Efficiency was a key perceived online transaction benefit for customers relative to other marketing channels such as a call centre.

“The way the site is structured is very simple, very easy to navigate. We make the facility of booking online as easy as possible and from the home page you can click straight into the booking engine which is unlike a lot of them, e-commerce sites where you have to actually browse through several pages before you get to the bit you want. I think in trying to keep it very simple and keep it dynamic and keep it interesting is the way we're trying to differentiate ourselves from other airlines.”

Richness of Information

Another perceived online benefit described by Dawson in 1999 that easyJet created using the Internet's capabilities was a dynamic website to encourage customers to make return visits even if it was just to browse around. The company believed that a very important objective was achieved by keeping customers coming back to the site just to see what was happening and what was different. One way to achieve that for the company was as follows:

“One of the things I do is make sure; for example, every day there is a new piece of news posted up on the website. So if you go into our news section, and you look back you will see that there is a piece of news every single day since 2 to 3 months ago when we started this whole aspect. And we're finding that people do just literally drop in to see what's happened that day which is exactly what we want to encourage people to do to make our site the site to visit when you are thinking about a low cost airline. We also change the design of the site every 4-6 months again to keep it fresh, to keep it interesting.”

The Effects of Internet Benefits on the Salient Attribute of the Customer

Preference Structures

In 1999, benefits such as flexibility, convenience, ease of use and richness of information (news) improved performance on attributes of secondary importance in the business but did not impinge directly upon the most important attribute namely low price for the customer. It was therefore expected to see a limited effect on customer loyalty regarding these potential

benefits discussed above. However in 2007, customers were expected to access a broader range of information on the site even though it did not directly affect the salient attribute. The impact on customer loyalty was probably greater when combined with the ability of easyJet to reduce costs.

EasyJet increased the economic online transaction benefits for customers. Alternative marketing channels such as the call centre did not provide the same benefits. Thus, the gap in using other marketing channels to reach the same perceived benefits had increased in the mind of the customer who, as a result, may be increasingly expected to use the company's website.

Summary

In 1999, the objective of the easyJet website was to sell more seats online to reduce their costs by providing customers with an efficient, convenient and dynamic shopping experience (e.g., ease of navigation, news, emails and link to other services). The easyJet website was more than just a marketing tool; it was part of the business model. Because it had to sell seats at a competitive price and still make profits, easyJet had to investigate every single means to reduce costs and the Internet seemed to be a most appropriate marketing channel for this purpose. This emphasis was driven by the most important attribute of low cost fares.

Was the easyJet model sustainable over time?

In 1999, easyJet offered an easy to use straightforward website where the emphasis was on low cost functionality only. EasyJet provided customers with low relative pricing compared with other marketing channels such as a call centre. However, the relative benefit of the online transaction in the mind of the customer was low, as it was mainly a convenience benefit. EasyJet had as a strategic choice, created transaction profitability by reducing relative internal costs compared with alternative marketing channels, notably its call centre. However, in the longer run, the attractiveness of low price combined with low perceived benefits may not last, as competitors would learn to replicate the model with added value for their customers. EasyJet may not in the long run carry on generating high volumes of customers if they did not enhance the relative perceived benefits for customers by marketing innovations. To answer this concern, easyJet moved since 2005 towards a partnership online strategy with alliances such as Mondial Assistance and Europcar to provide customers with complete travel solutions at low prices.

LOYALTY

High rates of Internet sales growth

The matching of the capabilities of the Internet to customer preferences resulted in high customer acquisition and retention rates in 1999:

“We are actually 37% right now. We are aiming to be at a much higher percentage this time next year. We started we sold maybe 2% of seats on the Internet. So in 18 months we have gone from 2% to 37%....First of all, we have heavily promoted our website so in our off line advertising we talk about ourselves as a website airline. We publish our URL address on all

our advertising. So I think that's very important. And I think it's genuinely hum as people have more and more access to the Internet, and it becomes much more widely available, people will use it. And we're a very well known brand now and therefore once people do have access to the Internet we're a place where they'll feel happy to go with. We're not a new company that nobody has heard of so."

The question of how much the current easyJet website increased transaction profitability and what return on the website investment was achieved seemed to be measurable. On the revenue side of the equation, what was clear was that easyJet was generating additional transaction profitability via the Internet through low cost channel pricing and some perceived online benefits. For example, in October 1999 easyJet ran a sale - a sale only available on the Internet. EasyJet sold over 60% of all their seats over the Internet, which they believed to be a world record in the aviation industry. By doing that, they expected customers to get familiarised with the process and make their next booking online. In November 1999 on a day-to-day basis, easyJet sold 35% of their seats online taking into consideration that their website was launched in 1997 - just two years after the airline actually started - and easyJet started to sell seats online in April 1998. As a result in only 18 months, a large proportion of their seats were already sold online. In addition, when easyJet ran a sale, the percentage of the Internet sales seemed to go up by 5%. In 1999 Dawson explained:

"On a general sort of trading period where we're not running any kind of Internet promotion or sales or anything like that, it's around about 35%. Before we had our Internet sale we were about 30% so it's up by another 5%. We'll probably do another sale in the next few weeks and we'll hope to go up to 40% after that. So it keeps going up in steps as we keep sensitising people."

Consequently the easyJet website was both focussing on customer acquisition and customer retention and improving market share over time.

SUMMARY

In 1999, the capabilities of the Internet directly satisfied the low cost attribute thereby creating transaction profitability. The global reach of the Internet in turn generated higher sales volume and as a result market share was gained. For easyJet the Internet was reducing the unit cost of the service sold online at the same time as increasing sales volume. In this way, this increase in market share was converted into profits. However, to achieve profitability, online benefits needed to be durable. EasyJet had answered this condition by adopting innovative marketing ideas such as offering a complete travel solution (e.g., possibility to rent a car, book a hotel or buy a travel insurance on the same website at a low cost) that had an impact on customer acquisition and loyalty.

On the cost side of transaction profitability the website created savings in fixed and variable costs. For example easyJet reduced its total employee wage bill by decreasing the number of staff in its call centre. EasyJet also decreased its fixed costs by reducing the rent paid on the building in Luton airport for a reduced office size for the call centre.

The following diagrams provide a summary of the effects of the capabilities of the Internet in transforming the customer acquisition and retention capabilities of easyJet from 1999 to 2007. The basis of this positive effect appeared to be the clear strategic intent in using the Internet capabilities on those benefits which were central to the customer's buying intentions – namely low cost and convenience. The other contextual elements such as richness of information play a supporting rather than a main role.

Figure 42: A Comparison of easyJet Website Implementation against Themes from the Literature in 1999

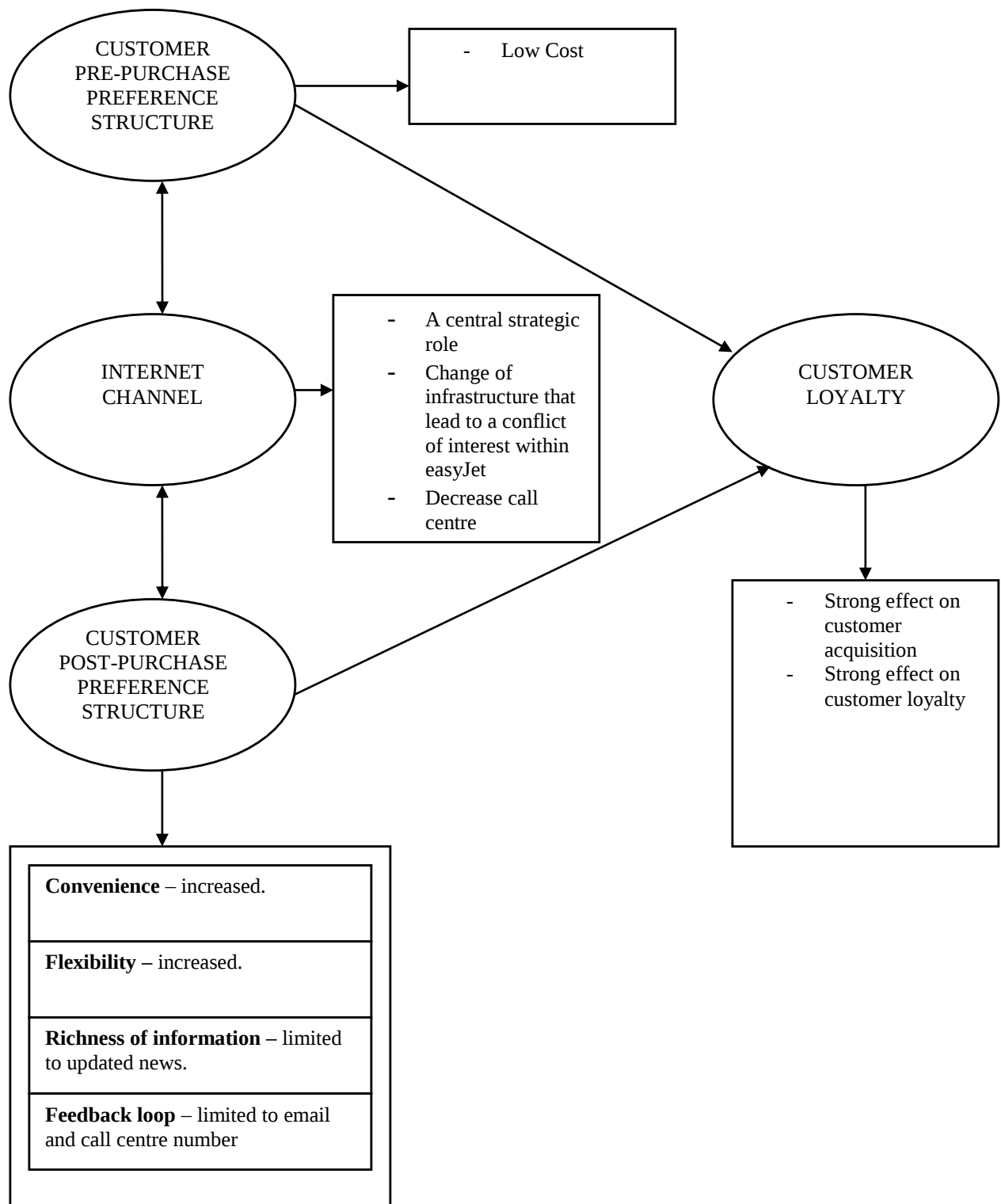
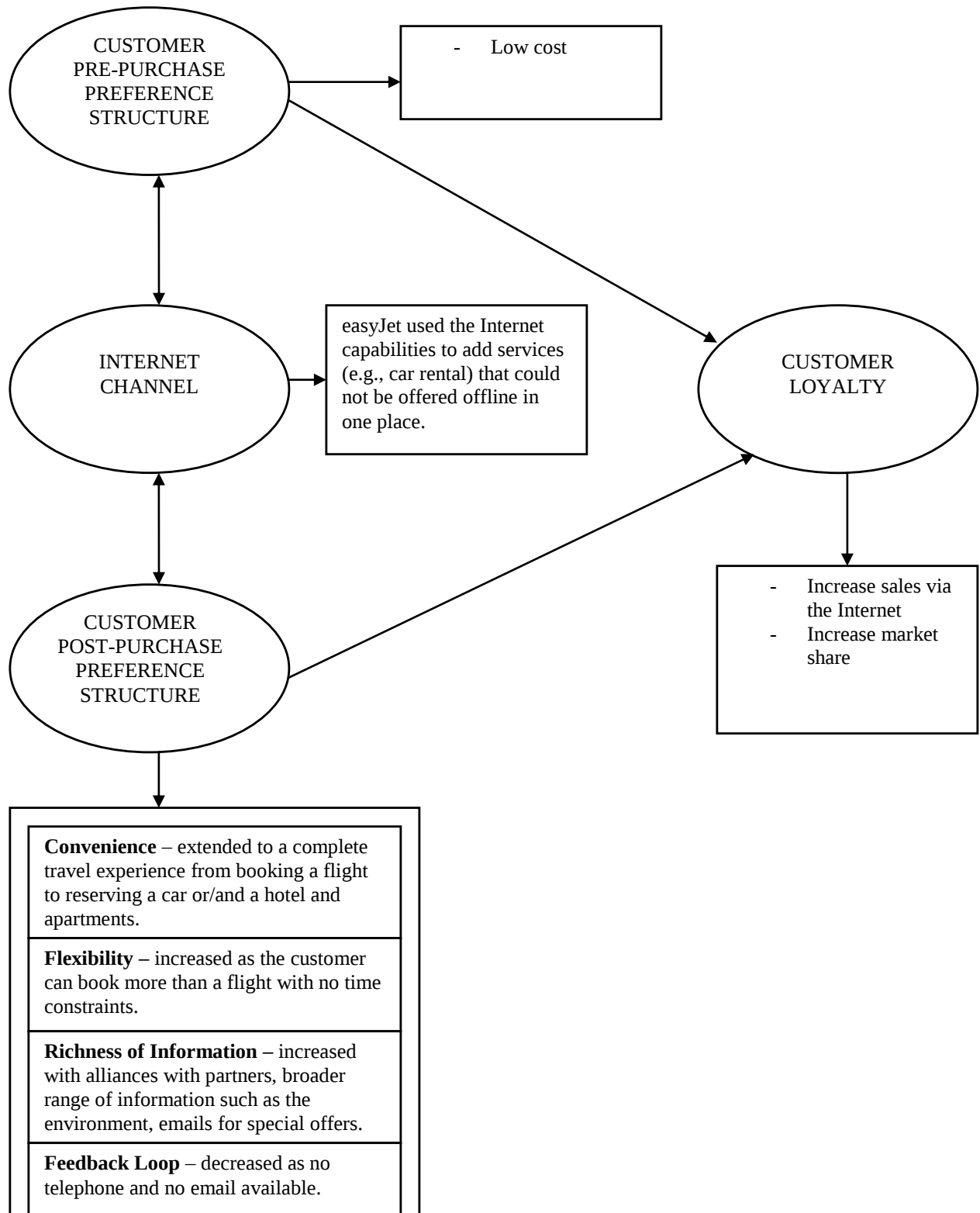


Figure 43: A Comparison of easyJet Website Implementation against Themes from the Literature in 2007



The following table serves as a basis for considering how EasyJet viewed its customers' pre- and post-purchase preference structures and used the capabilities of the Internet as a modifier of those preferences.

Table 60: A longitudinal comparison of easyJet's Internet channel in relation to the theoretical model

EasyJet							
Pre-Purchase Preference Structure		Internet Capabilities		Post-Purchase Preference Structure		Loyalty	
2001	2007	2001	2007	2001	2007	2001	2007
Low cost	Low cost	A central strategic role Change of infrastructure that lead to a conflict of interest within easyJet Decrease call centre	easyJet used the Internet capabilities to add services (e.g., car rental) that could not be offered offline in one place.	Convenience – Increased Flexibility – Increased Richness of Information – Limited to news updates Feedback Loop - Limited to email and call centre number	Convenience – extended to a complete travel experience from booking a flight to reserving a car or/and a hotel and apartments. Flexibility – increased as the customer can book more than a flight with no time constraints. Richness of Information – increased with alliances with partners, broader range of information such as the environment, emails for special offers. Feedback Loop – decreased as no telephone and no email available.	Strong effect on customer acquisition Strong effect on customer loyalty	Increase sales via the Internet Increase market share

The evidence would suggest that easyJet had an unambiguous understanding of their customers' dominant attribute, namely low price. The low cost global connectivity was used to directly structure their organisation such as the elimination of a high cost call centre. By 2007 the low cost of adding complementary services was the progression made by coupling low cost global connectivity to interactivity. By 2007 the range of services to improve convenience would suggest that easyJet had a view of their customers' preference structure that was still driven by price but customer acquisitions could be made by appealing to more full service orientated preference structures. The range of services offered was complementary to the journey being undertaken. Convenience was therefore being seen as an increasingly importance attribute. With regards to loyalty easyJet seemed to be orientated to a behavioural view where customers came to the transaction with a firmly formed preference structure (low price). The addition of convenience services would be a case of attempting to adapt that preference structure during the course of the transaction.

CHAPTER 14: RAC MOTORING SERVICES

CASE: A ROUTE TO NEW SERVICES

INTRODUCTION

The case was compiled from in-depth interviews conducted in February 2000 with Ms. Georgina Ross, Marketing Communications Manager of RAC Motoring Services in London, U.K. In addition published sources and the RAC website were used to complement the face-to-face interviews. This interview lasted for almost two hours. The last interview was conducted over the phone in 2007 to examine how the company's perspectives of the Internet context and their customers' preferences had evolved over time.

RAC PERSPECTIVE ON CUSTOMER PRE-PURCHASE

PREFERENCES

The purpose of the initial part of the interview was to establish RAC Motoring Services understanding of their customers' pre-purchase preferences.

Brand Values: Trust and Reliability

"There's the communication. Everything we do and say in terms of talking or touching a customer has to relate to the brand values. So everything has to support the RAC brand

whether that's a phone call, a letter, the website or anything. You know that's the most important thing. I think if all of the sudden, he starts to getting a letter which really didn't seem like RAC then customers don't relate it. The other core thing is obviously the ground level service that they get in breakdown that's the patrol going out to fix the car. That as well has to dictate the customer service that we want. That is what the customer is buying. They're buying the insurance that somebody will come out to fix the car and get them back on the road. And that will dictate whether the customer stays or goes really. It doesn't matter how good your call centre, website or anything else is if the customer gets a full service from you. It doesn't mean to say we have to fix the car but that's the aim. But even if we don't fix the car, we have to make sure that the experience was good or as good as it could have been given the situation. For example depending on the level of service they buy we can let a car but it's also that added extra you know that cup of tea at the side of the road when it's cold or the lend of a jacket when it's cold. Those kinds of things make them think yes, that's OK, and it wasn't so bad you know."

RAC USE OF INTERNET CAPABILITIES

This section analyses the qualitative data along the dimensions of Internet capabilities. The purpose is to reveal RAC Motoring Services level of understanding of the Internet capabilities.

No Strategic Marketing Context

"The RAC has had a website for years in terms of just a name and a phone number on the Internet just to own the main name really more than anything so that no other company could come and take it."

Towards a Marketing Strategy Led Website

Since 1997, all services on the RAC website were created by marketing people.

“Then we repositioned and re-branded the business in 97, April 97 which led to the new logo, the new design and everything else. And what we were looking for was a real tangible solution to the repositioning, which was all about mobility. We wanted to be a mobility organisation or solutions to people. And although we could talk about it, it was a case of finding a way to demonstrate it and the Internet at that time provided the ideal solution. It’s fully marketing led.”

In 2000, the RAC marketing department viewed the Internet as creating a new business opportunity as well as extending the current business.

Creation of New Online Services

In 1997, two services were created online:

“So what we did is, we really kind of explored how we could deliver information to people online and what we had internally to do it. So selling breakdown cover was an obvious choice, we had to do that; no other major breakdown company was doing that. And we also wanted to provide something else and within RAC we have a lot of traffic management information collected by the travel team as well as through traffic master. It was an ideal opportunity to create a new product, which led to the half hourly updates that we have on the site. And those were the two core products launched in 97.”

From 1997 to 2000, two new services were created using the Internet capabilities:

“Since then we developed that mobility area into a hotel finder. It takes the database of about 4000 hotels you know and really gives a valuable service for people. Obviously there are bigger ones as well but with the brand name and accreditation and trust that goes with the RAC then it provides something smoother to handle than other hotel looking systems can't provide. And that's kind of developed into other services including route planner you know everything else that we have. That's how we started.”

As a result, the separation of contact, content and context derived from the Internet capabilities (Rayport and Sviokla, 1994) led to the creation of new products sold online. This

separation might only be partial for some customers who still required a help line number. However the Internet offered a full separation of RAC employees from the customer as a partial separation was a choice not a necessity as pointed out by Ross:

“If you go into buy something from the site you won't necessarily have any direct contact with RAC staff at all. You can if you want, there is a call system on there but that's by choice rather than necessity and then you don't actually make the purchase on the site, you make the purchase through the call centre.”

In 2007, more new services were added to the existing ones such as Mileage and fuel claim calculator. In addition a business customers' website was created. This was an important area of RAC business that was not profitable back in 2000 and that had now turned profitable with the Internet.

Interactivity

Was a High Degree of Interactivity Required for the RAC Website?

“The objective of the site when it first started was to make it as interactive as possible to always provide somebody with something to do. You know we started off with a very almost arrogant position of we will not put phone numbers on the site because the site is here to deal with people on line. No phone numbers, nothing. Now we have sort of taken a bit of a step back from that because we found that as the site grew in traffic and maturity that we won't provided information that people wanted us to give them on line so they were e-mailing us with lots of questions. And they were frequently asked questions about international driving permits, about technical information about car maintenance. All of these kinds of information are very flat. It's not interactive but people were asking us for it. So you have to build that into the site because you know in two ways we didn't have the resources to manage the amount of e-mails that were coming in and it showed that we were not provided the best customer service. If people wanted that information we should give it to them. So it's kind of let us step back and look at the information and how interactive it was.”

In 2000, the RAC website was dealing with 500 emails per week sometimes more depending on any new information displayed on the website.

The Success of an Interactive Forum

“But also with the site we have the voice section, which is this chat forum. When it started, it was absolutely incredible the amount of activity that goes on that. I think that it suffers at the moment through the way that it's set up into the different sections but we are addressing that.”

Ross explained why the chat forum was more popular at the beginning than now:

“It used to be one big pot on the site and we have kind of split in through the site in different areas and the feedback that we have from the customer is that they prefer it as a one big pot. So we'll go back there.”

In 2007, the RAC website reverted to the idea of splitting the forum into different themes and each theme in turn contained various categories. For example under the “driving theme” categories such as “motoring finance and insurance” appeared. In this way, it was easier for RAC to use the emails provided by the chat forum as directions in terms of what information customers wanted on the website.

The main benefit of having a forum was described by Ross as follows:

“But I think that really, it builds a community on the site, it gives people something to go and have a look at, go and see what the latest debate is or anything like this. It's purely customers, RAC don't get involved unless there is a need to. It's just customers managing their own conversation. It's good.”

Competitive Move

"I think it's much more interactive than the breakdown competitors in terms of the contacting area with your voice section. AA is beginning to go down that route, but they are still not to the same degree as we are. With other motoring sites that are coming up, I still think RAC at the moment is leading the way in terms of what you can do on line. That may not always be the case but because new companies are coming in with new sets of experiences you know everything else. They start from scratch; we are building on something that's already there."

However the interesting point that Ross raised was that for RAC to deliver higher value than competitors, RAC needed to identify customer preferences as a starting point.

"I don't think there's so much of a winner in this area anymore as long as you're delivering the best customer service, you win. And if that means information, interactivity or development then you have to hit the level that the customer wants and is suitable for the information that you are providing. And as long as you do that, you're getting it right."

Increased Efficiency for RAC

"It's more efficient in terms of the customer comes to you. They made the choice. They can do it 24 hours a day. And you know you deliver the information once and then the customer does the hard work. At that extent, yes it's more efficient but that doesn't mean it's easier you know because there is more attention to it, you have to keep it going; you have to keep it fresh. You can't you know with brochures for example, you could do a print run and that would be it for 6 months. But you can't build a site and sit back and let everything happen. It won't work that way."

Breaking the Trade-Off between Reach and Richness

Some authors described the distinctive capabilities of the Internet by focusing on how the buying environment was deconstructed. For Evans and Wurster (1997) the dissociation of the physical flow of products to the related information offered opportunities for all participants in the value chain.

“I think that the biggest thing that people are talking about is a new way of doing business rather than a specific activity which the Internet will help people by. It's a complete business transformation. You can treat people as individuals you can sell different products you can bring goods to market quicker, you can take risks you couldn't do in a traditional business and you have to because the .com companies come so fast with an awful lot of money as well”.

This quote implied that the Internet was viewed as a new way to conduct transactions rather than an alternative communication channel. The way the online RAC strategy had evolved was to increase online traffic and thereby use the Internet as a tool to add value to their existing customer relationships.

An Increase in Reach

The Internet led to an increase in reach at lower cost than when using other marketing channels such as direct mail.

“When you buy breakdown cover we claim you as a member of RAC and obviously previous member relationship management has been through direct marketing. With the Internet obviously then it gives you a much greater opportunity to handle that relationship faster, cheaper, better. And you can have that relationship with other customers as well, they can be AA members, they can be anything. So you can develop a rapport with somebody much easier in a much more cost-effective way.”

An Increase in Richness

“The Internet gives you the opportunity to develop one to one marketing and it is best. This is the all-learning process and people are beginning to understand the importance of personalisation on sites. People don't want to be e-mailed with lots of information they don't want. They want information that they have asked for. People like Last Minute and QXL are great sending newsletters but it is general information. Now if you could personalise that by saying: ‘tell me about skiing holiday’ and likewise then that's much more valuable.”

“The technology behind it allows the personal relationship to develop because you can create databases. You can hold a database a lot easier and it's the speed at which it's growing allows you to do things you will never do off line because traditionally off line businesses don't move that fast. So I think mostly the Internet gives you that dynamic market place basically”.

In addition to personalisation, the increase in richness came from the online customer experience. Ross believed that the customer experience online was more important than extending the product ranges to offer motoring services as competitors would imitate them quickly. What was less easy to imitate was to add value to the customer by delivering the service or product with a different spin. Ross gave an example of what was achieved in 2000:

“For example we wanted to provide a route planning service because we have the traffic news and naturally with the traffic news we wanted to provide something different. You know another service; a mobility service, which will help the customer, gets from A to B so we source a supplier for the route planning data, a third party. We licence that information from them and the next thing was to say OK we can provide a route planning service, we've got that, that's fine but how do we make it different from another route planning service. And the answer really came down to the fact that we have the traffic news and we could create a unique product by putting the route planning together with the traffic news and delivering something much better. So the customer doesn't have to go in, find the route, come out and look at the traffic news. It's all together as one.”

In addition, Ross emphasised that as the three main motor breakdown organisations (RAC, AA and Green Flag) were similar in terms of the purchase of breakdown cover, only the experience of the site made the difference. The sites were very different and they portrayed the businesses: AA's site was insurance focussed whilst Green Flag was just breakdown compared with the RAC website that offered more useful information.

The Effect of the Internet on the Rest of the Business

As argued by Evans and Wurster (1997), using the Internet led to the deconstruction of the value chain. As a result the role of other departments needed to be re-considered.

A Progressive Reduction of RAC Call Centre

In 2000, RAC recognised that with the development of an e-business, the structure of the current business was required to change. For example Ross explained that the RAC call centre was going to gradually be reduced as a result of the development of the company website. Ross described how this change of direction was affecting their call centre:

“Call centres see the website as a threat. They have a job to do in terms of selling to the customer over the phone, in terms of managing the customer's relationship over the phone. As an individual operator on the phone it is quite a threat to see quite a lot of talk about the Internet prosperity. Call centres I mean everybody knows that in the future call centres will reduce or they will have a different job to do or there will be a mixture of both. But as a business we don't know where that is going to take us at the moment. We know it's going to move. They are not going to have call centres that purely sell RAC breakdown cover. They might be customer managers. They might be speaking to somebody who's having a problem finding something on our site, completing a form. They might be there to talk him through it watching the same screen that the customer is looking at maybe.”

RAC employees at the call centre were multi-skilled in the sense that they dealt with customers' queries and sales to customers. The reward system was based on a combination of a fixed income and a commission. Consequently would the employee be as helpful to a customer who had only queries about the Internet compared to a customer who want to buy a breakdown cover over the phone. This question raised the issue of redefining the role of the call centre.

In addition, the effect of the development of the website had an impact on the other departments of the business. An example was given by Ross:

“And also the other big area is IT. There is a big push from the IT department led by marketing at the moment to create the system that's required to deliver an e-business. So there is an awful lot of work going on in that area because obviously when we developed the site we developed it independently of the legacy system we have. And now it's the case of if you want to make the step change that one bit further we have to bring the rest of the business up to speed.”

A Lack of Integration

“There are various systems disadvantages in terms of we haven't integrated with the RAC legacy system. There are core database systems, customer relationship management systems in RAC. The site is a completely separate product. To make the most of this relationship, you have to bring the two together. So that if you walk up to a salesman outside Tesco and have a conversation with him, he might be interested in breakdown cover but you know he'll think about it. The real value comes if he can log that conversation and say that I spoke to Mr Smith and said he might be interested and there's a record there. Mr Smith can go home 4 hours later go into the website and go oh yes you have spoken to Mr Jones, outside Tesco, you had a conversation, and do you want to take it up now: fantastic. You know and then that relationship starts and it doesn't matter where the customer comes in to us. The Internet becomes another mean of communication. It doesn't dictate to the customer how they speak to us. At the moment we say you either phone us or you go to the Internet or you do this. I think the real value that comes from this is building a system, which lets the customer decide. And the Internet can be a very dynamic way of doing this.”

CUSTOMER POST-PURCHASE PREFERENCES

The following section considers the interview data from RAC Motoring Services perspective of the key attributes of their online customers.

In the quote below, Ross summarised how the relationship between RAC and its customers had changed with the Internet:

“Obviously we can't change the ground level; we can't change how the patrol deals with customers on the roadside. That's up to the patrol. But the communication and the brand values we can demonstrate and develop significantly on line you know through the customer contact that we have, through the demonstration of the RAC being flexible, experts, professional, brand, customer focussed you know we can really demonstrate that to the audience. So it's really how the Internet has helped. But I think also it's a case of it adds another dimension you know the opportunity to develop or deliver more to the customer. Before the customer's communication would be on a particular subject or fragmented so at one point they get breakdown information, the next thing they might get would be travel information 3 months down the line. Once they come to us on the site we can deliver all of that at once and it's up to the customer how they choose it. So I think the main thing is that the communication channel, the power of the communication channel gets back to the customer.”

Richness of Information

“We can provide new services like route planning, like the hotel finder. We had those kinds of services already but on the site we can provide it quicker, easier, and cheaper and obviously, it is giving us the opportunity to provide new information, stuff that people won't normally think RAC do.”

“Well this is the main thing you see, there is only a certain amount of people that think we would know or we have the information about their technical advice, about how to protect your car in winter. By putting that information on site add value to the RAC experience. It just opens up to anybody so you become the first point of contact and it is trustworthy the information, people believe it because it's from RAC. So that's the main difference.”

“We could never provide that much information to one customer at one point of contact and we could never speak to people 5 times a week whereas with traffic route planning we can because they are coming to us.”

In 2007, the RAC website provided additional information in a more structured way under the section “RAC know how” in order to increase the ease of use for the customer. Each sub-

section represented an activity that the customer might undertake at some stage such as “Driving in Europe”, “Learning to drive”, Buying and selling a car” and “Owning a car”. The intent was making it simple for the customer to gather enough information.

The Convenience Call

In the literature, convenience was defined by the concepts of saving time and efforts (Lohse and Johnson, 1999; Berry, Seiders and Grewal, 2002; Rohm and Swaminathan, 2004; Farag et al., 2007).

The RAC website increases online convenience by offering their products and services in one place:

“There is everything in one place while if you try to find that much of information you will probably have to make 20 phone calls.”

This gain of time and effort added value by increasing efficiency for the customer.

LOYALTY

The Internet: Just another Communication Channel?

For RAC Motoring Services the Internet was definitively not just a communication channel as explained by Ross in 2000:

“It's a lot of things. It's a sales channel that's becoming more important to us. It's a customer relationship tool because we are having relationships not only with our end customers but with members of other breakdown organisations as well.”

However later on in the discussion, Ross mentioned that the Internet was not seen as a replacement channel but rather another communication marketing channel that added value to the customer and consequently was complementary:

“I think it's also important to point out that I don't think you can ever do it alone. An Internet only company will never work by only advertising on the Internet for example. This is why people like Last Minute or Smile use all the other mediums as well to communicate to their customers because although the Internet is everything that we said you have to bear in mind that it's still just another communication channel at the same time and you need television, you need press, you need everything to drive the awareness of your product.”

This statement was probably directed at traditional products as Ross mentioned earlier that the Internet offered the possibility to launch new products such as half hourly update and hotel finder that could not be offered through traditional marketing channels.

Increased Profitability

In 2000, Ross mentioned that even if the website was just at a breakeven point but it will rapidly turn profitable as customers tend to buy higher basic product:

“The joiners that we have had via the site have historically been of a higher value than any other business channels in general. So we have been selling people the higher quality they have been naturally up selling themselves. Now you can put that down to a variety of reasons. That might be because the people on line have more disposable income and are naturally inclined to be of a higher bracket because of the Internet audience's you know the A, B, C one type person in the office you know, whatever. So I mean all of that could contribute to the fact that we have had the higher product purchased. I think also when you haven't got somebody selling to you; you naturally pick up product that you want.”

According to Ross the RAC website reached their most profitable customer segment which was the breakdown customer and that the Internet supported this segment through online services.

The overall effect of the Internet was an increase to the business's bottom line:

“What we can say is that Internet sales are growing and the amount of traffic that we're getting to the site is growing. For example on the website, we're getting about 100 000 new visitors to the site every week.”

Regarding the online sales, RAC reached 2,000 sales online in December 2000. However the growing amount of traffic was not representative of the sales ratio as the conversion rate was still low because most people come to the site to look at the traffic and travel information for example. According to Ross, the sales conversion rate was 0.003 in 2000.

In addition, Ross stated that RAC was getting a higher level of repeat business than through traditional methods by using the Internet.

Focus on Retention

In 2000, the Internet was more viewed as a way to add value to the existing customer base than to attract new ones even though AA customers visited RAC website when their policy expired:

“The retention rate is incredibly high anyway. It's very good so there isn't that much fluctuation between the previous. The renewal rate is in its 80% you know which is very high

so you're talking of a difference between 81 and 82%. You really can't put that much down to the Internet. What it means is that you don't loose them to somebody else who is adding more value than you are. So I don't think you'll see a big increase but you won't see a loss.”

The overall effect of the Internet on customer retention seemed to be positive as described by Ross in 2000:

“We did some brief analysis on very small samples of people who had enrolled on the site and what their renewal rate was against the average in year 1, so the first year of membership and it was higher. People who had enrolled on the site were naturally higher in renewing than the general. So that was positive and you can put that done to the fact that if they enrolled then they probably had an on line relationship.”

SUMMARY

A couple of years after the launch of the first RAC website in 1995, the development of the website was led by the marketing department. In 2000, the major benefit of the RAC website was the creation of new online services with the aim of retaining existing customers rather than to acquire new ones. Every September the RAC website was modified based on customers' feedback on the type of information desired.

In 2007, the RAC website had an increased number of services presented in a more structured way to help customers make faster decisions. The improvement of the website was focused on bringing third party service providers in to work with RAC with the objective to create a motoring portal (e.g., auto sales, airport services).

The online strategy seemed to have remained the same from 2000 to 2007 that was to be a mobility service which helps customers to get from A to B.

Figure 44: A Comparison of RAC Website Implementation against Themes from the Literature in 2000

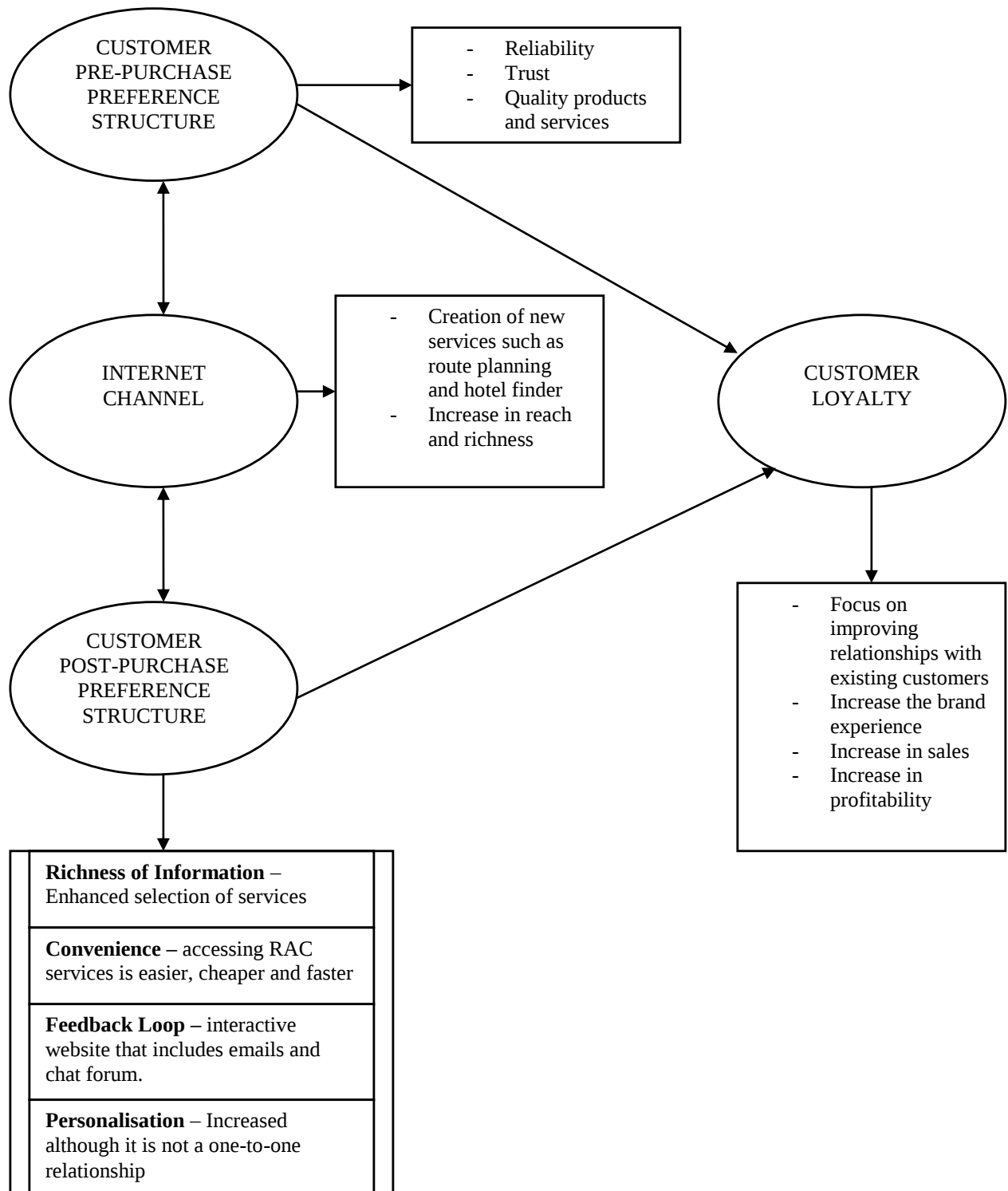
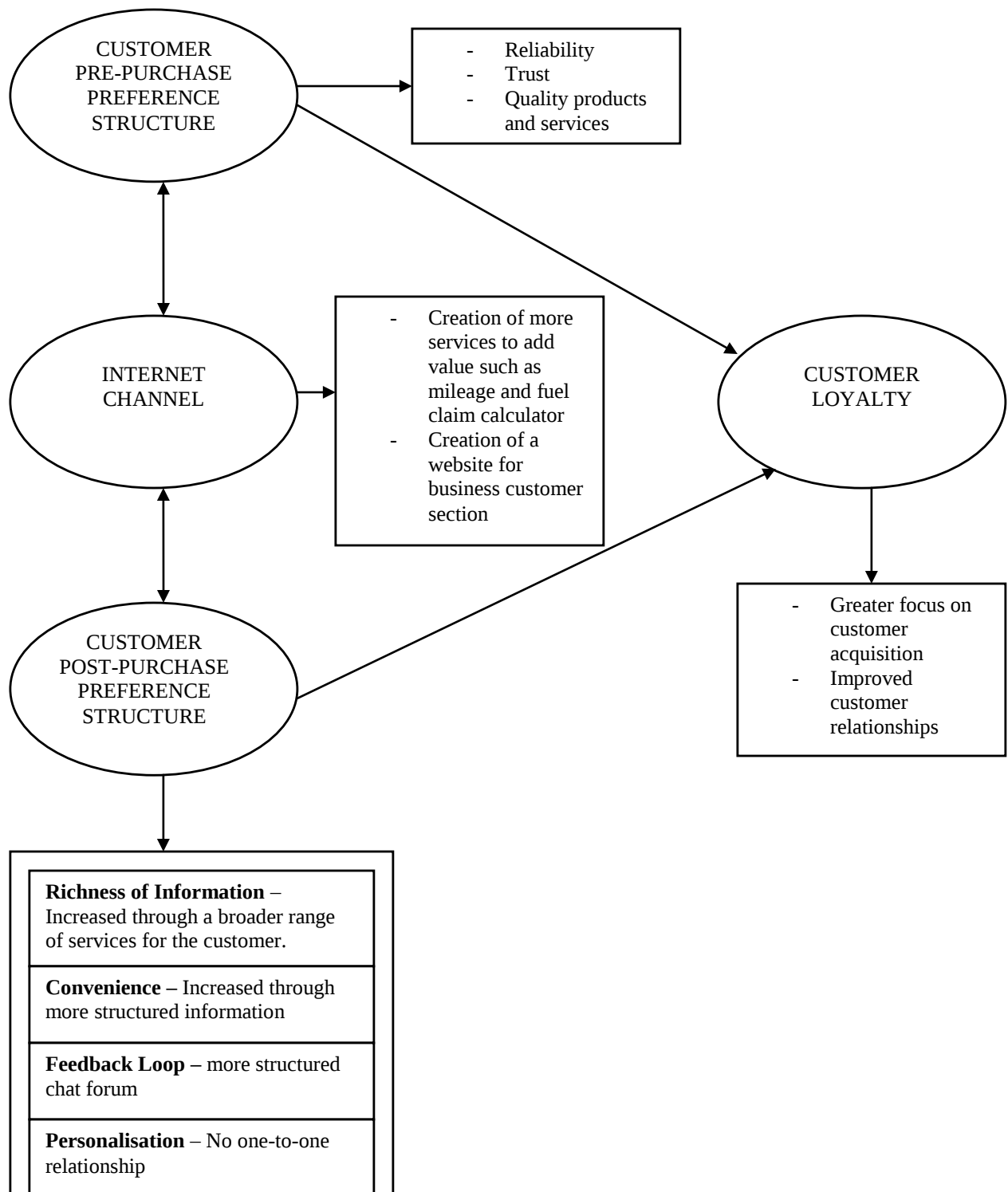


Figure 45: A Comparison of RAC Website Implementation against Themes from the Literature in 2007



The following table attempts to compare and contrast the changes to RAC's understanding of their customers' preferences structures from 2000 to 2007.

Table 61: A Longitudinal Comparison of RAC Motoring Services Internet Channel in Relation to the Theoretical Model

RAC Motoring Services							
Pre-Purchase Preference Structure		Internet Capabilities		Post-Purchase Preference Structure		Loyalty	
2000	2007	2000	2007	2000	2007	2000	2007
Reliability Trust Quality products and services	Reliability Trust Quality products and services	Creation of new services such as route planning and hotel finder Increase in reach and richness	Creation of more services to add value such as mileage and fuel claim calculator Creation of a website for business customer section	Richness of Information Enhanced selection of services Convenience Accessing RAC services is easier, cheaper and faster Feedback Loop Interactive website that includes emails and chat forum. Personalisation Increased although it is not a one-to-one relationship	Richness of Information – Increased through a broader range of services for the customer. Convenience – Increased through more structured information Feedback Loop – more structured chat forum Personalisation – No one-to-one relationship	Focus on improving relationships with existing customers Increase the brand experience Increase in sales Increase in profitability	Greater focus on customer acquisition Improved customer relationships

Source: this study

The RAC business model seems to be built upon an unchanging perception of the key attribute that is the basis of their customers' utility value. This is quality as reliability and quality as excellence. This understanding appears to have transferred into a focus on the interactive capability of the Internet in the creation of new services. The development of the

generic nature of website does not appear to have changed over time reflecting a consistent understanding of customers' preference structures. The RAC appears to have designed their website on a combination of behavioural loyalty as far as reliability of service is concerned and on attitudinal loyalty on the quality as excellence dimension.

CHAPTER 15: CONCLUSION TO PART IV

INTRODUCTION

This chapter integrates the preceding interviews with the literature review and theoretical model. The purpose of this integration is to provide a context from which conclusions can be drawn in relation to the proposed model. The structure of the chapter follows the development of the literature review. Each of the dimensions lifted from the literature review are compared and contrasted across the company interviews.

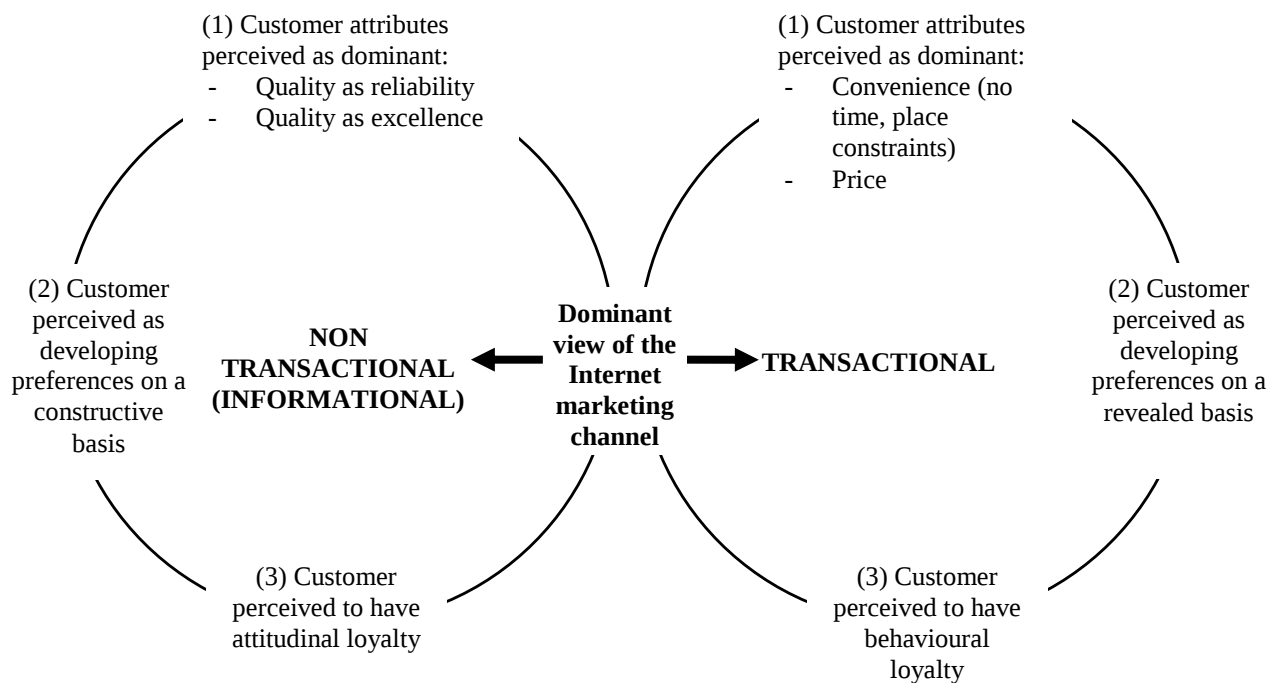
A SYNTHESIS OF THE LITERATURE WITH THE CONCLUSIONS OF PART IV

The chapter's main conclusions are (1) that the company's view of whether the Internet is a significant channel through which to capture future transactions shapes its use of the Internet's capabilities, (2) that the nature of the company's product or service has an important bearing on whether it views the Internet channel as transactional or informational (3) if the company viewed its customer's preference structure as being dominated by quality attributes (as reliability or excellence) then the Internet loyalty orientation would be attitudinal rather than behavioural (4) conversely if the preference structure was viewed as being dominated by time based (convenience) and price attributes then a behavioural orientation to loyalty was

predominant (5) similarly, a company's view of their customers' preferences being formed on a constructive or revealed basis was linked to the company's view of their customers' loyalty orientation (attitudinal relates to constructive and revealed relates to behavioural), (6) there can be a difference in offline versus online preference structures (7) companies can erroneously assume traditional offline preference structures are the same as online preference structures or (8) assume that the capabilities of the Internet will not significantly enhance performance on key attributes.

The following diagram attempts to link these conclusions together:

Figure 46: Diagram to Show the Relationship between Main Dimensions of the Qualitative Conclusions



Source: this study

This diagram suggests that a company's commercial orientation to the Internet channel is formed around their understanding of their customers' preference structures. This understanding seems to lead to either a transactional or informational bias in the way that the Internet capabilities are deployed. In similar fashion it forms the company's orientation to loyalty management. The implication of these conclusions is that it is imperative that a company understands their target customers' preference structures if they are to avoid deploying the capabilities of the Internet in an inappropriate way.

The balance of the chapter takes a closer look at preference structures, use of Internet capabilities and approaches to loyalty. A cross interview approach is taken.

CONCLUSIONS ON PREFERENCE STRUCTURES, CAPABILITIES AND LOYALTY

The following table summarises the data in relation to preference structures, capabilities and loyalty and draws conclusions by comparing and contrasting them.

Table 62: A Summary of Conclusions

Company	Preference structure type	Preference structure development	Loyalty type	Dominant view of Internet channel	Dominant use of Internet Capabilities
Sainsbury's	Dominated by quality of product and a traditional view of convenience (location)	A constructive view of the development of preference structures e.g. through interaction with store staff, provision of information	An attitudinal view of customer loyalty through reinforcement of the brand e.g. extensive use of forums, provision of recipes.	Informational moving towards transactional	<i>Low cost global connectivity</i> for richness of information moving to <i>transaction interactivity</i>
Mercedes Benz	Quality as excellence and quality as reliability	A constructive view of the development of preference structures e.g. interactive car configurator, dominance of information presentation	An attitudinal view of customer loyalty through reinforcement of the brand e.g. sophisticated ways of presenting information which reinforces quality attributes	Informational	<i>Low cost global connectivity</i> for information dispersion and <i>informational interactivity</i> on the website
EasyJet	Low price and convenience	A revealed view of customer preferences e.g. Internet capabilities used strategically to lower costs and increase	A behavioural view of customer loyalty e.g. no time place constraint in booking	Transactional	<i>Low cost global connectivity</i> and <i>transaction interactivity</i>

		convenience			
RAC	Service quality as excellence and reliability as excellence	A constructive view of customer preference development e.g. many interactive informational services	An attitudinal view of customer loyalty e.g. information based services designed to reinforce service/ dependability branding	Informational	<i>Low cost global connectivity and informational interactivity</i>

Low cost global connectivity appears to be a capability that is basic to either a transactional or informational orientation of the Internet by companies. The differences between orientations in a company's use of the capabilities of the internet lie in the use of the interactive capability. The bias is either informational or transactional. The Internet channel is either designed mainly to allow customers to extract greater information through the interactive features or to permit them to easily buy the product or service using the interactive capability to complete the transaction. Why does this difference arise?

The difference between a transactional or informational view of the Internet seems to be rooted ultimately on the company's view of the customer's preference structure. If the brand relies on the dimension of quality, then the company sees the strategic role of the Internet in terms of providing information and interactive experiences (flow) that attempt to influence the construction of those customer preferences and enhance their attitudinal "ownership" of the company's brand. On the other hand if the company sees the customer's preference structure being well formed (revealed preferences) before any interaction with the company,

then the company sees the strategic role of the Internet to provide an efficient means of prompting action (behavioural loyalty) in the form of a transaction.

These longitudinal case studies provide evidence for the defining importance of understanding online or potential online customer preference structures before orientating the company's Internet strategy. These preference structures may not change significantly over time but the capabilities of the Internet may change the scope and performance levels on key attributes or indeed open up new ways of doing business.

The next chapter is an integrated discussion of the findings of both Part III and Part IV.

PART V - DISCUSSION

INTRODUCTION TO PART V

This final chapter contains discussions of the quantitative and qualitative results. The implications of these results for managers are considered along with limitations and interpretation. Ideas for future research that builds on these discussions conclude the study.

The chapter starts with a discussion of the quantitative and qualitative results in relation to the research question.

AN OVERVIEW OF THE RESULTS IN RELATION TO THE RESEARCH QUESTION

The qualitative and quantitative findings provide different insights into the question:

“Do the capabilities of the Internet result in a changed prioritisation of customer preferences which in turn lead to changed loyalty behaviours?”

The following table attempts to summarise the differences between the quantitative and qualitative findings.

Table 63: A Comparison of Qualitative and Quantitative Findings

Dimension of the research question	Qualitative findings	Quantitative findings
Capabilities of the Internet	a) Low cost global interactivity a base line requirement for all Internet marketing models b) Interactivity bias in the Internet model can be either informational or transactional	There can be a different prioritisation of Internet capabilities between online and offline customers
Changed prioritisation of customer preferences	a) Company's traditional perceptions of customer preferences carry over into Internet channel i.e. company's perception of customers' preference structure remain unchanged b) Emphasis on capturing more of the same preference structures through low cost global connectivity c) How customers preference structures are seen to form (revealed or constructive) influences overall Internet channel strategy (informational versus transactional)	There can be significantly different preference structures between online and offline customers
Changed loyalty behaviours	a) Attitudinal loyalty is linked to constructive preferences which in turn yields an informational approach to Internet capabilities b) Behavioural loyalty is linked to revealed preferences which in turn yields a transactional approach to Internet capabilities	The effect of differences between online and offline preference structures on loyalty behaviours was indeterminate
General conclusion	Internet capabilities do not change the traditional preference structure rather they provide another means of supporting the pre-existing view of how customers' preferences form and how to create loyal customers.	There can be significant differences between online and offline customers' preferences structures

What becomes clear from the above table is that (1) companies have tended to carry over their traditional assumptions of their customers' preference structures into the strategic design of their Internet channels, however (2) there is the possibility that there are significant differences between online and offline customer preference structures in both the rank order and weighting of attributes. This gives rise to (3) the possibility that companies may limit the potential use of the capabilities of the Internet to merely gathering more of the same type of customer through low cost global connectivity. Consequently companies could be (4) excluding the opportunity of increasing market share through Internet channel design which caters for different customer preference segments and (5) investing in an Internet strategy that could be erroneously based on the wrong perceptions of customer preference structure development and loyalty type or (6) losing competitive capacity to those who have a more refined understanding of differences between online and offline preference structures.

DISCUSSION OF THE QUANTITATIVE RESULTS

The main features of the analysis of the choice-based conjoint utilities are (1) the number of significant differences between the preference structures of online and offline grocery customers (2) time and quality attributes are important to both online and offline shoppers (3) average utility values for time and quality attributes were higher for pre-purchase preference structures, (4) the preference structures of high and low frequency shoppers were similar (5) demographic variables have a minor role to play in explaining the differences in pre- and post-purchase preference structures (6) offline customers confirmatory model provided the best fit characteristics with the data.

As suggested by the theory it was to be expected that there would be significant differences between pre- and post-preference structures. The attributes that discriminated between pre- and post-purchase preference structures were delivery cost, delivery reliability, time to order and number of substitutes. The attribute of quality was marginally above $\alpha = .05$. These results remain constant when rates of change in utility values were considered.

Why are these particular attributes discriminatory between pre- and post-purchase preference structures whilst the attributes new product section, discount, help line and delivery time are not? Looking at the broad nature of the discriminating attributes, time and quality are key dimensions and are also high in the rank order of both preference structures. However, looking at the average utility values, in all cases, except for the attribute on-time delivery, the average utility value for these discriminating variables is higher for pre-purchase preference structures. Why? One explanation may be that the pre-purchase preference structures represent an over optimistic expected utility to be gained from the capabilities of the Internet whilst the post-purchase preference structure attribute utility values have been modified downwards by the actual experience of shopping online, without substantially changing the rank order of attributes. The exception was the attribute delivery on time, which may have increased due to post experience recognition of additional problems when deliveries do not occur when they are supposed to.

Which of the Internet capabilities may have influenced this outcome? With regard to time based attributes this would be no time place constraint. However the post-purchase utility value is lower on these attributes. This suggests that the performance of this capability did not meet pre-purchase levels of utility value (expectations). This points to the conclusion that

a gap can exist between pre- and post-preference structures based on levels of “felt” performance of the capabilities of the Internet. Consequently it would be insufficient to merely identify which capabilities of the Internet are important but rather the size of the “preference performance gap” on the key attributes is the real competitive issue. Support for this view comes from the results of differences in pre- and post-purchase preference structures for high and low frequency online shoppers. Here virtually no significant differences were found (except for delivery cost). This would suggest that perhaps conformity of expectations had resulted from actual online shopping experiences.

The attributes of new product section, discount, and help line were not discriminatory and were not high in rank order in both preference structures. This underlines the importance of the convenience based capabilities of the Internet rather than those capabilities that support richness of information.

However can these differences in pre- and post-purchase preference structures be attributed to the modifying effects of the capabilities (or rather the performance of these capabilities) of the Internet alone? Or are there other intervening variables that may have caused these differences? To answer these questions a range of demographic variables were tested for differences between pre- and post-purchases preference structures. These were age, income source, number of children, house value, shopping venue and shopper type. The results on demographic variables would suggest that they have a minor role to play in explaining the differences in pre- and post-purchase preference structures.

The main feature of the structural equation models is the difference in fit between the online customers and the offline confirmatory models. The level of variance in the dependent variable loyalty explained by the pre- and post-preference structures also differs markedly.

There is support for the underlying theory posited by this study within the offline customers group judged by the measures of fit, coefficients and intercepts. The evidence supports a view that the quality dimension is the most important to customer acquisition and retention.

What explanations could there be for the different fit of the models and the weak regressions with loyalty? The first explanation could be the way in which the loyalty questions were constructed. Ratio rather than interval data could have been collected on the loyalty variables to allow for a wider range of responses with greater sensitivity. The problem is less likely to be a specification error in the conjoint experiment as 9 out of 10 attributes have significant differences in the utility values of levels.

At a theoretical level the preference structures as calculated in the conjoint experiment may represent the *desired* (pre) performance on each attribute but not the *felt* (post) level of performance as a direct result of experience. The difference between the desired performance and the felt level of performance may have a closer association with past and future loyalty behaviours. I.e. the smaller the difference between desired and felt levels of performance the greater the loyalty behaviour. The preference structures reported on provide insights into how the attributes could be used to weight the desired/felt performance differences to give a more sensitive appreciation of the relationship to loyalty behaviours.

What evidence is there in the results to support this theory? The main support comes from the difference between online and offline fit statistics, with offline customers showing better fit to the desired preference structures than online customers. This may suggest that the theoretical basis of the structural equation model better fits the preference structure *before* the actual experience of shopping online has modified the preference structure. Once the transaction has taken place then it may be more appropriate to relate the difference between the desired (pre) and felt (post) preference structures to changes in loyalty behaviours. The testing of this hypothesis would be the focus of further research.

No structural models for within the online customers group were developed (i.e. high versus low frequency online customers) because the sample size did not support the split (n=44 for high frequency customers and n=85 for low frequency customers). It is not recommended to carry out SEM with sample sizes less than 50 (Hair, et al, 1998). In addition the earlier t-test had demonstrated that there is considerable homogeneity between the attribute utility values of high and low frequency customers.

LIMITATIONS OF INTERPRETATION OF THE QUANTITATIVE DATA

The initial limitation to the interpretation of the results is defined by the sample, the population of which were the families of pupils attending independent schools in Surrey and South West London. The results are not generalisable across the population of online and offline customers within Surrey and South West London or more broadly the UK.

There is little evidence to support a misspecification error arising from the design of the choice-based conjoint experiment. In this regard 9 out of 10 attributes provided discriminatory power when the utility value of their levels was measured. However the loyalty measures (not conjoint based) would probably have benefited from being measured through ratio data rather than through interval scales. The loyalty measures lack breadth and sensitivity in relation to the breadth and sensitivity of the attribute utility values. This observation is supported by the highest Cronbach's alpha being (0.706) for expenditure and frequency as items of a loyalty scale.

The latent class analysis provided evidence that class membership could be predicted to a high level of reliability (0.944). This means that identification of underlying preference structures within attribute utility values was not a problem. This isolates the measurement of loyalty items as a weakness of this study.

The tests for time and quality construct reliability in the 2 confirmatory structural equation models suggests that caution needs to be exercised in the case of the online customers.

Overall the interpretation of the offline structural equation confirmatory model is probably more secure than the online model. One possible theory based reason for this was discussed above.

DISCUSSION OF THE QUALITATIVE RESULTS

The qualitative results lend themselves to a broader interpretation than do the quantitative results. An initial finding of the qualitative results is the absence in the early years of a strategic approach to the use of the capabilities of the Internet by some companies. By strategic is meant an approach which embraces a proactive understanding of the customers' preference structures and consideration of how the capabilities of the Internet could possibly be used to strengthen the business model. Why did Sainsbury's, for example, not pursue a strategic approach to the development of the Internet as a transaction based marketing channel? Some evidence is to be found in the interview transcripts. This evidence suggests that the culture of the organisation was coalesced around preserving the historic competencies and resources of Sainsbury's. For example being "efficient storekeepers for the last 150 years through well located stores". The requirement that shopping lists were first set up by the customer physically going into the store (at the cost of customer convenience) reflects Sainsbury's adherence to their traditional shopping channel. Indeed even in 2007 the Sainsbury's website reflects an emphasis on richness of information rather than convenience. If the quantitative results are compared and contrasted with respect to Sainsbury's, a preference gap is evident between the data collected from customers and the data collected for Sainsbury's. Sainsbury's data shows the company to have a view of the top preferences of the customer to be in store customer service, richness of information (new products, recipes) and product quality. Both online and offline customers (within the sample parameters) are saying that their top preferences are the time based attributes, ordering and delivery time (i.e. convenience) and product quality. These 3 attributes account for about 60% of customers' utility value. The attribute in common between Sainsbury's understanding and customers'

preferences is quality. The capabilities of the Internet cannot directly affect the quality of the physical products however the richness of information provided by their website may enhance a quality image for their products. This dimension accounts for about 20% of the customers' utility value. The time attributes where the capabilities of the Internet may provide substantial performance improvements are not viewed as important from Sainsbury's internal perspective. The top 2 time based attributes account for about 40% of customers' utility values. The implications of this gap for Sainsbury's management could include lower online customer acquisition and retention rates than their competitors. The overall implication is the Sainsbury's should have from the beginning been developing a transactional rather than an informational website.

And yet other firms with traditional marketing channels were capable of seeing the capabilities of the Internet as a new marketing opportunity. For example easyJet and RAC had strategically positioned their Internet marketing channels to deliver low cost convenience (easyJet) and low cost introduction of new products and convenience (RAC). Evidence from Tesco's website (within the same industry as Sainsbury's) demonstrates an emphasis on low cost convenience rather than richness of information. What enabled these companies to more closely align themselves with customer pre-purchase preference structures? Could it be that companies without a legacy such as easyJet find it easier to think strategically about the capabilities of the Internet? Indeed how well did the interview data fit into the theoretical model which links preference structures, Internet capabilities and customer loyalty?

The initial construct in the theoretical model is the pre-purchase preference structure. How well did the interviewed companies understand these structures? None of the interviewed companies had undertaken market research that was aimed at directly understanding customer pre-purchase preference structures as they related to the Internet as a marketing channel. EasyJet had a clear business model based on customers' high utility value for low cost airfares. This business model was carried over directly to the Internet and the low cost capabilities of the Internet were deliberately applied across a range of activities. The underlying business model for Sainsbury's is based on customers' utility values for convenience and product quality and yet there is little evidence that this historic business model had any significant cross-over into the use of the Internet capabilities in the same way that it had for easyJet. RAC on the other hand had quickly transferred its membership based customer service model into how it used the capabilities of the Internet. In these three companies there was a clear business model which represented the durable preference structures of the majority of their customers. However, only two of these companies successfully married this knowledge to the capabilities of the Internet to strengthen their business model in their early use of the Internet.

The Mercedes Benz historic business model was based on product quality (reliability and luxury) and service attributes which were delivered through an extensive network of dealers. The nature of the sales transaction required such a high degree of person to person and product interaction that the benefits of the disintermediation capabilities of the Internet were insufficient to change the business model substantially. Consequently transactions were likely to remain within the traditional marketing channel. Nevertheless Mercedes Benz had

utilised to the capabilities of the Internet to standardise information about the product and service offering and to lower direct marketing costs.

None of the companies interviewed provided information that suggested that they were systematically measuring the post-purchase preference structures of the customer. Changes to their websites were driven more through observation of what competitors were doing rather than changes in customers' preferences.

MANAGERIAL IMPLICATIONS OF MERGED QUALITATIVE AND QUANTITATIVE FINDINGS

When the findings of the quantitative and qualitative findings are considered together, what are the implications for management?

The quantitative findings point to the difference between pre- and post-purchase preference structures. The qualitative interviews point towards the importance of developing a clear strategy for the use of the capabilities of the Internet in those business models where convenience carries a high utility value and product information can be easily unbundled from the product itself without increasing transaction risk to the customer. Consider the difference between RAC products and Mercedes Benz products.

From these two findings a picture emerges that suggest that management should develop strategies for using the capabilities of the Internet in relation to customers' pre- and post-

purchase preference structures. These preference structures could be the same as those of the existing business model. The difference between the pre- and post-purchase preference structures may represent a competitive opportunity which can be delivered through improved use of the capabilities of the Internet. To be specific, management could approach the development of their Internet channel by asking the questions (1) in what ways does our traditional understanding of our existing customers' preference structures differ from online customers preference structures? (2) What new customer preference segments can be targeted through the Internet channel? (3) What balance should there be between informational or transactional website designs? (4) Are new competencies required as a result of new attributes? (5) Are new levels of performance possible on existing attributes?

To apply these conclusions management could proactively research the nature of pre- and post-purchase preference structures and then consider how the capabilities of the Internet could be deployed to improve the delivery of higher levels of utility to customers.

Let us consider these implications in more detail. At a strategic level clear choices are required. For example how attractive is the Internet marketing channel as a means for generating future quality transactions in existing markets? Does the Internet channel offer the prospect of penetrating new markets with existing products or perhaps existing markets with new products? The following diagram assists in exploring the strategic implications of the research findings by relating the capabilities of the traditional and Internet marketing channels to new and existing markets.

Figure 47: The market channel capability matrix

		CHANNEL CAPABILITIES	
		INTERNET	TRADITIONAL
M A R K E T S	EXISTING	(A) Increased utility performance on existing preferences leading to greater market share and transaction profitability? What investments? What capabilities? What competencies?	(B) Limits of increased utility through existing channel capabilities? Diminishing returns to new investment? Limits to extending existing capabilities and competencies?
	NEW	(C) Performance capabilities on new preference structures? What investments? What capabilities? What competencies?	(D) Performance capabilities on new preference structures? What investments? What capabilities? What competencies?

Source: This study

The qualitative findings have shown that there are potentially significant differences between market types in the deployment of the Internet marketing channel. The quantitative findings suggest that there are also differences in preference structures within the same market depending on channel preference (online versus offline shoppers). These market and channel differences mean that managers have strategic choices to make between marketing channel types or some proportional mix of marketing channels. The implications of these decisions on resource, competency and capability development have a direct consequence on the company's ability to gain a superior number and quality of future transactions.

With this in mind if we consider quadrant (A) of the market channel capability matrix where the capabilities of the Internet channel is considered for the existing market, a number of strategic marketing questions and choices arise. The starting point is existing customer preference structures – can the capabilities of the Internet provide greater utility value for existing customers than the traditional channel? The possibility may exist through higher utility delivery for increased numbers of future transactions leading to a higher share of existing markets. In addition the capabilities of the Internet marketing channel may lead to lower transaction costs resulting in an improvement in transaction profitability. Both these strategic opportunities may apply to the existing market through the capabilities of the Internet marketing channel. Are these benefits significantly superior to traditional marketing channels to make the investment in an Internet marketing channel and its underlying supply chain activities worthwhile?

The essential implication for managers from these findings is that understanding the utility values of the attributes that comprise their existing customers' preference structures is the starting point in making these strategic choices. Once these choices have been made i.e. which channel capabilities will better support competitiveness on future transactions, then functional level decisions can be made in a focussed and coordinated basis. For example (1) the level of financial investment for a given improvement in the number and quality of future transactions, (2) what organisational capabilities and competencies need to be developed and (3) the nature and quantity of scarce resources to be acquired. On the flip side of these strategic choices, decisions would need to be made in respect of obsolete resources, capabilities, and competencies.

In sum, the rationale for strategic change for existing markets is linked to understanding *a priori* customer preference structures and the combination of channel capabilities which provide the highest potential customer utility values at lowest cost. In quadrant (A) the risk is that historic understanding of these preference structures may be assumed to apply to the Internet channel which could result in the incorrect strategic development of this channel or indeed the loss of segments of existing markets.

Quadrant B of the market channel capability matrix is the space where the traditional marketing channel is explored for untapped opportunities to increase customer utility and reduce transaction costs by more effective use of existing channel capabilities. If the company has gained a dominant share of the existing market through effective use of traditional market channels then perhaps it is facing diminishing returns on increased investment aimed at improving the performance of these capabilities further. This assumes a rather static picture of their customers' preference structures. However, the company could be facing a more dynamic product life cycle where early customers may have been satisfied buying through a traditional marketing channel but, as the market grows and matures, these same customers may perceive that greater utility can be derived from an Internet marketing channel. Indeed, as the market grows, this growth may be based on increasingly diverse sets of customer preference structures; some of which are better served through deployment of the capabilities of the Internet. The risk for the company is being late in identifying these preference structures and thereby falling behind in market share growth.

Quadrants C and D represent the space where the capabilities of both traditional and Internet marketing channels are compared and contrasted with new markets as they are defined and

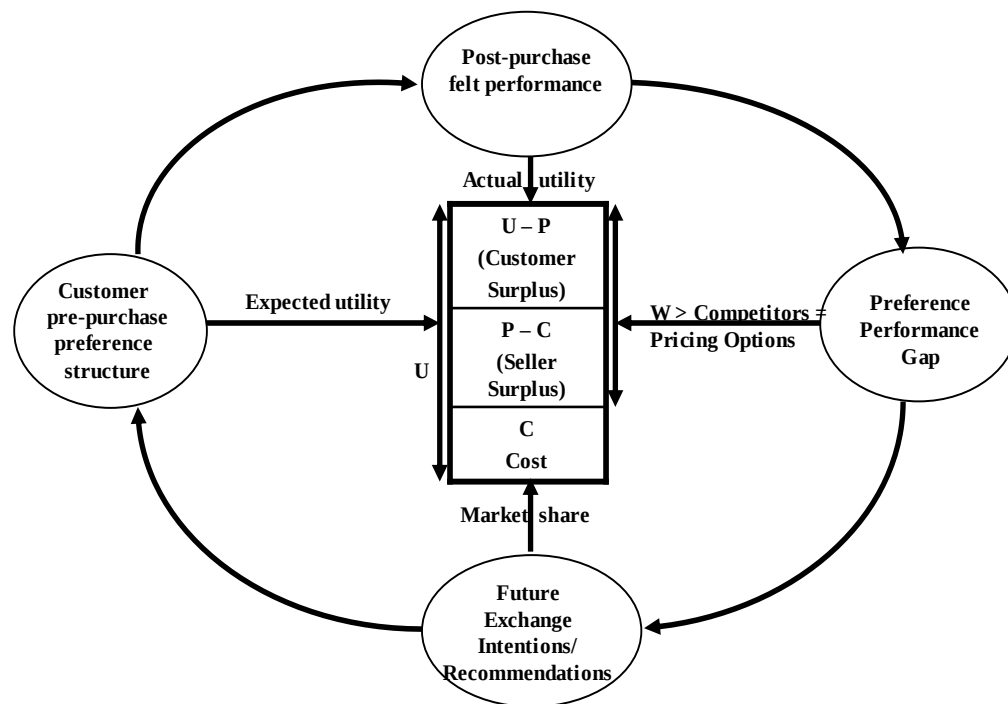
segmented on preference structures. The analysis of the new market in preference structure terms, and how these preference structures may change over the product life cycle, is the first step before consideration of the marketing channels themselves. Knowledge of the utility values the customer expects from the transaction is required before the relative values of the capabilities of each of the marketing channels can be assessed. Once the derived utility values of the capabilities of alternative marketing channels are known over the product life cycle, executive decisions can be better made in relation to investment levels, and building of capabilities and competencies for each channel. This may lead to decisions ranging from complete re-engineering away from traditional marketing channels to affirmation of the superiority of traditional marketing channels as applied to new markets. As entering new markets generally represents a higher investment risk, this preference structure led approach may lower these risks by arriving at reasoned choices regarding marketing channels.

A set of broader managerial implications can be derived directly from this study. These link future transactions (the source of future wealth) to preference structures and customer loyalty. How then do the theoretical model and findings of this study, relate to the primary interest of managers, namely the creation of future wealth?

The following figure titled “Strategic Marketing – A Transaction Based View”, describes a dynamic model which links a generalised view of a future transaction to the theory and findings of this study. The model comprises five components; (1) the components of a future transaction, (2) customer pre-purchase preference structures (3) post-purchase felt performance, (4) a post-purchase preference performance gap, and (5) future purchase intentions.

Figure 48: Strategic Marketing - A Transaction Based View

Strategic Marketing – A Transaction Based View



(Source: This study)

Future wealth is created through an exchange where a number of conditions exist: (1) there is a sufficient surplus for both the seller and buyer to willingly engage in an exchange; (2) once agreed the exchange can be legally enforced (3) the right to use and/or own the product or service transfers from the seller to the buyer, and (4) for transaction efficiency, there are alternative choices for both the seller and buyer in terms of what to produce, what to buy,

who to sell to and who to buy from. If these conditions do not exist, or are limited in some way, then this model has less relevance from a future wealth creation perspective. On the assumption that these conditions do exist, then the following describes the relationship of this study to future wealth creation (“wealth creation” from a technical economics perspective or “profitability” from an accounting perspective).

The potential and immediate total wealth to be created in a transaction is the difference between the total net utility (total utility less buyers cost in engaging in the transaction) derived from the transaction and the total cost for the seller in creating the product or service which is the subject of a transfer of rights in the transaction. The transaction price is effectively an agreement on how the wealth in the transaction will be shared between the buyer and the seller. The key to the transaction is the total utility that the buyer expects from the transaction. This total utility is the total of (1) the buyers (customer’s) surplus (2) the seller surplus, and (3) the cost of the product or service. The level of the total customer utility sets the upper limit on the total level of wealth that can be created in the transaction. The costs determine the amount of utility that remains as new wealth to be distributed between the customer and seller. Consequently understanding total customer utility and those dimensions of the product or service which give rise to that utility is of primary importance to managers concerned with creating future wealth.

The question therefore is how can total utility be measured? This study has developed a method with findings on how this can be done. The study has also shown the importance of understanding the differences between pre- and post-purchase preference structures. Consequently, the way is open for managers not only to measure the expected utility of

customers prior to a transaction but also to calculate the level of felt performance, which would be a measure of how much utility was perceived as being received from the transaction. In this way a 'preference performance gap' can be calculated in utility values. Why would this preference performance gap (PPG) be of importance to managers?

There are a number of reasons: (1) the PPG could be related to customers' future buying intentions and thereby give an indication of risk to market share (2) PPG could be measured between competitors to provide a measure of competitive advantage which is a measure of the value of the firm, (3) PPG could be used to identify the product or service attributes which posed the greatest risk/opportunity to the future transactions of the firm, and (4) PPG could assist in the allocation of scarce resources and in the development of competencies on attributes that potentially provide the greatest return.

In summary the findings of this study could have relevance to practicing managers not only in relation to marketing channel choices, but also in the management of the future value of the firm.

LIMITATIONS

The limitations of the quantitative research relate to the sample selection and item construction for loyalty variables. The sample selection limits any conclusions to a population that comprises families with children at certain private schools in Surrey and South West London. The sample selection and the industry selection (online grocery shopping) mean that interpretation is limited to by respondent and industry types. Extrapolation of these findings beyond these limits is speculation.

The weakness in the construction of the loyalty items probably contributed to the limited findings in the relationship between preference structures and loyalty variables,

The quantitative component of the study produced findings which are limited to an incidence of differences between online and offline grocery shopping (cross sectional). Consequently, conclusions of association are permissible but not conclusions regarding causal change. To move onto assertions of causality would require repetitions of the study over an extended period of time (longitudinal). This would be possible in any future research programme which would, as a result of this study, now have an initial point of comparison.

The sample size used in the choice based conjoint experiment was adequate given that conjoint is more robust than other multivariate data analysis techniques and the whole sample was used to calculate utilities. The split between online and offline shoppers occurred after the utility values were calculated from the full data set. However this is not the case for structural equation modelling, particularly where the sample was split between offline and

online respondents and applied to separate structural equation models. The sample size in each case was marginally acceptable in this situation. Consequently the sample size becomes a point of weakness at this point in the study. In addition the identification of certain models through the elimination of offending parameters resulted in only one observable variable for the unobserved endogenous variable, loyalty, in one model. This is a weakness in this study and could be related to the limitations already identified.

The qualitative findings suffered from limited access to key players in each company over an extended period of time. Nevertheless use of secondary sources of information e.g. website evolution over time, annual statements and press releases helped to minimise the gaps.

The conceptual chapter has not fully discussed the experiential (hedonic) literature (Dubé and LeBel, 1999; Koenig-Lewis and Palmer, 2008). Some experiential aspects emerged in the qualitative research, for example in the RAC case. Hedonic items were viewed as potential attributes of preference structures but were not considered as key to the quantitative sections of this particular study. Nevertheless it could be valuable, for instance, to explore if different types of products or services are associated with hedonic attributes and look at the implications in terms of how to deploy the capabilities of the Internet in these different contexts.

For example based on the interview conducted with Mercedes-Benz, the company saw the strategic role of the Internet in terms of providing information through interactive experiences that attempt to influence the construction of customer preferences. Different interactive experiences such as the interactive car configuration or the G-Class nature tour showing

motion pictures may lead to various emotions that point towards constructive preferences. Hence the link between the way Mercedes Benz viewed its customer preferences and the way the company deploys the capabilities of the Internet. It seems that when the website is designed to provoke various types of affective experiences which in turn might influence preferences (constructive preferences) seem in turn to be biased towards an informational approach to Internet capabilities. Therefore by including the experiential (hedonic) approach in future research, the experiential complexities could help in obtaining a better understanding of the key attributes of the customer preferences structures as well as making it possible to explore potential links between the ways in which the customer organises their experiences, to compare and choose amongst alternative online offerings.

Moreover looking at the company cases, there seems to be a link between the way companies deploy their websites and the degree to which customer's emotions may affect their preferences. For example easyJet needed to use the Internet capabilities in a way that would prompt action as opposed to Mercedes-Benz which needed to consider and evaluate the affective elements that is the emotions evoked by the interactive online experiences with their website to predict future behavioural intentions. Would levels of positive emotions be associated with recommendation and future buying intentions? And how would these levels of emotions would be defined in the customer preference structures?

FUTURE RESEARCH

One of the findings was that what offline shoppers' view as important in an Internet based shopping channel can be different from what online shoppers consider as important in the

same shopping channel. This has obvious implications for e-commerce managers when they consider customer acquisition and retention strategies.

However understanding that customer preference structures differ between online and offline shoppers may only be a limited insight, because buying behaviour is in part influenced not only by what is desired, but also by what is experienced. When the customer makes a choice to buy through one of a number of competing marketing channels or from a range of alternative choices, then whether they change their behaviour from their last purchasing act will include their evaluation of their experience of that last purchasing act. This difference between what was expected and what was felt after the purchase has been made has been called “post purchase dissonance” in the marketing literature (Menasco and Hawkins, 1978; Montgomery and Barnes, 1993; Nadeem, 2007).

The purpose of future research would be to take this line of reasoning one stage further by proposing a theoretical model that seeks to measure the size of the “gap” between the utility value of the pre-purchase preference structure and the post-purchase felt performance on the same preference structure.

These attribute preference performance gaps would be related to various measures of customer retention to test the hypothesis that increases in the preference performance gap leads to increased likelihood of customer defections. If the preference performance gaps of each attribute are weighted by the relative importance of each attribute in the preference structure, then the model should demonstrate the relationship to buying intentions more clearly.

Therefore, this gap represents the degree to which the company has achieved the customer's incentive from the transaction. The message to companies would be "if you are going to perform worse than the competition make sure that it is on attributes that matter least to the customer" or conversely "make sure that you outperform the competition on the attributes that matter most to the customer". The gap can be either positive or negative. If the gap is positive, it means that the company has exceeded the customer's pre-purchase expectation of the value that they would get from engaging in this transaction. However if the gap is negative, it still needs to be smaller than competitors' gaps.

This future research would be qualitative and quantitative using the skills developed in this study. This research could begin with qualitative work looking for inductive insights into the context in which the transaction will occur. This context is made up of (1) direct product or service attributes, (2) the attributes of the channel contexts within which the product or service can be purchased (3) the attributes of the context within which the product and service is consumed. These multiple contexts would be used to identify the customers' preference structures and thereby establish a more holistic appreciation of the attributes that define customers' utility values.

This qualitative work could lead to a selection of attributes to be included in the choice-based experiment. The first step would be to measure customer preference structures before the transaction. The next step is to measure the felt performance for each attribute and then compare these performances with the expected values assigned before the transaction for not only the company products but also for competing products.

The weighted preference performance gap can be calculated by creating utility curves from the underlying levels that measure an attribute and calculating the slope of the curve using Lagrange Interpolating Polynomials. These calculations will make it possible to investigate for example (1) to what degree will variations in the size of the gap relate to variances in changes in exchange intentions and (2) if there is a tipping point in gap performance where the customer will suddenly change future exchange intentions. The final step could be to see how well the hypothesised model fits the data and explore the relationships that link the preference performance gap to future purchase intentions. To achieve that, competing models strategy could be used using SEM. Factor and Latent class analysis will assist in this process.

In addition to influencing buying intentions, the preference performance gap can also cause changes to the utility values assigned to attributes before the next transaction. The proposed future research model is therefore dynamic where each element needs to be re-examined over time. There is therefore a clear research agenda based on what has been gained from this study.

APPENDIX 1: PRELIMINARY QUESTIONNAIRE FOR THE PRE-EXPERIMENT CONJOINT STUDY

Name:

Date:

Place:

Time:

No.:

- 1. How important is it that the website provides you with a virtual store experience with a visual life-like presentation of products and store layout where label information is easily viewed compared with a narrative description of products?**
- 2. How important is it for you to be able to walk down virtual aisles and select product images that can be rotated, enlarged and added to the virtual basket as compared with finding products with descriptive categories?**
- 3. How important is it to you that there is a help line number in comparison with an online help desk?**
- 4. How important is it to you that there is the presence of a chat room with other customers?**

- 5. How important is it to you that there are a wide variety of services and products for sale on the supermarket's website?**
- 6.1 To select your typical monthly shopping basket on the Internet and check out, what amount of time could you consider is currently normal for online shopping?**
- 6.2 To select your typical monthly shopping basket on the Internet and check out, what amount of time could you consider being just acceptable?**
- 6.3 To select your typical monthly shopping basket on the Internet and check out, what amount of time could you consider being well beyond your expectations?**
- 7.1 What do you think is currently the average time to have your typical monthly online shopping basket delivered to your home?**
- 7.2 What could be the minimum acceptable time to have your typical monthly online shopping basket delivered to your home?**
- 7.3 What amount of time could delight you to have your typical online monthly shopping basket delivered to your home?**

- 8.1 Out of a normal monthly online shopping basket, how many items on average are currently changed due to stock outs?**
- 8.2 Out of a normal monthly online shopping basket, how many items could be changed due to stock out that you could find barely acceptable on an ongoing basis?**
- 8.3 Out of a normal monthly online shopping basket, what level of product availability could you consider to be extraordinary good service?**
- 9.1 In a monthly online shopping basket, how many items on average could you consider to be below acceptable quality to the extent that you could return them?**
- 9.2 In a monthly online shopping basket, how many items below your quality expectations could you consider to be barely acceptable, to the extent that you return the items?**
- 9.3 In a monthly online shopping basket, how many items below your quality expectations could you consider to be extraordinary good quality service?**
- 10.1 Assuming that there is an online email helpdesk, what is your estimation of the current average response time?**

- 10.2 Assuming that there is an online email helpdesk, what is the longest response time to your enquiry that is barely acceptable?**
- 10.3 Assuming that there is an online email helpdesk, what is the response time to your enquiry that you could consider being extraordinary good service?**
- 11.1 What is contained in the average level of personalisation in accordance with your online purchasing experience?**
- 11.2 What is the barest minimum level of personalisation in accordance with your online purchasing pattern that you could find acceptable?**
- 11.3 What level of personalisation in accordance with your online purchasing patterns that you could consider being extraordinary good service?**
- 12. Can you think of other criteria that you consider important in your decision to buy groceries online?**

APPENDIX 2: DEMOGRAPHIC QUESTIONNAIRE

All information disclosed in this questionnaire is kept confidential and is
for academic research purposes only

Gender: ☐ Female ☐ Male

Age: <25 ☐ 25-29 ☐ 30-34 ☐ 35-39 ☐ 40-44 ☐ >44 ☐

Number of children living at home: ☐ <5years old ☐ >5 years old

Do you own your house that you live in? ☐ Yes ☐ No

What is the value range of your house (thousands of pounds)?

<£200 ☐ £200-399 ☐ £400-599 ☐ £600-799 ☐ >£800 ☐

Are you a dual-income household? ☐ Yes ☐ No

Who normally does the shopping in the household?

.....

APPENDIX 3: LOYALTY QUESTIONNAIRE

All information disclosed in this questionnaire is kept confidential and is for academic research purposes only

1. *Customer Acquisition*

- 1.1. Did you to buy your first online grocery shopping from the same physical groceries store that you used the most?

☐ Yes

☐ No

2. *Customer Retention*

- 2.1. My plastic shopping bags at home come from the following supermarket(s)(please tick):

☐ Sainsbury's

☐ Tesco

☐ Waitrose

☐ Iceland

☐ M&S

☐ Safeway

☐ Others (please specify)

- 2.2. I am so disappointed with my online grocery shopping experience, I will never consider shopping online again for my groceries.

I strongly agree 7 6 5 4 3 2 1 I strongly disagree

- 2.3. How many grocery website are you registered with?

- 2.4. How likely are you to switch to another grocery website within the next 12 months?

Very likely 7 6 5 4 3 2 1 Very unlikely

APPENDIX 4: LETTER OF INTRODUCTION

Hello!

My name is Muriel Wilson and I am currently completing my DPhil with Templeton College, University of Oxford. I am in the data collection stage of my research and I need your help.

I am investigating grocery shopping patterns on the Internet. I have conducted executive interviews for qualitative case studies with Sainsbury's, EasyJet, Mercedes-Benz, MFI, Royal Mail and RAC Motoring Services.

I now need to expand my research with customers and I was wondering if you could help me. I could be most grateful if you could complete this survey and send it back to my email address at mwilsonjeanselme@aol.com

If you like, on completion of this study I may send you a management summary of the results of the research.

It is important to note that this is a University based project and therefore does not involve any other institutions. The issues discussed and the results may be kept confidential and may be used in an academic context only.

Yours sincerely

Muriel Wilson

APPENDIX 5: PRE-SURVEY VALIDATION INTERVIEWS

Name: Debbie Bowler

Date: Monday 9th December 2002

Place: Esher

Time: From 9:30am to 10:15am

No.: 1

- 6. How important is it that the website provides you with a virtual store experience with a visual life-like presentation of products and store layout where label information is easily viewed compared with a narrative description of products?**

I quite like the label. The labelling information for example in a supermarket so you can see the ingredients, these sorts of things. But the virtual store experience is not a decisive criteria, it is probably desirable but not essential. *If you only have lines of narrative description that could be fine.* I think so yes as long as you can find out a bit more if you need to elsewhere maybe not a huge amount of text but if you could, if you want to find out more you can click on it.

- 7. How important is it for you to be able to walk down virtual aisles and select product images that can be rotated, enlarged and added to the virtual basket as compared with finding products with descriptive categories?**

Hum again I'd say it's probably desirable. I think that if they've done very good descriptive categories then it may be the same as physically working down an aisle. But I

think if I can find what I am looking for quickly then I don't think I need an image, a state of the art image then I can pretend I am walking down a supermarket. I don't think that could help particularly for me.

I've never used a help line number before. I think I might have an online help previously but I suppose it's important that there is one there, that you feel you are not totally alienated. But I never actually needed to use one but again I suppose it's desirable to have one there for everybody to use in case they get stuck. But I am not sure, I've never needed, I've never phoned anyone, I think I've probably used the online help a couple of time. If you go to a website and it doesn't have a helpline number and you want to tell them something you won't think oops there is no human interaction and you may go to another website. Yes I think so but I think it...If everything is straightforward you couldn't need it ideally but if there was a technical problem or something or I don't know you suddenly crash and you weren't sure whether you've lost your shopping, you want to speak to somebody then it could be nice to have that help line number couldn't it? So I may still say desirable. *But it couldn't be decisive in the sense that it was going to make up your mind whether you shop online with this website or not?* If I was going to a site for the first time and there was no number there, I probably still have a go. You *may do?* Yes. *It won't put you off!* Laughter.

8. How important is it to you that there is the presence of a chat room with other customers?

I'll say that's irrelevant. *Why is it totally irrelevant?* I think if I am doing it, I am doing it to save time if I want to shop online and I don't want any distractions. It's a similar point

as the virtual aisles for me, I just want doing it. I know it is very clever that you can do all of this and I appreciate how clever it is but for me it's a distraction and I just wanting to get my bits and pieces ordered as quickly as possible. Hum and with as little fuss as possible. I mean these are nice things to have but for me personally I am here for the time savings. Voilà that's it online is time savings so you are not going to spend half an hour chatting while you're doing online shopping.

9. How important is it to you that there are a wide variety of services and products for sale on the supermarket's website?

I'll say that's decisive. *By products and services for example I mean you go to buy your groceries online and at the same time you have financial services and others.* That's right. *Do you know why it could be important?* Hum, I think maybe that just feeling you may be getting the equivalent experience of maybe going into a store. If there was a promotion, hum I don't know about their financial services, a Tesco's card or something or I don't know, just I suppose just that you've got the same products online as you have got in a store I guess or even more (laugh) online.

6.1 To select your typical monthly shopping basket on the Internet and check out, what amount of time could you consider is currently normal for online shopping?

Hum, for a monthly shop 45 minutes to 1 hour.

6.2 To select your typical monthly shopping basket on the Internet and check out, what amount of time could you consider being just acceptable?

By just acceptable I mean for example it's an hour and this is just acceptable but if it has to be an hour and 10 minutes or 15 minutes or more then you just won't shop online. This is what I meant by just acceptable. All right, huh, huh. This is your limit. Huh, huh, yes. Hum I think over 1 hour I'll say I was pushing it because I was thinking that I was not saving enough time by being online. So I think if I looked at it I'll think: "Oh gosh I've been on here you know for ever or it's slow or it's not working. I can't found what I am looking for." With that frustration I probably may think: "Oh I am not going to do this again if it's over 1 hour".

6.3 To select your typical monthly shopping basket on the Internet and check out, what amount of time could you consider being well beyond your expectations?

So you are just delighted, you are just very happy (laugh from the respondent). I guess 20 or 30 minutes could be (laugh), I may be very happy.

7.1 What do you think is currently the average time to have your typical monthly online shopping basket delivered to your home?

You mean when you are trying to find a slot to have them delivered. Exactly, you've done your shopping, you've paid, and what's the average time do you expect to have the groceries delivered. Could it be next day? Could it be in 2 hours? Could it be in the afternoon if you've done it in the morning? Hum, I think normally when I do it, it's normally the next day. Usually I select the next day or if it's more convenient for me maybe the day after because it's easy to do it in advance than when you need it to a certain extent. If you've got people coming for the week-end you may want to get the order out of the way but have it delivered on Friday close to the week end. I've

been quite fortunate I have been able to choose quite well. So hum, actually it's usually the next day but sometimes I might delay but that's for my own...*Your own choice...* My own choice.

7.2 What could be the minimum acceptable time to have your typical monthly online shopping basket delivered to your home?

What could be the minimum acceptable time to have them delivered? Hum, if I wanted it as soon as possible then I couldn't really want to go more than 2 days I'll say. *2 days.* Yes.

7.3 What amount of time could delight you to have your typical online monthly shopping basket delivered to your home?

Hum I guess later the same day or if you were doing the order the previous evening or something, the next morning could be good, couldn't it? (Laugh)

8.1 Out of a normal monthly online shopping basket, how many items on average are currently changed due to stock outs?

2

8.2 Out of a normal monthly online shopping basket, how many items could be changed due to stock out that you could find barely acceptable on an ongoing basis?

I suppose for a monthly one: perhaps 10 items I may find that quite annoying. *And if it has to go beyond 10, you may give up.* Hue.

8.3 Out of a normal monthly online shopping basket, what level of product availability could you consider to be extraordinary good service?

I suppose if you have none. (Laugh) My expectation is a bit high.

9.1 In a monthly online shopping basket, how many items on average could you consider to be below acceptable quality to the extent that you could return them?

9.2 In a monthly online shopping basket, how many items below your quality expectations could you consider to be barely acceptable, to the extent that you return the items?

9.3 In a monthly online shopping basket, how many items below your quality expectations could you consider to be extraordinary good quality service?

Anything so far. I don't know (laugh). *Maybe if you imagined yourself in a scenario where if you have to return some items, how many for you may be just barely acceptable, may be good service or average.* I expect to (silence). *And it could depend upon the type of product; if it's fresh you may return the product below your expectations. If it's only some washing powder...*(respondent took over). It's very different isn't it? I think for the fresh stuff, if it had been badly pack, obviously it's been squashed or bruised in transit or something then you may have to, you may want to get the refund or send it back. Barely acceptable for a monthly one could be 5 items I suppose. And good service I suppose could be probably nothing. Everything you'll be picked as if you've chosen the fresh stuff at the store yourself and they won't be obviously mouldy fruits or vegetables. I suppose if you order a video and

the case was dented and it was for a present or something, you could not want that or if it was a box of chocolate. You expect them to shop with the same sort of eyes than you when they look at the products. Again it's like shopping for a powder or something it couldn't matter. But if it was obviously maybe an item like a book or a CD for a present potentially anyway you may expect them to do that with more care. For the fresh stuff or the frozen stuff, you may expect to be kept cold enough so obviously it was not defrosted. *Basically, you may be delighted if they do the shopping like you may do the shop. And you say 5 for barely acceptable and on average? 1 or 2.*

10.1 Assuming that there is an online email helpdesk, what is your estimation of the current average response time?

I'll say 24 hours I suppose.

10.2 Assuming that there is an online email helpdesk, what is the longest response time to your enquiry that is barely acceptable?

I think anything over 24 hours may be very annoying.

10.3 Assuming that there is an online email helpdesk, what is the response time to your enquiry that you could consider being extraordinary good service?

I think it's about 2 or 3 hours could be... You'd hope somebody may be checking the email regularly. Even if they don't answer straight away they give you a response to say that they acknowledge the receipt. This is the thing with the emails when they go,

you are not quite sure who is reading them and when are you? That may be good 2 to 3 hours.

11.4 What is contained in the average level of personalisation in accordance with your online purchasing experience?

11.5 What is the barest minimum level of personalisation in accordance with your online purchasing pattern that you could find acceptable?

11.6 What level of personalisation in accordance with your online purchasing patterns that you could consider being extraordinary good service?

Silence. For example you buy on a regular basis and they found out what you are buying, you know if you are buying their toddler products or vegetarian products or things like that. And they may send you emails according to what you are buying on a regular basis: send you recipes or send you coupons or promotion for the products you buy. Read the question again. I'll expect some hum what I saved maybe from the previous time. If you do a monthly shop because it could assume that you are buying a lot of the same materials so I could like to have saved what you bought last time. Delete what you didn't want this time so you have a starting point, that's quite useful and again keep on bringing to your attention any special promotions. You know: "we noticed that you bought this red wine last time, there is a special promotion if you buy six bottles or something." That could be a good level I think without going completely mad (laugh) and bombarding you with things but just enough again to make you feel hum as if you are going in the actual supermarket if you are walking

down the aisles you might see a promotion on the shelf I suppose then you may be in store getting that benefit. That should be online. Hum so I am trying to put a level (laugh). *And what could be the barest minimum of personalisation.* I think definitively if they didn't have the ability to save the previous shop hum and if you have to start from scratch each time hum I think that may be quite annoying. So I think that's the savings of the last shopping basket or your general shopping patterns. *And what could you consider being you know extraordinary good service that you could be very delighted to see.* I think if you really felt that by shopping online you haven't missed out on any of the ideas or the recipes that we were saying, or the coupons and the promotions, in that way you may feel very pleased. And maybe if you were still browsing in the wine section or the toddler section and they popped up with a few suggestions as to what was on offer or just a bit of information that they want to share or whatever. You may be given a lot of information that may be very good. *OK so what you mean really is that overall to make sure that you are not missing out of anything online as compared when you shop physically. That's what's important.* Huh, huh.

13. Can you think of other criteria that you consider important in your decision to buy groceries online?

Last question:

- Silence. I think the security aspect I think that could be quite important because obviously they are holding your credit card details presumably hum and also they've got your address, when you're likely to be in and out (laugh). You know it's a sort of slightly worrying combination. So I check the security

of their system when you first enter your financial details I check if they mention anything on the secure products and things like that. How they display maybe the credit card details back to you, how they display the phone number or if they've just got a partial number or hum things like that are quite reinsuring to know hum and what they are going to do I suppose with your details and make sure they don't pass it on to people and things like that. The most I know is that they're using it for marketing purposes but not outside of that. Sometimes you have a tick if you don't want your details to be passed on to buyers then you have the right to say. *That could be quite an essential decision for you. For example you won't go and buy your groceries on a website which is not as well done as you feel the security aspect should be.* I still always check, it's quite important, before I shop I may check how they hold the credit card details and things.

- *So for example when you are in front of the computer and you're about to buy anything online, what is the main motivation, why are you shopping online, for example you mention savings time.* I think because you can do the shopping at a time that is convenient for you as well I know that it is 24 hours (laugh) but being able to hum maybe do the shopping later in the evening hum when it's quieter. And think you can plan your shopping few days in advance and then sometimes having it delivered the next day or whatever. It is a good use of time whereas even though the supermarket is open late at night you won't do it while you're happy to do that online.

- *And if you have to choose for example between Sainsbury's and Tesco why could you choose one over the other. What's the first criteria that may prompt you to choose one supermarket's website over another.* Probably personal recommendation of somebody that recommended it. If I was aware that both had an online system hum actually maybe a friend's recommendation could make me try one first. And I think once you've set one up it's a lot easier to stick with that one unless it's a very poor service and then you may do all the setting up with another one to assess next time. And also they often put a leaflet through your door to say it's now available in your area delivery that kind of things. That could be another factor.
- *For example could you shop with Sainsbury's online because that one has been recommended to you or because you are already using Sainsbury's for your physical shopping?* Hum I think it may be more likely to be a friend's recommendation because we don't have physically any loyalty particularly to where I shop. It's more likely to be somebody who said: "well I've tried it and it was a good service". Then I am more inclined to try those first.
- *So you mentioned the recommendation, the security aspect and yet it is easier to stick to one when you know it and know what you get. Huh, huh. This could also be linked to a degree of familiarisation. Maybe the more you shop online, the easier it is then to change. But if you don't do that on a regular basis, you tend to stick to the same website because then it may take more time. Yes.*
- We talked also about the personalisation. I think that knowing about new products could be helpful, couldn't it? Because again that's something that

you could notice walking down an aisle physically in a supermarket. You'll notice if you were in a vegetarian section for example (laugh) that is something of interest to me. It might be that they brought out their own brand of vegetarian sausages or something that you haven't seen before so again that could be useful. You are a vegetarian or you eat a lot of vegetarian food, you might be interesting in this new sausage that they produced, hum that is the sort of things you do notice: "Oh I might try those!" That again could be a personalisation that could be quite useful. Because otherwise you could just again be using your previous shopping or order the same thing and not be aware of what else is available in the shop. And also I suppose if you're used to go into a supermarket that's not one of these really really big ones, you might not be aware of the wider range of things as well. *Yes it does save time to just recall your last shopping basket and unless someone sends you an email: Oh we've got this new product in this section", otherwise you have to browse again for all their products.*

- The use of the site, we talked about the fact that it was not important to me to have this all-virtual reality experience of going down the aisles. But the way people categorise things is not always how you could expect and you kind of trying to find an item and you are not sure if it's going to be in the chilled or the frozen section. If you had time to look through hum having a good search facilities, one that you can actually use, type any key words and things to bring up ideas like searching the vegetarian and might tell me: "oh we have some under here" for example. I think that sort of help is steering you in the right way. In fact the same as if you were lost in a physical supermarket and

you could ask somebody where could that be and they say: "oh well you know it's not with this it's over here because it's a different section these sort of things in different places. So that could be important I think to have that level of help. I think if I found that the one I was using didn't work or I was continually not finding things I could have thought which should have sort of popped up on the website I could get quite annoyed and I think it could be essential.

- *In terms of the vocabulary, the concepts that I am using, is there anything that you think was complex or belong to the marketing jargon or something that I should reword? When I was reading to you, is there things that were not very clear straight away or that you found a bit confusing?* Hum, I don't think so although it's quite typical language (laughter). The personalisation question was a bit woolly wasn't it? But then we talked about it. It was more of a discussion questionnaire rather than putting numbers on something all the time. Everything is clear.
- *Thank you very much for your time and contribution. It is most appreciated.* You're welcome.
- *Respondent 1 agreed to participate in the conjoint experiment after I explained what she may have to do with the scenario cards and answer 2 short questionnaires.*

APPENDIX 6: CONJOINT PROFILE CARDS

1

- Good search facilities
- Ordering time: over 1 hour
- Grocery products only
- Help line number available
- Store's brand products price: much lower than in the physical store
- Minimum level of personalisation: recall last shopping basket
- Delivery: next day
- Delivery cost: £5
- Delivery time reliability: on time
- No. of substitutes: none
- Products quality: 2 items below expectations
- Doorstep presentation: average - polite

2

- Good search facilities
- Ordering time: 45 minutes
- Availability of a selection of products and services other than grocery products
- Help line number available
- Store's brand products price: same than in the physical store
- Minimum level of personalisation: recall last shopping basket
- Delivery: next day
- Delivery cost: £5
- No. of substitutes: none
- Products quality: 2 items below expectations
- Doorstep presentation: average - polite

3

- Good search facilities
- Ordering time: 45 minutes
- Availability of a selection of products and services other than grocery products: No
- Help line number available
- Store's brand products price: same than in the physical store
- Good level of personalisation: personalised emails on special offers and on new products of interest
- Delivery: next day
- Delivery cost: £5
- No. of substitutes: none
- Products quality: 2 items below expectations
- Doorstep presentation: average - polite

4

- Good search facilities
- Ordering time: 20 minutes
- Grocery products only
- Help line number available
- Store's brand products price: same than in the physical store
- Minimum level of personalisation: recall last shopping basket
- Delivery: next day
- Delivery cost: £5
- Delivery time reliability: on time
- No. of substitutes: none
- Products quality: 2 items below expectations
- Doorstep presentation: average - polite

5

- Bad search facilities
- Ordering time: 45 minutes
- Availability of a selection of products and services other than grocery products: Yes
- Help line number available
- Store's brand products price: same than in the physical store
- Minimum level of personalisation: recall last shopping basket
- Delivery: next day
- Delivery cost: £5
- Delivery time reliability: +/- 10mns
- No. of substitutes: none
- Products quality: 2 items below expectations
- Doorstep presentation: Excellent – look smart, polite, check that everything is all right

6

- Excellent search facilities
- Ordering time: 45 minutes
- Availability of a selection of products and services other than grocery products: Yes
- Help line number available
- Store's brand products price: same than in the physical store
- Minimum level of personalisation: recall last shopping basket
- Delivery: next day
- Delivery cost: £5
- Delivery time reliability: +/- 20mns
- No. of substitutes: none
- Products quality: 2 items below expectations
- Doorstep presentation: Excellent – look smart, polite, check that everything is all right

7

- Bad search facilities
- Ordering time: over 1 hour
- Availability of a selection of products and services other than grocery products: No
- Help line number available
- Store's brand products price: same than in the physical store
- Good level of personalisation: personalised emails on special offers and on new products of interest
- Delivery: Later on the same day
- Delivery cost: £5
- Delivery time reliability: on time
- No. of substitutes: None
- Products quality: Excellent – as you will have done the shopping yourself
- Doorstep presentation: Excellent – look smart, polite, check that everything is all right

8

- Excellent search facilities
- Ordering time: 20 minutes
- Availability of a selection of products and services other than grocery products: Yes
- No help line number available (online email support)
- Store's brand products price: same than in the physical store
- Minimum level of personalisation: recall last shopping basket
- Delivery: 2-3 days
- Delivery cost: £5
- Delivery time reliability: +/- 20mns
- No. of substitutes: 4-5
- Products quality: 3-5 items below expectations
- Doorstep presentation: Poor – rude, not helpful, not smart

9

- Excellent search facilities
- Ordering time: 20 minutes
- Availability of a selection of products and services other than grocery products: Yes
- Help line number available
- Store's brand products price: same than in the physical store
- Good level of personalisation: personalised emails on special offers and on new products of interest
- Delivery: 2-3 days
- Delivery cost: £5
- Delivery time reliability: +/- 20mns
- No. of substitutes: 4-5
- Products quality: 3-5 items below expectations
- Doorstep presentation: Poor – rude, not helpful, not smart

10

- Bad search facilities
- Ordering time: over 1 hour
- Availability of a selection of products and services other than grocery products: No
- No help line number available (online email support)
- Store's brand products price: same than in the physical store
- Minimum level of personalisation: recall last shopping basket
- Delivery: Later on the same day
- Delivery cost: £5
- Delivery time reliability: on time
- No. of substitutes: none
- Products quality: Excellent – as you will have done the shopping yourself
- Doorstep presentation: Excellent – look smart, polite, check that everything is all right

11

- Excellent search facilities
- Ordering time: 20 minutes
- Availability of a selection of products and services other than grocery products: Yes
- No help line number available (online email support)
- Store's brand products price: same than in the physical store
- Minimum level of personalisation: recall last shopping basket
- Delivery: later on the same day
- Delivery cost: £5
- Delivery time reliability: on time
- No. of substitutes: None
- Products quality: Excellent – as you will have done the shopping yourself
- Doorstep presentation: Excellent – look smart, polite, check that everything is all right

12

- Good search facilities
- Ordering time: 45 minutes
- Availability of a selection of products and services other than grocery products: No
- Help line number available
- Store's brand products price: same than in the physical store
- Minimum level of personalisation: recall last shopping basket
- Delivery: next day
- Delivery cost: £5
- Delivery time reliability: +/- 10mns
- No. of substitutes: 2-3
- Products quality: 2 items below expectations
- Doorstep presentation: Poor – rude, not helpful, not smart

13

- Bad search facilities
- Ordering time: over 1 hour
- Availability of a selection of products and services other than grocery products: No
- No help line number available (online email support)
- Store's brand products price: much lower than in the physical store
- Minimum level of personalisation: recall last shopping basket
- Delivery: 2-3 days
- Delivery cost: Free
- Delivery time reliability: +/- 20mins
- No. of substitutes: 4-5
- Products quality: 3-5 items below expectations
- Doorstep presentation: Poor – rude, not helpful, not smart

14

- Good search facilities
- Ordering time: 45 minutes
- Availability of a selection of products and services other than grocery products: No
- Help line number available
- Store's brand products price: much lower than in the physical store
- Minimum level of personalisation: recall last shopping basket
- Delivery: next day
- Delivery cost: Free
- Delivery time reliability: +/-10mins
- No. of substitutes: 4-5
- Products quality: 2 items below expectations
- Doorstep presentation: Average - polite

15

- Good search facilities
- Ordering time: 45 minutes
- Availability of a selection of products and services other than grocery products: No
- No help line number available (online email support)
- Store's brand products price: same than in the physical store
- Minimum level of personalisation: recall last shopping basket
- Delivery: next day
- Delivery cost: £5
- Delivery time reliability: +/-10mins
- No. of substitutes: none
- Products quality: 2 items below expectations
- Doorstep presentation: Average - polite

16

- Good search facilities
- Ordering time: 45 minutes
- Availability of a selection of products and services other than grocery products: No
- Help line number available
- Store's brand products price: same than in the physical store
- Minimum level of personalisation: recall last shopping basket
- Delivery: next day
- Delivery cost: £5
- Delivery time reliability: +/-10mins
- No. of substitutes: 2-3
- Products quality: Excellent – as you will have done the shopping yourself
- Doorstep presentation: Average - polite

17

- Good search facilities
- Ordering time: 45 minutes
- Availability of a selection of products and services other than grocery products: No
- No help line number available (online email support)
- Store's brand products price: same than in the physical store
- Minimum level of personalisation: recall last shopping basket
- Delivery: Later on the same day
- Delivery cost: £5
- Delivery time reliability: +/-10mins
- No. of substitutes: 2-3
- Products quality: 3 to 5 items below expectations
- Doorstep presentation: average - polite

18

- Good search facilities
- Ordering time: 20 minutes
- Availability of a selection of products and services other than grocery products: No
- No help line number available (online email support)
- Store's brand products price: same than in the physical store
- Minimum level of personalisation: recall last shopping basket
- Delivery: 2 to 3 days
- Delivery cost: £5
- Delivery time reliability: +/-10mins
- No. of substitutes: 2-3
- Products quality: 3 to 5 items below expectations
- Doorstep presentation: average - polite

19

- Excellent search facilities
- Ordering time: 20 minutes
- Availability of a selection of products and services other than grocery products: Yes
- Help line number available
- Store's brand products price: same than in the physical store
- Good level of personalisation: personalised emails on special offers and on new products of interest
- Delivery: 2 to 3 days
- Delivery cost: £5
- Delivery time reliability: +/-20mins
- No. of substitutes: 4-5
- Products quality: 3 to 5 items below expectations
- Doorstep presentation: Poor – rude, not helpful, not smart

20

- Bad search facilities
- Ordering time: over 1 hour
- Availability of a selection of products and services other than grocery products: No
- No help line number available (online email support)
- Store's brand products price: same than in the physical store
- Minimum level of personalisation: recall last shopping basket
- Delivery: later on the same day
- Delivery cost: £5
- Delivery time reliability: on time
- No. of substitutes: none
- Products quality: Excellent – as you will have done the shopping yourself
- Doorstep presentation: Excellent – look smart, polite, check that everything is all right

APPENDIX 7: CHOICE TASK EXAMPLE

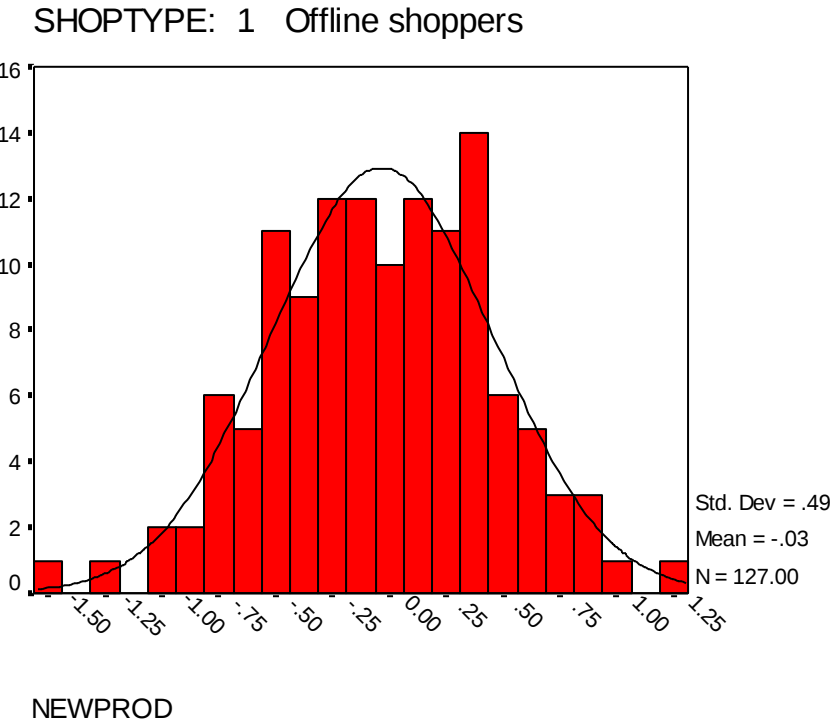
Choice Task Example

If you were considering buying groceries online for your next grocery supplies and these were the only alternative supermarket websites, which one would you choose?

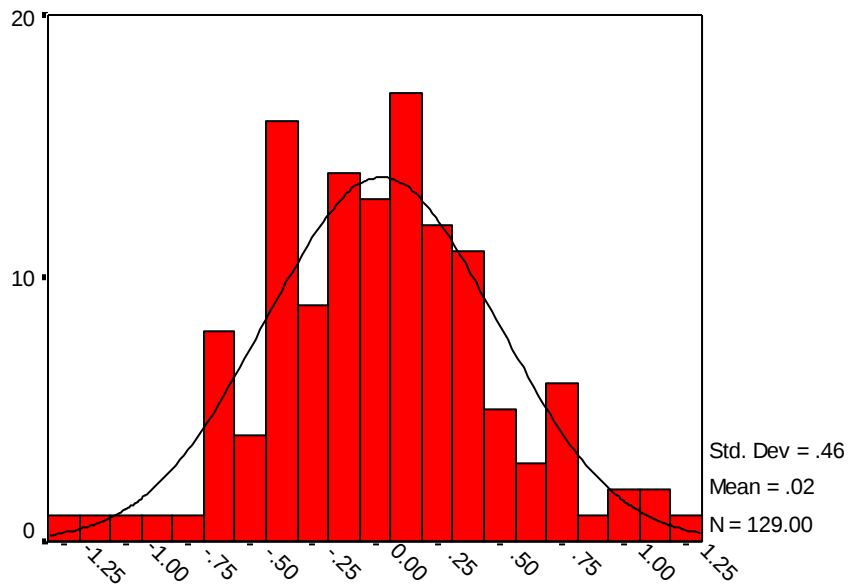
Advisory emails	Advisory emails	No advisory emails	None: I wouldn't purchase my groceries online from any of these described websites.
Bad doorstep presentation	Good doorstep presentation	Good doorstep presentation	
Help line number	No help line number	No help line number	
Delivered in 6 hours	Delivered in 24 hours	Delivered in 48 hours	
£5 delivery cost	No delivery cost	No delivery cost	
Delivery on time	Delivery on time	Delivery 30 minutes late or in advance	
5 items below quality	5 items below quality	No items below quality	
1 hour to place an order	20 minutes to place an order	1 hour to place an order	
No substitutes	No substitutes	5 substitutes	
0% discount for online prices	10% discount for online prices	0% discount for online prices	

Make your selection by clicking within the box with the mouse.

APPENDIX 8: GRAPHICAL ANALYSES OF NORMALITY

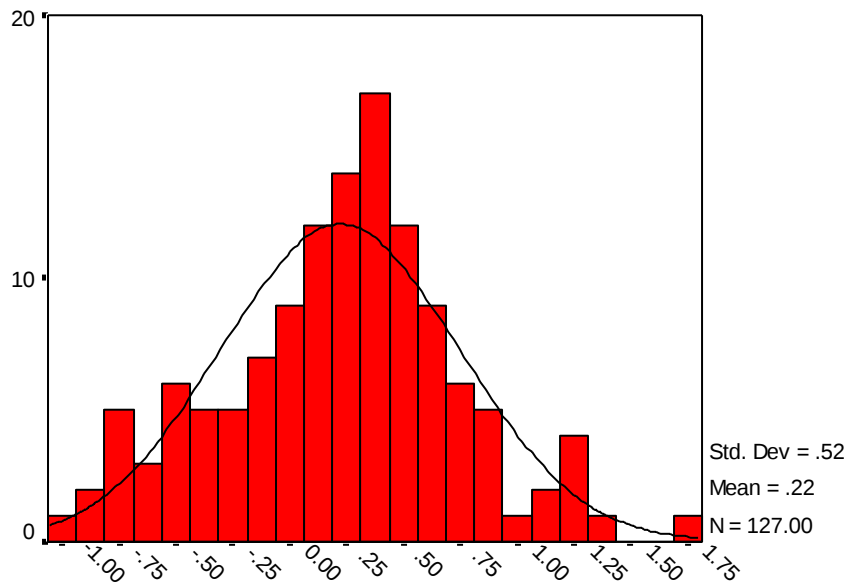


SHOPTYPE: 2 Online shoppers



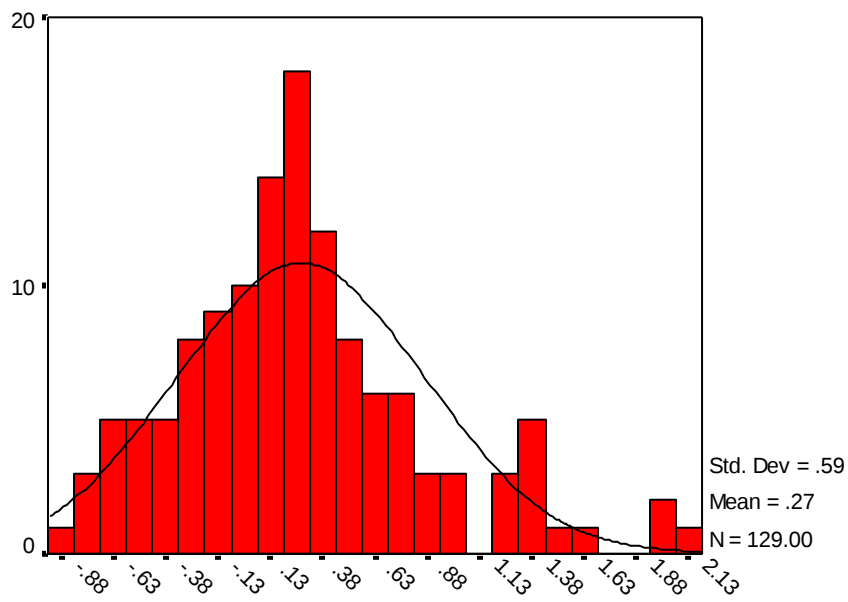
NEWPROD

SHOPTYPE: 1 Offline shoppers



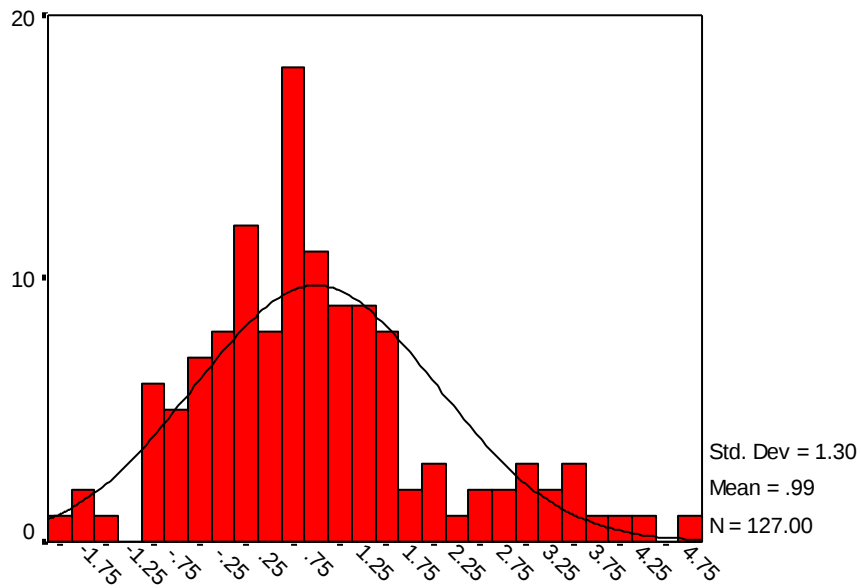
HELPLINE

SHOPTYPE: 2 Online shoppers



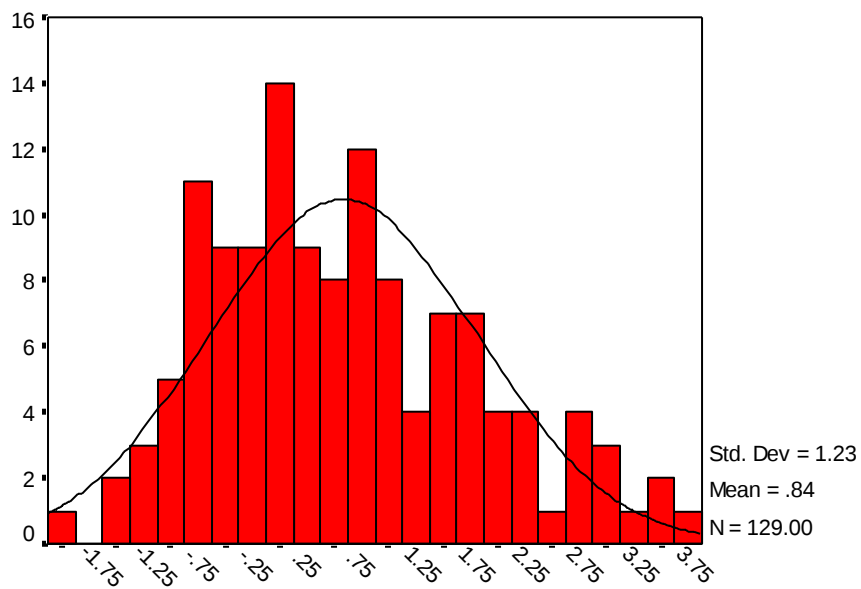
HELPLINE

SHOPTYPE: 1 Offline shoppers



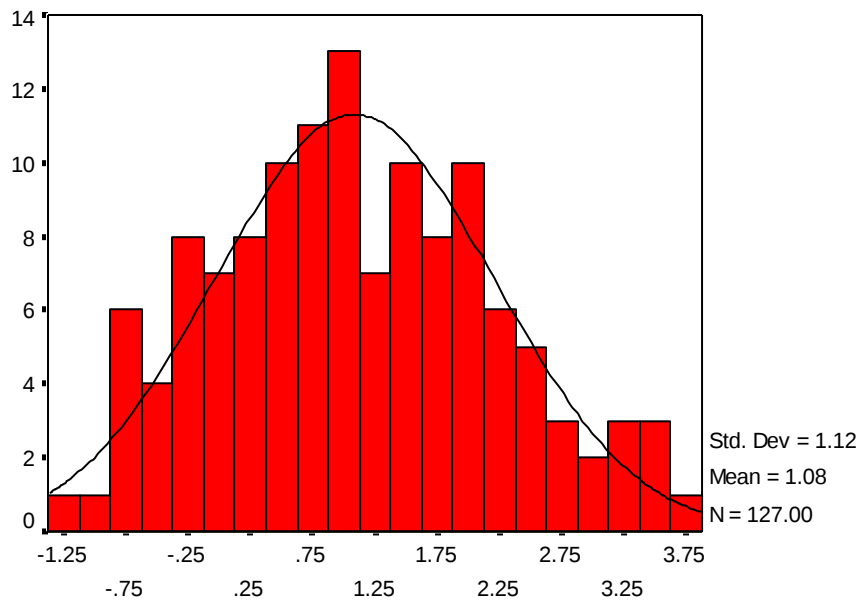
DE6HOURS

SHOPTYPE: 2 Online shoppers



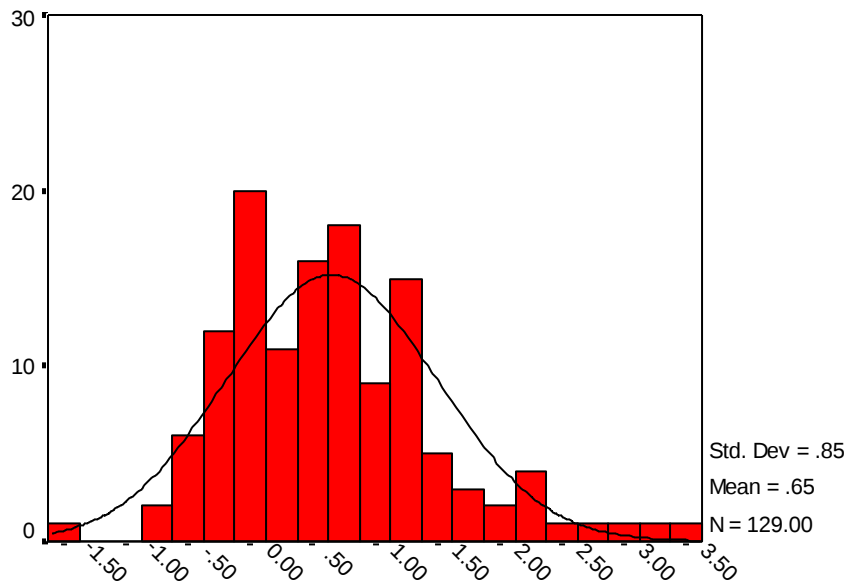
DE6HOURS

SHOPTYPE: 1 Offline shoppers



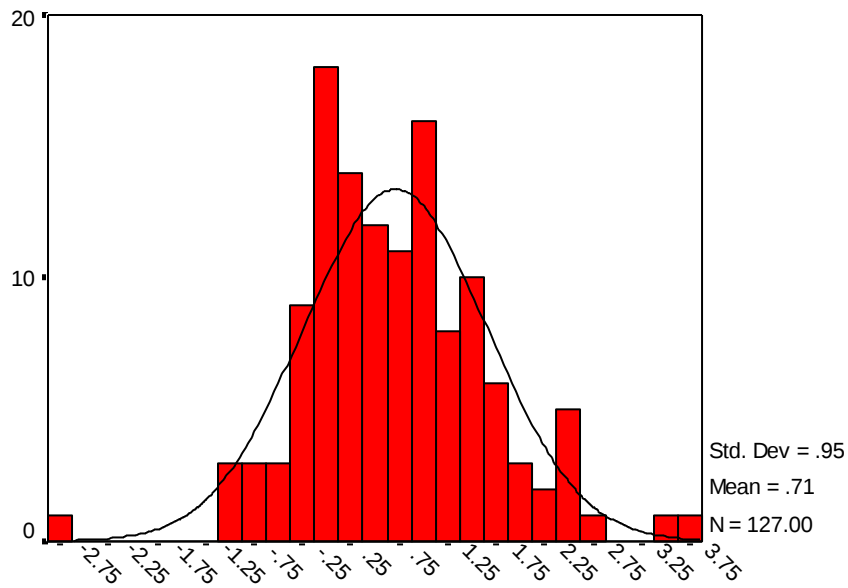
NOCOSTDE

SHOPTYE: 2 Online shoppers



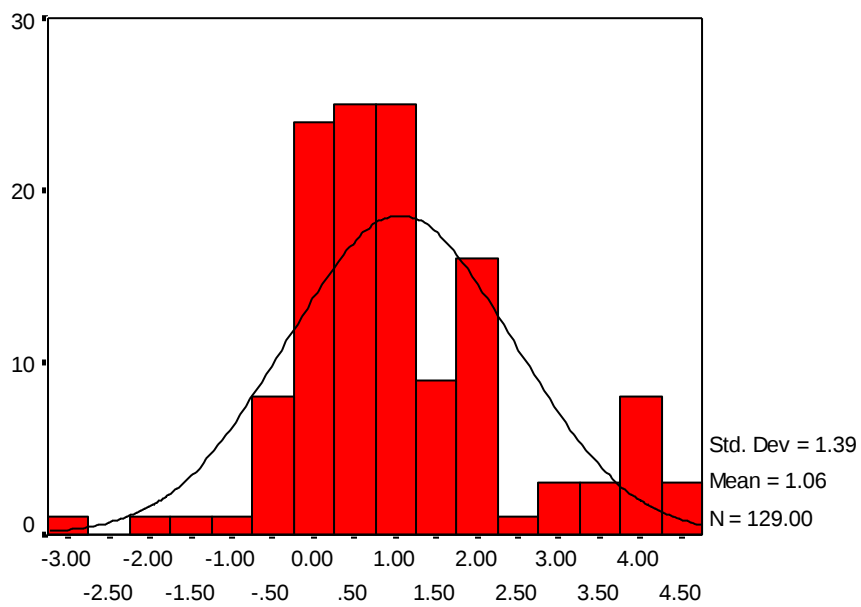
NOCOSTDE

SHOPTYPE: 1 Offline shoppers



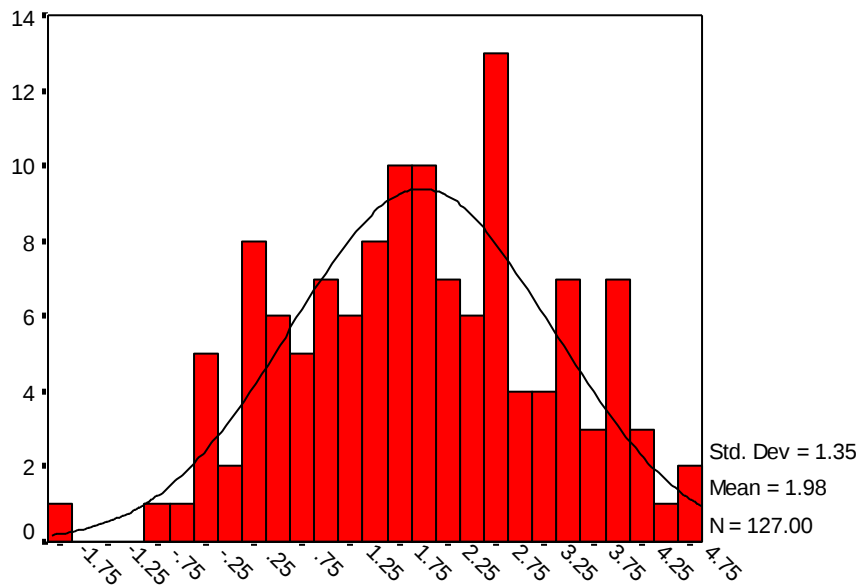
DELONTIM

SHOPTYPE: 2 Online shoppers



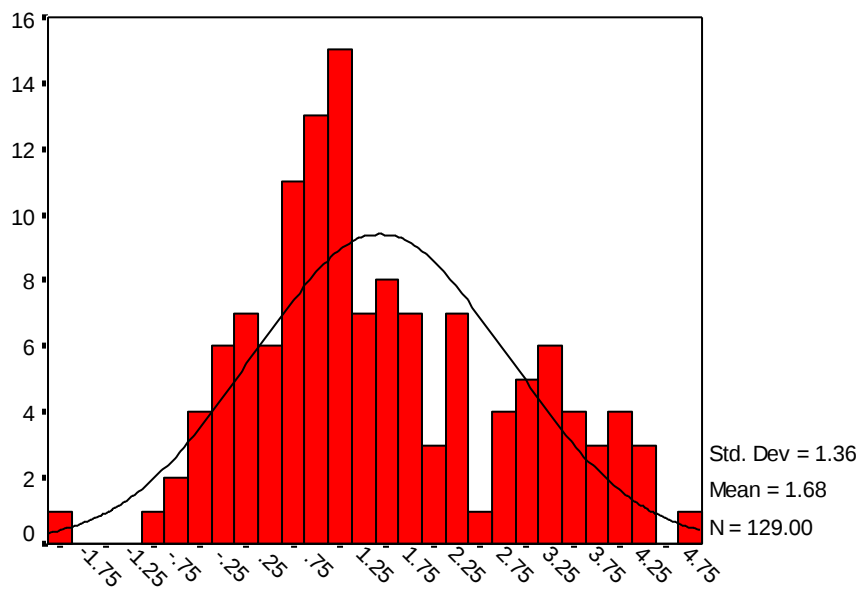
DELONTIM

SHOPTYPE: 1 Offline shoppers



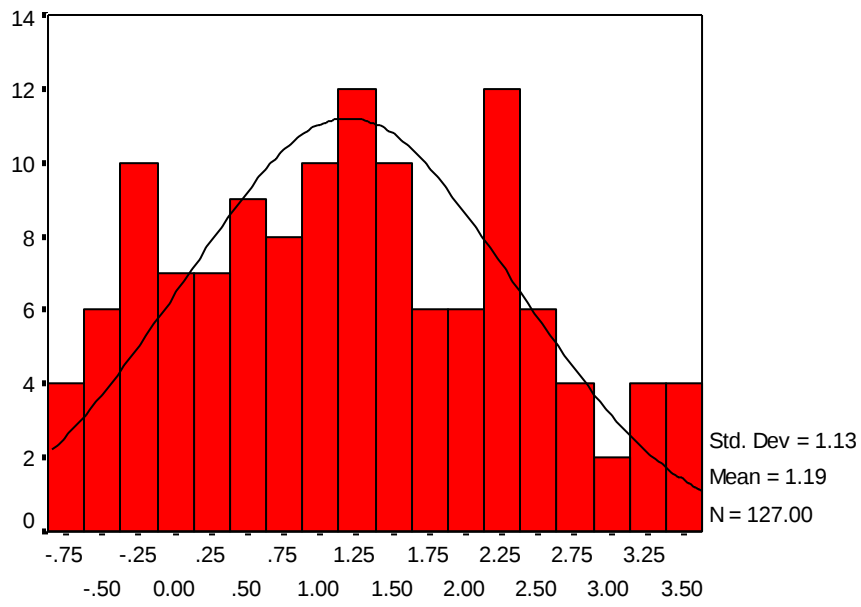
ALLITEMS

SHOPTYPE: 2 Online shoppers



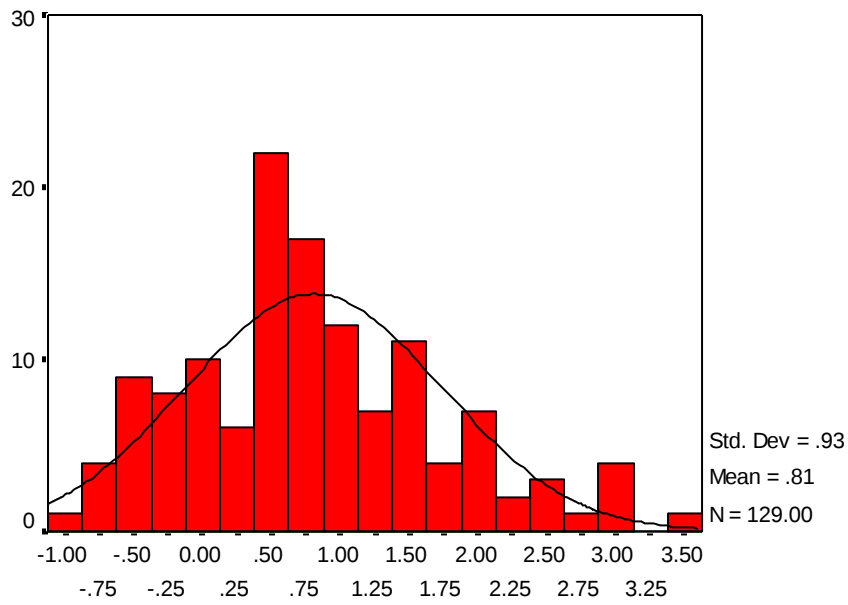
ALLITEMS

SHOPTYPE: 1 Offline shoppers

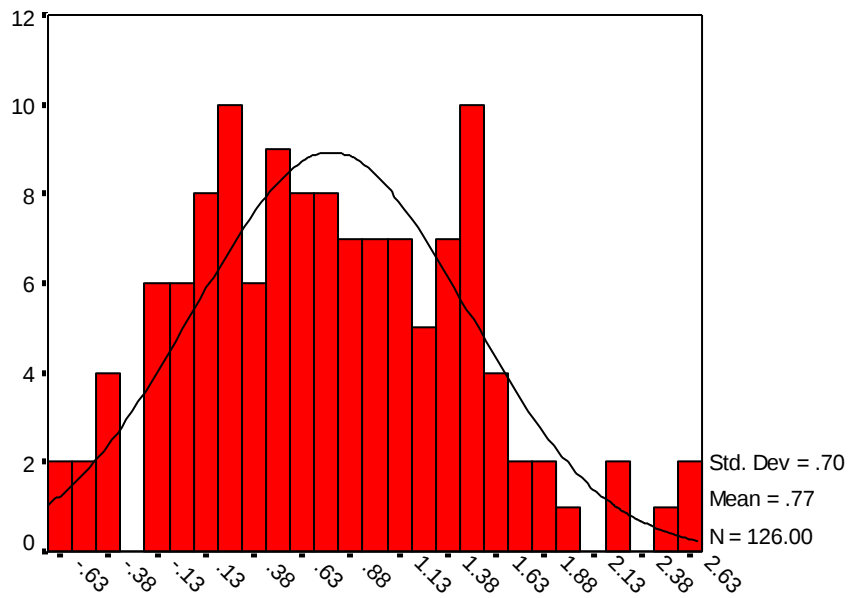


NOSUBS

SHOPTYPE: 2 Online shoppers

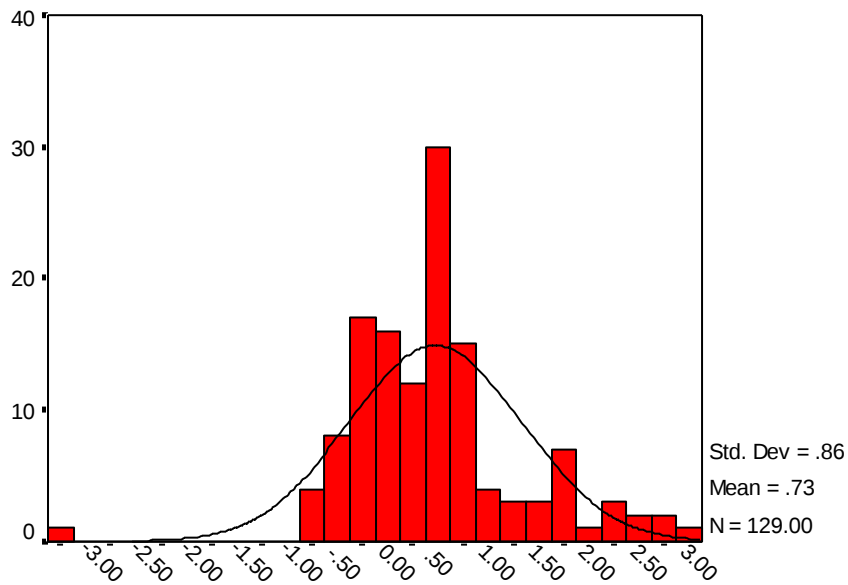


SHOPTYPE: 1 Offline shoppers



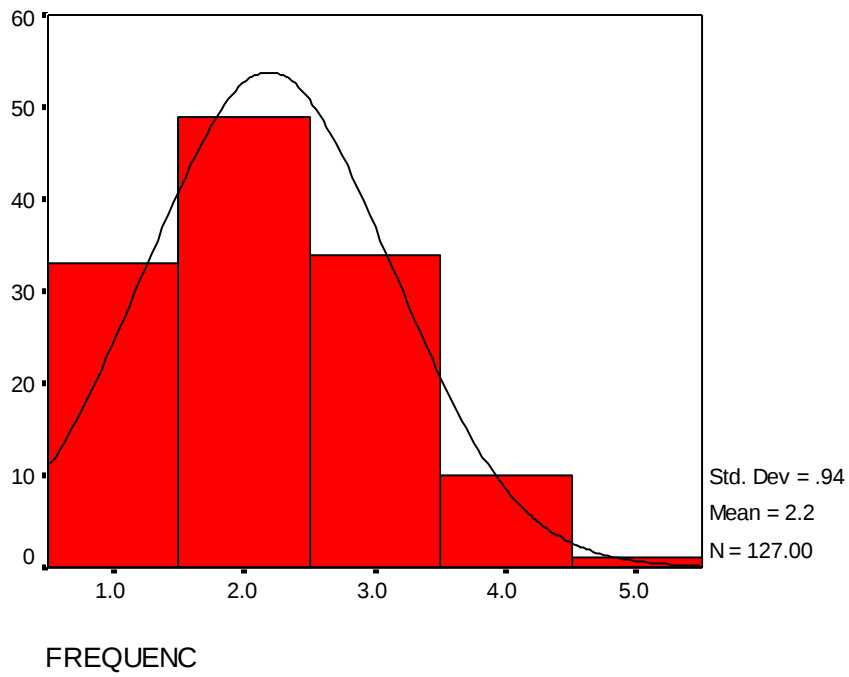
DISC10

SHOPTYPE: 2 Online shoppers

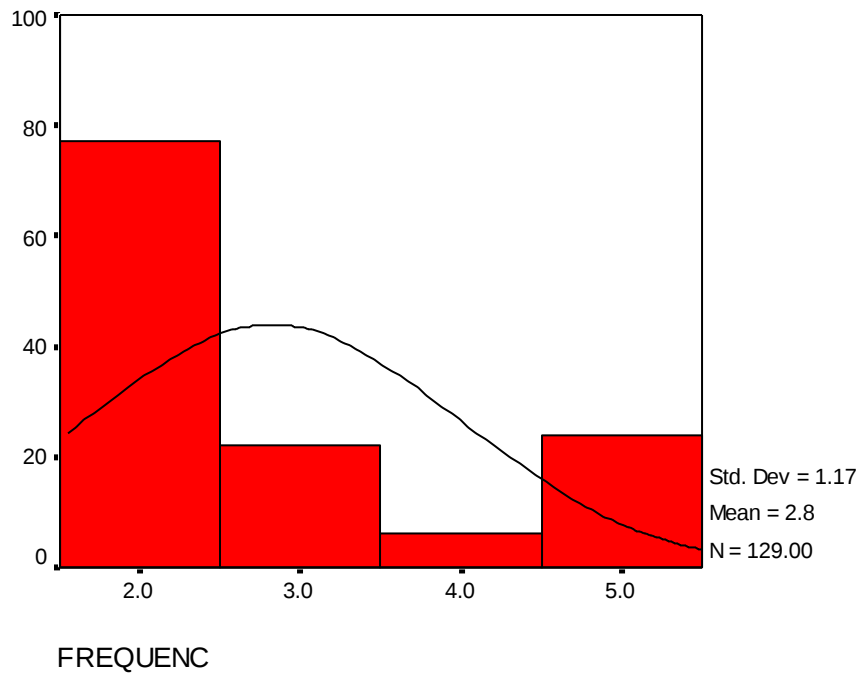


DISC10

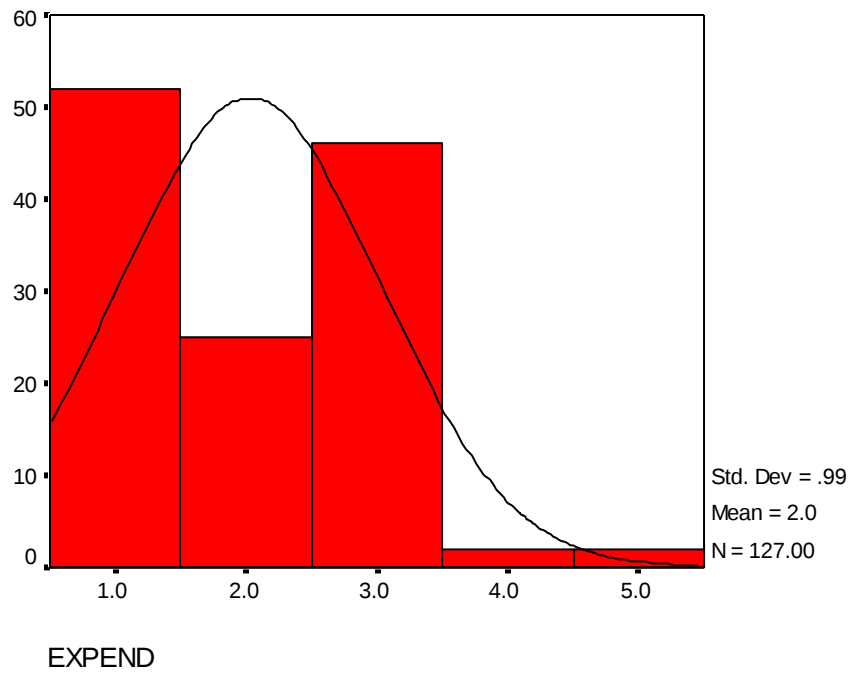
SHOPTYPE: 1 Offline shoppers



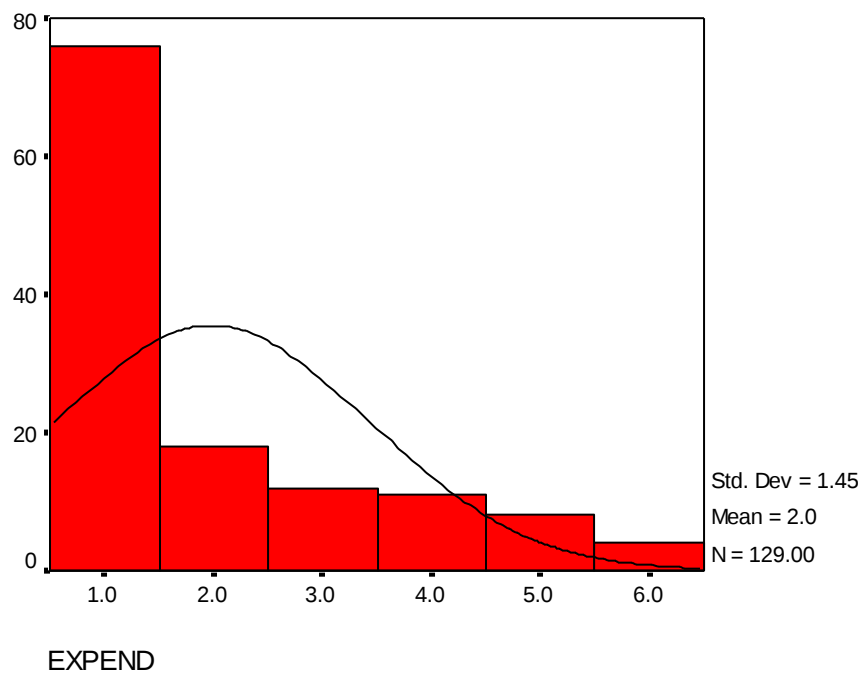
SHOPTYPE: 2 Online shoppers



SHOPTYPE: 1 Offline shoppers



SHOPTYPE: 2 Online shoppers



APPENDIX 9: SKEWNESS AND KURTOSIS CALCULATIONS

OF NORMALITY

Descriptive Statistics

SHOPTYPE		N	Minimum	Maximum	Mean	Std.	Skewness		Kurtosis	
		Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Offline shoppers	SPEOFF	127	-.833	1.625	.33126	.519345	.348	.215	-.093	.427
	TIMETOOR	127	-1.277	5.143	1.78891	1.288873	.211	.215	-.225	.427
	RETENT	127	1.00	8.00	3.4488	2.09954	.627	.215	-.547	.427
	NEWPROD	127	-1.448	1.229	-.03405	.489103	-.145	.215	-.046	.427
	HELPLINE	127	-1.020	1.774	.22165	.523737	-.033	.215	.139	.427
	DE6HOURS	127	-1.679	4.890	.99297	1.297443	.780	.215	.683	.427
	NOCOSTDE	127	-1.265	3.658	1.08462	1.118634	.212	.215	-.567	.427
	DELONTIM	127	-2.647	3.640	.71080	.945566	.253	.215	1.205	.427
	ALLITEMS	127	-1.633	4.848	1.98008	1.347563	-.045	.215	-.584	.427
	NOSUBS	127	-.848	3.594	1.19166	1.129230	.177	.215	-.831	.427
	DISC10	126	-.654	2.644	.77139	.702689	.328	.216	-.176	.428
	EXPEND	127	1.00	5.00	2.0315	.99153	.433	.215	-.621	.427
	FREQUENC	127	1.00	5.00	2.1890	.94055	.426	.215	-.406	.427
	Valid N (listwise)	126								
Online shoppers	SPEOFF	129	-1.428	2.469	.32662	.626418	.151	.213	.948	.423
	TIMETOOR	129	-1.049	4.416	1.67421	1.165839	.373	.213	-.376	.423
	RETENT	129	1.00	7.00	4.3876	1.68314	-.341	.213	-.649	.423
	NEWPROD	129	-1.196	1.289	.02468	.463979	.104	.213	.275	.423
	HELPLINE	129	-.866	2.185	.27088	.592542	.804	.213	.983	.423
	DE6HOURS	129	-1.708	4.014	.83501	1.227122	.538	.213	-.241	.423
	NOCOSTDE	129	-1.488	3.426	.65203	.846066	.740	.213	.924	.423
	DELONTIM	129	-2.988	4.384	1.05880	1.387467	.643	.213	.670	.423
	ALLITEMS	129	-1.704	4.922	1.68038	1.364683	.399	.213	-.512	.423
	NOSUBS	129	-.942	3.586	.80584	.930882	.475	.213	.063	.423
	DISC10	129	-2.998	3.178	.72587	.862466	.251	.213	2.725	.423
	EXPEND	129	1.00	6.00	1.9845	1.44690	1.332	.213	.603	.423
	FREQUENC	129	2.00	5.00	2.8217	1.16893	1.070	.213	-.497	.423
	Valid N (listwise)	129								

Offline Customers

Variable name	Z values of Skewness	Z values of Kurtosis	Critical value
Special offer section	0.70	2.20	+/- 2.58
New product section	-0.67	-0.10	+/- 2.58
Help line number	-0.15	0.32	+/- 2.58
Delivery in 6 hours	3.59	1.57	+/- 2.58
No cost delivery	0.97	-1.30	+/- 2.58
Delivery on time	1.16	2.77	+/- 2.58
All items quality	-0.21	-1.34	+/- 2.58
No substitutes	0.81	-1.91	+/- 2.58
10% discount	1.51	-0.40	+/- 2.58
Ordering time 20 minutes	1.73	-0.87	+/- 2.58
Frequency	1.96	-0.93	+/- 2.58
Expenditure	1.20	-1.43	+/- 2.58
Retention	-1.58	-1.50	+/- 2.58

Online Customers

Variable name	Z values of Skewness	Z values of Kurtosis	Critical value
Special offer section	0.70	2.20	+/- 2.58
New product section	0.48	0.64	+/- 2.58
Help line number	3.73	2.28	+/- 2.58
Delivery in 6 hours	2.49	-0.56	+/- 2.58
No cost delivery	3.43	2.14	+/- 2.58
Delivery on time	2.98	1.55	+/- 2.58
All items quality	1.85	-1.19	+/- 2.58
No substitutes	2.20	0.15	+/- 2.58
10% discount	1.16	6.32	+/- 2.58
Ordering time 20 minutes	1.73	-0.87	+/- 2.58
Frequency	4.96	-1.15	+/- 2.58
Expenditure	6.17	1.40	+/- 2.58
Retention	-1.58	-1.50	+/- 2.58

APPENDIX 10: ONE SAMPLE KOLMOGOROV-SMIRNOV TEST

Test Statistics^a

		SPEOFF	NEWPROD	HELPLINE	DE6HOURS	NOCOSTDE	DELONTIM	ALLITEMS	TIMETOOR	NOSUBS	DISC10	EXPEND	RETENT	FREQUENC
Most Extreme	Absolute	.092	.096	.109	.105	.254	.145	.189	.109	.218	.126	.180	.270	.260
Differences	Positiv e	.085	.035	.109	.105	.254	.023	.189	.109	.218	.126	.180	.055	.000
	Negativ e	-.092	-.096	-.069	-.051	-.056	-.145	-.015	-.040	-.018	-.076	-.147	-.270	-.260
Kolmogorov-Smimov Z		.734	.772	.874	.843	2.034	1.163	1.509	.872	1.741	1.008	1.438	2.157	2.079
Asymp. Sig. (2-tailed)		.654	.591	.430	.476	.001	.134	.021	.433	.005	.262	.032	.000	.000

a. Grouping Variable: SHOATYPE

APPENDIX 11: QUESTIONNAIRE FOR THE INTERVIEW

WITH MISS SUE JACKSON – PROJECT MANAGER AT

SAINSBURY'S

The objective of the research is to investigate the impact of the Internet on Customer Relationship.

This meeting aim to raise the relevant issues of the topic in order to develop the appropriate questions for case studies.

Incentive:

1. A transcript of the interview:- a) to ensure that I have captured the essence of what has been said; b) to identify any important issues that may not have come up in the interview
2. A management summary of the thesis
3. Will send any particular articles that are relevant to the work Miss Jackson is doing
4. Will send published articles

The meeting will start with 7 context setting questions to ensure that the future questions will be answered within an understood framework.

1. When did Sainsbury's start to make its first investments in the Internet?
2. On what grounds was that investment justified?
3. Which function was initially responsible?
4. What is the current annual direct investment in the Internet (software development/hardware/personnel etc...)?
5. What is the current commercial logic to the current investment? Who is responsible?
6. By what factor do you see the annual Internet investment changing over the next 3 years?
7. In what ways could the commercial logic driving this investment change over the next 3 years?

Next are the areas to be explored, which are divided into 4 sections.

1. The nature of the relationship between Sainsbury's and its customers - the different elements of this relationship

What are the main elements of Sainsbury's relationship with its customers?

- Convenience of the location i.e., proximity of the shop
- Convenience of the one stop shopping i.e., all under one roof
- Car park facilities
- Dining facilities
- Hours of operation
- Economy i.e., prices
- Shop design i.e., easy findings of products
- Products quality
- Products selection
- Stock availability
- Efficiency i.e., speed of the service helped by technology such as the scan system
- Waiting lines

Which one of these is the most important?

Which one of these is the least important?

2. The capabilities of the Internet and comparison of these capabilities with other ways of communication

Are all your in store products available on line? if no, why not?

What are the advantages to shop online versus in Sainsbury's outlets?

(e.g., more time to shop, greater selection of products since no floor space constraint, more time to spend with family, economic costs etc...)

Have you conducted research on consumers needs and desires to design your website or have you focussed on what is possible technically and logistically?

Is the Sainsbury's online service an efficient method of shopping for groceries vs conventional shopping? Why?

What percentage of items bought each week are replenishment?

What is the quantity and the quality of information provided on the Internet (e.g., product information, discount etc...)?

Delivering the goods:-

How do you manage the cost of delivery charges (i.e., cost of service)?

How are you delivering grocery products to your customers?

Is it in your opinion the best way?

What is the operating cost per order?

Is it high or low?

In what ways do you anticipate Internet ordering changing your physical distribution system (changes in physical assets)?

Designing the customer interface

How did you design the customer interface?

(i.e., text-based system, graphical system, 3D model of the physical store)

Why is it designed like that?

In your opinion and with your experience, what are the advantages and disadvantages of your system?

How much information is available?

Why do you provide customer service representatives?

How does your system influence the ease of use and speed of operation?

How does your system facilitate the purchase of certain brands?

How is the Internet different from other communication ways used by Sainsbury's?
(e.g., phone, call centre, fax, catalog...)

What are the Internet barriers to entry for your particular business?

Do you have a set of standards in terms of which data is presented to the customer?

3. The impact of these capabilities on the different elements of the relationship between Sainsbury's and its customers

Does your online service increase convenience and economy for your customers?

If yes, how?

If no, why not?

Is Sainsbury's online service capable of meeting the following customer's requirements

- If yes how and if no why?

- Convenience? e.g., by avoiding crowded stores, bad weather etc...
- Product variety?
- Product information?
- Taking orders? Options?
- Delivering merchandise? Options? From where to where?
- Stock? Out of stock problem? Why?

Who are your customers on the Internet?

- Stay-at-home mothers?
- Retiree?
- Dual income households?
- Single-parent families?
- Disabled?
- Others?

What are the profitable segments for your type of retail business?

Are you reaching these segments through the Internet?

If no, why?

Are these segments the same on the online?

If no, why?

How do you handle on the Internet:- delivery times to be convenient for customers?

How do you handle on the Internet:- perishable items?

How does the quantity and/or quality of information provided on the Internet impact, influence, change some elements of the customer relationship?

(i.e., the customer has no contact with the product - can't touch and smell fruits, bread...; can't pick up the latest expiration dates for dairy products)

Is the Internet a more efficient way to pass information onto customers?

Is the Internet a more efficient way to sell products versus retail store?

How do you help your customers to make better and faster decisions on the Internet?

(i.e., shopping list with relevant and desired product categories and brands, highlighted new products, store specials, product information etc...)

How do you make the experience of shopping online efficient?

(e.g., access product categories directly, recall shopping list, apply coupons etc...)

Is this efficiency getting to fewer impulse purchases?

How are you creating customer value through Sainsbury's online service?

With the capabilities of the Internet, is Sainsbury's objective to build relationship with its customers or to achieve economies of scale?

4. The impact of these changes on Sainsbury's performance

Have you conducted research to forecast the impact of online?

If yes what type of research and why?

If no, what were the reasons not to?

Impact on sales

Are sales increasing on the online service?

If yes, at which speed e.g., in percentage per month, per year?

If yes, what are the elements of this online service that contribute to this increase in sales?

If no, are sales limited in part because not all the products are available through these channels and are there other additional factors and which ones?

Impact on profits

Are profits increasing?

If yes, at which speed?

If yes, why? If no, why?

Impact on customer acquisition?

Is Sainsbury's attracting different types of customers i.e., customers from different segments?

Are online customers Sainsbury's existing customers? if no, why?

Are you attracting, reaching more customers?

Impact on distribution costs

Are distribution costs down?

If yes, which ones?

If no, could you explain why not?

The future of your online service

Do you think that more and more customers will change their behaviour?
(i.e., be more and more comfortable buying products without handling them physically)

Is there a reluctance of your customers to try new technologies?

If yes, is it going to change over time?

Are customers better served as a result of new technologies?
(i.e., is the content richer: more variety of products, products can be shown in different contexts etc...)

Is the communication with customers more direct, intelligent and personal?

Are orders getting larger on the Internet?

Do you notice less or more or the same brand switching on the Internet than in physical stores?

Impact on customer retention

Is Sainsbury's online service the way to get closer to your customers?

Integration of online service and in-store
(i.e., do you think that Sainsbury's first get its customers (customer acquisition) because they go to the store and then go on line

APPENDIX 12: QUESTIONNAIRE SENT TO

SIMON MILLER – SAINSBURY’S

1- Managing the nature of the relationship between Sainsbury's and its customers

- What are the main elements of Sainsbury's relationship with its customers?

2- Managing customer relationship before the launch of the Internet site

- How did you try to accomplish each element of your relationship with customers?
- What are the other communication methods used by Sainsbury's for customer relationship management?
- How do they help accomplishing the management of your relationship with customers?

3- Managing customer relationships with the Internet

- How has the way you accomplished each elements of your relationship with customers changed with the Internet?
- How is the Internet different from other ways of communication?
- What are the advantages to shop online versus shopping in Sainsbury's supermarkets?
- Is there any inconvenience to shop on line?

- Is Sainsbury's online service capable of meeting your customer's requirements and how?
- Who are your customers on the Internet? Are they your profitable segments? Are the Internet customers different from the in store customers?
- How are you creating customer value through Sainsbury's online service?
- Is the Internet a more efficient way to pass information onto customers? Why?
- Is the Internet a more efficient way to sell products versus in-store retailing?
- In what ways do you anticipate Internet ordering changing your physical distribution system?

4- The impact of managing customer relationships with the Internet on Sainsbury's performance

- What is the impact on sales?
- What is the impact on profits?
- What is the impact on customer acquisition?
- What is the impact on customer retention?

APPENDIX 13: QUESTIONNAIRE SENT TO MRS ELIZABETH GLASS – SAINSBURY'S.CO.UK

1. In what ways could the commercial logic driving the current Internet investment change over the next 3 years?
2. Who is responsible for the design and the content of the company's website? Why?
3. Is your website focusing more on the acquisition of customers or on the loyalty side? Why?
4. Would you say that the nature of the relationship between Sainsbury's and its customers has changed with the Internet service? If yes, how and if no, why not?
5. What are the advantages and disadvantages for the customer to shop online versus in Sainsbury's outlets?
6. Would you please rank the following variables from what you consider being the most important to your customers to the least important when making the decision to shop online (1 = most important):
 - the time to place an order

- the delivery slot
- the delivery cost
- the punctuality of the delivery
- a new product section
- the special offer section
- access to a help line number
- a discount that is only available when shopping online
- the fact that there are no items below the quality expected by customers
- the fact that there are no substitutes products at delivery

7. How are you planning to increase customer value through Sainsbury's online services?

8. What are the top two market criteria against which Sainsbury's positions itself?

9. Would you say that your website supports these two criteria? If so how?

10. Would you say that your website is "sticky" for consumers so they stay connected up to they transact? And if yes, how?

11. What is your view about online communities with regards to how it might affect Customer Loyalty?

12. Would you say that it is important to entertain customers online? If yes, how do you do it? If no, why not?
13. If sales have increased since the existence of Sainsburys.co.uk, what would you say are the characteristics of your online service that has contributed to this increase in sales? Internet capabilities linked to customer loyalty
14. Would you say that Sainsburys.co.uk is attracting different types of customers i.e., customers from different segments? Are you entering new markets? Please describe.
15. Is Sainsbury's online service the way to get closer to your customers? And if yes, How and why?

APPENDIX 14: Detailed Statistical Tables

Independent Sample T-Test of Online and Offline Customers Attribute

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
ABSSPEOF	Equal variances assumed	.153	.696	-1.692	254	.092	-.1724	.10192	-.37316	.02826
	Equal variances not assumed			-1.693	252.668	.092	-.1724	.10185	-.37303	.02813
ABSNEWPR	Equal variances assumed	.109	.741	.845	254	.399	.0608	.07197	-.08092	.20256
	Equal variances not assumed			.845	253.865	.399	.0608	.07198	-.08093	.20257
ABSHELPL	Equal variances assumed	5.084	.025	-.313	254	.755	-.0303	.09694	-.22124	.16057
	Equal variances not assumed			-.314	236.212	.754	-.0303	.09672	-.22087	.16021
ABSDELTI	Equal variances assumed	.161	.689	.158	254	.874	.0421	.26610	-.48196	.56612
	Equal variances not assumed			.158	252.847	.875	.0421	.26620	-.48218	.56634
ABSCOSTD	Equal variances assumed	14.256	.000	4.362	254	.000	.8928	.20467	.48974	1.29587
	Equal variances not assumed			4.353	235.862	.000	.8928	.20509	.48876	1.29685
ABSDELON	Equal variances assumed	18.606	.000	-2.908	254	.004	-.7293	.25075	-1.22306	-.23545
	Equal variances not assumed			-2.918	217.330	.004	-.7293	.24991	-1.22181	-.23669
ABSQUALI	Equal variances assumed	.077	.782	1.904	254	.058	.6005	.31533	-.02048	1.22153
	Equal variances not assumed			1.905	253.985	.058	.6005	.31528	-.02036	1.22141
ABSORTIM	Equal variances assumed	.001	.976	2.074	254	.039	.6826	.32919	.03430	1.33086
	Equal variances not assumed			2.074	253.992	.039	.6826	.32913	.03441	1.33075
ABSSUBST	Equal variances assumed	12.772	.000	3.327	254	.001	.7153	.21502	.29184	1.13874
	Equal variances not assumed			3.320	238.602	.001	.7153	.21543	.29091	1.13967
ABSDISCT	Equal variances assumed	.890	.346	.050	253	.960	.0087	.17305	-.33213	.34946
	Equal variances not assumed			.050	245.478	.960	.0087	.17264	-.33138	.34872

Independent sample t-test of absolute utility values between high and low frequency online customers

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
absspecialof fer	Equal variances assumed	.156	.693	.300	254	.764	.03170	.10561	-.17629	.23969
	Equal variances not assumed			.305	213.140	.761	.03170	.10397	-.17324	.23665
absnewprods	Equal variances assumed	.610	.435	.424	254	.672	.03152	.07426	-.11472	.17776
	Equal variances not assumed			.428	207.772	.669	.03152	.07371	-.11380	.17683
absshelpline	Equal variances assumed	.197	.657	1.226	254	.221	.12216	.09963	-.07405	.31837
	Equal variances not assumed			1.242	211.162	.216	.12216	.09838	-.07178	.31610
absdelttime	Equal variances assumed	.326	.568	-.195	254	.846	-.05344	.27425	-.59352	.48665
	Equal variances not assumed			-.195	202.942	.846	-.05344	.27426	-.59419	.48732
absdelcost	Equal variances assumed	5.736	.017	2.061	254	.040	.44702	.21690	.01987	.87416
	Equal variances not assumed			2.132	224.541	.034	.44702	.20971	.03377	.86026
absdelontime	Equal variances assumed	3.501	.062	-1.290	254	.198	-.33781	.26184	-.85347	.17785
	Equal variances not assumed			-1.249	182.443	.213	-.33781	.27043	-.87139	.19577
absquality	Equal variances assumed	.322	.571	.217	254	.828	.07102	.32728	-.57351	.71555
	Equal variances not assumed			.216	199.957	.829	.07102	.32880	-.57734	.71939
absorderingtime	Equal variances assumed	2.448	.119	-.747	254	.456	-.25514	.34176	-.92819	.41790
	Equal variances not assumed			-.735	192.642	.463	-.25514	.34728	-.94009	.42981
abs substitutes	Equal variances assumed	3.064	.081	1.022	254	.308	.23091	.22592	-.21402	.67583
	Equal variances not assumed			1.050	220.272	.295	.23091	.21994	-.20255	.66436
absdiscount	Equal variances assumed	.338	.562	-.572	254	.568	-.11015	.19248	-.48921	.26891
	Equal variances not assumed			-.591	223.873	.555	-.11015	.18630	-.47727	.25697

t-Test to Examine Attribute Utility Rate of Change Coefficients between Online and Offline Customers

COEFORDT	Equal variances assumed	.001	.976	2.074	254	.039
	Equal variances not assumed			2.074	253.992	.039
COEFCOST	Equal variances assumed	14.256	.000	4.362	254	.000
	Equal variances not assumed			4.353	235.862	.000
COEFDELO	Equal variances assumed	18.606	.000	-2.908	254	.004
	Equal variances not assumed			-2.918	217.330	.004
COEFSUBS	Equal variances assumed	12.772	.000	3.327	254	.001
	Equal variances not assumed			3.320	238.602	.001

Correlations between Attributes and Loyalty for Online and Offline Customers

SHOATYPE			EXPEND	RETENT	FREQUENC
Offline shoppers	EXPEND	Pearson			
		Correlation	1	.031	.691(**)
		Sig. (2-tailed)	.	.727	.000
		N	127	127	127
	RETENT	Pearson			
		Correlation	.031	1	.109
		Sig. (2-tailed)	.727	.	.221
		N	127	127	127
	FREQUENC	Pearson			
		Correlation	.691(**)	.109	1
		Sig. (2-tailed)	.000	.221	.
		N	127	127	127
	SPEOFF	Pearson			
		Correlation	-.107	-.056	-.020
		Sig. (2-tailed)	.229	.529	.821
		N	127	127	127
	NEWPROD	Pearson			
		Correlation	.024	.075	-.014
		Sig. (2-tailed)	.790	.402	.880
		N	127	127	127
	HELPLINE	Pearson			
		Correlation	-.191(*)	-.009	-.093
		Sig. (2-tailed)	.031	.917	.297
		N	127	127	127
	DE6HOURS	Pearson			
		Correlation	-.123	.069	.032
		Sig. (2-tailed)	.168	.439	.720
		N	127	127	127

Online shoppers	NOCOSTDE	Pearson			
		Correlation	-.151	-.066	-.213(*)
		Sig. (2-tailed)	.091	.458	.016
		N	127	127	127
	DELONTIM	Pearson			
		Correlation	.273(**)	-.057	.147
		Sig. (2-tailed)	.002	.528	.098
		N	127	127	127
	ALLITEMS	Pearson			
		Correlation	-.045	-.103	-.039
		Sig. (2-tailed)	.617	.249	.663
		N	127	127	127
	TIMETOOR	Pearson			
		Correlation	.046	.031	.007
		Sig. (2-tailed)	.609	.731	.933
		N	127	127	127
	NOSUBS	Pearson			
		Correlation	-.082	.021	-.086
		Sig. (2-tailed)	.358	.818	.337
		N	127	127	127
	DISC10	Pearson			
		Correlation	.013	-.009	.049
		Sig. (2-tailed)	.888	.924	.588
		N	126	126	126
	EXPEND	Pearson			
		Correlation	1	.051	.557(**)
		Sig. (2-tailed)	.	.569	.000
		N	129	129	129
	RETENT	Pearson			
		Correlation	.051	1	.047
		Sig. (2-tailed)	.569	.	.594

	N	129	129	129
FREQUENC	Pearson			
	Correlation	.557(**)	.047	1
	Sig. (2-tailed)	.000	.594	.
	N	129	129	129
SPEOFF	Pearson			
	Correlation	.023	.073	.041
	Sig. (2-tailed)	.792	.412	.648
	N	129	129	129
NEWPROD	Pearson			
	Correlation	.112	-.132	.021
	Sig. (2-tailed)	.207	.135	.809
	N	129	129	129
HELPLINE	Pearson			
	Correlation	-.070	-.053	.005
	Sig. (2-tailed)	.428	.551	.957
	N	129	129	129
DE6HOURS	Pearson			
	Correlation	-.047	-.035	-.043
	Sig. (2-tailed)	.598	.693	.628
	N	129	129	129
NOCOSTDE	Pearson			
	Correlation	-.183(*)	-.005	-.229(**)
	Sig. (2-tailed)	.037	.953	.009
	N	129	129	129
DELONTIM	Pearson			
	Correlation	.041	-.033	.101
	Sig. (2-tailed)	.648	.709	.255
	N	129	129	129
ALLITEMS	Pearson			
	Correlation	.118	.136	.071

	TIMETOOR	Sig. (2-tailed)	.184	.124	.426
		N	129	129	129
		Pearson			
		Correlation	.081	-.027	.081
	NOSUBS	Sig. (2-tailed)	.364	.765	.362
		N	129	129	129
		Pearson			
		Correlation	-.021	.206(*)	-.030
	DISC10	Sig. (2-tailed)	.817	.019	.732
		N	129	129	129
		Pearson			
		Correlation	.047	-.103	.077
		Sig. (2-tailed)	.595	.244	.388
		N	129	129	129

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

REFERENCES

Abdellaoui, M., Barrios, C. and Wakker, P.P. (2007) "Reconciling introspective utility with revealed preference: Experimental arguments based on prospect theory" *Journal of Econometrics*, Vol. 138, Issue 1, 356-378

Agarwal, R. and Venkatesh, V. (2002) "Assessing a Firm's Web Presence: A Heuristic Evaluation Procedure for the Measurement of Usability" *Information Systems Research*, June, Vol. 13, Issue 2, 168-186

Aggarwal, P. and Vaidyanathan, R. (2003) "The Perceived Effectiveness of Virtual Shopping Agents for Search vs. Experience Goods" *Advances in Consumer Research*, Vol. 30, Issue 1, 347-348

Ajzen, I. (2002) "Perceived Behavioral Control, Self-Efficacy, Locus of Control, and the Theory of Planned Behavior" *Journal of Applied Social Psychology*, April, Vol. 32, Issue 4, 665-683

Alba, J.W. and Hutchinson, J.W. (1987) "Dimensions of Consumer Expertise" *Journal of Consumer Research*, March, Vol. 13, Issue 4, 411-455

Alba, J., Lynch J., Weitz B., Janiszewski C., Lutz R., Sawyer A and Wood S. (1997) "Interactive Home Shopping: Customer, Retailer, and Manufacturer Incentives to Participate in Electronic Marketplaces" *Journal of Marketing*, July, Vol.61, 38-53

Amine, A. (1998) "Customers' true brand loyalty: the central role of commitment" *Journal of Strategic Marketing*, Vol. 6, 305-319

Anderson, R.E. and Srinivasan, S.S. (2003) "E-Satisfaction and E-Loyalty: A Contingency framework" *Psychology and Marketing*, February, Vol. 20, Issue 2, 123-138

Ansari, A., Essegai, S. and Kohli, R. (2000) "Internet Recommendation Systems" *Journal of Marketing Research*, August, Vol. 37, Issue 3, 363-375

Ariely, D. and Carmon, Z. (2002) "On the Elusive Value of Value: Determinants of Consumers' Value Perceptions" *Advances in Consumer Research*, Vol. 24, Issue 1, 333-333

Azjen, I. (1988) Attitudes, Personality and Behavior Chicago, IL: Dorsey Press

Baker, P.M. (2001) "Policy Bridges for the Digital Divide: Assessing the Landscape and Gauging the Dimensions" *First Monday*, Vol. 6, No.5, http://www.firstmonday.org/issues/issue6_5/baker/index.html

Bakos, J.Y. (1997) "Reducing buyer search costs: Implications for electronic marketplaces" *Management Science*, December, Vol. 43, Issue 12, 1676-1693

Baldinger, A.L. and Robinson J. (1996) "Brand loyalty: the link between attitude and behaviour" *Journal of Advertising Research*, November-December, 22-34

Ballantine, P.W. (2005) "Effects of interactivity and product information on consumer satisfaction in an online retail setting" *International Journal of Retail & Distribution Management*, Vol. 33, Issue 6, 461-471

Barnes, D. Hinton, M. and Mieczkowska, S. (2003) "competitive advantage through e-operations" *Total Quality Management & Business Excellence*, August, Vol. 14, Issue 6, 659-676

Bart, Y., Shankar, V., Sultan, F. and Urban, G.L. (2005) "Are the Drivers and Role of Online Trust the Same for All Web Sites and Consumers? A Large-Scale Exploratory Empirical Study" *Journal of Marketing*, Vol. 69, Issue 4, 133-152

Bateson, J. (2002) "Are your customers good enough for your service business?" *Academy of Management Executive*, November, Vol. 16, Issue 4, 110-120

Bauerfeld, W. and Holleczech, P. (1989) "Global Connectivity" *Computer Networks & ISDN Systems*, Vol. 17, Issue 4-5, 300-305

Bechwati, N.N. and Xia, L. (2003) "Do Computers Sweat? The impact of Perceived Effort of Online Decision Aids on Consumers' Satisfaction with the Decision Process" *Journal of Consumer Psychology*, Vol. 13, No.1-2, 139-148

Becker, H.S. (1960) "Notes on the Concept of Commitment" *American Journal of Sociology*, July, Vol.66, 32-40

Bellenger, D.N. and Korgaonkar, P.K. (1980) "Profiling the Recreational Shopper" *Journal of Retailing*, Fall, Vol.56, Issue 3, 77-92

Bellman, S, Lohse, G.L. and Johnson, E.J. (1999) "Predictors of Online Buying Behavior" *Communications of the ACM*, December, Vol. 42, No. 12, 32-38

Benjamin, R.I. and Wigand, R.T. (1995) "Electronic Markets and Virtual Value Chains on the Information Superhighway", *Sloan Management Review*, Winter: 62-72

Berry, L.L., Seiders, K. and Grewal, D. (2002) "Understanding Service Convenience" *Journal of Marketing*, July, Vol. 66, Issue 3, 1-17

Berthon, P. and Pitt, L. (1996) "Marketing communication and the World Wide Web" *Business Horizons*, September-October, Vol. 39, Issue 5, 24-33

Betancourt, R. and Gautschi, D. (1990) "Demand Complementarities, Household Production, and Retail Assortments" *Marketing Science*, Spring, Vol. 9, Issue 2, 146-162

Bettman, J.R. and Luce, M.F. (1998) "Constructive Consumer Choice Processes" *Journal of Consumer Research*, December, Vol. 25, Issue 3, 187-218

Bettman, J.R. and Park, C.W. (1980) "Implications of a Constructive View of Choice for Analysis of Protocol Data: A Coding Scheme for Elements of Choice Processes" *Advances in Consumer Research*, Vol. 7, Issue 1, 148-153

Betts, M. (2001) "Brands Still Matter, Even for Shopbots" *MIT Sloan Management Review*, Vol. 42, No.2, 9

Bhatnagar, A. and Ghose S. (2004) "Segmenting customers based on the benefits and risks of Internet shopping" *Journal of Business Research*, Vol.57, Issue 12, 1352-1360

Biswas, D. (2004) "Economics of information in the Web Economy: Towards a New Theory?" *Journal of Business Research*, Vol. 57, No. 7, 724-733

Blackston, M. (1992) "A brand with an attitude: a suitable case for treatment" *Journal of the Market Research Society*, July, Vol. 34, No. 3, 231-241

Blattberg, R.C. and Deighton J. (1991) "Interactive Marketing: Exploiting the Age of Addressability" *Sloan Management Review* 33, fall, 5-15

Blattberg, R.C. and Deighton J (1996) "Manage Marketing by the Customer Equity Test" *Harvard Business Review*, July-August, Vol. 74, Issue 4, 136-144

Bloemer, J. and de Ruyter, K. (1998) "On the relationship between store image, store satisfaction and store loyalty" *European Journal of Marketing*, Vol. 32, Issue 5/6, 397-513

Boston Consulting Group (1998) “The state of online retailing” November, *Shop.org/BCG e-commerce report*

Brännback, M. (1997) “The Knowledge-Based Marketing Concept – A Basis for Global Business” *Human Systems Management*, Vol. 16, Issue 4, 293-300

Brown, J.J and Reingen, P.H. (1987) “Social ties and word-of-mouth referral behaviour” *Journal of Customer Research*, Vol. 14, December, 350-362

Brynjolfsson, E., Hu, Y.J. and Smith, M.D. (2006) “From Niches to Riches: Anatomy of the Long Tail” *MIT Sloan Management Review*, Vol. 47, Issue 4; 67-71

Brynjolfsson, E. and Smith, M.D. (2000) “Frictionless Commerce? A Comparison of Internet and Conventional Retailers” *Management Science*, Vol. 46, Issue 4, 563-585

Bucklin, L.P. (1963) “Retail Strategy and the Classification of Consumer Goods” *Journal of Marketing*, Vol. 27, Issue 1, 50-55

Burke, R.R. (1997) “Do You See What I See? The Future of Virtual Shopping” *Journal of the Academy of Marketing Science*, Vol. 25, Issue 4, 352-360

Burke, R.R., Harlam B.A., Kahn B.E. and Lodish, L.M. (1992) “Comparing Dynamic Customer Choice in Real and Computer-simulated Environments” *Journal of Customer Research*, June, Vol.19, 71-82

Burroughs, R.E. and Sabherwal, R. (2002) "Determinants of Retail Electronic Purchasing: A Multi-Period Investigation" *Infor*, February, Vol. 40, Issue 1, 35-56

Chase, R.B. (1978) "Where Does the Customer Fit in a Service Operation?" *Harvard Business Review*, Vol. 56, Issue 6, 137-142

Cameron, M. (1999) "Content that works on the Web" *Target Marketing*, November, 58-87

Carlsson, B. (2004) "The Digital Economy: what is new and what is not?" *Structural Change & Economic Dynamics*, September, Vol. 15, Issue 3, 245-264

<http://www.census.gov/mrts/www/data/html/07Q1table4.html>

Chen, S.J. and Chang, T.Z. (2003) "A descriptive model of online shopping process: some empirical results" *International Journal of Service Industry Management*, Vol. 14, Issue 5, 556-569

Chen, Q. and Wells, W.D. (1999) "Attitude towards the site" *Journal of Advertising Research*, Vol. 39, Issue 5, 27-38

Chiang C-F. and Jang, S. (2006) "The Effects of Perceived Price and Brand Image on Value and Purchase Intention: Leisure Travelers' Attitudes Towards Online Hotel Booking" *Journal of Hospitality & Leisure Marketing*, Vol. 15, Issue 3, 49-69

Chu, Y.P. and Chu, R.L. (1990) "The Subsidence of Preference Reversals in Simplified and Marketlike Experimental Settings: A Note" *American Economic Review*, September, Vol. 80, Issue 4, 902-911

Christensen, C.M. and Tedlow, R.S. (2000) "Patterns of Disruption in Retailing" *Harvard Business Review*, January-February, Vol. 78, Issue 1, 42-46

Cohen, J. (1977) Statistical Power Analysis for the Behaviour Sciences, New York: Academic Press

Cooper, W. (2006) "Comparison Site Launches for Supermarkets" *New Media Age*, 10/19/2006, 7-7

Coupey, E. (1994) "Restructuring: Constructive Processing of Information Displays in Consumer Choice" *Journal of Consumer Research*, June, Vol. 21, 83-99

Crain, R. (2004) "The Growing Impact of Consumers' Web Publishing: Why Advertising Can No Longer Be A One-Way Monologue" AdAge.com (November 1)

Crosby, L.A. and Taylor, J.R. (1983) "Psychological Commitment and its Effects on Post-Decision Evaluation and Preference Stability among Voters" *Journal of Customer Research*, March, Vol. 9, 413-431

Csikszentmihalyi, M. (1977) Beyond Boredom and Anxiety, Second Edition, San Francisco, CA: Jossey-Bass

Csikszentmihalyi, M. (1990) Flow: The Psychology of Optimal Experience, New York: Harper and Row

Csikszentmihalyi, M. (1997) "Happiness and Creativity: Going with the Flow" *Futurist*, Vol. 31, Issue 5, Special Report on Happiness, 8-13

Dabholkar, P.A. (2006) "Factors Influencing Consumer Choice of a "Rating Web Site": An Experimental Investigation of an Online Interactive Decision Aid" *Journal of Marketing Theory and Practice*, Vol.14, No. 4, 259-273

Darlin, D. (2005) "The Only Question That Matters" *Business 2.0*, September, Vol. 6, Issue 8, 50-52

Day, G.S., (1969) "A Two-Dimensional Concept of Brand Loyalty" *Journal of Advertising Research*, September, Vol.9, 29-35

De Wulf, K., Odekerken-Schröder, G. and Van Kenhove, P. (2003) "Investments in consumer relationships: A Critical Reassessment and Model Extension" *International Review of Retail, Distribution & Consumer Research*, Vol. 13, Issue 3, 245-261

Degeratu, A. M., Rangaswamy A. and Wu J. (2000) "Customer choice behavior in online and traditional supermarkets: The effects of brand name, price, and other search attributes" *International Journal of Research in Marketing*, Vol. 17, Issue 1, 55-78

Deighton, J and al (1996) "The Future of Interactive Marketing" *Harvard Business Review*, November-December, 151-162

Dellaert, B., and Kahn, B. (1999) "How tolerable is delay?: Consumers' Evaluations of Internet Web Sites after Waiting" *Journal of Interactive Marketing*, Vol.13, No.1, 41-54

Dholakia, U. and Bagozzi, R.P. (2001) "Consumer Behaviour in Digital Environments" in *Digital Marketing*, 163-200

Dick, A.S., and Basu, K. (1994) "Customer Loyalty: Toward an Integrated Conceptual Framework" *Journal of the Academy of Marketing Science*, Spring, Vol.22, 99-113

Ding, M., Grewal, R. and Liechty, J. (2005) "Incentive-Aligned Conjoint Analysis" *Journal of Marketing Research*, February, pp. 67-82

Donegan, P. (1996) "High-tech in a high-touch way" *Progressive Grocer*, December, Vol. 75, Issue 12, 133-135

Doney, P.M. and Cannon, J.P. (1997) "An Examination of the Nature of Trust in Buyer-Seller Relationships" *Journal of Marketing*, Vol. 61, Issue 2, 35-52

Dubé, L. and LeBel, J.L. (1999) "Accounting for Pleasure: On the Unitary and Multi-dimensional Nature of Hedonic Experiences" *Advances in Consumer Research*, Vol. 26, Issue 1, 160-162

Easterby-Smith, M., Thorpe, R. and Lowe, A. (1991) Management Research: An Introduction, London: Sage Publications

Ehrenberg, A.S.C., Goodhardt, G.J. and Barwise, T.B. (1990) "Double Jeopardy Revisited" *Journal of Marketing*, Vol. 54, July, 82-91

Ellis, G.D, Voelkl, J.E. and Morris, C. (1994) "Measurement and analysis issues with explanation of variance in daily experience using the flow model" *Journal of Leisure Research*, Vol.26, No. 4, 337-356

Evans, P.B. and Wurster, T.S. (1997)"Strategy and the New Economics of Information" *Harvard Business Review*, September-October, 71-82

Evans, P.B. and Wurster, T.S. (1999) "Getting Real about Virtual Commerce" *Harvard Business Review*, November-December, 84-94

Fader, Peter, S. and Hardie, Bruce, G.S. (2001) "Forecasting Repeat Sales at CDNOW: A Case Study", *Interfaces*, May/June, Vol. 31, Issue 3, S94-S107

Farag, S., Schwanen, T., Dijst, M. and Faber, J. (2007) “Shopping online and/or in-store? A structural equation model of the relationships between e-shopping and in-store shopping”, *Transportation Research Part A: Policy and Practice*, Vol. 41, Issue 2, 125-141

Festinger, L. (1957) A Theory of Cognitive Dissonance, Stanford, CA: Stanford University Press

Fischhoff, B., Slovic, P. and Lichtenstein, S. (1980) Knowing what you want: Measuring labile values. In T. Wallsten (Ed.), “Cognitive processes in choice and decision behaviour”, 117-141, Hillsdale, NJ: Erlbaum

Forrester (2004):

<http://web.archive.org/web/20020210142542/http://www.forrester.com/ER/Press/ForrFind/0,1768,0,00.html>

Frambach, R.T., Roest, H. and Krishnan, T. (2007) “ The impact of consumer Internet experience on channel preference and usage intentions across the different stages of the buying process” *Journal of Interactive Marketing*, Vol. 21, Issue 2, 26-41

Ganesan, S. (1994) “Determinants of Long-Term Orientation in Buyer-Seller Relationships” *Journal of Marketing*, Vol. 58, Issue 2, 1-19

Gatti, J. and Rupert, J. (1999) “Multi-Commodity Consumer Search” *Journal of Economic Theory*, Vol. 86, Issue 2, 219-244

Gefen, D. (2000) "E-commerce: the role of familiarity and trust" *OMEGA The International Journal of Management Science*, Vol. 28, No. 6, 725-737

Ghani, J.A. and Deshpande, S.P. (1994) "Task characteristics and the experience of optimal flow in human-computer interaction" *Journal of Psychology*, Vol.128, No.4, 381-391

Ghose, S. and Wenyu, D. (1998) "Interactive Functions and their Impacts on the Appeal of Internet Presence Sites", *Journal of Advertising Research*, March/April, Vol. 38, Issue 2, 29-43

Giaglis, G.M., Klein, S. and O'Keefe, R.M. (2002) "The role of intermediaries in electronic marketplaces: developing a contingency model" *Information Systems Journal*, July, Vol. 12, Issue 3, 231-246

Gilpatrick, K. (2001) "E-Loyalty Strategy" *Credit Union Management*, August, Vol.24, Issue 8, 10-14

Girard, T., Korgaonkar, P. and Silverblatt, R. (2003) "Relationship of type of product, shopping orientations, and demographics with preference for shopping on the Internet" *Journal of Business & Psychology*, Fall, Vol. 18, Issue 1, 101-120

Goffman, E. (1967) Interaction Ritual, Chicago: Aldine

Gommans, M., Krishnan, K.S. and Scheffold, K.B. (2001) "From Brand Loyalty to E-Loyalty: A Conceptual Framework" *Journal of Economic & Social Research*, January, Vol. 3, Issue 1, 43-59

Google Product Search (2008) http://www.google.com/products/intl/en_us/about.html

Gopal, R.D., Pathak, B., Tripathi, A.K. and Yin, F. (2006) "From Fatwallet to eBay: An Investigation of Online Deal-Forums and Sales Promotions" *Journal of Retailing*, Vol. 82, Issue 2, 155-164

Gremler, D.D. and Brown S.W. (1999) "The loyalty ripple effect" *International Journal of Service Industry Management*, Vol. 10, No. 3, 271-291

Grenci, R.T. and P.A. Todd (2002) "Solutions-Driven Marketing" *Communications of the ACM*, Vol. 45, No.3, 65-71

Grether, D.M. and Plott, C.R. (1979) "Economic Theory of Choice and the Preference Reversal Phenomenon" *American Economic Review*, September, Vol. 69, Issue 4, 623-638

Hair, J.F., Anderson, R.E., Tatham, R.L., and Black, W.C. (1998) Multivariate Data Analysis, fifth edition, New Jersey: Prentice Hall International, 387-441

Hair, J.F., Babin, B., Money, A.H. and Samouel, P. (2003) Essentials of Business Research Methods, New Jersey: Wiley

Hair, J.F., Tatham, R., Anderson, R. & W. Black, W.C. (1998), Multivariate Data Analysis, fifth edition, New Jersey: Prentice Hall International

Hart, C.W. and Johnson, M.D. (1999) "Growing the Trust Relationship" *Marketing Management*, Spring, Vol. 8, Issue 1, 8-19

Häubl, G. and Murray, K.B. (2003) "Preference Construction and Persistence in Digital Marketplaces: The Role of Electronic Recommendation Agents" *Journal of Consumer Psychology*, Vol.13, Issue1/2, 75-92

Häubl, G. and Trifts, V. (2000) "Consumer Decision Making in Online Shopping Environments: The Effects of Interactive Decision Aids", *Marketing Science*, vol.19, No.1, 4-22

Hawkes, T. (1977) Structuralism and Semiotics, London: Routledge

Haythornthwaite, C. and Wellman, B. (1998) "Work, Friendship, and Media Use for Information Exchange in a Networked Organization" *Journal of the American Society for Information Science*, Vol. 49, Issue 12, 1101-1114.

Heskett, J.L. (2002) "Beyond customer loyalty" *Managing Service Quality*, Vol. 12, No.6, 355-357

Hesler, M.T. (1999) “Bridge the gap between online and offline customer profiling and personalization” *Target Marketing*, November, Vol. 22, Issue 11, 57

Hill, T. (1993) Manufacturing Strategy: The Strategic Management of the Manufacturing Function, Second Edition, London: Mac Millan Press

Hill, T., (2000), Manufacturing Strategy: Texts and Cases, Second Edition, New-York: Palgrave Macmillan

Hoffman, L. D. and Novak T.P. (1996) “Marketing in Hypermedia Computer-Mediated Environments: Conceptual Foundations” *Journal of Marketing*, Vol. 60, winter, 50-68

Hoffman, D.L., Novak, T.P. and Peralta, M.A. (1999) “Information Privacy in the Marketspace: Implications for the Commercial Uses of Anonymity on the Web” *The Information Society*, Vol. 15, 129-139

Holton, R.H. (1959) “What is Really Meant by ‘Specialty’ Goods?” *Journal of Marketing*, Vol. 24, Issue 1, 64-66

Iacobucci, D., Arabie, P. and Bodapati, A. (2000) “Recommendations Agents on the Internet” *Journal of Interactive Marketing*, Vol.14, No.3, 2-11

International Telecommunications Union (2007) “Measuring the Information Society 2007”
ITU, <http://www.itu.int/net/home/index.aspx>

Internet Growth Charts (2005) <http://navigators.com/stats.html>

Internet Systems Consortium, Inc. (2007) <http://www.isc.org/index.pl?/ops/ds/>

Iqbal, Z., Verma, R. and Baran, R. (2003) “Understanding Consumer Choices and Preferences in Transaction-Based e-Services” *Journal of Service Research*, Vol. 6, No. 1, August, 51-65

Iyengar, J.V. (2004) “A discussion of current and potential issues relating information security for Internet communications” *Competitiveness Review*, Vol. 14, No. 1&2, 90-95

Jakobson, R. and Halle, M. (1956) Fundamentals of Language, The Hague: Mouton

Jallat, F. and Capek, M.J. (2001) “Disintermediation in Question: New Economy, New Networks, New Middlemen” *Business Horizons*, March-April, Vol. 44, Issue 2, 55-61

Johnson, G. J., Bruner II, Gordon C. and Kumar, A. (2006) “Interactivity and its facets revisited” *Journal of Advertising*, Vol. 35 Issue 4, 35-52

Johnson, M.D., Herrmann, A. and Huber, F. (2006) “The Evolution of Loyalty Intentions” *Journal of Marketing*, Vol. 70, Issue 2, 122-132

Jones, Q. (1997) "Virtual-Communities, Virtual-Settlements and Cyber-Archaeology: A Theoretical Outline" *Journal of Computer Mediated Communications*, Vol. 3, Issue 3, Retrieved July 10, 2005 from <http://jcmc.indiana.edu/vol3/issue3/jones.html>

Jones, T.O. and Sasser, W.E. (1995) "Why Satisfied Customers Defect" *Harvard Business Review*, November-December, 88-99

Kabadayi, S and Gupta, R. (2005) "Website loyalty: an empirical investigation of its antecedents" *Int. J. Internet Marketing and Advertising*, Vol. 2, No. 4, 321-345

Kanter, R.M. (1968) "Commitment and Social Organization: A Study of Commitment Mechanisms in Utopian Communities" *American Sociological Review*, August, Vol. 33, Issue 4, 499-517

Kay, A. (1984) "Computer Software" *Scientific American*, September, Vol. 251, Issue 3, 53-60

Keough, J. (2007) "Whatever happened to 'disintermediation'?" *Industrial Distribution*, Vol. 96, Issue 5, 7-7

Kirkby, J. (2005) "You Have Permission to Talk to my Wife" *Journal of Database Marketing & Customer Strategy Management*, Vol. 13 Issue 1, 24-27

Klein, L.R. and Ford, G.T. (2003) "Consumer Search for Information in the Digital Age: An Empirical Study of Prepurchase Search for Automobiles" *Journal of Interactive Marketing*, Vol. 17, No. 3, 29-49

Kling, R. and Wigand, R.T. (1997) "Electronic Commerce: Definition, Theory, and Context", *Information Society*, Vol. 13, Issue 1, Jan-March, 1-16

Koenig-Lewis, N. and Palmer, A. (2008) "Experiential Values over Time – A Comparison of Measures of Satisfaction and Emotion" *Journal of Marketing Management*, Vol. 24, Issue1/2, 69-85

Kotler, P. (1994) Marketing Management: Analysis, Planning, Implementation, and Control Eighth Edition, Englewood Cliffs, New Jersey: Prentice-Hall

Kumar, N., Lang, K.R. and Peng, Q. (2005) "Consumer Search Behavior in Online Shopping Environments" *e-Service Journal*, Summer, Vol. 3, Issue 3, 87-102

Kuttner, R. (1998) "The net: a market too perfect for profits" *Business Week*, 11th May, Issue 3577, 20-20

La, K.V., Walker, R. and Kam, B. (2005) "Customer loyalty in Internet shopping: an exploratory study", *Int. J. Internet Marketing and Advertising*, Vol.2, No. 3, 237-258

Lambin, J.J. (1990) La Recherche Marketing: Analyser- Mesurer-Prévoir, Paris : Mc Graw-Hill, 399-415

Lattin, J., Carroll, J.D. and Green, P.E. (2003) Analyzing Multivariate Data, Pacific Grove, CA, USA: Thomson – Brooks/Cole

Lederer, A.L., Maupin, D.J., Sena, M.P. and Zhuang, Y. (2000) “The Technology Acceptance Model and the World Wide Web” *Decision Support Systems*, Vol. 29, No. 1, 269-282

Lee, Louise (2007) “Dell’s Road to Recovery” *Business Week Online*, June, 13-13

Lee, G.-G. and Lin, H.-F. (2005) “Customer perceptions of e-service quality in online shopping” *International Journal of Retail & Distribution Management*, Vol. 33, Issue 2, 161-176

Lee, D.-I. and Sohn, C. (2004) “Trust and switching cost as a way to build e-loyalty in internet markets”, *Int. J. Internet and Enterprise Management*, Vol. 2, No. 3, 209-220

Lee, M.K.O. and Turban, E. (2001) “A Trust Model for Consumer Internet Shopping” *International Journal of Electronic Commerce*, Fall, Vol. 6, Issue 1, 75-92

LeFevre, J. (1988) Flow and the quality of experience during work and leisure, In *Optimal Experience: Psychological Studies of flow in consciousness*, Csikszentmihalyi, M. and Csikszentmihalyi, I. (eds.) New York: Cambridge University Press

Lewandowski, D. (2005) "Web searching, search engines and information retrieval" *Information services & Use*, Vol. 25, Issue3/4, 137-147

Liu, Y. and Shrum, L.J. (2002) "What is Interactivity and Is It Always Such a Good Thing? Implications of Definition, Person, and Situation for the Influence of Interactivity on Advertising Effectiveness" *Journal of Advertising*, Winter, Vol.31, Issue 4, 53-64

Lovelock, C. and Gummesson, E. (2004) "Whither Services Marketing? In Search of a New Paradigm and Fresh Perspectives" *Journal of Service Research*, Vol. 7, Issue 1, 20-41

Lovelock, C.H. and Young, R.F. (1979) "Look to Consumers to Increase Productivity" *Harvard Business Review*, Vol. 57, Issue 3, 168-178

Lu, H. and Lin, J. C.C. (2002) "Predicting customer behaviour in the market-space: a study of Rayport and Sviokla's framework" *Information & Management*, Vol. 40, Issue 1, 1-11

Luo, J.T., McGoldrick, P., Beatty, S. and Keeling, K.A. (2006) "On-Screen Characters: Their Design and Influence on Consumer Trust" *Journal of Services Marketing*, Vol. 20, Issue 2, 112-124

Lynch, J and Ariely, D. (2000) "Electronic shopping for wine: how search costs for information on price, quality, and store comparison affect consumer price sensitivity, satisfaction with merchandise, and retention" *Marketing Science*, Vol.19, No.1, 83-104

Lynch, P., Kent, R. and Srinivasan, S. (2001) "The global Internet shopper: evidence from shopping tasks in twelve countries" *Journal of Advertising Research*, May-June, 15-23

Macleod, H. (2006) "Role of multimedia in bridging the digital divide" *Digital Opportunity Channel*, <http://www.digitalopportunity.org/article/view/127770/1/>

Maes, P. (1994) "Agents that Reduce Work and Information Overload" *Communications of the ACM*, July, Vol. 37, Issue 7, 31-40

Malhotra, N.K. (1996) Marketing Research: an Applied Orientation, second edition, New Jersey: Prentice Hall International, pp. 709-729

Massimini, F. and Carli, M. (1988) The systematic assessment of flow in daily experience, In Optimal Experience: Psychological Studies of flow in consciousness, Csikszentmihalyi, M. and Csikszentmihalyi, I. (eds.) New York: Cambridge University Press

Mathwick, C. and Rigdon E. (2004) "Play, Flow, and the Online Search Experience" *Journal of Customer Research*, Vol. 31, September, 324-332

Maylor, H. and Blackmon, K. (2005), Researching Business and Management, Hampshire, Palgrave Macmillan

Keeling, K., Macaulay, L.A. and McGoldrick, P. (2007) "DiTV and e-commerce among disadvantaged community groups", *Behaviour & Information Technology*, Vol. 26, Issue 6, 545-560

McKinnon, A.C. and Tallam, D. (2003) "Unattended delivery to the home: an assessment of the security implications" *International Journal of Retail & Distribution Management*, Vol. 31, Issue 1, 30-42

Menasco, M.B. and Hawkins, D. (1978) "A Field Test of the Relationship between Cognitive Dissonance and State Anxiety" *Journal of Marketing Research*, Vol. 15, Issue 4, 650-655

Michaelidou, N., Arnott, D.C. and Dibb, S. (2005) "Characteristics of Marketing Channels: A Theoretical Framework" *Marketing Review*, Spring, Vol. 5, Issue 1, 45-57

Montgomery, C. and Barnes, J.H. (1993) "A Short Rating Scale for Measuring Post Purchase Dissonance" *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, Vol. 6, 203-216

Morgan, R.M. and Hunt, S.D. (1994) "The Commitment-Trust Theory of Relationship Marketing" *Journal of Marketing*, Vol. 58, Issue 3, 20-39

Mukherjee, A. and Nath, P. (2003) "A Model of Trust in Online Relationship Banking" *The International Journal of Bank Marketing*, Vol. 21, Issue1, 5-15

Murphy, P.E. and Enis, B.M. (1986) "Classifying Products Strategically" *Journal of Marketing*, July, Vol. 50, Issue 3, 24-42

mySupermarket (2007) available at: <http://www.mysupermarket.co.uk/FirstTimeHome.aspx>

Nadeem, M.M. (2007) "Post-Purchase Dissonance: The Wisdom of the 'Repeat' Purchases" *Journal of Global Business Issues*, Summer, Vol.1, Issue 2, 183-193

Nakamura, J. (1988) Optimal experience and the uses of talent, In *Optimal Experience: Psychological Studies of flow in consciousness*, Csikszentmihalyi, M. and Csikszentmihalyi, I. (eds.) New York: Cambridge University Press

Negroponte, N. (1970) The Architecture Machine: Towards a More Human Environment Cambridge, Mass.: MIT Press

Newell, F. (2000) Loyalty.com: Customer Relationship Management in the New Era of Internet Marketing, New York: Mc Graw Hill

Niccolai, J. (1997) "Web-analysis tools can measure more than a site's success" *Info World*, Vol. 19, No. 14, 62

Nielson/Net Ratings (2007) available at:
<http://searchenginewatch.com/showPage.html?page=3626903>

Novak, T.P., Hoffman, D.L. and Duhachek, A. (2003) "The Influence of Goal-Directed and Experiential Activities on Online Flow Experiences" *Journal of Consumer Psychology*, Vol. 13, No 1 & 2, 3-16

Novak, T.P., Hoffman, D.L. and Yung, YF (2000) "Measuring the Customer Experience in Online Environments: A Structural Modelling Approach", *Marketing Science*, Winter, Vol. 19, No. 1, 22-42

Nussbaum, B. (2006) "A Critique of Chris Anderson's Long Tail Book" *Business Week*, July 28th, available at:
http://www.businessweek.com/innovate/NussbaumOnDesign/archives/2006/07/a_critique_of_c.html

Oliva, R.A. (1998) "Painting with Business Marketers' 'Web palette'" *Marketing Management*, Summer, Vol.7, Issue 2, 50-53

Oliver, R. (1999) "Whence customer loyalty" *Journal of Marketing*, Special Issue, Vol. 63, 33-44

Olney, T.J., Holbrook, M.B. and Batra, R. (1991) "Consumer Responses to Advertising: The Effect of Ad Content, Emotions, and Attitude toward the Ad on Viewing Time" *Journal of Consumer Research*, Vol. 17, Issue 4, 440-454

Oppliger, R. (2005) "Privacy-enhancing technologies for the world wide web" *Computer Communications*, October, Vol. 28, Issue 16, 1791-1797

Orsingher, C. (2006) "Le Script de Service : Fondements du Concept et Applications au Marketing des Services" *Recherche et Applications en Marketing*, Vol. 21, Issue 3, 115-128

Murphy, P.E. and Enis, B.M. (1986) "Classifying Products Strategically" *Journal of Marketing*, Vol. 50, Issue 4, 24-42

Palmer, J.W. and Griffith D.A. (1998) "An emerging model of Web site designs for marketing" *Communications of the ACM*, March, Vol. 41, Issue 3, 44-51

Palopoli, L., Domenico, R. and Domenico, U. 2006 "Agents' Roles in B2C e-commerce" *AI Communications*, Vol. 19, Issue 2, 95-126

Payne, J.W., Bettman, J.R., and Johnson, E.J. (1992) "Behavioral Decision Research: A Constructive Processing Perspective", *Annual Review of Psychology*, Vol.43, 87-131

Peppers, D. and Rogers, M. (1998) "Better business – one customer at a time" *Journal for Quality & Participation*, March-April, Vol. 21, Issue 2, 30-38

Peter, J.P. and Olson J.C. (1990) Consumer Behavior and Marketing Strategy Second Edition, Boston: Irwin

Peters, L.D. (2006) "Conceptualising computer-mediated communication technology and its use in organisations" *International Journal of Information Management*, Vol. 26, Issue 2, 142-152

Peterson, R.A. and Balasubramanian, S. (1997) "Exploring the Implications of the Internet for Consumer Marketing." *Journal of the Academy of Marketing Science*, Fall Vol.25, Issue 4, 329-347

Pfeifer, P.E. (2005) "The optimal ratio of acquisition and retention costs" *Journal of Targeting, Measurement and Analysis for Marketing*, Vol. 13, No. 2, 179-188

Phillips, J.T. (2002) "Privacy vs. Cybersecurity" *The Information Management Journal*, May-June, 46-50

Pingjun, J. (2003) "Managing Customer Price Perceptions: An Empirical Investigation on the Impacts of E-Tailing Services" *Services Marketing Quarterly*, Vol.24, Issue 4, 77-98

Porter, M.E. (2001) "Strategy and the Internet" *Harvard Business Review*, March, Vol. 79, Issue3, 62-78

Preece, J. and Maloney-Krichmar, D. (2005) "Online Communities: Design, Theory, and Practice" *Journal of Computer-Mediated Communication*, Vol. 10, Issue 4, article 1.
<http://jcmc.indiana.edu/vol10/issue4/preece.html>

Press, L., Burkhart, G., Foster, W., Goodman, J. and Goodman, S.Y. (1998) “An Internet Diffusion Framework” *Communications of the ACM*, October, Vol. 41, Issue 10, 21-26

Pritchard, M.P., Havitz M.E. and Howard D.R. (1999) “Analyzing the Commitment-Loyalty Link in Service Contexts” *Journal of the Academy of Marketing Science*, Vol. 27, No. 3, 333-348

Ranaweera, C. and Prabhu, J. (2003) “On the relative importance of customer satisfaction and trust as determinants of customer retention and positive word of mouth” *Journal of Targeting, Measurement & Analysis for Marketing*, September, Vol. 12, Issue 1, 82-90

Ratchford, B.T. (1982) “Cost-Benefit Models of Explaining Consumer Choice and Information-Searching-Behavior” *Management Science*, Vol. 28, 197-212

Ratchford, B.T., Lee, M-S and Talukdar, D. (2003) “The Impact of the Internet on Information Search for Automobiles” *Journal of Marketing Research*, Vol. 40, May, 193-209

Rayport, J.F. and Sviokla, J.J. (1994) “Managing in the Marketspace” *Harvard Business Review*, November-December, Vol. 72, Issue 6, 141-150

Reddy, M.J. (1979) “The Conduit Metaphor – A Case of Frame Conflict in Our Language about Language” In Andrew Ortony (Ed.): Metaphor and Thought, Cambridge: Cambridge University Press, 284-324

Reibstein, D.J. (2002) “What Attracts Customers to Online Stores, and What Keeps Them Coming Back?” *Journal of the Academy of Marketing Science*, Vol. 30, No. 4, 465-473

Reichheld, F.F. (1996) The Loyalty Effect, HBS Press, Boston: Bain & Company

Reichheld, F.F. (2003) “The One Number You Need to Grow” *Harvard Business Review*, December, Vol. 81, Issue 12, 46-54

Reichheld, F.F. and Sasser, Jr. W.E. (1990) “Zero Defections: Quality Comes to Services”, *Harvard Business Review*, 68, September-October, 105-111

Reichheld, F.F. and Schefter, P. (2000) “E-Loyalty: your secret weapon on the Web” *Harvard Business Review*, July-August, 105-113

Rohm, A.J. and Swaminathan, V. (2004) “A typology of online shoppers based on shopping motivations” *Journal of Business Research*, Vol. 57, 748-757

Rowley, J. and Slack, F. (2001) “Leveraging Customer Knowledge – Profiling and Personalisation in e-Business” *International Journal of Retail & Distribution Management*, Vol. 29, Issue 8/9, 409-416

Rust, R.T. and Kannan, P.K. (2003) “E-service: a new paradigm for business in the electronic environment” *Communications of the ACM*, Vol. 46, No.6, 37-42

Rust, R.T. and Zahorik, A.J. (1993) "Customer Satisfaction, Customer Retention and Market Share" *Journal of Retailing*, Vol. 69, Issue 2, 193-216

Sagi, J.; Carayannis, E.; Dasgupta, S. and Thomas, G. (2004) "ICT and Business in the New Economy: Globalization and Attitudes Towards eCommerce" *Journal of Global Information Management*, Vol. 12, Issue 3, 44-64

Saunders, M., Lewis, P. and Thornhill, A. (1997) Research Methods for Business Students, London: Pitman Publishing, pp. 127-128, 147, 412-414

Sawtooth Software, (2002), <http://www.sawtoothsoftware.com/>

Sen, R. and King, R.C. (2003) "Revisit the Debate on Intermediation, Disintermediation and Reintermediation due to E-commerce" *Electronic Markets*, June, Vol. 13, Issue 2, 153-163

Shankar, V., Smith, A. and Rangaswamy, A. (2003) "Customer satisfaction and loyalty in online and offline environments", *International Journal of Research in Marketing*, Vol. 20, No. 2, 153-175

Shoniregun, C.A. (2004) "Is cybermediation really the future or risk?" *International Journal of Electronic Business*, Vol. 2, Issue 6, 1-1

Shunk, D., Carter, J., Hovis, J. and Taiwar, A. (2007) "Electronics Industry Drivers of Intermediation and Disintermediation" *International Journal of Physical Distribution & Logistics Management*, Vol. 37, Issue 3, 248-261

Simon, H.A. (1956) "A Behavioral Model of Rational Choice" *Quarterly Journal of Economics*, February, Vol. 69, 99-118

Simonson, I. (1993) "Get closer to your customers by understanding how they make choices" *California Management review*, Summer, Vol. 35, Issue 4, 68-85

Simonson, I. (2005) "Determinants of Customers' Responses to Customized Offers: Conceptual Framework and research Propositions" *Journal of Marketing*, January, Vol.69, Issue 1, 32-45

Sinha, I. (2000) "Cost Transparency: The Net's Real Threat to Prices and Brands" *Harvard Business Review*, Vol. 78, March/April, 43-50

Sivadas, E. and Prewitt, J.B. (2000) "An examination of the relationship between service quality, customer satisfaction, and store loyalty" *International of Retail & Distribution Management*, Vol. 28, No.2, 73-82

Slovic, P. (1995) "The Construction of Preference" *American Psychologist*, May, Vol.50, Issue 5, 364-371

Smith, M.D. (2002) "The Impact of Shopbots on Electronic Markets" *Journal of the Academy of Marketing Science*, Vol. 30, No. 4, 442-450

Smith, R.A. and Houston, M.J. (1985) "A Psychometric Assessment of Measures of Scripts in Consumer Memory" *Journal of Consumer Research*, Vol. 12, Issue 2, 214-225

Srinivasan, S. S., Anderson R. and Ponnnavolu K. (2002) "Customer loyalty in e-commerce shopping: an exploration of its antecedents and consequences", *Journal of Retailing*, Spring, Vol.78, Issue 1, 41-50

Srivastava, R.K., Alpert, M.I. and Shocker, A.D. (1984) "A Customer-oriented Approach for Determining Market Structures" *Journal of Marketing*, Spring, Vol. 48, Issue 2, 32-46

Steuer, J. (1992) "Defining virtual reality: dimensions determining Telepresence" *Journal of Communications*, Autumn, Vol. 42, 73-93

Stewart, T.A. (1997) Intellectual Capital: The New Wealth of Organizations London: Nicholas Brealey, 142-165

Su Bo-Chiuan (2007) "Consumer E-Tailer Choice Strategies at On-Line Shopping Comparison Sites" *International Journal of Electronic Commerce*, Vol. 11, Issue 3, 135-159

Szymanski, D.M. & R.T. Hise, (2000), 'e-Satisfaction: an initial examination', *Journal of Retailing*, 76(3), pp.309-322

TeleGeography.com (2006) “The Bandwidth Glut is Over”

<http://www.telegeography.com/cu/article.php?article-id=12155>

Tesco Price Check (2007) available at: <http://www.tesco.com/todayattesco/pricecheck.shtml>

Than, C.R. and Grandon, E. (2002) “An exploratory examination of factors affecting online sales” *Journal of Computer Information Systems*, Vol. 42, No. 3, 87-93

Trevino, L.K., and Webster, J. (1992) “Flow in Computer-mediated communication” *Communication Research*, Vol.19, No.5, 539-573

Trifts, V. and Häubl, G. (2003) “Information Availability and Consumer Preference: Can Online Retailers Benefit From Providing Access to Competitor Price Information?” *Journal of Consumer Psychology*, Vol. 13, Issue 1-2, 149-160

Tversky, A. and Kahneman, D. (1981) “The framing of decisions and the psychology of choice” *Science*, Vol. 211, Issue 4481, 453-461

Tversky, A., Sattath, S. and Slovic, P (1988) “Contingent Weighting in Judgment and Choice” *Psychological Review*, Vol. 95, Issue 3, 371-84

Tversky, A. and Thaler, R.H. (1990) “Anomalies” *Journal of Economic Perspectives*, Spring, Vol. 4, Issue 2, 201-211

Waldo, J. (2001) "When the Network is Everything" *Communications of the ACM*, March, Vol. 44, Issue 3, 68-69

Wang, W. and Benbasat, I. (2005) "Trust in and Adoption of Online Recommendation Agents" *Journal of the Association for Information Systems*, Vol. 6, No. 3, March, 72-101

WARD'S Dealer Business (2007) "Autobytel Revs Up Its Search Engine with a New Offering" April, Vol. 41, Issue 4, 56-56

Warschauer, M. (2003) "Demystifying the Digital Divide" *Scientific American*, Vol. 289, Issue 2, 42-47

Weinberg, B.D. (2000) "Don't keep your Internet customers waiting too long at the (virtual) front door" *Journal of Interactive Marketing*, Winter, Vol. 14, Issue 1, 30-39

Wells, A. (1988) Self-esteem and optimal experience In Optimal Experience: Psychological Studies of flow in consciousness, Csikszentmihalyi, M. and Csikszentmihalyi, I. (eds.) New York: Cambridge University Press

Widdifield, R. and Grover, V. (1995) "Internet & the implications of the information superhighway for business" *Journal of Systems Management*, May-June, Vol. 46, Issue 3, 16-23

Wikipedia, (2007) “Intelligent Agent” The Free Encyclopaedia, available at:
http://en.wikipedia.org/wiki/Intelligent_agent

Wikström, S. (2005) “From E-Channel to Channel Mix and Channel Integration” *Journal of Marketing Management*, September, Vol. 21, Issue 7/8, 725-753

Wilcox, D.L., Ault P.H. and Agee W.K. (1989) Public Relations: Strategies and Tactics
Second Edition, New York: Harper Collins Publishers

Willcocks, L., Sauer, C. (2000), Moving to e-Business Random House Business Books,
London

Wind, J. and Rangaswamy, A. (2001) “Customerization: the next revolution in mass
customization” *Journal of Interactive Marketing*, Vol. 15, Issue1, 13-32

Wittink, D.R., Krishnamurthi, L. and Nutter, J.B. (1982) “Comparing Derived Importance
Weights Across Attributes” *Journal of Consumer Research*, Vol. 8, March, pp. 471-474

Wittink, D.R., Krishnamurthi, L. and Reibstein, D.J. (1990) “The Effects of Differences in
the Number of Attribute Levels on Conjoint Results” *Marketing Letters*, Vol. 1, No. 2, pp.
113-129

Wong, A. and Sohal, A. (2003) “Service quality and customer loyalty perspectives on two
levels of retail relationships” *Journal of Services Marketing*, Vol.17, No. 5, 495-513

Zeithaml, V.A., Berry, L.L. and Parasuraman, A. (1996) “The behavioral consequences of service quality”, *Journal of Marketing*, April, Vol. 60, 31-46

Zeithaml, V. A. and Bitner, M. J. (2003) Services Marketing: Integrating customer focus across the firm, third edition, McGraw-Hill, New York, 2003

Zeithaml, V. A., Parasuraman, A. and Berry, L. (1985) “Problems and Strategies in Services Marketing” *Journal of Marketing*, Vol. 49, Spring, 33-46

Zeithaml, V.A., Parasuraman, A. and Malhotra, A. (2002) “Service Quality Delivery Through Web Sites: A Critical Review of Extant Knowledge” *Journal of the Academy of Marketing Science*, Fall, Vol. 30, Issue 4, 362-375

Zwiebach, E. (2007) “Supermarkets Less Vulnerable to Disintermediation” *Supermarket News*, Vol. 55, Issue 19, 48-50