A CONSUMER DECISION PROCESS MODEL FOR THE INTERNET

A Thesis Submitted for the Degree of Doctor of Philosophy

By

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ABSTRACT

This investigation attempts to improve understanding of the behaviour of internet consumers from an empirical basis. It reports on the results of studies into decision-making processes of consumers on the internet in the context of apparel retailing. Consumers consisting of a profile sample of working female consumers, aged between 18 and 45, in the ABC1 social group, are considered in terms of their decision making processes online. These observations are contrasted with the assumptions underlying a key reference model of traditional consumer behaviour, the Consumer Decision Process (CDP) model (Blackwell, Engel & Miniard, 2001). The research arrives at several key findings. A primary finding is that there are substantive differences between internet-based and traditional decision making purchases - especially when considering consumers' behaviour in relation to so-called *sensory products*. A related finding is that many of the assumptions underlying the CDP model fail to explain many aspects of observed internet consumers' behaviours in this respect.

The observed incongruence is addressed by the thesis through fundamental revisions and extensions of the CDP model. Three key changes proposed include: the introduction of the concept of overlapping stages (where two decision-making stages can occur together); the notion of varying modalities of behaviour depending on a consumer's intentions, and the possibility of a shift in modality during the purchasing process. These notions are incorporated in a proposed model referred to as the Electronic Consumer Decision Process model (eCDP).

ACKNOWLEDGEMENTS

Firstly, I would like to thank my supervisor, Professor Ray Paul, who had confidence in me from the beginning and who kept me sane throughout.

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I could never have made it to the end however, without the support and encouragement from my family, especially, David, my husband. My children, Alpha and Mir, were also there as an inspiration to make me realise that there is actually something harder than completing a PhD – giving birth and bringing up children! But the moral is the same, "you will only get out of it, what you put into it!".

I would also like to thank all of the people who participated in this research, the respondents and the helpers, as well as the administration team at DISC at Brunel University.

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GLOSSARY

ABC1	This is a market research term used to categorise consumers by social grade. ABC1 means that the occupation of the chief income earner in a household is non-manual (i.e. higher managerial – junior managerial, clerical, qualified non-manual, administrative, professional) (MORI, 2001)
APBI	Apparel purchasing behaviour on the internet
B2B	Business to Business retailing on the internet
B2C	Business to Consumer retailing on the internet
'Bricks and mortar'	Traditional retail outlet (high street store, shopping mall etc.)
CDP	Consumer Decision Process Model
CILM	Cotton Incorporated Lifestyle Monitor
Chatrooms	Internet web-sites where consumers can chat online with other consumers about particular products or subjects of interest to them
Sensory Products	Products difficult to retail on the internet due to their complex attributes; i.e. consumers are not able to easily make a purchasing decision purely based on the information and image offered online. Consumers need to use more than their eyes and ears to make a decision.
eCDP	Electronic Consumer Decision Process (Model)
E-Commerce	Electronic Commerce
GT	Grounded Theory
JIT	Just in Time (stock replenishment system)
Online	On the internet
Replenishment goods	Typically goods such as grocery and household goods which are usually bought every week: items such as milk, bread etc. In apparel retailing, these are items such as socks, hosiery, underwear, basic white t-shirts.

Traditional retail   High street retail chains and independents, department stores, shopping malls, 'out-of-town' super stores (the physical retail outlets)

WWW   World Wide Web (internet)

PUBLICATIONS

As a direct result of this research the following papers have been published:

Ambaye, M.L. & Poncin, I. (2004)*, Impact of perceived similarity and ad-processing mode in commercials, Lalonde Marketing Conference, Milan.*

Ambaye. M.L. & Paul, R. J. (2003), *Towards a Consumer Decision Process Model for Online Behaviour*. Proceedings of the UKAIS (UK Academy for Information Systems) 8th Annual Conference, University of Warwick., 9th – 11th April. P. 2 – 12.

Ambaye, M.L., Lee, H. & Paul, R. J. (2002). *A Research Framework for Investigating Women's Purchasing Behaviour Online*. Proceedings of the 2nd International Conference on Systems Thinking in Management 2002, University of Salford, UK, 3rd – 5th April. Editors: Sharp, J.M.; Irani, Z.; Davies, J.; Atkinson, C.; Alshawi, S.; Love, P.E. University of Salford & Brunel University. p.p. A1 – 20 – 27.

Ambaye, M.L. Lee, H. & Paul, R. J. (2001) *Investigating Consumers' Purchasing Behaviour for Apparel Online*. Proceedings of the 11th Annual BIT2001 Conference, Manchester Metropolitan University, UK, 30th & 31st October.

The following paper has been submitted to the International Journal of Fashion Marketing and Management, (published by Emerald Insight, UK.):

A Consumer Decision Process Model for Purchasing Apparel on the Internet.

OVERVIEW OF THESIS

Section	Focus	Content
Chapter 1	Introduction and overview of the dissertation	Research questions and objectives are stated. The concept of online consumer behaviour and the theory is introduced.
Chapter 2	Literature review	Setting the research questions in focus by presenting an overview of the current literature in online consumer behaviour.
Chapter 3	Consumer behaviour on the internet versus traditional retail	A review of current consumer behaviour models. Introduction of the Consumer Decision Process (CDP) Model for traditional retailing.
Chapter 4	Research Methods	Strengths and weaknesses of different approaches and why the method chosen is appropriate. An overview of the techniques utilised.
Chapter 5	Analysis of the data and preliminary findings	How the analytical framework was applied, the initial findings and the implications of a different purchasing behaviour on the internet.
Chapter 6	A proposal of the eCDP model adapted for the internet - eCDP	A more detailed look at the findings and how a CDP model for the Internet was devised. Different 'modes' of consumer behaviour are examined in more detail. The Electronic CDP model (eCDP) is applied to three separate sensory products in different scenarios.
Chapter 7	Conclusions and areas for future research.	A review of the findings, the implications and the contributions to the field. Future research areas are indicated.

CHAPTER 1: BACKGROUND

1.0 Introduction

Over the last 10 years the internet has increasingly become a common channel for merchant sites for all sorts of products including apparel. Whereas many other aspects of these merchant sites appear to have experienced growth, the apparel retail industry appears to have developed at a relatively slower pace in the UK.

Many reasons have been offered for this phenomenon. However, an analysis with which most agree (Afzali, 1999; Blackwell, Engel and Miniard, 2001; Cyberatlas1999; De Kare Silver, 1998;) is that there is room to improve our understanding of the cultural issues surrounding apparel purchasing behaviour on the internet (APBI).

This thesis argues for models of internet consumers' behaviour directly based on an empirical understanding of how internet consumers behave, as opposed to being based on consumers' purchasing behaviour in traditional outlets. At present, traditional consumer behaviour models appear to be the basis for attempting to understand internet purchasing behaviour. This thesis therefore enters this debate through its main conjecture that it is important to question whether it is sufficient to assume that the internet shopping experience is simply an analogue of the traditional bricks and mortar experience**.**

This research carries out an empirical investigation of consumer decision-making processes on the internet and applies it to sensory products (i.e. needing more that just eyes and ears to be able to make a purchasing decision (Fenech & O'Cass, 2001; Levin, Levin & Heath, 2003)). It uses apparel merely as an illustration to enable a fuller understanding of the possible difficulties of purchasing online.

In doing so, it utilises an existing traditional Consumer Decision Process (CDP) model and compares it to the findings of actual consumer decision processes on the internet. It concludes that there needs to be a revision of the traditional assumptions about consumers, portrayed by existing consumer decision models. It also concludes that without taking these behavioural issues into consideration, developing technology solutions may be inadequate and internet retail sales affected.

This chapter lays out the overall plan of this thesis, starting with the background to the research: consumer behaviour on the internet. Section 1.2 explains the problems that are

encountered when attempting to retail sensory products on the internet: in this case the focus is on apparel as an example of a sensory product. A brief summary of the apparel retail industry is given in section 1.3 and traditional consumer behaviour is discussed. Section 1.4 looks at the current state of apparel retailing on the internet, and briefly discusses women as internet consumers. Consumer purchasing behaviour on the internet is outlined in section 1.5. The research aims and objectives are presented in 1.6, along with the chosen methodological approach and a reference to the key contributions. The Conclusions section points to the main outcomes of the research and gives a brief description of each chapter.

1.1 Theoretical Background

Traditional retail channels for apparel purchase include high street stores, shopping malls, department stores and mail order. Many studies have been conducted, and are ongoing, within the field of consumer behaviour for traditional retailing (Wilkie, 1994; Maslow, Stephens & Heil, 1998; Mowen & Minor, 2000; Schiffman & Kanuk, 2004; Blackwell, Engel & Miniard, 2001).

Loudon & Della Bitta (1993) define the study of consumer behaviour as *'the study of the buying units and the exchange processes involved in acquiring, consuming and disposing of goods, services, experiences and ideas'*.

The study of consumer behaviour is a vast and complex subject, of which consumer decision making processes in traditional stores is only a small part. Many theories have been developed towards understanding these processes in the context of traditional stores, but there appears to be little specifically for the internet.

There is consensus that internet shopping is not simply an analogue of traditional shopping (Afzali, 1999; Blackwell et al., 2001; De Kare Silver, 1998). Vrechopoulos (2001) touches on this as a result of his study of influencing factors on consumer behaviour in the context of traditional stores. Factors which strongly influence consumer behaviour in-store are factors such as: store images (storefront, store layout), store atmospherics (sound, scent) and store theatrics (décor themes and merchandising). His conclusion is that it is not possible to translate traditional store atmosphere on to the internet because of the different natures of the

psychological factors involved. He is not alone in these conclusions as the literature in both academic and industry contexts indicates a tacit acceptance of fundamental differences.

Nevertheless, it is disappointing to note that there appears to be little empirical research aimed at arriving at a better model of consumer behaviour on the internet. This research attempts to bridge this gap through empirical investigations that specifically focus on improving understanding of consumer decision making processes on the internet. With the ultimate aim of modelling the observed consumer behaviour.

1.2 Sensory Products

The choice of apparel products as a subject of study in this investigation is an important one. The research distinguishes between simple and sensory products (such as apparel) in that the latter are bought based on both tangible (less subjective) and intangible (more subjective) criteria. An important characteristic of sensory products is that they are often difficult to retail on the internet due to complex attributes not easily portrayed online.

For instance, when buying clothes consumers are often not able to easily make a purchasing decision based simply on the information and image offered online. For apparel, this appears to be supported by recent statistics which indicate that predictions of apparel sales on the internet have been conflictingly lower than predicted (Beck, 2002; Greenspan, 2003; Rodriguez, 2003; Vargas, 2004). This is while sales in the same time frame for other less sensory products have actually increased markedly.

Products such as: cars, houses, certain domestic appliances and cosmetics are other examples of sensory products or 'experience goods' (Levin, Levin & Heath, 2003). To be able to make effective purchasing decisions of these products requires the gathering a richer set of information than can be carried out online. The consumer can begin the decision making process about a product from information obtained online; however, the finer details and certain important criteria for making the final decision to purchase are usually not available online.

When purchasing a car, it is rare that a consumer buys without test driving their final choice. When buying perfume or cosmetics, colour and texture are not as tangible online as in real life (unless it is a repeat purchase for a particular brand and colour that the consumer has bought

in a traditional store before). When buying an item of apparel, the fit, colour and flow of the garment are key considerations to whether the consumer finally makes a purchase – again, this is less possible online. Thus apparel are indeed sensory products.

In selecting a sensory product as a subject for study, it is hoped that the investigation will be more likely to identify a superset of the possible issues, concerns and factors and mechanism that consumers may encounter in an online purchase situation.

Although the main focus of this investigation is Consumer Behaviour, in particular consumers' underlying motivations for purchasing decisions on the internet, the following sections give a brief overview of the of apparel products in the context of the fashion retail industry. This is to enable the reader to have a better understanding of the background and context for this research. Two major areas are focused upon: consumer purchasing behaviour in traditional apparel retailing and consumer purchasing behaviour in internet based apparel retailing. In both cases, due to time and resource constraints, this investigation will look at the pertinent issues from the consumers' side of the story only.

1.3 Traditional Apparel Retailing

Cox & Brittain, (1996) define retailing as '*typically the sale of goods and services to consumers for domestic use'* where the bulk of retailing is targeted at consumers who buy goods that are put to personal, family or household use. This can also include the purchase of a service such as insurance or a haircut. The term 'fashion' is generally understood to include clothing, accessories, cosmetics, footwear, even furnishings and architecture. More commonly, in the literature most commentators when discussing fashion mean clothing, as this epitomizes many of the fashion issues that dominate the industry as a whole (Bohdanowicz & Clamp, 1994).

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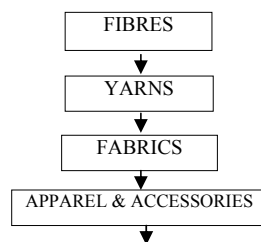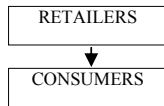
Exhibit 1-0: Traditional Marketing Chain
(Frings, 1996)

The way in which the traditional apparel retail industry operates can be related to the 'Traditional Marketing Chain', described by Frings (1996) in Exhibit 1-0 above. The process begins when product development is initiated. This involves raw materials being identified for the design of fashion garments or accessories. This is followed by the production stage where manufacturers make up the final product. Once the products are finished, they are ready to ship to wholesalers for distribution to retail outlets. Finally, an artistic process of garment selection and display, designed to entice customers is enacted. The latter process, known as merchandising, is the responsibility of customer-facing sales teams.

Two key assumptions have influenced the way retailers have interpreted the traditional marketing chain model. These assumptions relate to the retail outlet and consumer purchasing behaviour. These are dealt with in the following two sections.

1.3.1 The Retail Outlet

As Exhibit 1-0 (above) shows, the primary point of contact or interface with the consumer is the retail outlet. Traditionally, these have taken on particular significance for the retailer as a method of embodying the retailer's desired image and therefore conveying its brand positioning to the consumer (Blackwell et al., 2001). For instance, many well-known retail chains and clothing brands such as a Benetton or Levi's jeans shop, often employ a strategy for consistent shop design, so that the consumer knows what to expect if they visit a particular retailer, regardless of location (see Retail Brand Positioning in Exhibit 1-1 below).

Research has shown that the retail outlet, and all it embodies, can have a significant impact on the purchasing behaviour of consumers when shopping for apparel. (Bohdanowicz & Clamp, 1996; Blackwell et al., 2001, Vrechopoulos, 2001). Factors including pricing, shop layout and

design (architecture), personnel and others are seen as decisive in terms of influencing consumer purchasing behaviour (see Exhibit 1-1 below).

These factors (figure1-1 below) all form part of the make-up of the traditional retail outlet and the expectations of consumers. It becomes apparent as one reads this list, that the shopping 'experience' is a lot more complex than at first glance and to have an understanding of consumers' motivations and purchasing behaviour is paramount for retailers.

Retail outlet	Description	Importance
Location	Where the store is located -easy access (distance and easy to find)	High
Nature and quality of product	High turnover merchandise that appeals to the target market in the area the store is located.	High
Services offered	Self-service, ease of returning goods, delivery and credit	High
Physical store attributes	Lifts, lighting, air-conditioning, washrooms, layout, aisle placement, parking facilities, carpeting and architecture	High
Retail brand positioning through adverts	Image advertising about the store 'experience' and information	Medium
Sales personnel	Personality, temperament, age, appearance, skill levels and motivation of the sales personnel	Medium
Store clientele	The type of person who shops in a store can affect consumer purchase intention (matching image to which one aspires)	Medium
Point-of-purchase materials	Displays and signs to capture consumers' attention	Medium
Consumer logistics	The speed and ease with which consumers move through the retail and shopping process)	Medium
Price	Acceptable range of prices (low price doesn't always attract consumers who have other preferences).	Depends on consumers' preferences

**Exhibit 1-1: Deciding factors when selecting a retail outlet
(Adapted from Bohdanowicz and Clamp, 1994;
Blackwell, Miniard & Engel, 2001)**

Purchasing behaviour is a complex subject which is continuously being researched by marketers to try to better understand the motivations behind consumer purchases. Ideally, retailers would like to be able to predict preferences and consumer trends so that retailers can tailor their offerings to consumers. The following section (section 1.3.2) briefly looks at purchasing behaviour in traditional apparel retailing in general and section 1.4 considers the issues surrounding purchasing behaviour when buying apparel on the internet.

1.3.2 Consumer Purchasing Behaviour in Traditional Apparel Retailing

Consumer purchasing behaviour or 'buying behaviour' in the context of the fashion industry is a sophisticated process. This is because the fashion buyer is a complex being in its own right. It is generally accepted that such consumers make purchasing decisions based on a variety of tangible and non-tangible factors. Bohdanowicz & Clamp (1994) explain that fashion is '*essentially a social phenomenon, which transcends the basic human need for warmth and protection. It provides individuals with a statement of their identity and affects how the individual relates to others both within a given group and within society as a whole*' (p.14). So when buying a jacket consumers may attempt to satisfy (consciously and not) physical needs for warmth and comfort (physiological needs) but also other additional factors. These can range from simpler factors of colour to more sophisticated social meanings associated with a product.

A number of stage models of consumers' behaviour have been proposed over the last few decades (Blackwell, Engel & Miniard, 2001; Maslow, Stephens & Heil, 1998; Mowen & Minor, 2000; Schiffman & Kanuk, 2004; Wilkie, 1994). In these models, there is an assumption that consumers go through a number of key stages, each of which reflects increased levels of persuasion towards the decision to purchase a product (see Exhibit 1-2).

As early as the 1930s, Abraham Maslow developed a multi-stage model of human motivation, the 'Hierarchy of Needs', where there is a hierarchy of tangible and non-tangible needs (Maslow et al., 1998). The first stage in this model, known as 'physiological needs' deals with physical needs such as purchasing a winter coat to keep warm. Other stages were referred to as 'safety needs', 'social needs', 'esteem needs' and 'self-actualisation'. In particular the

model suggested a 'ratchet action' that until one level of need is satisfied, other levels will remain unsatisfied. Satisfaction of a majority of these stages would culminate in the consumer being convinced to purchase.
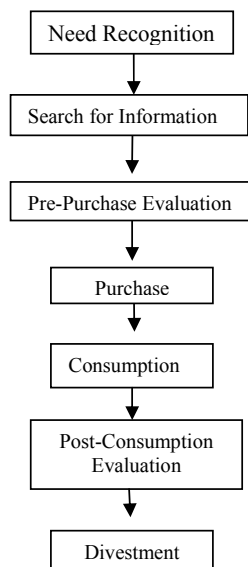
**Exhibit 1-2: How Consumers Make Decisions for Goods and Services
(Blackwell et al., 2001)**

Blackwell et al. (2001) have written much about consumer purchasing behaviour in traditional retail outlets and have developed a model for consumer behaviour in traditional stores, (the CDP model), which has evolved since it was first designed in the 1960s (see Exhibit 1-2 above). Their CDP model has seven stages which consumers are understood to go through: 1) Need Recognition, 2) Search for Information, 3) Pre-purchase Evaluation of Alternatives, 4) Purchase, 5) Consumption, 6) Post-Consumption Evaluation and 7) Divestment (see above in Exhibit 1-2). The subject of consumer behaviour models is discussed in detail in chapter 3.

1.4 E-commerce

Business to Consumer E-commerce promises to radically transform everyday notions of how people live and shop (Anklesaria, 2004; Cyberatlas.internet.com, 2000b; De Kare Silver, 1998; Turban et al., 2000). According to Turban et al. (2000) e-commerce is:

> *'...an emerging concept that describes the process of buying and selling or exchanging products, services and information via computer networks including the internet'*.

E-commerce has already empowered a growing number of consumers with the ability to shop remotely (Greenspan, 2004; Drucker, 1999). Food, apparel or even cars, can be bought from

one's home or office, so long as there is some sort of internet connection available. Through this facility the need to make visits to shops is said to reduce sharply and consumers are able to place orders out of shop hours. This type of internet retailing, aimed at consumers, is generally referred to as Business to Consumer (B2C) retailing (this is explained further in Chapter 2).

There is much written to indicate that internet based retailing has been growing rapidly worldwide (Canadian Internet Retailing Report, 1997; Cyberatlas.internet.com, 2000; Dembeck, 2000). Currently it is estimated that there are between 20million and 34 million internet users in the UK (ClickZ Stats, 2004; Miniwatts International, 2004).

Predictions by some in the industry suggest that these numbers will continue to increase (ClickZ Stats, 2004b; Falcon 1997; Cotton Incorporated Lifestyle Monitor (CILM), 1998; MORI, 2004). However others are wary about such predictions given some of the problems already encountered (Doherty, Ellis-Chadwick & Hart, 1999; Greenberg, 2000). As Doherty et al. (1999) argue the majority of such speculation and orchestration is not based on primary evidence but from over exuberance about the technology. Often it is difficult to ascertain, on what basis forecasts are made and whether they are biased or not. Moreover, much of the information published about internet retailing is '*not adequately documented*', with '*varying statistics*' (Jones & Biasiotto, 1999) and anecdotal at worst and so it is very difficult to verify the real situation.

1.4.1 Apparel Retailing on the Internet

In principle the internet ought to be popular amongst apparel retailers because of the prospect of an idealistic sales and marketing channel, having low transaction costs, JIT (Just In Time) stock control, low capital investment requirement and immense flexibility, which internet commerce promises. The Internet also offers increased choice; considerably lower prices and '*fingertip*' ready convenience for consumers (see Exhibit 1-3 below). But as is discussed below the litmus test is consumer uptake and this has not been very encouraging.

Benefits to consumers	**Benefits to retailers**
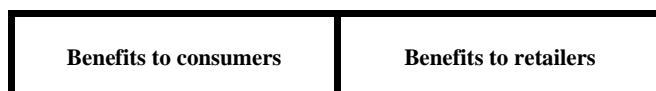
Increased choice	Lower costs
Lower prices	Increased profits
Easier access	Direct Marketing – easier to target consumers
Privacy	
Time saving	

Exhibit 1-3: Benefits of the Internet for Apparel Retailing (Ambaye, 2001)

Data collected before 2005 suggests that B2C e-commerce in particular has experienced high rates of growth (ClickZ Stats, 2004; De Kare Silver 1998; Economist, 2000; Keynote, 1999b; Webb, 1999).

Evidence already presented (Cyberatlas.internet.com, 2000b; Davidson, 1999; Drucker, 1999) and other information does appear to suggest that this is helped by the fact that key high street retailers, in a wide range of markets, are moving in that direction. In sharp contrast, data for the same period suggests that apparel consumers are not following this trend (Lindstrom, M., 2000; McGrane, S., 2000; Morissette et al., 1998; Murphy, R., 1998). This indicates growth in B2C e-commerce of apparel retailing is not yet closely pegged to general B2C e-commerce growth rates (CILM, 1998; Falcon, 1997; McGann, 2004b).

As one report suggests, 'While almost 5 percent of Americans have browsed the Web for clothes, fewer than 2 percent have actually placed orders' (CILM, 1998). Another from ClickZ Stats (2004) claims that only 6.18% bought clothing in the busiest period of the year – Christmas.

Types of products which appear to sell easier include books, CDs and music (TNSI, 2002). Products such as property are more difficult to sell over the Internet. Findings by De Kare Silver (1998) give one possible explanation of why some products sell better than others do. These conclude that '*replenishment goods'* (goods regularly purchased, such as grocery and household goods) have most success selling over the Internet. On the other hand, goods which are not bought so often and appear to require more complex reasoning by the consumer or richer interaction behind a purchasing decision, are more difficult to sell over the Internet.

Apparel is one of these products, not bought daily or weekly, needing to be 'touched/tasted/smelt' (De Kare Silver, 1998) and therefore more difficult to be marketed online. Moreover, expensive fashion goods, such as clothing or shoes, which are usually different items each time, may require more than just an image to enable a purchasing decision to be made. Pre-packaging can be used to overcome some of the difficulties for basic items such as underwear, tights, socks, handkerchiefs and basic shirts. This gives the perception of them as "replenishment" goods easier to sell without feeling or trying them on.

A number of factors which primarily relate to consumers' purchasing behaviour have been speculated about by a number of commentators to attempt to explain the slower than expected uptake of sales of apparel on the internet (Cybersolver, 1997; Cotton Incorporated Lifestyle Monitor (CILM) 1998; Cyberatlas 1999; Jones & Biasiotto 1999; NUA, 1999a & b; NUA 2000). These are issues such as: a) known limits for e-shopping, b) replenishment goods sell best on the internet, c) infrastructure and customer service (Mail Order) - a priority, d) shopping trips as a social event/meeting places, e) convenience and availability, f) brand power and g) inefficient search Engines.

1.4.2 Women as Internet Consumers

As the internet becomes very popular for all sorts of activities, including shopping, women are increasingly taking an important role. A recent survey by eMORI (2004) shows how shopping on the internet is becoming more popular and how female users (46%) now nearly equal male users (54%) in the UK (eMORI, 2004; Jameson, 2002). These are identified as "E-shoppers" (having bought a product or service online in the past 12 months) and make up just over a quarter of the (UK) population (26%) (MORI, 2001). Overall, the social classes which use the internet the most are the AB social group, with 78% and the C1 group with 66% (eMORI, 2004).

Blackwell et al. (2001) advocate that women in North America and Europe today have much higher rates and better quality of employment than ever before. '*More than 66 percent of women are employed in the in the UK.*' (Equal Opportunities Commission, 2004). Since 1983 there has been an increase of more than 26% of women in managerial roles, and it is now estimated that 30% of all women now occupy such positions (Chartered Management

Institute, 2004). Moreover, women consumers between the ages of 18 – 45 are today more likely to be working, have access to the internet at most times and possess a good level of disposable income (Blackwell et al., 2001; e-MORI, 2004; McGann, 2004a; NOP, 2001; TNSI, 2002).

The thesis concentrates on investigating how working female consumers (aged between 18 and 45), living in the UK, behave when making an apparel purchase on the internet. This particular social group has been chosen because they have become a primary target of internet apparel retailers. This targeting is related to the fact, already mentioned, that they have rapidly developed equality, in percentage usage terms, to male consumers on the internet (Blackwell et al., 2001; eMORI, 2004; McGann, 2004a; NOP, 2001). The trends are that women appear to be adopting the internet as an alternative retail channel to support and augment their changing roles in society. As important is that they are also still the dominant social group in the purchase of the products of interest to this research- apparel and have a high disposable income (eMORI, 2004; McGann, 2004b; TNSI, 2002).

1.5 Closing the Gap Between Traditional and Internet Retailing

This research considers the extent to which the basic principles of purchasing behaviour, arrived at from the study of traditional retailing, may be applied to the internet. To date no empirically grounded attempt has been made to arrive at a model of consumer behaviour which can explain internet behaviour. Authors such Blackwell et al. and O'Connor & O'Keefe have made internet specific proposals but these are primarily speculative in nature and often incomplete.

For instance, in adapting their CDP model to the internet, Blackwell et al. (2001) appear to only adapt the first few stages of their seven stages, appearing to make the assumption that subsequent stages are unchanged. In developing their own model, O'Connor & O'Keefe, (2000) allude to this problem with CDP. They conjecture that if one considers the basic elements of the CDP model, it becomes apparent that traditional consumer purchasing behaviour will be dismissed by consumers and replaced with new alternatives that the internet's technology makes possible. They contend that because the internet consumer has

more choice of product, more information (internet newsgroups, 'chatrooms' etc.) and can decide to ignore or avoid the advertisements, the stage model may be inapplicable. Blackwell et al. (2001) appear to absorb this criticism when they state that although the reasons are not yet clear, only a small percentage of the thousands who visit a retail web-site, actually purchase goods over the internet.

Given the above factors, it appears that internet-based apparel retailers do not yet understand how these factors are manifested on the internet. All things being equal, two key factors that are strong determinants of the success or failure of a retail operation are the nature of the retail outlet and how consumers are likely to behave (Vrechopoulos, 2001; De Kare Silver, 1998). In the next section the conjunction of apparel retailing and internet technologies are considered. An emerging theme of the discussion is that it is not sufficient to simply apply traditional assumptions about marketing and retail strategies employed in physical outlets to internet based retailing, especially where sensory products such as apparel are involved.

1.6. Aims and Research Questions

Until now, consumer behaviour in both academic and industry research has been represented by models such as the *CDP* model developed by Blackwell et al., (2001) and the *Hierarchy of Needs* model developed by Maslow (1968) (Chapman, 2002) which are derived from observations of consumers interacting with traditional channels (see Chapter 3).

Initial research (see Ambaye 2001) indicates that existing models such as the CDP model (Blackwell et al. 2001), grounded in observations of consumer behaviour in traditional physical stores contexts, are not suited for directly and accurately describing internet consumer behaviour . Thus, deriving models appropriate to internet consumer behaviour needs to be rooted in observations of 'e-consumer' behaviour, in e-shopping contexts. In so doing the thesis makes the general point that, although the principles of consumer behaviour may remain fundamentally unchanged from channel to channel, the factors and mechanisms that operate are likely to vary in important ways.

With the above thesis as a backdrop, it is possible to identify the three key aims of the investigation focused on improving understanding of consumer behaviour on the internet. as:

1) To investigate how representative are traditional models of CDP consumer behaviour to internet consumption at an empirical level.

2) To utilise the results as a basis for developing a plausible model of consumer behaviour on the internet which takes into account observations made

3) To examine the utility of the resulting model for describing consumer behaviour in relation to sensory products through the use of scenario based analysis

Although, these aims are kept in the forefront, other issues and concepts are expected to emerge as the investigation progresses.

1.6.1 Methodological Framework

Initial literature reviews indicate that much of the current research into consumer behaviour has typically been conducted under HCI or market research frameworks, In the former, the objectives are usually to understand whether consumers, often referred to as users, find retail user-interfaces easy to understand and navigate. Typically users are modeled as generic computer users using a web site, instead of consumers using the internet to achieve shopping objectives. In the latter, users are viewed as consumers, but the objectives are often about identifying broad based opinions and conclusions in respect to topics or products, not about how and why consumers carry out activities or the decision making processes. The needs of this research transcend what can be provided by these approaches as they stand and has led to the need to innovate an appropriate research framework.

Some of the key complexities that Exhibit in consumers' purchasing behaviour have already been described in section 1.2 and 1.4 above. From a methodological standpoint, these complexities are not easily addressed by quantitative approaches due to the prominence of subjective, intangible factors and mechanisms that may be involved.

Stake (1995) notes key differences between qualitative and quantitative research. He suggests that quantitative researchers press for explanation and control while qualitative researchers press for understanding of the complex interrelationships among all that exists. Qualitative methods place high priority on direct interpretation of events and lower priority on the interpretation of measurement data.

In this research, there is a focus to understand whether the CDP model as it stands can explain the complexities of what is observed and should it prove not to do so, modify it or create an alternative model. This overall objective requires an empirical understanding of consumer behaviour that additionally points to a qualitative approach because it requires the researcher 'tapping' into the interplay between consumers and a merchant site. In turn it strongly implies an emphasis on the qualitative aspects of that relationship and a focus on the social and psychological aspects of that interaction. In the end it is about understanding what motivates users, what their apprehensions are and why they make the eventual choices they make. A qualitative approach will help in unravelling the complexities of purchasing behaviour, enabling the researcher to delve under the surface of opinions and emotions of online apparel consumers.

Finally a qualitative approach is a natural choice for such research because it offers a wide variety of methods to enable the researcher to get close to consumers' attitudes and behaviour during the purchasing process. Denzin and Lincoln (2000) argue that qualitative research is inherently multi-method and this aspect can help secure *'an in-depth understanding of the phenomenon in question'*. By triangulating through the application of multiple methods such as focus groups, individual interviews and participant observation (Barbour & Kitzinger, 1999; Denzin & Lincoln, 2000), the qualitative approach can improve explanations and accuracy of data (Stake, 1995).

An important view adopted by the researcher is that research rigour can be assisted greatly by ensuring that the techniques employed are done so under a governing methodological framework. In this light, of a number of mainstream qualitative research philosophies considered, Grounded Theory (Glaser and Strauss, 1967) was chosen. Its main benefit is that it can accomodate the need for research process rigour, flexibility, context sensitive descriptions whilst providing explanations of observed phenomenon.

It also fulfills the objective of theory building and testing because of its insistence on grounding conjectures and conclusions in real data. This is done in a structured manner via a continous interplay between data collection and analysis. According to Myers, (1997) this type of framework is commonly used in social and IS research, where the need is *'develop theory that is grounded in data systematically gathered and analyzed through the research*

process'(Strauss, Corbin 1998, p.12) It is an approach that gives prominence to the data and field under study rather than the theoretical assumptions (discussed further in Chapter 4). Thus the methodological orientation can be characterised as:

1. Involving theory testing and theory development

2. Having flexibility in the Research Process

3. Grounded in rich empirical, consumer-centered data

1.6.2 Contributions to Academia and Industry

An overall aim of this research is to attempt to understand how consumers interact with internet based retailing technology in order to improve that interaction. More specifically, the particular investigation carried out here aims to improve understanding of internet consumer behaviour processes and to communicate this understanding through an improved consumer decision process model. Improved understanding in this respect would enable retail specialists to design more effective systems, helping reduce costs and improving predictability of implementation success. In effect the principle which guides the research is that system design on the basis of more representative model of how consumers behave will lead to systems that better meet users' needs. One possible link between better user models and improved system design is the development of commercially viable design guidelines. Another is the potential development of evaluation heuristics that could be used to evaluate retail web-sites.

The investigation has attempted to take a number of small first steps, which when taken together, define the scope of the investigation as one of building a better theory about how consumers interact with online retailing systems. The five main contributions are briefly outlined below.

Firstly, a critical review of recent literature on consumer retailing on the internet is carried out. This analyses existing publications in the area of consumer behaviour on the internet and in traditional retail and presents them in a novel fashion, specifically tailored to the research at hand.

Secondly, the research innovates by combining qualitative data collection and analyses under a Grounded Theory framework in combination with theory testing using Scenario-Based Analysis (Carroll, 2000), and applied in an internet context. The use of Grounded Theory in this way, although not uncommon in many quarters of sociology, is less common in the field of information systems and even rarer in the field of consumer behaviour. The findings also have many implications for other areas of consumer behaviour studies. Given that the decision making processes of online consumers are found to be somewhat different to those making traditional purchasing decisions, this may mean that other areas of internet consumer behaviour may also be affected.

Thirdly, the research's aim is to provide empirically-based insight into the factors and mechanisms driving online user behaviour and to model that behaviour. To this end, it conducts an empirical study of an appropriately selected sample of internet consumers at close quarters. It brings together a representative combination consisting of female consumers, who come from an ABC1 social group and who are also internet consumers, in order to study their motivations when purchasing apparel online.

The research design and its implementation have proved fruitful in providing the fourth contribution. That is, the identification of gaps between predictions of the traditional CDP model and the observed realities of internet consumer behaviour, culminating in the eCDP model with 3 disinct new modes: overlapping stages, modalities and shifts in modes. (These are discussed in more detail in chapters 5 and 6). This attempts to reconcile the traditional CDP model with the observed realities, providing a better insight into the behaviour of internet apparel consumers.

Finally, the eCDP model provides a structured way to investigate the internet shopping experience of more than just an analogue of the traditional bricks and mortar experience..

1.7 Conclusion

This chapter has described the generally agreed observations that consumer resistance to internet shopping of sensory products may stem from a fundamental misunderstanding of how internet consumers think and behave. In these terms, it is suggested that consumer behaviour on the internet may be dramatically different to behaviour exhibited in traditional retail

channels and not a simple analogue. It has argued for the need to carry out empirical research into this area and outlined a rigourous approach for doing so. Moreover, it has summarised the main outline of the research and how it is to be carried out.

Chapter 2 gives the reader an overview of the current published literature for online consumer behaviour. Due to the paucity of literature in this specific area, it also looks at related literature such as apparel retail, consumer behaviour and E-commerce. Chapter 3 details the focus of the research, and reviews existing CDP models for traditional retail. A traditional CDP model is selected to be applied to consumer behaviour when purchasing apparel on the internet. This model is analysed and explained in detail so that it can be applied to online consumer behaviour during the research.

Chapter 4 outlines the chosen methodology and discusses its strengths and weaknesses. Chapter 5 details the analysis and presents the results of the research. Chapter 6 discusses the implications of the findings and proposes a revised Consumer Decision Process model for internet purchasing, referred to as the eCDP (electronic decision process) model. Chapter 7 draws overall conclusions from this dissertation and lays out the principal contributions. Future research and areas for development in the area of consumer decision-making processes on the internet are also discussed.

CHAPTER 2: RELEVANT ASPECTS OF FASHION AND CONSUMER BEHAVIOUR LITERATURE

2.0 Introduction

Chapter 1 introduced the vision of B2C e-commerce as spelt out by leading commentators and analysts. It described briefly the key drivers behind the interest being shown by small and large retailers alike. It also discussed the implications of these drivers for the apparel retailing industry, noting in particular the relatively smaller impact E-commerce appears to be having on this industry. It hinted that key cultural issues such as the conservative nature of the industry in relation to IT, coupled with other factors related to consumer attitudes and behaviour, might be obstacles for the significant adoption of E-commerce for retailing apparel.

As detailed in chapter 1, apparel has been chosen as a sample sensory product. In selecting a sensory product as an example, it is more likely that the investigation will be able to identify most of the possible issues consumers may encounter in an online purchase situation.

Chapter 2 therefore lays the foundation for the research by considering the key aspects which impact on working women's attitudes towards shopping online in general and looks at apparel as an example of a sensory product to be bought on the internet. Section 2.1 begins by describing traditional fashion retailing, its assumptions and processes. Here it arrives at the conclusion that traditional retailing in 'Bricks and Mortar' stores (physical outlets) relies heavily on meeting the needs of consumers' behaviour in the physical shopping experience. Section 2.2 focuses on the UK market for apparel in particular. This is followed by a brief overview of the current state of internet retailing in section 2.3. Section 2.4 discusses the notion of sensory products on the internet and looks at the example of apparel as a sensory product. Section 2.5 examines the current issues for fashion retail on the internet. Section 2.6 focuses on consumer behaviour and outlines the available traditional models that may be useful to use as a reference when investigating online consumer behaviour.

The conclusion to this chapter summarises current findings and lays the foundation for Chapter 3 where the focus for the research examine how existing models of consumer behaviour might be applicable to the internet.

Perhaps because the internet is a fairly recently developed retail channel, there appears to be little available literature relating specifically to online consumer behaviour. In particular, empirically-based research appears to be scarce. However, much has been published in parallel fields of consumer behaviour for traditional retail channels and also for simple products (as opposed to sensory products such as apparel) for sale on the internet. In particular, literature on Consumer Decision Process (CDP) models used in traditional retail is identified for possible application in this research. Therefore, the first section starts by giving the reader a general overview of apparel retailing in a traditional sense.

2.1 Traditional Apparel Retailing

Prior to discussing what is meant by fashion retailing, it is important to remember what is meant by the notions of retail marketing and fashion. As outlined in Chapter 1, this thesis uses the term '*fashion*' or '*apparel*' as outlined by Bohdanowicz & Clamp (1994), to mean '*clothing and clothing accessories (this includes footwear, belts and scarves)*'. This thesis will equally use the description of retailing as determined by Cox & Brittain (1996): '*typically the sale of goods and services to consumers for domestic use*' (excluding purchases for business or industrial use).

'*The apparel business*' is widely known as the '*fashion business*' because fashion change is so intimately associated with apparel in the minds of most people (Glock, 1995). Fashion change relates to changes in colour, styling, fabrics, silhouette, and performance to reflect fashion trends.

This section gives an overview of the main channels of distribution in the UK fashion retail market and sets the apparel industry in perspective. It also focuses on how '*womenswear*' (apparel for women) fits into the overall market, as this is the most likely apparel product to be bought by the chosen sample group.

2.1.1 Channels of Distribution and Retail

Many different channels of distribution exist for getting the product to the consumer, as can be seen in Exhibit 2-0 below. The channel of distribution can be complex, but some manufacturers do sell directly to customers, as is sometimes the case with the internet.
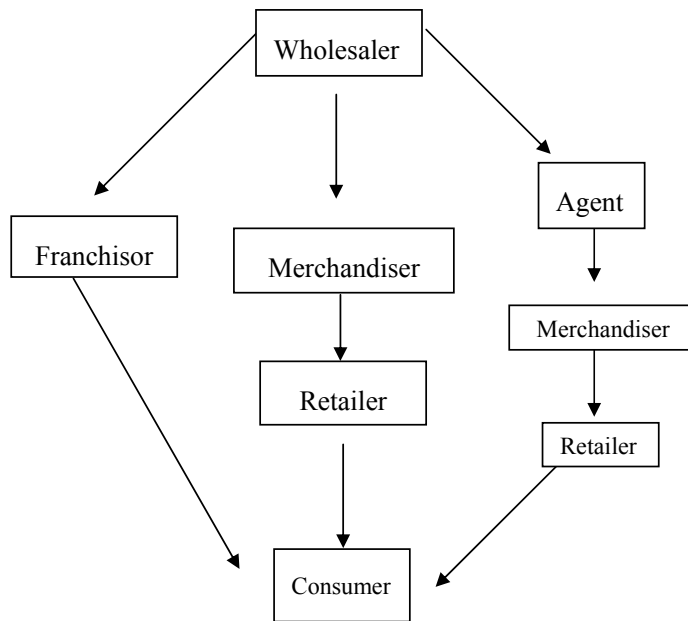
Exhibit 2-0: Channels of Distribution
(Cox & Brittain, 1996)

Traditionally, wholesalers sell through agents, franchisors or retailers to consumers, where each one has to take their margin. This often ends up with a high price for the consumer to pay, as it includes all of these margins (Cox & Brittain, 1996). Exhibit 2-0 depicts the different elements involved in transferring goods from the manufacturer/wholesaler to the consumer.

In the sensory makeup of fashion retailing, a combination of fashion and seasonal change makes the apparel business the most change-intensive business in the world. Bohdanowicz & Clamp (1994) coined a term to explain fashion: '*A fashion is the styling or mode that is accepted by a particular group of people at a particular time and place*', which in itself implies constant change.

Fashion retailers therefore have to adapt to this constant change, which results in a far more complex business environment than their counterparts (for example, fast-moving consumer goods - FMCG). Issues such as extremely tight timescales, numerous seasons, rapid turnover and change of styles on a regular basis, are particular to the culture of the fashion industry. This is added to the fact that fashion manufacturers often have to plan 12 – 15 months ahead, predicting what will be in fashion at that time. Most manufacturers also offer small-scale,

short-term, high fashion ranges that they can introduce at short notice to keep up with the latest trends. This complements their existing range of basic (clothing that is on sale all year round, such as socks, hosiery, t-shirts). This has the advantage of keeping their image high with consumers, whilst still selling the bulk of their basic clothing range to the mass market.

2.2 The UK Apparel Market

It is estimated that the clothing and textile industry is one of the most important parts of the manufacturing economy of the UK- its output accounts for 2.6% of the UK's GDP (Keynote, 1999a).

To set the fashion retail market in context, it is worth having a brief look at the overall figures for the market. Retailing in the UK is a growing industry: figures for the total clothing and footwear retail market in the UK in 2002 were estimated at £26.9bn (at Retail Sales Price - RSP). Apparel retailing is an important part of a nation's economy, often accounting for one of the largest single contributors to GDP (Keynote, 1999a).

The breakdown of the UK clothing market by value shows that Marks & Spencer (aimed at the 25 – 45 year old age group) have the largest share at 10.2%. Next plc are also a strong retailer (aimed at a slightly younger consumer (20 – 40 year olds)). Arcadia, who own fashion chains such as Top Shop and Miss Selfridge (aimed at the younger end of the market, (15 – 25 year olds) have 5.9% of the market share.

Brand	Sales(m)	Market Share(%)	Number of Outlets
Marks & Spencer	2,743	10.2	315
Next	1,708	6.3	333
Arcadia	1,609	5.9	1,603
Debenhams	1,076	4.0	97
Asda	963	3.6	215
Matalan	776	2.9	137
Tesco	710	2.6	588
Bhs	631	2.3	163
New Look	552	2.1	573
John Lewis	482	1.8	25

Exhibit 2-1:UK Clothing Retail Market
Deutsche Bank 2002

Although Marks & Spencers have the largest share of the market, Arcadia are the biggest fashion retail group, in terms of outlet numbers. With over 1600 specialist clothing outlets in the UK spanning retail brands such as: Top Shop/Top Man, Burton Menswear, Dorothy Perkins, Evans, Wallis, Outfit and Miss Selfridge, Arcadia are easily the largest chain of apparel stores in the UK today (Siddiqui, O'Malley, McColl & Birtwistle (2003).

Traditionally the high street has been the centre for fashion retail outlets, and more recently out of town shopping centres have become increasingly popular. Now with the advent of the internet (as with mail order), location has no relevance, as most products can be ordered via a computer and delivered directly to the customers' door.

2.2.1 Mail Order

Mail Order was until recently also quite a significant sector, with 53% in 2002. However it plummeted to 25% in 2004 and online sales overtook it, rising from 9% to 32% in 2004 (Mintel, 2004). However, some Mail order companies that have gone online have found the transition easier than traditional retail outlets as their infrastructure is already in place. Their distribution network is geared up for direct sales to consumers. This means that they do not have to greatly alter their infrastructure to enable them to service their online customers in terms of returns, direct delivery and warehousing.

In addition to the internet as a form of remote shopping, consumers also have available to them two additional 'home shopping' channels: Interactive TV and Mail Order. According to Richard Perks, Director of Retail Research at MINTEL, *'the internet is still seen by many as an exciting new and convenient way to home shop, while catalogues are often seen as old fashioned and downmarket'*.

However some mail order companies have managed to capture both markets. Next plc is a good example of a 'bricks and mortar' store who successfully launched a mail order business and several years later built their internet site on the back of this. Their delivery and warehousing infrastructure was already in place, and therefore it was relatively straightforward to expand into internet sales (Next Plc, 2001).

Similarly, interactive TV has become increasingly popular in recent years and QVC, the leader in electronic retailing, now reaches over 80 percent of all US cable homes and over 4 million homes in the UK (Goldsmith & Flynn, 2004).

Goldsmith & Flynn (2004) suggest that while it may be unrealistic to anticipate a future with no physical stores, there will be fewer paper catalogues as used in mail order. They offer several reasons for this, namely more perceived risk associated with in-home shopping than in-store shopping. '*This risk appears to lessen with experience of shopping through direct channels*'. Goldsmith & Flynn (2004) see this as a similarity with online shopping. Other similarities were convenience, value for money and variety. The contend that this could also point to similarities in motivations of online and catalogue shoppers. It also points to similarities in demographics on these consumers, particularly since recently more women have access to the internet and prefer to purchase clothing '*via both modes*' (Bhatnagar et al.2000).

Due to time and resource constraints and principally due to a need for focus, other forms of remote shopping such as described above are not considered. Such a consideration would assist direct comparisons on the effects of differing channels on purchasing behaviour. However, it would contribute less directly to the debate on the specifics of how consumers behave when using the internet to purchase products, because such channels are substantively different to the internet.

2.3 Internet Retailing

The apparent success of online shopping for certain types of goods has offered many consumers the chance to save time and effort when making purchases of a wide variety of goods. In principle, consumers with busy working lives can spend more '*quality leisure time*' as a direct result of the many benefits of internet shopping (Blackwell et al., 2001; De Kare Silver, 2001; IBM, 2000).

This research is mainly concerned with the effects of selling apparel to consumers via the internet, coined as Business to Consumer (B2C) (Turban et al., 2000). Turban et al. (2000) identified six main types of transaction on the internet, commonly known as: Business to Business (B2B); Business to Consumer (B2C); Consumer to Consumer (C2C); Consumer to Business (C2B); Non-business Electronic Commerce and Intra-business.

Cybersolver (1997) defines a retail transaction on the internet as a transaction with the final consumer: '*Retailing involves the request of transactions and in most cases allows for the close of a transaction with the final consumer.*'
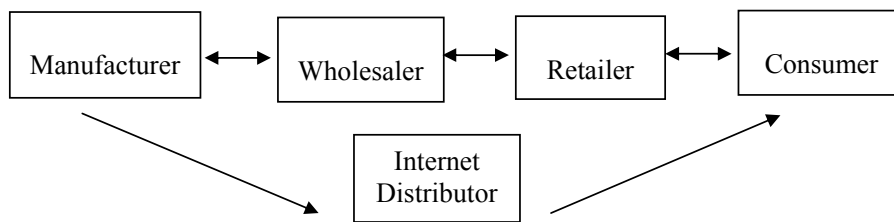
Exhibit 2-2: Business to Consumer on the Internet

The most common consumer purchases over the internet are via retail web sites who sell directly to consumers (Turban et al., 2000). These retailers may also have a separate channel (either internet or traditional) for suppliers and /or manufacturers. As shown in Exhibit 2-3 above, the internet bypasses the various '*middle-people'* and services consumers directly.

E-commerce is changing the standard retail and marketing strategies which retailers have been used to up until now. Until recently, traditional stores have limited consumers' options, making consumers location-dependent and time-dependent (see Exhibit 2-3 below - Hasty & Reardon, 1997). The internet has now opened up a new channel for retailing and offers more flexibility and choice to the consumer. The consumer can now purchase from anywhere there is an internet connection and at any time of the day or night. The location of the retailer does not matter and its business hours can be at any time. Some retailers also set up a telesales backup system where customers can obtain a person to person contact (for problems with deliveries, exchanges, returns etc.). In this case, customers can speak to someone following an initial search or purchase via the retailer's web-site. (There is usually a telephone number or e-mail address advertised on the web-site). The telesales office is often open 24 hours, and a sales assistant can be contacted out of office hours.
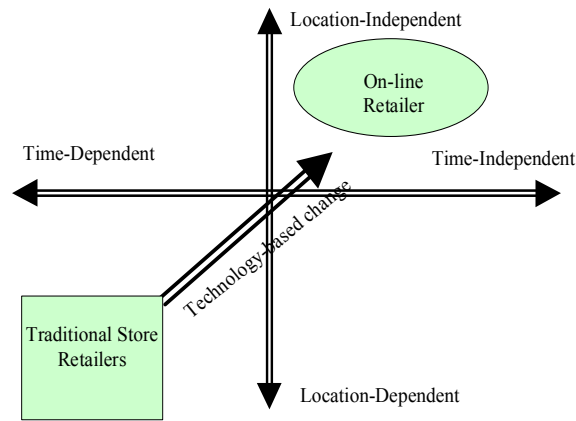
Exhibit 2-3: Information Technology is freeing consumers from time and location constraints of traditional retailers. (Hasty & Reardon, 1997)

With no time and location constraints, retailers equally benefit: they will have less overheads (no physical retail outlets required) and less personnel (staff can be centrally located). This means that to enable a smooth operation, however, the retailer will need to have an efficient distribution system in place, an agreement with a delivery company and a warehouse for storing and managing the orders.

Retailers can also use their web-site to gain information about customers who access it to purchase products. Personal profiles of the customers can be built up and products can be tailored accordingly (Stone, 2000).

However, the retail strategy is only part of the equation. According to Morissette, Clemmer & Bluestein (1998), consumers are the key to the success of selling online, which is why this thesis concentrates more on understanding consumer behaviour. One assumption is that there is little published evidence to identify their online behaviour because their attitudes, expectations and behaviour towards online shopping are only just beginning to form a pattern.

In this thesis the overall aim has been to attempt to understand the consumer's side of the story and therefore to investigate consumer behaviour. However, throughout, retailers' and manufacturers' sides of the story have also been briefly referred to as they are unavoidably

linked and therefore need to be taken into consideration. Due to time constraints and resources, this investigation has not considered this in detail.

2.3.1 Multi-channel Conflict

Moreover, certain issues have arisen to do with comparing traditional and internet retailing which are worth noting in summary: internet channel conflict and multi-channel comparison models.

Internet channel conflict is where internet and traditional channels destructively compete against each other when selling to the same markets (Lee, Lee & Larsen, 2003; Schoenbachler & Gordon, 2002). For instance, Wal-Mart and Home Depot warned Black & Decker that they would take its products off their shelves should Black & Decker start selling its products online. This is a new phenomenon which has arisen since the development of retailing online and is a serious problem for some retailers.

Multi-channel comparison models (Lee, Lee & Larsen, 2003; Schoenbachler & Gordon, 2002) which are also to do with the retailers' side of the story, deal with consumer behaviour to some extent as they look at how consumers choose a channel to make purchases.

Interestingly, these models use some aspects of the traditional CDP model (lifestyle factors, demographics, past experience) and some of the issues outlined in this thesis (familiarity with the brand, security online, past internet experience and return behaviour). This multi-channel strategy is a complex one and needs to consider the fact that consumers now have more power as they have more choice of channels and the added difficulty of the channel conflict (where retailers and intermediaries clash). Bhatnagar et al. (2000) offer some possible reasons for consumers' choice of a particular shopping channel. They imply that the effect of convenience and risk on channel choice patterns are moderated by individual demographic factors (see section 2.5 where risks are discussed further).

However, since this deals primarily with the retail side of the story, it is not considered in detail in this thesis.

2.3.2 The Current State of E-commerce

There is no shortage of those arguing that the internet is bringing or is about to bring a revolution to retailing.

Miniwatts (2005 show an increase of 151% in internet usage in Europe between 2000 and 2005. Ryan (2002) also points out that internet shopping continues to remain a very slim slice of the retailing pie, however, it is growing rapidly.

There are a number of different forecasts for the value of retail sales over the internet, due to the way sales or volume have been calculated or defined. However, it is generally agreed that internet sales are rapidly growing in all industries and no sector will remain unaffected by the internet. For example, IBM (Jones & Biasiotto, 1999) predicts that from $2 billion in 1997, sales will increase to $1 trillion in 2010. Ryan (2002) agrees that internet usage is increasing with 8% of Central Europeans accessing the web at least once a month in 2000, but should rise to 23% by 2006.

This is mainly due to '*cultural factors, high access costs relative to disposable income and low home pc penetration*' (Ryan, 2002).

The UK, along with France and Norway are the three leading countries in Europe in terms of internet technology (behind the US) (Dembeck, 2000). Sweden also comes top (overtaking the US) in terms of '*E-readiness*' ('*E-readiness ranks the extent to which a country's business environment is ready for internet-based commercial opportunities*' (Jupiter Media Corporation, 2005)). The US and the Uk are estimated to be equally third in such rankings. Predictions for E-commerce in the UK show incredible growth: eMORI (2004) show that since January 1997 the growth of the internet penetration into the UK market has increased by 46% (see Exhibit 2-4 below).
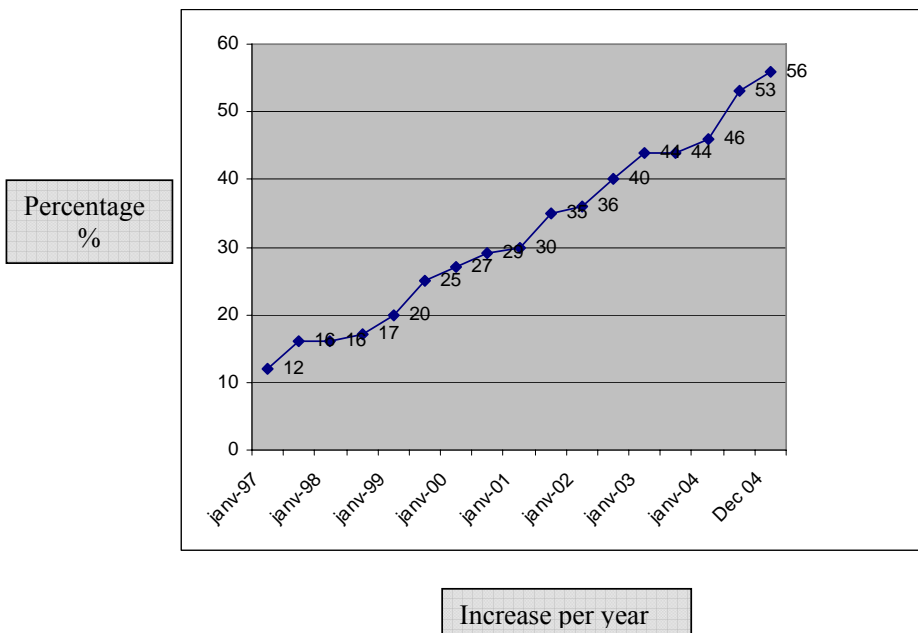
Exhibit 2-4 Internet Usage - eMORI Technology Tracker (2004)

However, although most commentators are in agreement about technology altering the sales and marketing landscape of the future, the jury is still out on the extent of that change (Walters, 2001).

Retailing on the internet has experienced phenomenal growth worldwide in the last 4 – 5 years. In the UK alone, this has risen from an estimated £290m in 1997 to £2,800m in 2002 (Webb, 2002). According to eMori (2004), around 40% of the total population use the internet and of this, women users (46%) have become a significant user base of the internet. In the U.S. female users are estimated to be 50.4% - *'outnumbering male users for the first time in the history of the internet'* (Reuters, 2000; McGann, 2004a).

Thus studying female users on the internet, who attempt purchase '*experience*' or sensory products is therefore a good base for attempting to better understand consumer behaviour on the internet.

2.4 Sensory Products on the Internet – Apparel as an example.

Apparel is often termed '*fashion*' (see chapter 1 section 1.1), and is generally understood to include clothing, accessories, cosmetics, footwear, even furnishings and architecture. However, most commentators when discussing fashion refer to it meaning clothing, as this epitomizes many of the fashion issues that dominate the industry as a whole (Bohdanowicz & Clamp, 1994).

In addition distinctions are also made between so-called *'simple'* and *'sensory'* products. Products such as grocery, CDs and books are referred to as 'simple' products because there is less need to touch, feel or try out such goods, prior to purchase. It therefore follows that these goods may be relatively easy to retail online because consumers need only rely on a brief textual description and an image. For example, CD's and books are able to be easily sampled online.

It is generally agreed that the main issues and problem areas for internet shopping concern those of sensory products and indeed this is the focus of this research. Apparel, for a variety of reasons described in the following sections (see for example 2.5), are used as the quintessential example of 'sensory' products. Our use of apparel should enable the research output to be useful in providing insight for both sensory and less sensory products as well.

A key premise of this thesis is that apparel retailing is unlikely to increase its profile on the Web without a commensurate improvement in understanding of the complexities, cultural and otherwise, surrounding the purchasing of fashion products. Understanding the reasons for consumer resistance will be the primary grounding for significant moves and changes to existing polices and practices.

Trying to piece together a picture of apparel retailing on the internet is not a trivial task as much of the available information is sparse and difficult to compare (Fenech & O'Cass, 2001; Goldsmith & Goldsmith, 2002). One reason for this is that, for competitive reasons, much data collected by apparel retailers is not shared.

Figures published by Greenfield Online (2000) and Clarke (2000) show that internet sales of apparel in the U.S. have been quite a long way behind other types of goods for a while – 16%, compared to 26% of books, and 24% of CDs. Internet sales of all goods have risen in popularity and TNSI (2002) report sales of apparel in the US now (2002) to be as high as 25% (books still remain a favourite at 26%).

The same report (TNSI 2002) suggests that sales of apparel over the internet in the UK are not as popular as in the US (only 14%). BBC Online Network (2002) also states that the most popular products online in the UK are still CDs (21%), videos and books (19%).

Many fashion retailers are now beginning to appear online in the UK, (eg. Arcadia, the biggest apparel retail group in the UK, with Zoom.co.uk). In many cases such retailers are looking to the internet, not as a channel in its own right, but rather as a promotions and marketing tool to advertise products which they are selling in their physical stores.

Top fashion designers and fashion retailers often research all manner of trends in the US to obtain ideas for their own ranges and retail planning. This is because US fashion trends tend to be reflected in Europe about six to twelve months later. This applies to designs as well as trends in retail marketing, merchandising and point of sale This appears to be happening with the trends on the internet as well (Dembeck, 2000). Consumers seem to be following trends in internet online fashion purchasing, which have been happening in America for 6 to 12 months already (Lee Cooper, 2002).

Other types of sensory products which also have been used as an example are goods such as perfume – '*experience goods*' - where direct experience with the product is necessary (Levin, Levin & Heath, 20003) or where '*tactile senses*' count (Stein-Wellner, 2001). According to Fenech & O'Cass (2001), the significant weakness of the internet is the fact that it can realistically only reproduce two of our five senses: sight and sound.

Acccording to Bhatnagar et al. (2000) a consumer, when making a decision to purchase a product, associates a product category risk with the product itself. They suggest that apparel is a high risk product due to the fact that consumers need to '*feel the merchandise*'.

Cosmetics, such as perfume and other makeup, are also perceived to be difficult to sell online (Stein-Wellner, 2001), due to the fact that a consumer needs to make a decision to buy products that are about colour and smell '*in the vacuum of cyberspace*'. DigiScents (a technology design company) provide a little hope as they have recently designed a product called iSmell Personal Scent Synthesizer, which allows internet users to smell what they are looking at online: '*It's a speaker-size peripheral device that you plug into your computer. Imagine an inkjet printer that's loaded with various scent cartridges instead of ink. When the device receives the right code from a web site, it emits the smell according to the formula. This will help consumers in the market for fragrance shampoo, and any kind of cosmetic.*'

There has been much speculation about the future of the traditional high street stores being affected by the increase in sales over the internet. De Kare-Silver (1998) points to a potentially serious conclusion whereby many retail outlets need only experience a drop of 15% in store traffic to make them unprofitable. This has not yet shown significant impact.

The figures for internet sales however mean nothing by themselves, without detailed explanation and often little or no evidence is available to show how they have been calculated. To better understand how these figures relate to the shopping process online, it is necessary to try to understand the source of these figures: the consumer. However, the art of understanding consumers and how they behave when shopping online and how this translates into figures for online shopping is an altogether complex and intricate subject. This will be elaborated further in chapter 3 where the traditional CDP model will be examined further to identify how it may be utilised to help understand the internet consumers' purchasing habits.

2.5 Current Issues for Online Apparel Shopping – Trust and Security

Recent research indicates that relatively sensory products, such as apparel and some personal household goods, appear to be particularly difficult to market online (De Kare Silver, 2001; Greenfield Online, 2000; McGann, 2004b). Bhatnagar, et al. (2000) state that there is little conclusive evidence to explain the reluctance of some consumers not to purchase on the internet.

So far, some research has been published in general with regards to consumers' reluctance to purchase apparel via the internet. This may be due to certain cultural issues intrinsic to the fashion industry, both from the point of view of the consumer and the retailer. Consumers are used to the purchasing in a physical retail outlet and like to try things on and feel the texture of the garments.

McGann (2004) and TNSI '2002) also point to concerns over '*cyber security*', citing 6 out of 10 consumers thinking about reducing their online shopping. This figure is up by 10% since 2003. Equally, Jameson (2002) cites the worry about payment security among internet consumers and '*the need to feel goods before buying*'.

A recent survey by PricewaterhouseCoopers (NUA, 2000) also found that respondents felt that the inability to try on clothes or to feel the quality of the material were a problem when purchasing clothes over the internet. Returning products, privacy of personal information and the total cost of buying clothes (higher than in physical outlets) were also problems which potentially need to be addressed.

Some further research has been carried out with regards to retailing in general over the internet. Findings by De Kare Silver (2001) give one possible explanation of why some products sell better than others do. De Kare Silver (2001) concludes that '*replenishment goods*' have so far had the most success selling over the internet, as they are often seen as a '*chore*' which needs to be done on a regular basis. These are typically goods such as grocery and household goods which are usually bought every week. Goods which are not bought as frequently, appear to have a more complex reasoning behind the purchasing decision, and therefore more difficult to sell over the internet.

According to De Kare Silver (2001), apparel is a type of product that needs to be '*touched/tasted/smelt*' and therefore more difficult to be marketed to an online consumer. Lindstrom (2000) also contends that retail is good at using all of our senses and the internet only appeals to two of them. He estimates that until this issue is addressed, retail success will remain limited.

Packaging overcomes some difficulty when selling basic items such as underwear, tights, socks, handkerchiefs and some basic shirts online. As these items are perceived as types of '*replenishment*' goods they are therefore easier to sell without feeling or trying them on (De Kare Silver, 2001). Goods such as clothing or shoes, which are usually different items each time, may require more than just an image to enable a purchasing decision to be made.

A recent Stein Wellner (2001) study also brings up the fact that people still like the experience of shopping as a possible reason for not using the internet when shopping for apparel. According to the respondents, they like to touch the fabric and try it on: '*computer generated visuals don't reliably show the colour, drape or lustre of a garment*'.

Greenberg (2000), suggests that one possible reason for the slow uptake of apparel online is that the '*walk-ins*' (shopping malls) are still doing very well because people like to shop. Greenberg (2000) believes that online shopping won't damage sales through traditional channels in the foreseeable future, because of the human '*desire to browse*'. Some consumers

like the experience of going shopping- it is seen as a social outing and the most important target group for fashion retailers (12 – 25 year olds) often use shopping malls/high streets as a meeting place. This type of social interaction cannot take place over the internet in the same way. Koernig (2003) confirms that the instore variables such as lighting, colour, smell and store layout influence consumers' reactions in physical stores.

However, a major conclusion from the survey was that sales of clothing over the web are not replacing, but complementing offline business in traditional stores. One main reason clothes are bought on the internet, besides convenience, is because items are not available in the traditional stores.

Bhatnagar et al. (2000) suggest that the more interactive (and sensory) the purchase is (where feel and touch are important), the riskier the product becomes. '*The likelihood of purchasing on the internet decreases with increases in product risk. Other risks associated with products (on line or offline) are:*

- *Technical complexity*

- *Ego-related needs*

- *Higher price (relatively)'*

Online retailers often neglect customer service and order fulfilment and concentrate on just marketing and selling their products. For example, in a recent survey published by Forrester Research (2000), it was found that online retailers will need to improve the service they provide if they want to maximise earnings from the predicted boom. It cited the most common complaints from consumers to be expensive shipping and handling charges and slow-loading pages.

Another contributing factor could be search engines on the internet. According to Connexions (2001), the major names in B2C e-commerce in the UK (including the principal clothing and grocery retailers) simply fail to appear anywhere near the top of search engine listings used by potential customers, because US sites still dominate the field.

Shopping cart abandonment, or 'failure to complete a purchase' (Kaufman-Scarborough & Lindquist, 2002), is also another term which has appeared since the advent of online shopping. Certain factors which have been identified are issues such as: slow load times,

inability to locate certain items, incomplete information, lack of human-interaction, failure with account setups, or simply some consumers may never have intended to complete a purchase online.

2.5.1 Positive Factors for Online Apparel Shopping

There are some positive influencing factors which can help internet consumers when making purchases online. Indeed, Cyberatlas (2000a) reported that online apparel shopping is beginning to gain in popularity. However, they report that the likely drivers of this shift are that satisfied consumers are '*sticking around*' – first-timers to internet shopping are more difficult to persuade. Also, more established brands are selling online. They report that consumers are driven by the familiarity of established retailers and manufacturers: 77% of shoppers have shopped for clothing at web-sites operated by a physical store or mail order retailers. It appears therefore that the perceived benefits portrayed by the promoters of the internet need to be investigated more fully.

In light of this, there is general consensus that a key question of interest to retailers is how to ensure increased success of their online channels. Another point of agreement is the need to gain a better understanding of the consumption behaviour of online shoppers (De Kare Silver, 2001; IBM 2000). This leads to the question which motivates this paper: 'do online consumers behave the same way as traditional ones and if not how do they differ?' This question currently is under-explored, especially from an empirical perspective (Greenberg, 2000). Much research has been conducted into the Human Computer Interaction (HCI) aspect of online shopping, (Cole, 2000; Lindstrom, 2000). However, it appears that little has been done in the area of consumer behaviour where retailers attempt to understand how the consumer makes decisions when purchasing online.

Sophisticated interactive decision aids can be made available to consumers, due to recent technological advances in online shopping environments. Such decision aids can help consumers to locate and compare product offerings, such as price and product attributes (Haubl & Trifts, 1999). This can therefore help consumers find the most competitive offering at a particular time on the internet. This advantageous service is not available through normal shopping channels.

As the decision making process for apparel appears already to be quite complex, the virtual shopping process makes it even more complex as some of the factors are missing which

enable the decision making process to take place. This research therefore takes a look at the consumer's decision making process when shopping online, to identify areas for improvement in our understanding. Due to the lack of published material in this area, traditional consumer behaviour models are consulted to enable an appropriate comparison. These are discussed further in Chapter 3, section 3.6.

2.6 Consumer Behaviour

Blackwell et al. (2001) state that if a retailer is to be successful in the marketplace, it is necessary to understand and research consumer behaviour. Understanding consumer behaviour can help provide insight into product, pricing, retail, advertising and communication strategies for retailers: *'[retailers need to know] how to meet the needs of their online consumer'* (Ambaye, 2001). Therefore it is extremely advantageous to understand how their customers think, why they make decisions about purchasing and why they behave in certain ways.

Consumer behaviour is a vast and complex subject '*covering characteristics that influence consumers' decisions and behaviour, such as demographics, lifestyles, personality, values, culture, and family'* (Blackwell et al., 2001). To enable a feasible comparison with online behaviour, a small area of traditional consumer behaviour was chosen for its focus: the Consumer Decision Process. Minor & Mowen (2000) define this process as *'the processes involved in recognising problems, searching for solutions, evaluating alternatives, choosing among options, and evaluating the outcomes of the choice.'* Much research has been carried out into this area for traditional retail, but it appears there is little empirical research for the internet. Certain authors refer to the internet as a new sales channel, (Cybersolver, 1997; De Kare Silver, 1998; IBM, 2000) but it appears that there are no specific models or theories for the internet. In the main it appears that is treated as just another shopping channel by consumer behaviour authors.

Many Consumer Decision Process (CDP) models have been developed which look at how consumers go through the process of making a purchase for traditional retail outlets. One such model, is the CDP model by Blackwell et al. (2001) '*How Consumers Make Decisions for Goods and Services'*, which has been evolving since 1968, was briefly discussed in chapter 1 (Exhibit (1-4). Other authors have designed similar models, following a similar pattern from **Need Recognition** to **Consumption** (Mowen & Minor, 2000; Schiffman &

Kanuk, 2004; Wilkie, 1994). Maslow et al. (1998) proposed a slightly different model with a hierarchy of stages that consumers progress through in a linear fashion. These are discussed in further detail in Chapter 3.

2.7 Conclusion

As the chapter has shown, consumer behaviour in a remote shopping context has many particularities. These particularities can affect the choice of products, services and underlying business models utilised as well as the way technology is employed to serve consumers perceived needs and motivations. They can also ultimately affect the usability of the system through the resulting user experience.

In the case of internet shopping, it is clear from the previous discussions that there is very limited research published on internet consumer behaviour. There is concerning paucity of empirically grounded research, especially in regards to consumer behaviour for purchasing sensory products (such as apparel). The lack of published material falls into 3 categories:

1. Internet Consumer Behaviour (in general)

2. Decision Making Processes Online (very little, the only one being Blackwell et al.'s (2001) brief reference to it.)

3. Sales of Sensory Products Online (such as apparel)

This lack of published material indicates strongly a need for research into the subject. Improved understanding is a pre-requisite for making substantive improvements to the current unsatisfactory situation which many commentators are agreed exists. Improved understanding in these areas will be a necessary step towards attempting to gain a better appreciation of the key issues involved in online consumer behaviour. The resulting improved insight would be helpful to researchers, technology specifiers and product marketeers.

However, given the complexity of consumer behaviour and the breadth of the subject area, it is important that any research activity is properly focussed. Failure to do so could lead to difficulties in carrying out indepth investigations that produce meaningful results. Therefore, a focus is made on *Decision Making Processes Online* and *Sales of Sensory Products Online* as core areas for this research. Taking a smaller section of consumer behaviour with a

focused subject area and investigating it in greater depth increases the likelihood of more effective results.

Chapter 3 therefore considers traditional consumer behaviour, its complex nature, how it is modelled and looks at whether it is possible to transfer the underlying principles onto the internet. In particular it identifies four relevant traditional consumer decision process models and selects one for use in the research.

CHAPTER 3: CONSUMER DECISION PROCESS MODELS

3.0 Introduction

The literature survey described in Chapter 2 demonstrated that online sales of certain types of products possessing complex attributes, such as apparel appear to be significantly slower than predicted (section 2.4). In contrast, online sales of simpler products, such as CDs, and software appear to be more successful in terms of online sales.

The survey highlighted the need for empirical investigations of this phenomenon, especially from a consumer behaviour perspective (Blackwell et al. 2001; Lindstrom, 2000; Minor & Mowen, 2001; Salisbury et al., 2001;).

This chapter begins by taking a brief look at the literature on traditional consumer behaviour theory. From the main body of consumer behaviour study, the key sub-category of focus for this investigation is the study of the *consumer decision processes* in relation to purchases online.

In the interest of rigour section 3.2 describes a number of the more important traditional consumer decision process models in use today, including the Hierarchy of Needs model (Maslow, A.; Stephens, D.; Heil, G.,1998), the CDP model (Blackwell et. al, 2001) and the Behaviour Model (Schiffman & Kanuk , 2004). Keeping mind that a model represents a cleaned up version of reality, an initial analysis was carried out using informal walk-through and scenario based data (see Appendix 2, Section 3 and Section 3.5). This led to the conclusion that most do not easily lend themselves to describing observed behaviours of internet consumption.

Of these the traditional Consumer Decision Process (CDP) (Blackwell et al., 2001), model emerges as one having most potential for a variety of reasons. Sections 3.3 takes a closer look at this model and consider its strengths and weakness as a reference model for the investigation proposed in subsequent chapters. Section 3.4 examines this traditional CDP model in terms of its suitability for describing observed behaviour of 'real' consumers. This gives an initial indication of where the fault-lines needing to be addressed may lie, in relation to using a traditional model to describe consumer behaviour on the internet.

Section 3.5 justifies why Blackwell et al.'s model has been selected and section 5.6 outlines the implications. This includes the main strategy of the research, which is to test using

empirical data, whether the traditional CDP model can sufficiently assist in describing consumer behaviour on the internet.

3.1 Consumer Behaviour in Traditional Retailing

Consumer behaviour research is a complex subject, with many different areas and perspectives. Loudon & Della Bitta (1993) attempt to tidy it up as *'the study of the buying units and the exchange processes involved in acquiring, consuming and disposing of goods, services, experiences and ideas'*.

Understanding consumers' likely decisions processes is a key value to business success. Thus far, in the traditional retailing context, this understanding has been essential in aiding retailers better target the potential needs of consumers. In traditional retail channels such as mail order, high street shops or out of town hypermarkets, the study of consumer behaviour plays a major role in how retailers market their products leading retailers to carry out constant monitoring of their consumers' behaviour.

In most instances, consumer behaviour is both a complex mental decision process and a physical activity (Blackwell et al., 2001; Loudon & Della Bitta, 1993). It is also governed by much serendipitous as well as functional activities. People may buy because they need something or because they simply feel like it. Buying behaviour can be as much about individual choices as it is about cultural influences. When shopping for sensory products such as apparel, many influencing factors including the need to touch, try on and feel the quality of the garments before purchase are important. As are the social atmosphere associated with shopping for clothes (female camaraderie) and the physical interaction with the garments (De Kare Silver, 2001). Each of these factors are all capable of influencing the adoption of products and their eventual sale. This is not to confuse consumer behaviour with the act of purchasing alone. Viewed in this way, the actual purchase is just one stage in a set of mental and physical activities, where several stages may precede the purchase and several may follow it.

Wilkie (1994) asserts that the are four basic types of decisions made by consumers: Budget allocation (how and when to spend (or save), available funds and whether to borrow), Store Patronage (which retail outlet to visit), Product Purchase (or not) and Brand/Style choice. In traditional retailing, Store Patronage is of utmost importance and can further influence the consumer once in the store.

Recent research (Wilkie, 1994) confirms that many consumer decisions are made on impulse. To this end, retailers put in a lot of effort to attempt to influence decisions made at the point of sale or in store. Point of sale promotional displays have become increasingly important and are now used in most stores.

Translating some of these physical manifestations onto the internet's consumer interface is not a trivial task and cannot be carried out in the same way. Creative substitutes have been devised. Advertising banners (the flashing messages that come up when a consumer opens a certain webpage), or a list of colourful images around the webpage being consulted, (with links to other websites), can be seen as the equivalent of point of sale promotion online.

3.2 Consumer Decision Process Models

Schiffman & Kanuk (2004) define a decision as a *'selection of an option from two or more alternative choices'.* Consumers make purchasing decisions without being aware that they are doing so. However there are many studies and models which concentrate solely on the decisions and processes that consumers go through when making a purchase. These models are aimed at understanding the traditional shopping process. It appears not to be any specific model aimed at online consumer decision processes.

According to many consumer behaviour researchers there appear to be stages which make up the traditional decision making process when a consumer makes a simple purchase. This can take place over a short period of time or it can be very long – such as a year (Wilkie, 1994; Maslow et al., 1998; Mowen & Minor, 2000; Schiffman & Kanuk, 2004; Blackwell et al., 2001). In the following sections 5 established models of the traditional decision making process are described and discussed.

3.2.1 Maslow, A.; Stephens, D. & Heil, G. (1998) – Hierarchy of Needs

Wilkie (1994) notes that there are other useful models such as the Hierarchy of Effects model defined as: 'A classic marketing framework outlining a seven-stage process of a consumer moving from an advertising exposure to a brand purchase.' Maslow was one of the first to develop such a model in the 1960s.

Simlarly, Maslow's Hierarchy of Needs (1968) follows a similar principle. Each step, or 'need' has to be fulfilled before the next can be carried out in a hierarchical manner. The

motivations for carrying out each step is implied by the names given to each stage: Physiological Needs, Safety Needs, Social Needs, Esteem Needs and Actualisation. The Physiological Needs are basic biological needs such as the need for air, food, water and a temperature range. Safety Needs are those such as safety and the need to feel safe. Esteem Needs are those that affect our self-respect and respect from others. Actualisation is the desire to '*become what one is capable of becoming*' (Accel-Team.com, 2001). Maslow's model is outlined below in Exhibit 3-1.

| Actualisation |
| Esteem Needs |
| Social Needs |
| Safety Needs |
| Physiological Needs |
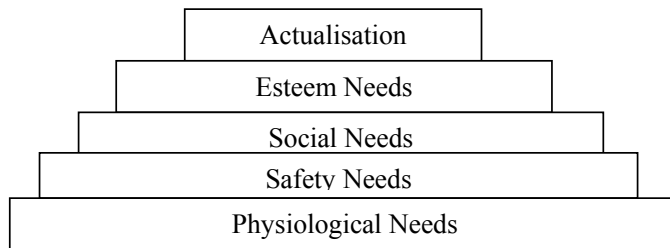
Exhibit 3-0: Maslow's Hierarchy of Needs (1968)
(Maslow et al., 1998)

Wilkie (1994) also developed a similar model which consists of seven stages, from Unawareness, Awareness, Knowledge, Liking, Preference, Conviction through to Purchase. Each step provides a foundation for the next step. This model has a 'fixed order' or a linear pattern that relies on one step to be fulfilled before another one can be carried out. Although this is rather simplistic, there are other factors that have been built into the model which allow for individual differences and timing differences.

3.2.2 Mowen & Minor (2000) – Consumer Decision Process Model

Minor and Mowen (2000) dedicate a section in their book (Chapter 9) to a similar Consumer Decision Process model to Blackwell et al.'s (2001). The stages are less elaborate and there are only 5 instead of 7. The five are: Problem Recognition, Search, Alternative Evaluation, Choice and Post-acquisition Evaluation. However, they employ the same principle: consumers move through several decision-making stages when making a purchase. They recognise that consumers often make decisions '*on the fly*' (impulsively), but the decision process is still influenced by the consumers' personal situation(s) (social, urgency of need, knowledge of the consumer, memory etc.).

The authors (Mowen & Minor, 2000) conclude that the traditional decision-making perspective is very rational and consumers move through the stages in a linear fashion. Whereas, in reality, there appear to be different conditions (high involvement and low involvement). For low involvement, limited decision-making and less search behaviour occurs and simplified rules therefore apply, and the Alternative Evaluation stage is largely omitted. For high involvement, more influences come into play and there is a more complex reasoning behind the decision (Ambaye, 2003).

3.2.3 Schiffman & Kanuk (2004) – Consumer Behaviour Model

Schiffman & Kanuk (2004) discuss a model which is less linear than the one proposed by Minor & Mowen (2004), however it is nevertheless similar and relatively simply laid out. It shows that consumers' decisions often 'feed back into' factors such as experience and that the stages are also interlinked and do not necessarily follow in a linear fashion. Schiffman & Kanuk (2004) propose a model that has three major components: input, process and output.

The input component is the stage where consumers are influenced by external factors such as a retailers marketing and advertising about a certain product as well as the socio-cultural factors which surround the consumer (family, social class, culture, peers).

The process and output components are very similar to the Minor & Mowen (2000) model, with only 5 stages to them: Need Recognition, Pre-purchase Search, Evaluation of Alternatives, Purchase and Postpurchase Evaluation

According to Schiffman & Kanuk (2004), the process and output components are also subject to influences from the psychological field. These are factors such as motivation, perception, learning, personality and attitudes.

They briefly refer to internet consumer behaviour in the Pre-purchase Search stage in their earlier edition, Schiffman & Kanuk (2000). They conclude that consumers can find much of the information they need about the products and services they are considering which enables them to have faster and more efficient information. Even though the product they cite as an example is a complex one, an automobile, they do not go further into the decision making process for such a product.

In the latest edition, Schiffman & Kanuk (2004), they dedicate an introductory section to the 'Digital Revolution' which discusses the use of the internet as a tool. The decision process of

the consumer in relation to the internet is not really mentioned. Their point of view is that the technology offers benefits to retailers and consumers, it can speed up the process and close the gap between retailers and consumers. Other benefits include saving time and money (again for both retailers and consumers). However, the questions they seem more concerned with appear to be from the retail perspective: ie. As the internet can potentially enable consumers to optimise based on price for a chosen product, this may reduce the effects of other differentiation features such as brand name and reputation. Equally, they may ask whether advertising and other hard copy forms of marketing will have a lower importance. Even though these questions are currently unknown, the main argument presented seems to be that the source from which these effects evolve is consumer behaviour, and understanding this in detail can lead us towards better solutions.

3.2.4 Wilkie (1994) – Hierarchy of Needs and CDP Model

Wilkie (1994) briefly touches on the Hierarchy of Effects model, developed by Robert Lavidge in 1961. He describes it as a 'classic marketing framework outlining a seven-stage process of a consumer moving from an advertising exposure to a brand purchase.' In this model the stages are: Unawareness, Awareness, Knowledge, Liking, Preference, Conviction and Purchase. Each step provides a foundation for the next step and they are therefore necessarily carried out sequentially. Even though this model allows for timing differences, (one consumer may take longer to make a decision than another), Willkie (1994) admits that there are certain controversies to the model. The model has its limitiations, but it may be a good overall guideline to use for a good start point when beginning to look at consumer decision processes.

Wilkie (1994) prefers to concentrate on a version of the Consumer Decision Process model, which is similar to the previous models discussed, although the stages are named slightly differently. The overall idea, however is the same, but there are only 4 stages: Problem Recognition, Information Search and Alternative Evaluation, Purchase Processes and Post-purchase Processes. As the make-up of these stages are similar to the Blackwell et al. (2001) model, these are discussed in more depth in the next section.

3.2.5 Blackwell et al. (2001) – Consumer Decision Process Model.

The hierarchical models discussed above appear to go some way towards appropriately representing consumer behaviour and are well recognised in terms of their use in traditional consumer behaviour studies.

However, as the next section discusses the traditional CDP (consumer decision process) model devised by Blackwell et al. (2001) appears to be the most comprehensive of the available models and the most adaptable to possible application to consumer behaviour on the internet. Out of the four previous authors mentioned above, only Blackwell considers a consumer purchase on the internet in 4 of the 7 stages. (Schiffman & Kanuk (2004) only referred very briefly to the internet).

This model was therefore selected for use in this investigation to examine whether it could be applied to consumer decision processes on the internet. The following section therefore reviews this model in more complete detail.

3.3 Traditional CDP model: Blackwell et al. (2001)

The Consumer Decision Process models were chosen because more comprehensive literature was available for comparison with consumer behaviour on the internet and it appeared more suited to internet consumer behaviour. This section therefore looks at Blackwell et al.'s (2001) traditional CDP model for studying consumer behaviour and looks at the first 4 stages, which appear to be where there is the most difference when purchasing on the internet.
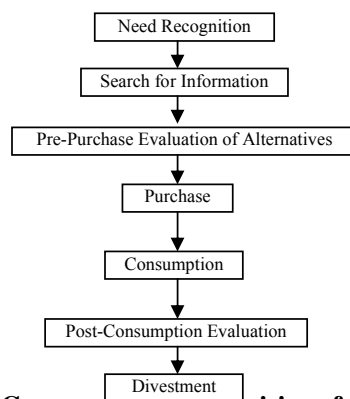
Exhibit 3-1: How Consumers Make Decisions for Goods and Services
(Blackwell et al., 2001)

The model in Exhibit 3-1 above shows seven major stages that a typical consumer might go through when purchasing a product or service: Need Recognition, Search for Information,

Pre-Purchase Evaluation of Alternatives, Purchase, Consumption, Post-Consumption Evaluation and Divestment. Each stage in turn is affected by a number of internal factors (memory, psychological) and external factors (peers, family and marketplace advertising). An in-depth understanding and constant monitoring of each stage in relation to a retailer's product or service helps marketers to devise marketing strategies to influence consumers to purchase from a particular retailer (Blackwell et al. 2001).

Having been developed in 1968, this model appears to have been primarily applied to traditional retail settings. According to Blackwell et al. (2001) their seven stage model (see Exhibit 3-1 above) can be applied to all retail channels, including the internet (this is discussed in more detail in section 3.5.1).

In Exhibit 3-2 above, the 7 stages of Blackwell et al. (2001) model are outlined. Each stage is influenced by a number of factors which can totally change a consumers' behaviour. Environmental influences, such as a consumer's cultural or social background and their personal and family situation, influences the choices and decisions made when realising they have a need.. Blackwell separates these from a consumer's individual differences such as consumer resources, motivations, knowledge, personality, values and lifestyle, all of which can influence a consumer's need.

The three stages where the consumer's behaviour is most likely to differ between traditional and shopping online are: Information Search (stage 2), Pre-purchase Evaluation of Alternatives (stage 3) and Purchase (stage 4). It also indicates that there are issues emerging from the data to do with the Need Recognition stage (stage 1) and Consumption stage (stage 5). These differences are explored in more detail in Chapter 5. Blackwell et al. (2001) give the following examples scenarios that illustrate the nature of each of the five stages and the interactions between them:

1. Need Recognition

The starting point of any purchase decision is a customer need (or problem). Need Recognition occurs when an individual senses a difference between what he or she perceives to be the ideal versus the actual state of affairs.

2. Information Search

Once consumers have recognised their need, they begin to search for information about how to satisfy this need. This may be internal (from memory) or external (peers, family, and the marketplace)

3. Pre-purchase Evaluation

Consumers evaluate alternative options identified during the search process. Consumers seek answers to questions such as "What are my options?" and "Which is best". They compare, contrast and select from various products or services.

They use new or pre-existing evaluations stored in memory to select products, services, brands and stores that will most likely result in their satisfaction with the purchase and consumption.

4. Purchase

This stage follows Pre-purchase Evaluation and is where consumers go through two phases. Having decided to purchase, they choose one retailer over another, and are then faced with in-store choices, influenced by salespersons, product displays, electronic media, and point of purchase advertising.

Sometimes consumers buy something quite different from what they intended to or opt not to buy at all because of what happens during the purchase or choice stage. A consumer may prefer one retailer but choose another because of a sale or a promotional event at a competitor's store, hours of operation, location or traffic-flow problems. Inside the store, the consumer may talk with a salesperson who changes his or her decision, see an end-of-aisle display that switches his or her brand preference, use a coupon or price discount, fail to find the intended product or brand, or lack the money or right credit card to make the purchase.

5. Consumption

After the purchase is made and the consumer takes possession of the product, consumption can occur – the point at which consumers use the product. Consumption can either occur immediately or be delayed. For example; if a consumer sees a sales

promotion for frozen food, they may stock up on the item buying more than can be used in the normal time frame of consumption. How carefully they use or maintain the product may also determine how long the product will last before another purchase is needed.

There are 2 more subsequent stages: Post-consumption and Divestment, which are not in the scope of this research.

3.3.1 Need Recognition

The diagram (Exhibit 3-2 below) shows that environmental influences make up only part of a consumer's need, memory also has a large influencing factor, especially if it is for a product that the consumer has purchased before.
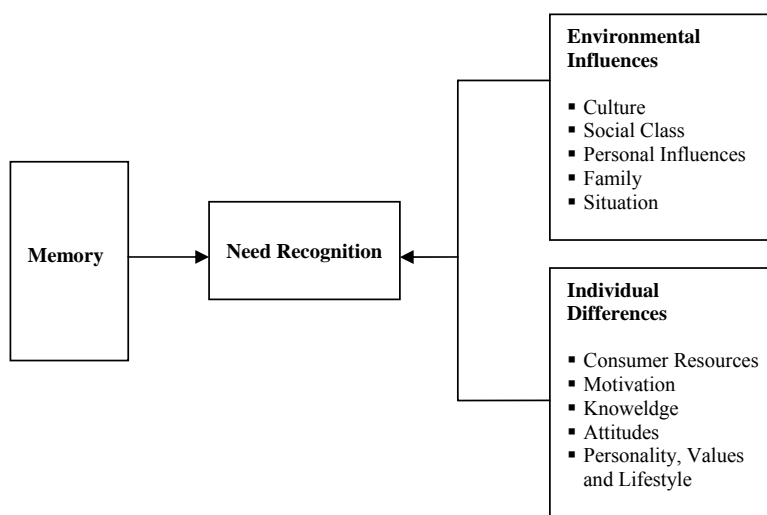
Exhibit 3-2: Need Recognition (Stage 1)
(Blackwell et al., 2001)

Advertising and promotion therefore also play a part in influencing consumers' memories to try to influence them to purchase differently the next time or to try a product they have never tried before.

3.3.2 Search for Information

In Blackwell's model, stage 2 is split into two parts. The first part, in Exhibit 3-3 below, shows how the different stages can be influenced by environmental influences and individual differences as well as memory, and these factors can feed back their influence to preceding stages at any given point. For example, once the consumer has recognized their need, they being the search process, still thinking and considering issues affecting them from previous purchases, listening to peer advice and their available budget. Whilst carrying out the search, a discovery of a new type of product could influence their need, provoking a reaction such as being satisfied with what they have already and thus terminating their purchase process. Equally a new information about new types of product may also influence their need and they may feel that they need more or different products than they initially thought.
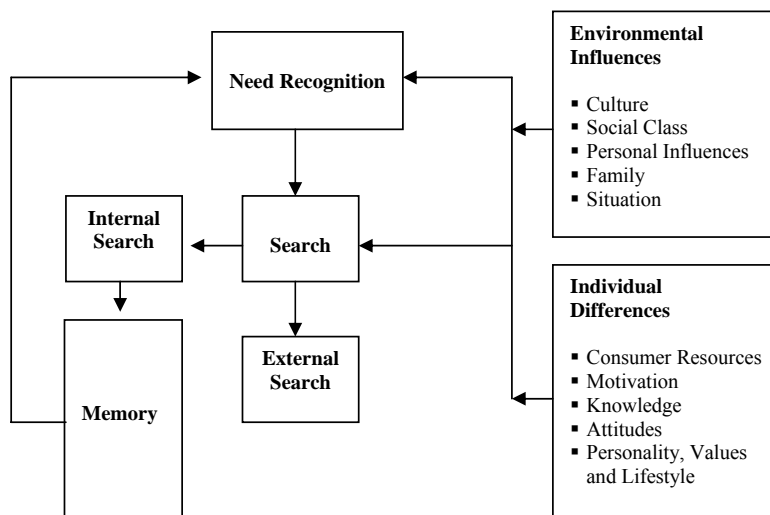
Exhibit 3-3: Search for Information (Stage 2 – first part)
(Blackwell et al., 2001)

In Exhibit 3-4 (below) Blackwell shows the second part of stage 2, explaining in more depth how a consumer's memory is an important part of the decision-making process. It shows how the consumer's memory can affect the consumer's decision in more detail. Blackwell also introduces the idea that the variety of sources sought by consumers, are mainly split into two categories: (1) marketer-dominated (anything that the supplier does for purposes of information and persuasion, such as advertising, salespersons, infomercials, web-sites and

point-of-sale materials) and (2) nonmarketer-dominated (includes friends, family, opinion leaders and media). At this stage, Blackwell mentions that the internet can increasingly aid the information search process, mainly because it is speedier in general. However, he concludes with a very general statement that *'it is the execution of the web site that influences how consumers will use it in the consumer decision process.'*
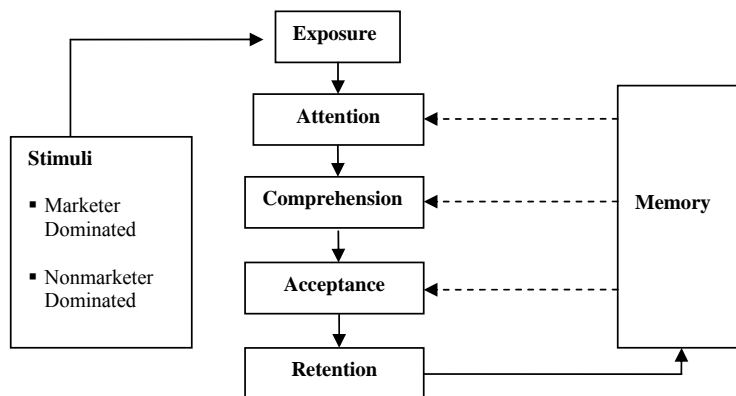
Exhibit 3-4: Information Processing (Stage 2- second part)
(Blackwell et al., 2001)

3.3.3. Pre-purchase Evaluation

In the third stage, Pre-Purchase Evaluation of Alternatives, (seen in Exhibit 3-5 below), the idealised consumer evaluates the alternative options that have been identified during the search process. Blackwell incorporates all of the previous influences and shows that the evaluation of a consumer's choices is also influenced by environmental and individual differences. At this point, the consumer looks at the '*determinant'* and '*salient'* attributes of the products. Blackwell defines 'salient' as '*the most important attributes of a product'* (i.e. the 'nuts and bolts') and '*determinant'* as '*details such as style and finish'*, factors which usually determine which brand or store a consumer chooses. When a consumer decides that the '*salient'* attributes are all equal, such as price and quality, they then make their decision based on the '*determinant'* attributes of a product such as ambience or personal attention given to the consumer.
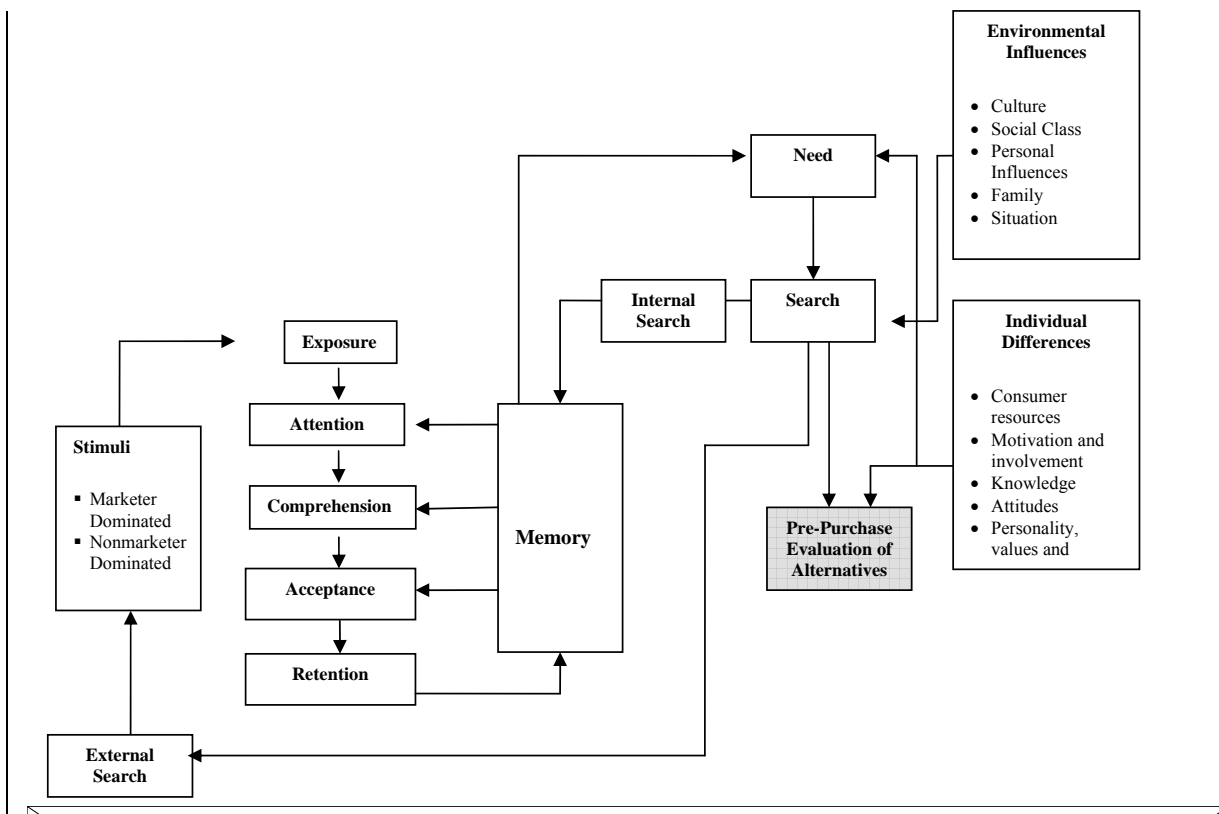
**Exhibit 3-5: Alternative Evaluation (Pre-purchase Evaluation of Alternatives) (Stage 3)
(Blackwell et al., 2001)**

3.3.4 Purchase

In Exhibit 3-6 (below), the Purchase Stage, shows what happens after the consumer has made
the decision to purchase. Blackwell considers this to be in two phases: in the first phase, the
consumer chooses one retailer over another, or other form of channel (retail outlet, catalogue,
TV, internet). The second phase is what happens once in the store, through the influence of
sales-personnel, product displays and point of purchase advertising. In this stage, it is show
how all of the influences lead up to the consumer's decision. A consumer may go through the
first three stages intending to purchase a particular product, but at the purchase stage be
influenced by sales-personnel or a product display to buy something different. Blackwell only
considers how this affects a consumer's decision making process in a physical store, not how
it may occur on the internet.
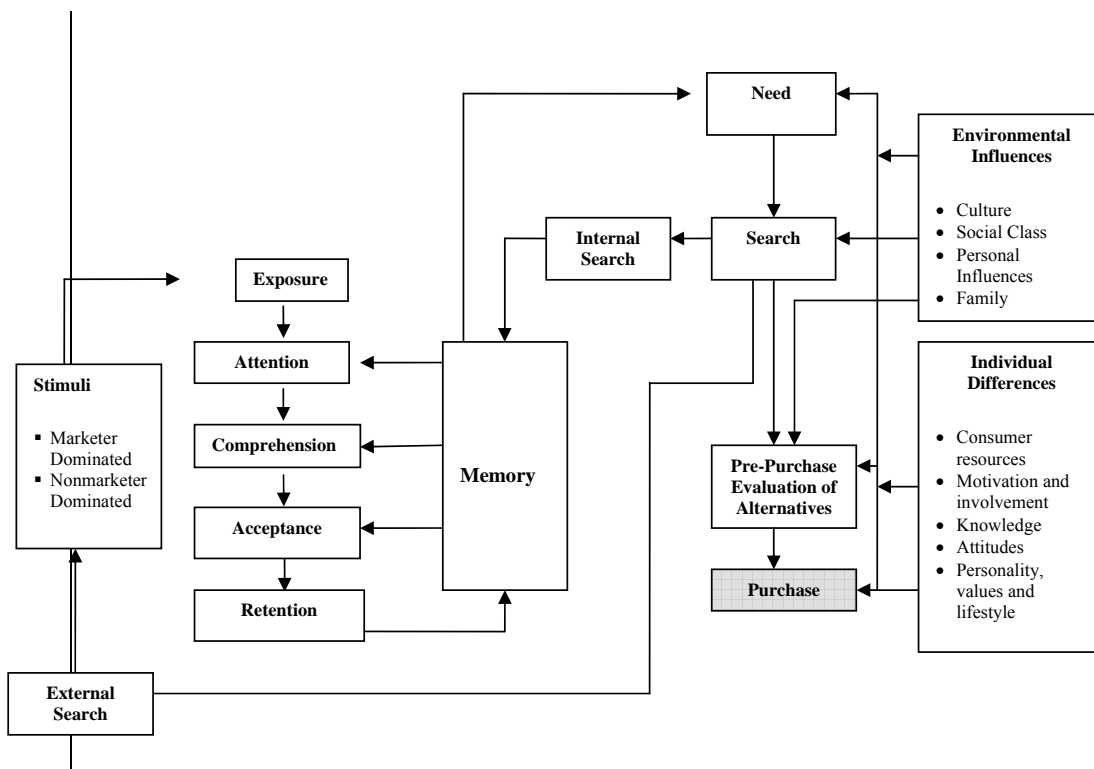
Exhibit 3-6: Purchase (Stage 4)
(Blackwell et al., 2001)

3.3.5 Consumption

Following the Purchase stage, the consumer takes possesssion of the product they have purchased. This is where Consumption occurs – when the consumer actually uses the product. Consumption can however be delayed (or it can occur immediately) depending on whether the consumer uses it immediately or not. If a consumer 'stocks up' on a product for example, buying more than can be used in a normal time frame of consumption, consumption can be delayed. How the consumer uses the product can also affect their evaluation of the product at the Post-consumption stage (see Exhibit 3-7). How the product is cared for can also affect how long the product will last until the next purchase.

Need

Environmental Influences
- Culture
- Social Class
- PersonalInfluences
- Family

Search

Internal Search

Exposure

Attention

Comprehension

Acceptance

Retention

Memory

Stimuli
- Mar keter Dominated
- No nmarketer

External Search

Pre-Purchase Evaluation of Alternatives

Individual Differences
- Consumer resources
- Motivation and involvement
- Knowledge
- Attitudes
- Personality, values and lifestyle

Purchase

Consumption

Post-Consumption Evaluation

Dissatisfaction

Satisfaction

**Exhibit 3-7: Consumption and Post-consumption
(Blackwell et al, 2001)**

In the next section, Blackwell et al.'s CDP model is considered in more detail with regards to consumer's decision-making process on the internet.

3.4 Blackwell et al.'s CDP Model and the Internet

Blackwell et al. (2001) do not refer to the internet as a separate case. They do however, set aside one diagram to describe 'A Consumer Analysis of E-commerce' (see Exhibit 3-7 below) taken directly from Blackwell et al.'s book and outlines the major issues and limitations that may occur during a purchase on the internet). Blackwell et al. (2001) dedicate only 2 pages in their book to the '*E-commerce Revolution*'. They apply the first four stages of the CDP model to e-commerce retailing and consumer purchasing. Equally, they apply it to sensory products, such as apparel and shoes, however not in much detail, nor from an empirical perspective.

In general, it is referred to in stage 2, Search for Information, as a source of information for the consumer in (Blackwell splits this stage into two parts: Search for Information and Information Processing, see Exhibit 3-3 and 3-4).

They argue that consumers searching for price information on the internet may make them more price sensitive. However comparison is made to other studies that have shown that the internet allows consumers to equally compare quality information and prefer to purchase products on quality rather than price.

Blackwell et al. (2001) agree with De Kare Silver (1998) that some consumers prefer to shop in physical outlets and *'browse through malls'*. They refer to the search for an evening dress in a traditional store, and the '*pleasure or fantasy association and anticipation*' the consumer may feel when trying it on. Here the experience may be more important than the price or the speed it is purchased.

Stage1: Problem Recognition

Which parts of shopping cause consumers problems that can be solved better on the internet or through an e-tailer?
- Not being able to go to a store when the store is open
- Store location is far away (either other city or country)
- Need special products that are not carried by many retailers (special sizes, out-of-print materials, personal preferences, or products for special medical needs)

Example A consumer might have difficulty buying size 14 shoes from a traditional retailer that cannot afford to carry inventory of specialised products that don't turn quickly. An e-tailer or shopping directly from the manufacturer solves the problem better for the consumer than the existing retail channel. E-tailers may have a major advantage in solving problems for these consumer *by selling products that appeal to segments too small for location-based retailers.*

In which instances is the search process enhanced or simplified by the internet?
- Searching a wide variety of sources of information , perhaps on a global basis
- Identifying a specific product title, name, or brand and retailer selling the item
- Searching for information on competitive brands or on a topic of interest
- Ability to 'shop' various retailers for products and prices

Example In the past, if consumers were looking for a specific book or music CD, they might have to travel to several stores to find the title. The search process could involve several phone calls or trips to various stores. With the internet, however, consumers can search online for the inventories of location-based retailers and choose to buy from the store or buy online. Also, accessing information about products or interests can be done from home rather than in the library.

Limitations If consumers are not exactly sure what they are looking for, the search may be complicated if help is not available to narrow the search process. The search will lead to purchasing in countries where the postal service or commercial services can deliver the products easily and cheaply, especially if issues such as transportation charges, shipping damages, and customs and duties are not solved satisfactorily.

Stage 3:Pre-Purchase Evaluation of Alternatives

In which instances is the evaluation process enhanced or simplified by the internet?
- When comparing product prices across retailers (especially global locations)
- When comparing features of products

Example E-tailing offers consumers advantages in comparing attributes of products offered by competitors, especially price. Numerous search programmes and web sites are available to compare prices after consumers have defined other attributes of brands that are in their consideration set.

Limitations Two major issues make it difficult for consumers to evaluate alternatives on variables other than price. First, many of the data for such comparisons are not retrievable from the databases of competitors, who may actively avoid the disclosure of such data. The second problem is that many of the most important attributes cannot be compared digitally.

Stage4: Purchase

Which parts of shopping cause consumers problems that can be solved better on the internet or through an e-tailer?
- When you can't physically go to the store
- When calling is difficult or not convenient
- When the same order is repeated
- When the consumer is familiar with the products being ordered
- When the consumer doesn't need the product immediately

Example Consumers who have purchased shirts from L.L.Bean in the past, might find it convenient to visit the website and order additional shirts. The advantage is that this can be done anytime, day or nigh, without fear that the size will be wrong. Some similarities exist for nonperishable , staple items found in grocery stores.

Limitations When a consumer walks through a grocery store to buy the average purchase of 18 items, the consumer uses about 21 minutes to search the store, select products, check out, and load the car. Can grocery e-tailing compare in time and assistance? Only if the e-tailer provides information about product selections and availability, provides 'time utility' and offers a similar or lower price. If it is easier and more convenient to use an e-tailer, then consumer may be willing to absorb the higher costs of home delivery and a 'hired shopper'.

Exhibit 3-8: A Consumer Analysis of E-Commerce
(Blackwell et al., 2001)

CDP model applicable to the internet. When applying the whole model to the internet (findings in chapter 6) it becomes apparent that the Need Recognition, and sometimes Consumption, are also pertinent.

However, this examination of how the model could be applied to an internet shopper's behaviour appears to be anecdotal rather than empirical.

3.5 Justification of Selection

As already stated, initial literature survey reveals a paucity in empirical research relating specifically to consumer behaviour on the internet. This paucity makes it necessary to take a lateral approach of considering what other work in related areas, empirical and otherwise can be co-opted for use in internet consumer behaviour. Much of the literature utilised in this research can be categorised broadly as relating to HCI (Human Computer Interaction) and supply chain issues on the internet. For instance, (Jones & Biasiotto,1999; Cotton Incorporated Lifestyle Monitor, 1998; NUA, 1999a & b) focus on limiting factors such as access to a computer terminal, credit card security and service (returns and delivery). Similarly, other authors consider certain difficult issues to be the main reasons for not purchasing sensory products on the internet. These are issues such as visual definition (De Kare Silver, 1998), fit/sizes not being standard or representative (not being able to try garments on/variable sizing), quality (only visible on delivery), colour (can look different on-screen than in reality), and slow loading images (Cyberatlas 1999; Cybersolver, 1997; NUA 2000).

However, there have been a number of studies that have tried to apply, at a theoretical level, traditional consumer behaviour models to the internet. For instance Blackwell et al. (2001) have considered whether aspects of their Consumer Decision Process (CDP) multi-stage model can be made to apply to the internet (see section 3.4). Similarly O'Connor & O'Keefe (2000) also take a theoretical approach in modifying the CDP model to take into account internet specific issues.

3.6 Implications

The CDP model developed by Blackwell et al. (2001) is significant in its own right, as that it is arguably one of the most influential models recognised by both practitioners and theorists

in the field of consumer behaviour (O'Connor & O'Keefe, 2000; Minor & Mowen, 2000). Most consumer researchers use this type of model, albeit sometimes with slightly different terms for the stages.

Initial findings (Ambaye, 2003) indicate that although some aspects of the Blackwell et al. (2001) model appear to assist in understanding of internet behaviour at a high level. However, stages 3 and 4 require substantive adjustment in order to reflect the reality of what happens when consumers are attempting to shop online.

A main issue is that CDP does not indicate how to handle the considerable differences (discussed above) in terms of the factors and mechanisms that govern consumers on the internet and those in traditional sales channels. Exhibit 3-9 below gives examples of the key assumptions embodied for stages 2, 3 and 4. Column 2 shows two key activities that take place in these stages, whereas column 3 shows the anticipated result of each activity.

For instance, in stage 3, the consumer goes through an exercise of comparing products, the culmination of which might be a shortlist of products in a given category.

STAGE	ACTIVITY	RESULT
Information Search	Retailer comparison	Look at alternatives
	Product comparison	Look at alternatives
Pre-purchase Evaluation of Alternatives	Retailer comparison	Choose a retailer
	Product comparison	Shortlist products
Purchase	Interaction with retailer	Choose different retailer
	Interaction with product	Choose different product

Exhibit 3-9: Assumptions in the Blackwell et al. (2001) CDP model

Thus Exhibit 3-9 (above) shows for each of the three stages, the relationship between an activity carried out in a stage and the anticipated result. Empirical findings suggest that such relationships do not apply readily in the case of internet shopping. For instance, Blackwell's model assumes that when a consumer wants to compare products they can compare products based on a like for like criteria and arrive at a plausible shortlist. In a traditional store, this is an interactive process where consumers can interact with sales personnel, and physically

appraise the product of interest. Clearly in the case of the internet, the assumption cannot be made that products will be described by different merchant sites according to exactly the same criteria. Moreover, on the internet, the immediacy of being able to interrogate in respect of the missing pieces of information is not available to the purchaser.

Similarly, in stage 4, Purchase, there is an assumption that the activity of interacting with a retailer may lead to the choice of a different retailer or product. In traditional stores, this involves in-store choice where factors such as sales-personnel, product displays, electronic media and point-of-purchase advertising can influence decisions. In the internet equivalent, the degree of immersive experience of consumers has yet to achieve levels of richness implied in this stage. With the exception of software products, it is not possible to try out products and therefore be distracted into making alternative choices. For the internet, it is also not likely that in-store sales personnel can actively influence buyers' behaviour in the same way.

3.7 Conclusion

This chapter began by summarising consumer behaviour in traditional retail contexts. It highlighted the useful role of consumer decision process models (CDP) in providing useful insight into the factors, mechanisms and influencing factors governing consumer behaviour. Subsequent sections detailed a number of examples of such models. Of the models explored, it was found that the Consumer Decision Process (CDP) model (Blackwell et al., 2001) would be most appropriate for use as a comparative reference model for the investigation. A number of reasons were given including, its widespread acceptance and utility in describing observed consumer behaviour for traditional retailing context. Nevertheless, the close similarities between the various models described should mean that lessons derived from using this model will have a degree of applicability to the rest.

The discussion in section 3.6 highlights some of the ways in which the Blackwell et al CDP model may be lacking relative to the needs of online retailing context. The chapter concludes that there is a pressing need to gain better insight into the factors and mechanisms governing the behaviour of internet consumers. It argues that the complexity of such factors and mechanisms suggests the need for empirical, rather than theoretical research approach.

Chapter 4 describes an empirical study designed to gain a fuller understanding of the consumer decision process in relation to online shopping. It uses as a comparative reference model, the traditional CDP model (by Blackwell et al., 2001). It outlines the main strategy of the research, which is to test, using empirical data traditional behaviour model in the internet

context. It describes the revised research objectives and proposes a methodology for gaining empirical understanding of consumers' behaviour involved in the purchasing of sensory products on the internet.

CHAPTER 4: RESEARCH METHODS APPLIED

4.0 Introduction

Chapter 3 discussed traditional consumer decision process models and argued that the traditional CDP model by Blackwell et al. (2001) (hence forth referred to as TCDP) can be a suitable starting point from which to construct an internet-focused analytical framework. The current chapter describes the actual work carried out towards this objective. It details empirical work designed to gain insight into some of the key factors and mechanisms governing the behaviour of internet consumers. Primarily qualitative in nature, multi-method research techniques are utilised to reflect upon predictions of the TCDP model against the backdrop of the observed behaviours of a sample consisting of female internet shoppers. Initial results from this research indicate that the TCDP model needs substantive changes in order to be appropriate to internet retailing environments.

The chapter begins by revisiting the overall focus of the research and outlines the main research questions. The discussion in section 4.2 examines current techniques used to study consumer behaviour in general, and in particular e-consumer behaviour (online consumer behaviour), culminating with a description and rationale for the selection made. Section 4.3 takes this discussion further and focuses on the particular question of issues of generalisability, in relation to qualitative research data, in the context of the research objectives at hand. It also outlines grounded theory as a proposed research framework. Section 4.4 gives an overview of the particular multi-method techniques employed, their strengths, weaknesses and appropriateness.

This is followed, in section 4.5 and 4.6, by a consolidation of the thinking exposed in previous sections by the proposal of an analytical framework to guide research collection and analysis in this thesis. In particular, section 4.6 describes Grounded Theory (GT) as the conceptual framework utilised in the investigation and disusses the related issues. (For a fuller description of the studies conducted, please refer to Appendix 1 for questionnaires, focus groups, interviews, observations).

4.1 Focus of the Research

Many studies show that women are usually the major purchasers of grocery, household and apparel goods in each household (Blackwell et al., 2001; De Kare Silver, 1998; NOP, 2001; e-MORI, 2004; Jameson, 2002). Since the recent advent of the internet as a new retail channel, women are increasingly becoming users of online shopping. Studies now

estimate that female online users are almost equal in percentage to male users (MORI, 2001; NOP, 2001).

Working women have undergone fundamental changes over the past decade, which are significantly important and different than before. Blackwell et al. (2001) advocate that women in North America and Europe today have much higher rates and better quality of employment than ever before. *"More than 66 percent of women are employed in the UK."* (Equal Opportunities Commission, 2004). Since 1983 there has been an increase of more than 26% of women in managerial roles, and it is now estimated that 30% of all women now occupy such positions (Chartered Management Institute, 2004).

Much research has been carried out into women's multiple roles, time pressures, changing family structures in this context (Blackwell et al., 2001, Forrester, 2003). Increasingly, working women often have two major roles: household responsibilities (including children) and their jobs outside the home. It is not surprising therefore that the recent advent of the internet as a shopping channel can play a major part in reducing some of the stress and time taken up with necessary and leisure purchases (Greenspan, 2004).

As a focal point therefore, this research considers working women (who are in the ABC1 social group, aged 15 – 45 – see glossary for fuller description) as internet shoppers. This particular social group has been chosen because recent research shows that this group of women is most likely to use the internet in their field of work or at home (Bhatnagar, Misra & Rao, 2000; Greenspan, 2004; Goldsmith & Flynn, 2004; Mora & Gray, 2001; NOP, 2001). To enable a better understanding of online purchases, sensory products have been chosen as sample products for this investigation. (products which are difficult to retail on the internet due to their complex attributes; i.e. consumers are not able to easily make a purchasing decision purely based on the information and image offered online). Sensory products, such as apparel and some personal household goods, appear to be particularly difficult to market online (De Kare Silver, 1998.) There are many factors and mechanisms related to the purchasing of such goods in general, some of which can be quite involved. For example, when purchasing apparel, the ability to try on, touch or feel the material, sizing, and the shopping experience are but a few of the expectations of fashion consumers.

The thesis conjectures that it is useful to study the purchasing behaviour of consumers interacting with such sensory products, as the factors and mechanisms observed are

A consumer behaviour model for the internet

likely to be supersets of issues of importance in the case of simpler products. It argues that better understanding of the issues influencing the purchase of sensory products online can be applied to improve how simpler products such as books, CDs or videos being are marketed on the internet.

A current model aimed at understanding consumer behaviour in traditional retail (the TCDP model) is therefore selected and used to attempt to improve such understanding. The TCDP model however is discovered to be of limited use in attempting to gain a better understanding of internet consumer behaviour, and therefore this research aims to try to improve the model to make it more suitable for the internet.

4.1.1 Rationale of the thesis

Until now, consumer behaviour in both academic and industry research has been represented by models such as the traditional Consumer Decision Process (TCDP) model developed by Blackwell et al., (2001) and the Hierarchy of Needs model developed by Maslow (1968) (Chapman, 2002) which are derived from observations of consumers interacting with traditional channels.

The thesis has conjectured that the advent of online channels such as the internet, is producing profound implications for the modelling of consumer behaviour. Initial research indicates that existing models such as the TCDP model by Blackwell et al. (2001), grounded in observations of consumer behaviour in traditional physical store contexts, do not appear to be suitable for accurately describing internet consumer behaviour (Ambaye, 2003). Thus, deriving a model appropriate to internet consumer behaviour, needs to be rooted in observations of 'e-consumer' behaviour and in e-shopping contexts. In so doing the thesis makes the general point that, although the principles of consumer behaviour may remain fundamentally unchanged from channel to channel, the factors and mechanisms that operate are likely to vary in important ways.

4.1.2 Research Aims and Questions

With the above thesis as a backdrop, it is possible to identify the three key aims of the investigation focused on improving understanding of consumer behaviour on the internet:

1) To investigate how representative traditional consumer decision process models are for internet consumption at an empirical level.

2) To utilise the results as a basis for developing a plausible model of consumer behaviour on the internet which takes into account observations made

3) To examine the utility of the resulting model for describing consumer behaviour in relation to sensory products through the use of Scenario-Based Analysis

Some important research questions that flow from these key aims include:

- What are the underlying motivations of consumers' behaviour on online?

- What are the key mechanisms that affect consumer decision making processes online?

- What is the relationship between product complexity and observed types of behaviours online?

- What can we say about the role of quantitative and qualitative research for capturing online user behaviour?

- How can we extend the findings to make generalisations?

Before these aims and questions can be addressed, it is necessary to understand how the study of consumer behaviour on the internet is currently carried out. The following section details several approaches.

4.2 The Study of e-Consumer Behaviour

So what is it about the study of e-shopping that may require a different approach compared to that of traditional channels? To start with, the study of traditional consumer behaviour, is a particularly complex and difficult venture (Blackwell et al., 2001; Mowen & Minor, 2001; Wilkie, 1994), informed by both qualitative and quantitative research approaches. There are already well-known difficulties associated with describing consumer behaviour, often in its own right a combination of impulsive and functional buying behaviour.

This complexity is increased significantly when attempting to study consumer behaviour as it happens over the internet. The internet channel overlays additional complexities of human behaviour mediated via a computer user interface (eg. GUI, graphical user interface). This remoteness leads to a number of manifestations, which are fundamental distinguishing features of the e-shopping environment. For example, the absence of

A consumer behaviour model for the internet

physical information and feedback; the control and ease the consumer has of being able to initiate or abandon the process; reduced opportunity of influence by vendors through for instance sales personnel, physical shop design; on-hand service and social dynamics (Ambaye, 2003; De Kare Silver, 2001; NUA, 2000). Many of these are manifested as a result of the process being driven by the user who has more control of the information when purchasing on the internet.

Research design benefits greatly when a hypothesis can be formulated about the phenomena in question. In the case of consumer behaviour, a hypothesis about how subjects are likely to behave, encapsulated in a workable consumer behaviour model would be a useful starting point. Unfortunately, the literature survey reveals that this benefit is not readily available. As close as we can come to this ideal, is Blackwell et al's (2001) notional conjecture that the CDP does apply to internet consumption. However, it would be difficult to argue that their model is anything more than a starting point, as it has neither the empirical basis nor the academic rigour that could form the basis for such an argument. Moreover, one must question the validity of being able to support the central assumption of their extension, that internet consumers behave the same as traditional consumers. In sharp contrast, most observers are agreed that consumer buying behaviour patterns observed in traditional 'physical' retail outlets differ significantly from those in virtual stores. As Turaif and O'keefe (1998) argue, there is no evidence that indicates that we can simply apply what we understand to be true in traditional retailing to online retailing due to its very important distinguishing features. Schiffman & Kanuk (2004) equally state that the internet provides the consumers with most of the information they require to make choices and therefore their searches are easier, thus affecting the Pre-purchase Search stages. The purchasing process itself is likely to change dramatically over the next decade.

The research described here has chosen to consider whether the TCDP can be a useful starting point from which to start an investigation into consumer behaviour, laying the groundwork for developing an improved and more specialised model for the e-shopping context. Assuming the TCDP as a starting point reduces one major issue, that of hypothesis formulation during research design.

4.2.1 Research Approaches to E-shopping

Following on from the discussions above, the next stage of research design might involve consideration of the available research techniques specifically developed for

the study of internet based consumer behaviours. Unfortunately, as for the previously described lack of descriptive models specifically aimed at the internet (see Chapter 3), the literature is also punctuated by a notable lack of available methods for studying this specific area. A survey of the literature points to an absence of consensus on tried and tested approaches aimed specifically at the study of e-consumer behaviour.

Instead over the years researchers have borrowed generic techniques and approaches from a variety of fields, such as marketing and psychology, to form what can be recognised as a loose collection of generic techniques for the study of consumer behaviour (Loudon, 1993; Mowen & Minor 2000; Wilkie, 1994;).

From time to time, a few researchers appear to have baulked this general trend and attempted to borrow from fields such as HCI, CSCW or ethnography (Cole, O'Keefe & Siala, 2000; Karat & Karat, 2003; O'Connor & O'Keefe, 2000). To date, none of these approaches take a suite of such techniques and integrate them into a framework to form a useful set of tools that can be repeatedly and predictably utilised to study consumer behaviour in the internet shopping context.

Minor & Mowen (2000) organise this disparity into consumer behaviour research into three key schools of thought: 'Decision-making Perspective', 'Experiential Perspective' and 'Behavourial Influence Perspective', each having an influence on the type of research methods utilised.

According to the 'Decision-making Perspective', (as in the Blackwell et al. (2001) TCDP model), the purchase process results from a perception that a problem first exists and then progressing through a series of steps with the aim of solving the problem. This approach is rooted in cognitive psychology and in economics, grounded in experiment and quantitative in focus.

Moreover, in the 'Experiential Perspective', the decision-making process is not according to a strictly rational process. When purchasing products, consumers are looking for products and services which are fun, create fantasies, and affect their emotions and feelings. Hence there is an emphasis on impulse and serendipity (Holbrook and Hirschman, 1982). This approach is often investigated through the use of interpretive research methods (Denzin & Lincoln, 2000) where the focus is on understanding rather than prediction and a strong reliance on quantitative methods.

The 'Behavioural Influence Perspective' assumes that strong environmental forces influence consumers to make purchases without necessarily first developing strong feelings or beliefs about the product. The consumer does not go through a rational decision-making process or rely on feelings to purchase a product or service. The effect on the consumer of environmental forces such as sales promotions devices, cultural norms the physical environment or economic pressures are considered to be critical. Like the 'Experiential Perspective', this approach is often investigated through the use of both quantitative and qualitative methods (Strauss & Corbin, 1998), where the focus is on understanding rather than prediction (Rothschild and Gaidis, 1981).

Thus traditionally there is a clear connection between perspectives on consumer behaviour and the methodological orientation utilised. The next section attempts to provide an overview of contemporary methodological approaches to the study of traditional consumer behaviour. This discussion is extended in the following section with a discussion of the difficulties associated with the study of internet based consumer behaviour and why a multi-method approach is desirable.

4.2.2 Traditional Approaches for Studying Consumer Behaviour

Thus from the above discussion it can be concluded that traditional research methods used for studying consumer behaviour can be classified very broadly into two methodological orientations - qualitative or quantitative. These in turn can be mapped into three key types of techniques which are commonly employed in consumer behaviour research: observational, experimentation and interviews/ surveys (Minor & Mowen, 2000; Wilkie, 1994).

1) Observational - where consumer behaviour is observed in different situations, either in their natural setting or an artificial setting;

2) Interviews and surveys - aimed at gathering information from a large sample of consumers by asking questions by mail, telephone, internet, or in person;

3) Experimentation - where there is an attempt to understand cause and effect by carefully manipulating independent variables either in an artificial setting or a natural setting (such as home or store).

As was suggested in the previous section, these distinctions are fairly well defined in the context of the consumer behaviour perspective adopted. For example, experimentation is generally associated with a quantitative orientation, biased towards a Decision Making

perspective whilst observational often tends towards the qualitative orientation of Experiential or Behavioural Influence perspectives. In traditional consumer behaviour research, the question of whether a qualitative versus a quantitative research orientation is thus a fundamental one.

A quantitative methodological orientation tends to require a rigorous following of a neat linear research process that is often not recursive. Each of the phases of the research process is considered to be independent of others and having defined outcomes, which serve as inputs into the next phase (Flick 1998). In qualitative research, the notion of the research process can be markedly different. Although, as for the quantitative approach, distinct phases of research are possible, the exception being an accepted mutual interdependence between them.

Moreover, in this context the quantitative orientation is by its very nature about looking at the broader picture and not about getting close to the human subject. In contrast, qualitative approaches are often more about getting close to the individuals and groups of interest in a particular context. The aim is often to better understand the factors and mechanisms underlying individuals' particular decision making processes. As Stake (1995) observes, it is about getting close to subjects' way of thinking and acting. He further comments that there are certain differences between qualitative and quantitative researchers themselves. He suggests that quantitative researchers press for explanation and control while qualitative researchers press for understanding of the complex interrelationships among all that exists.

Denzin & Lincoln (2000) provide further distinctions when they observe that *'the word* **quality** *implies an emphasis on the qualities of entities and on processes and meanings that are not experimentally examined or measured in terms of quantity, amount, intensity or frequency.'* . Strauss & Corbin (1998) suggest that '*qualitative methods can be used to obtain the intricate details about phenomena such as feelings, thought processes, and emotions that are difficult to extract or learn about through more conventional research methods*'.

Thus it can be argued that what differentiates qualitative and quantitative research is that the former is about understanding the underlying factors and mechanisms whilst the latter is about deriving direct generalisations. Qualitative methods place high priority on direct interpretation of events and lower priority on the interpretation of measurement data.

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4.3 The Proposed Research Framework

From a methodological standpoint, it can be argued that the study of consumer behaviour possesses complexities that are more readily addressed by a qualitative orientation. This suitability arises from the desire to capture consumers thoughts and motivations at close quarters in as rich as possible a manner, analyse and interpret it, to arrive at information which is useful and ultimately generalisable. So, for instance, in an effort to understand how consumers choose or reject particular products for purchase, one needs to study each individual's influence factors and motivational mechanisms when making a purchase. This may involve the identification of influences such as peer recommendation, competitive advertising, prior-knowledge, impulse and other emotional factors which can be important (De Kare Silver, 1998; George, 2002; Wilkie, 1994). This complexity is compounded by the observation that such decision processes, once identified, often do not lend themselves to an explanation by pure logic and are dynamically changing from purchase to purchase. As Blackwell et.al (2001) observe, such decisions are not usually made based on simple or conscious criteria, and so are difficult to explain, even on the part of the subject themselves.

Miles & Huberman (1994) state that because in qualitative research the data is usually captured over a sustained period, the researcher can go beyond brief descriptions and meanings and delve deeper to understand how and why things happen. Qualitative methods can enable the researcher to cope with three key demands of the investigation: 1) the need to gain first-hand understanding of consumers' behaviour, attitudes and opinions about online shopping; 2) the need to describe and capture the events surrounding such problems in as rich a way as possible; and 3) the ability to probe the underlying motivations of online shoppers. In general, therefore, there is acceptance that reliance on a qualitative framework implies the use of primarily qualitative techniques.

This research argues that this traditional tight linkage between perspectives on consumer behaviour, methodological orientation and the research techniques utilised, if subscribed to a strict manner, can be a limiting factor in the case of exploratory investigations (such as the one described here). As Flick (1998) observes, it is important to acknowledge that qualitative and quantitative research approaches are not incompatible opposites which should not be combined or even share a common set of techniques where appropriate. Each has its strengths and they need to be employed appropriately.

Additionally, the thesis argues this would be an unnecessary restriction that could hinder

the success of the current investigation because of the multiple objectives comprising both model testing and theory building.

To reiterate the three key aspects to the research objectives (see section 4.1.2) can be restated slightly differently as:

    a. To consider whether the TCDP model can appropriately describe observed phenomena and to identify the differentiations between traditional and internet

    b. To study and understand the nature of such differentiations in enough detail to be able to propose revisions to the TCDP model, where appropriate.

    c. To test the revisions proposed against independent observations and scenarios.

These objectives broadly approximate the phases of research to be followed. In such an exploratory investigation, the contingencies to be encountered are not always easy to anticipate. Thus the phases may not follow in a serial fashion and the outcomes of conducting each research objective will greatly influence how the next phase is handled.

For example, we can broadly define the first and third objectives as being specifically about theory testing, whilst the second (and also the third) are about theory building. In terms of the data gathering, all three objectives could be deemed to be very much reliant on rich, qualitative empirical data for success, because they are very much dependent on understanding consumers' emotions and motivations.

In objective 1, it is the capture and analysis of data which informs similarities or divergences to real consumer behaviour which is of interest. From this may emerge particular issues and concerns that need to be investigated in a wider or more focused context or it may simply be found that the TCDP model actually does a fine job as it is. The use of quantitative versus qualitative techniques is pretty much dependent on the findings. If it is found that the TCDP model works, then it may be that quantitative techniques will be used to understand how generally applicable the findings are. If the opposite is found to be true, it may be qualitative techniques which are used to better understand why. Thus the knock on effect of the research outcome at each phase for both the research process and the data collection techniques used, becomes obvious.

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Consequently, an aspect of the philosophy of research practised in this thesis is one that is inherently a qualitative one but also insists on being multi-method. It does this in order to facilitate theory building in ways that explicitly pay heed to cultural issues which are a common thread between the apparel industry and the complexities of consumer behaviour (Denzin & Lincoln, 2000). As Denzin & Lincoln (2000) also note, qualitative methods can help secure *'an in-depth understanding of the phenomenon in question'*. However, the insistence on multi-method not only has the advantage of supporting appropriateness of such complexities, but also of triangulation. The use of multiple methods such as focus groups, individual interviews and participant observation (Barbour & Kitzinger, 1999; Denzin & Lincoln, 2000), can improve explanations and accuracy of data (Stake, 1995) because it provides multiple perspectives on the same issues. It can also help reduce the likelihood of misinterpretation (Denzin & Lincoln, 2000; Myers, 1997), acting as a useful means of providing rigour.

4.3.1 Grounded Theory: A unifying research framework

There is a general consensus that research rigour can be established by ensuring that research strategies emanate from, and are governed by, a set of principle assumptions. And that these will have consequent implications for research design and data collection. In this light, a number of mainstream qualitative research approaches were considered including Action Research, Case Study Research (as used in IS), Ethnography and Grounded Theory. (Appendix 1 provides compares and contrasts these, respectively).

When considering each of these perspectives, it was necessary that they fulfilled the criteria described in the section above (section 4.2.3), including:

1. Theory Building

2. Theory Testing

3. Flexibility in the Research Process

4. Grounding in rich empirical, consumer-centred data

The need for research process flexibility, context-sensitive descriptions, explanations of observed phenomenon and the expected interplay between data collection and analysis, might strongly suggest any of the aforementioned research orientations. However, the objective of theory building and testing, coupled with the need to ground conjectures and conclusions in real data, was instrumental in the conclusion that a Grounded Theory

framework (Strauss & Corbin, 1998) would be most suited. According to Myers, (1997) this type of framework is commonly used in social and IS research, where the need is to *'develop theory that is grounded in data systematically gathered and analysed through the research process'* (Strauss & Corbin 1998). The Grounded Theory approach gives prominence to the data and field under study, rather than the theoretical assumptions (Flick 1998).

When pre-conceived theories are engaged at an early stage of the investigation, Grounded Theory can be used to elaborate and extend an existing theory. *'Grounded Theory is a research method that seeks to develop theory that is grounded in data and systematically gathered and analysed'* (Myers, 1997). As adopted in this research, the latter is not about hypothesis testing in the conventional, positivist sense, but rather about attempting to determine whether the reference model proposed by Blackwell et al. (2001) is emergent from the data to be gathered. At the operational level, theory testing and theory building will likely go hand in hand, because for example, the theory that accounts for observations made may be similar or divergent to those assumed in the reference model.

4.4 Overview of Research Techniques Utilised

The choices of selecting appropriate techniques to capture data about individual shopping experiences in the high street and online can at times appear to be a straight-forward task. However, its non-trivial nature becomes apparent when the issue to be overcome is how to accurately gather this data and analyse it, to produce useful results that can lead to generalisations.

Having discussed the issues of a qualitative approach above, this section now concentrates on the particular techniques utilised and the way in which they were employed. An overview of the research strategy is depicted in Exhibit 4-2. Three key techniques are utilised: *focus groups, interviews and particpant observation*. (Appendix 1 provides further details of these).

This multiplicity of methods is used to both assist the process of triangulation and to enable the researcher to attain a multi-level view of phenomena as they occur (Denzin & Lincoln, 2000) For instance, focus groups are used to enable the capture of group level perspectives on an issue, whereas interviews are used to capture each individuals' opinions and motivations on the same matter. At the same time, the issues emergent from

the focus groups and interviews can be checked through participant observations.
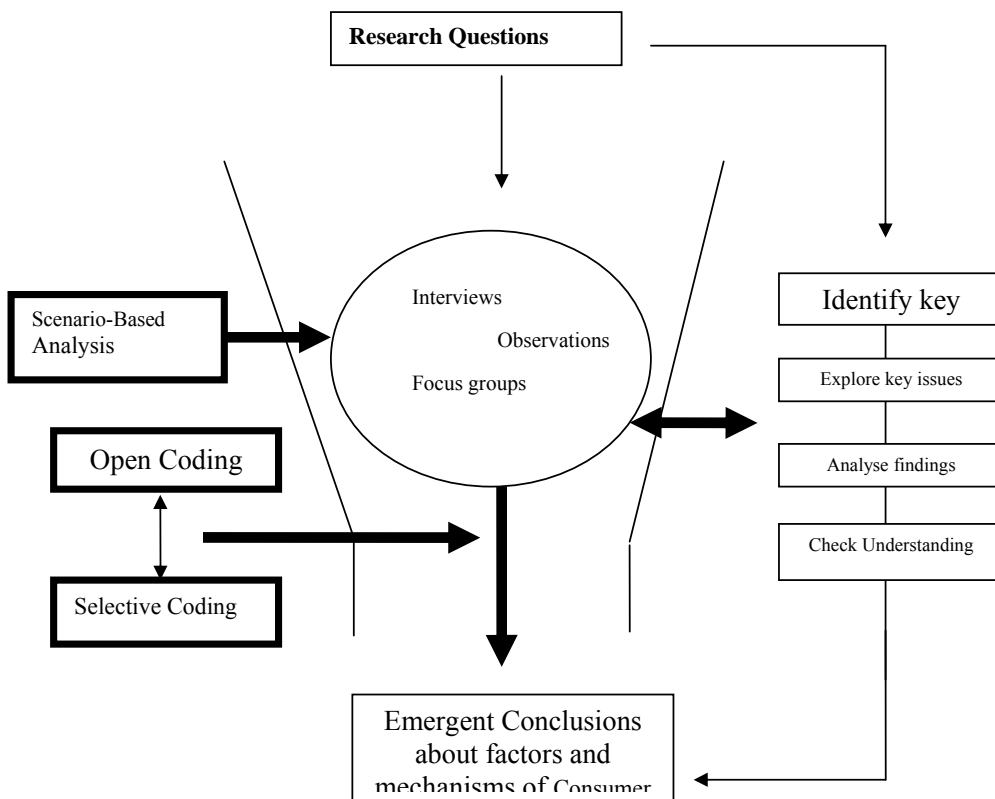
Exhibit 4-0: The Triangulation Approach Implemented

Morgan (1997) argues that in both social sciences and marketing it is sufficient to carry out five groups, any more do not enable further insights as the emerging patterns will already be obvious. In this case, 6 focus groups (of 7 respondents each) were selected, of which one was a pilot group to test the guideline questionnaire. There were also a further 5 individual interviews and 5 individual observations with respondents who had not attended the focus groups, to enable follow-up of the issues that emerged during the focus groups. Each was tape-recorded to enable transcripts to be written up after each session.

The focus groups, took place one after the other over a period of 5 weeks in April 2002, (roughly one a week). Once these were finished, an initial writing up of the transcripts was carried out to enable the researcher to collate all of the results while it was 'fresh in the mind'.

About 3 weeks later, May - June 2002, over a period of 4 weeks, 5 individual respondents were interviewed separately on a one-to-one basis (these were respondents who had NOT attended the focus groups). During the same 4 weeks, 5 individual observations were carried out aswell – also respondents who had not attended the focus groups and different to the individual interviewees.

The data collected was coded for analysis as described below (see section 4.5 for analytical framework) and in more detail in chapter 5.

4.4.1 Sampling Techniques

In qualitative research the aim of sampling is not 'statistical representativeness' (Barbour & Kitzinger, 1999). Instead, it is important that one decides on sampling based on who can best help provide answers to the issues and questions on hand for the simple reality that it is not possible to study closely large samples. Therefore questions such as: 'What type of people could give you the information you want?' facilitated the selection of appropriate respondents (Flick, 1998; Krueger, 2000).

Best practice in Grounded Theory suggests that theoretical sampling used can and should be updated as the theory and data emerges (Flick, 1998; Glaser & Strauss; Myers, 1997, Strauss & Corbin, 1998). The investigation carried out here was assisted from the outset by a definite focus on a particular sub-section of consumers (working women – due to their easy access to the internet and their spending power). A further sub-section of this was to delimit them by age-group, internet users and having experience of purchasing a product, preferably apparel, on line.

Barbour & Kitzinger (1999) suggest that it is best to maintain a flexible approach, while developing a topic-specific sampling strategy. Thus, as the focus of this research is working women who purchase products on the internet, it is desirable to include this into the sampling strategy initially and then focus on sub-groups once new distinctions emerge. Denzin & Lincoln (2000) similarly suggest that balance and variety are equally important. Also, bringing together consumers with similar background and shared experiences (of internet shopping) will encourage the respondents to feel at ease with each other (i.e. not threatened or in competition) and aid the flow of discussion (Krueger, 2000). It is also useful to include a few in the sample, who may otherwise have been excluded (Barbour & Kitzinger, 1999) – i.e. in this case, some consumers who have not shopped at all, or only once.

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Krueger, (2000) suggest that the best sample of consumers to study are respondents in the same target market, with similar needs and interests. The closer one can get in the sampling to the ideal candidate, the better. The profiling of the respondents in the sample group was therefore determined as follows:

- Working Women

- ABC1 social group

- Aged between 18 & 45

- Have experience of shopping (for apparel) on the internet

The next step is to consider how to recruit them to ensure correct results. This is detailed in the next section.

4.4.2 Recruitment of Sample

There are many ways to recruit the right respondents and some of the suggested methods are to contact consumers on 'specialised lists', 'network' with contacts, use posters or 'advertise' via email within already established groups or organisations where suitable candidates might be found (Silverman, 2000).

For this research an email was sent to all female members of staff of the Department of Information Systems at Brunel University as well as 'networking' with various contacts at the university. The Berkhamsted Adult Education Centre (where respondents attended evening classes in languages – and fitted the ABC1 working profile) was also contacted and a note was posted to all female members, as well as various 'personal' female contacts in the Berkhamsted area.

This helped identify a list of volunteer subjects who were in the desired sample and who could participate in focus groups, interviews and observations over a 3 month period.

4.4.3 Focus groups and Interviews

The main source of information for testing existing understanding, developing the theory and identifying emergent issues in this thesis is through interviews and focus groups. These were used in a carefully coordinated manner.

Focus groups were used to observe the process of prioritisation and decision-making

and, as Flick (1988) suggests, to explore and dig deeper at issues that are pertinent to the research question.

Barbour and Kitzinger (1999) define focus groups as: 'group discussions exploring a specific set of issues, where the group is focused in that is involves some kind of collective activity – such as viewing a video, examining a single health promotion message or simply debating a set of questions'. The group leader encourages participants to talk to each other, discuss the topic amongst themselves, giving their experiences and points of view. The size of focus groups will depend on the subject, the participants and the time and resource limitations. As statistical representation is not the aim of most focus group research, the use of 'qualitative sampling' to obtain diversity and compose a structured rather than random sample is more appropriate (as discussed in section 4.4.1 above).

In undertaking this research, potential problems such as logistics (sampling, recruiting and agreeing on a suitable time and date for all respondents) were critical. In doing so, the researcher planned for other potential problems, such as how to best mediate the focus groups to ensure that the research questions and interview guidelines were adhered to; making sure all respondents were included in the discussion (i.e. quieter individuals feeling shy to express their opinion or keeping rather verbose individuals at bay).

One of the more useful uses of focus group was in the pilot group which assisted with the design of the questionnaire and the focusing of the research questions. This not only ensured that the resulting questionnaire had a structure and content grounded in some empirical understanding, but it also enabled the researcher to better focus the research questions to reflect key issues.

As well as the focus groups, 5 further individual interviews took place with respondents (who had not attended a focus group). The aim of these individual interviews was to explore issues that were identified in the focus groups, to determine the correct understanding and validity on the part of the researcher.

The types of in-depth interviews carried out varied, depending on the issues and concerns being followed up. These ranged from an informal conversational approach, a general interview with a list of guide questions as well as standardised open-ended interviews. Because of the sample size, the interview techniques normally employed in internet-user related research such as telephone or e-mail were not used. This method also allowed the interviewer to probe certain issues as they arose or act upon certain

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emotional factors apparent when face to face with a respondent. (Denzin & Lincoln, 2000).

All focus groups and interviews were tape-recorded with the full consent of the respondents, to facilitate the transcription of the sessions afterward. This did not affect the groups or interviews, as once the session had started, most forgot that they were being recorded and spontaneity and open discussion flowed.

4.4.4 Observation

In conjunction with the use of focus groups and interviews, 5 observations were carried out. Observations generally involved carrying out 'cognitive walkthroughs' and 'participant observations' with the respondents, (Sperschneider & Bagger, 2003) discussing their shopping experience on the internet as it was occurring, as well as others where simple observation was utilised. Flick (1998) explains that the main features of participant observation are that the researcher 'dives headlong onto the field, observes from a member's perspective'. Equally, this technique has two aspects to it: firstly, to enable the researcher to become a participant by gaining access to the field and, secondly, to be able to focus on the key research questions at hand. Derived from cognitive psychology (Newell & Thomas, 1972), the 'walk-through' technique is extensively used in HCI in order to gather data about the underlying decisions the user is taking while using the system (Preece, 1993). This is a useful means of data capture often using a sample of representative users,

As utilised here, the observer gathered data by asking the subject to verbalise their thought processes and actions as they went about the business of shopping online (see the guideline questionnaire in Appendix 1, 4.6). Consumers were asked to describe the questions raised in their minds, the plans and strategies underlying as well as the inferences they were making from what they were seeing onscreen. The resulting descriptions known as 'Thinking Aloud Protocols' (Nielsen, 1993) are used for analysis.

The observations were carried out with respondents actually making a purchase on the internet. In each session, the participants were given £20 to spend and then these were followed up a week or two later to determine their post-purchase experience once the product had been delivered. Approximately a half hour per interviewee was budgeted to allow them to search and make a purchase online. The output from the observation sessions includes the following:

- *Observation log sheets*
- *Questionnaires*
- *Audio Tapes and Transcripts*

(These can be found in Appendix 1)

In certain cases, the researcher discussed the shopping experience on the internet as it was ocurring, in the others simple observation was utilised.

In the latter, the researcher passively observed what was happening taking notes where appropriate. At the end of the 'shopping session' the respondent described their thoughts and motivations. Each observation was tape-recorded, with the explicit consent of each respondent, to enable the researcher to remain 'hands-free' during the sessions and to be able to refer back to the results afterwards for analysis. (In all 5 cases in order to observe the 'buying process', each participant was given £20 to spend as part of the observational task scenario. Each participant was followed up a week or two later to determine their post-purchase experience once the product had been delivered. (Further details of the techniques described above can be found in Appendix 1).

4.5 Overview of the Data Analyis Framework

Analysis should start as soon as the investigation begins – this allows the researcher to test new hypotheses that emerge during analysis. By ensuring that the investigation is focussed and testing new ideas as they emerge, they can be included or discarded and the data sorted respectively as it emerges. This reduces the amount of analysis to a manageable size which can then be carried out more rapidly and more easily at the end of the investigation. (Miles & Huberman, 1994). There are many methods of analysing data from qualitative research, as detailed by Strauss & Corbin (1998), Flick (1998), Miles & Huberman (1994) and Denzin & Lincoln (2000).

Bearing in mind that the first and third objectives of this thesis are about 'theory testing', and that the second is about theory development, it was important that an analysis approach had appropriateness and effectiveness. As for the data capture techniques described in the sections above, these differing objectives are reconciled through a data analysis approach that is multi-method (Flick 1998).

A technique found to be very useful for the first and third phases of the research is one commonly known as '*Scenario-Based Analysis*' (Carroll, 2000; Kazman, Abowd, Bass

and Clements, 2001; Muller, 1997; Dzida & Freitag, 1998). The second objective of the research relies upon best practice in Grounded Theory research analysis approaches.

4.5.1 Scenario-Based Analysis

According to Carroll (2000), Scenario-Based Analysis is about building up clear '*stories about people and their activities*'. It is about highlighting what people (consumers) do when carrying out an activity, what procedures they adopt, or do not, and the interpretations they make in carrying out a task. Scenarios are very much about a situation so that the context such as a background which identifies the person's activity during the scenario is of utmost importance (Kazman et al., 2001) As in play scenarios, the analysis also involves identifying the plot which is the motivation for the sequence of actions and events involved. The object being tested is then applied to such a scenario and the outcome is analysed compared with another scenario. In the case of the research described here, the first phase of the investigation focused on capturing relevant and sufficient numbers of internet consumer purchasing scenarios that would enable testing of the TCDP model and its key assumptions.

This analysis is expected to provide three important results. The first is a useful insight as to whether the TCDP model is a workable one for describing consumer behaviour on the internet. The second, is an identification of the divergences of this model from the observed reatlities. Finally, it will also provide scenarios that can be used as benchmarks against which to test any proposed changes, including perhaps a totally new model unrelated to the TCDP.

An important note to make in regards to this technique is that it does not prescribe how to gather the data required to construct the analysis. It simply needs to be data useful in constructing the desired scenarios. Therefore, the assumption is that the researcher will gather the data using the most appropriate methods. In this case, data suited to the multiplicity of objectives was gathered relying upon Grounded Theory principles (Denzin & Lincoln, 2000). The advantages, in addition to appropriateness, is that of data reusability in later stages of the research. Scenario-Based Analysis is discussed in more detail in Chapter 5.

4.5.2 Grounded Theory Analysis

The type of analysis required for the second phase of the research is focused on theory development. As described previously, this aspect relies on established best practice within Grounded Theory. In this phase the need is to understand what the data tells the researcher about the observed complexities, in particular the interplay between observed factors and mechanisms that govern internet consumer behaviour (see Fig. 4-1 below). From this understanding the aim is to build a representative and useful model.

Strauss & Corbin (1998) state that the purpose of analysis in Grounded Theory is to build theory as the research progresses (emergent):

 '*By asking theoretical questions about a case and by thinking comparatively according to properties and dimensions of categories, we are opening up our minds to the range of possibilities, which in turn might apply to, and become evident, when we sample other cases.*'

An important technique which is used extensively by the researcher is the notion of 'coding' data in order to provide a systematic approach to handling often rich, diffuse and disparate types of data as they are captured. Strauss & Corbin (1998) define coding as:

 '*representing the operations by which data are broken down, conceptualised, and put back together in new ways*'

Strauss & Corbin (1998) suggest that coding procedures can assist:

- In building a theory

- In providing researchers analytic tools for handling large volumes of raw data

- In helping analysts to consider alternative meanings of phenomena

- In being systematic and flexible

- In identifying, developing, and relating the concepts that are the building blocks of theory to the data collected

Flick (1998) describes a variety of possible approaches to interpreting data in grounded theory. He refers to three approaches: *open-coding*, *axial-coding* and *selective-coding*

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which can be used individually or in combination. In general, open-coding is used at the early stages of the analysis process and selective coding towards the end of the whole analytical process. In this context, selective-coding is used to focus on the relevant factors and issues that arise from the open coding.

Thus in the coding process, there is a progression in how data is viewed and handled in a context sensitive manner depending on the contingencies faced by the researcher. So for example, in terms of informing questionnaires to be put to respondents, this would involve putting in place a coding system to help make decisions about which data to include when interviewing subsequent respondents.
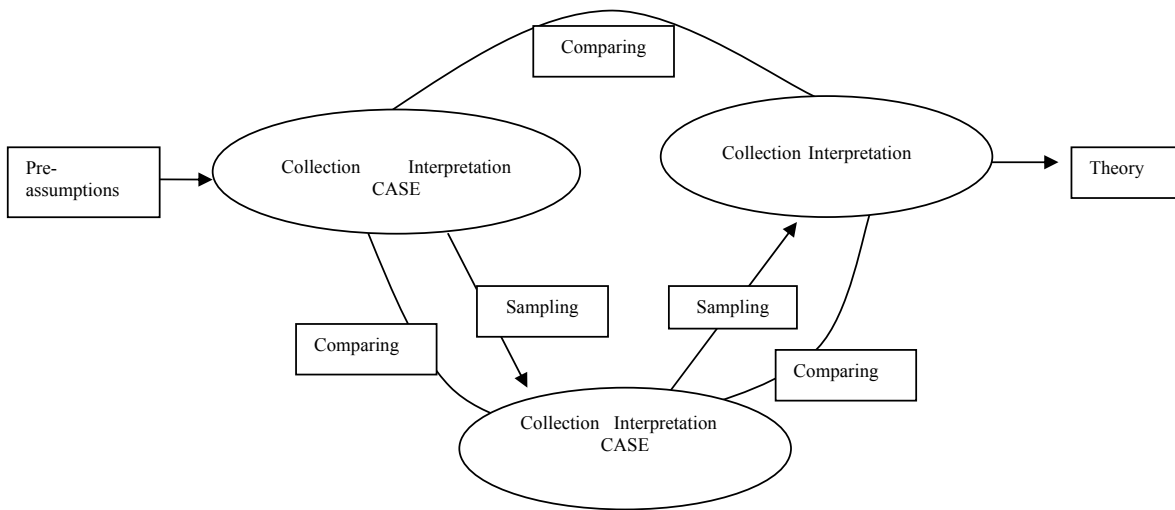
Exhibit 4-1: Circular Model of the GT Research Process (Flick, 1998)

4.5.3 The Analytical framework in practice

Qualitative methods have one major feature that is an advantage: they '*focus on naturally occurring, ordinary events in natural settings so that we have a strong handle on what 'real life' is like'*. (Miles & Huberman, 1994). This 'lived experience' is particularly appropriate to this investigation because it enables the researcher to understand the meaning that the respondents place on the events and the process taking place: '*Perceptions, assumptions, prejudgments and pre-suppositions'* (Miles & Huberman, 1994). '*Because theories are drawn from data, they are likely to offer insight, enhance understanding and provide a meaningful guide to action'* (Strauss & Corbin, 1998). This is particularly important as the research is engaged in understanding the complexities of consumer behaviour.

Other equally important features are that the data obtained will be rich and holistic with strong potential for revealing complexity, necessary for the particular research carried out into complex issues of consumer behaviour.

However, these same strengths of open-ness, flexibility and a reliance on rich data pose well-known problems. The following section deals with the most important of these relating to issues of generalisation and concerns about the appropriate use of techniques.

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4.6 Issues of Generalisation

In Grounded Theory the same factors will apply when analysing the data and concluding results as with many other qualitative methods. The strength of Grounded Theory in terms of generalisation is that it is an emerging theory that is being tested and analysed on a constant basis throughout the research (Flick 1998). Similar situations with similar respondents can be compared and allow a theory to emerge and be confirmed.

There is a high value placed on proving the generalisability of findings through quantitative approaches (Denzin, 1989), especially in IT. However, generalisation can also be effectively carried out in qualitative research: '*Generalisability depends not just upon a detailed description of a phenomenon, but on revealing the social relations that underpin it'* (Wainwright, 1997).

In qualitative research, generalisations are possible by mapping similarities of features of particular issues to the wider general issues (Miles & Huberman, 1994; Gomm et al. 2000). For example, the group of women selected for this research, all have similar characteristics. If one was to look at another group of women with similar characteristics (such as being working women, having easy access to the internet, with a need to purchase apparel and in charge of household purchases with little spare time) they would be likely to act in similar ways.

Grounded Theory, however, requires a great deal of creativity which '*manifests itself in the ability of researchers to aptly name categories, ask stimulating questions, make comparisons and extract an innovative, integrated, realistic scheme from masses of unorganised raw data'*. (Strauss & Corbin, 1998). Equally, Flick (1998) warns against researchers' own '*theoretical assumptions and structures'*, which can be fixed in the mind and therefore disregard other possibilities. This can make the research '*lose the discovery of the new'*. It is therefore recommended that the researcher keep an '*evenly suspended attention'* and attempt to keep an open mind.

The circular aspect of the general model of research (Exhibit 4-1) can help significantly when evaluating the research. Because it is not like the traditional linear method, it forces the researcher to permanently reflect on the whole research process, by consistent application (Flick, 1998). Because the collection and interpretation of data and the selection of empirical material are all closely linked and overlap, it allows the researcher to ask and answer how the methods, categories and theories relate to the subject and

data. As long as this is kept in mind when evaluating the research, it is an advantage.

Many researchers are used to hypothesis testing and, according to Dick (2002), they may have to 'unlearn' this way of investigating, to understand the particular rigour that is used in Grounded Theory (Dick, 2002). Judging the adequacy of the emerging data can also be a problem and must be addressed systematically to identify that the theory fits the situation and that it works.

Grounded theory does also carry some risk of over-generalisation, as with most qualitative methods. Issues which may appear straightforward and have features in common, may actually be exceptions to the rule and it is purely coincidental that they are unveiled. The researcher is equally at risk of generalising based on too few criteria, by not cross-checking or not trying to understand the whole situation and not comparing the findings with a similar respondent's situation. (Strauss & Corbin, 1998).

4.6.1 Technique Related Issues

As is the general practice in Grounded Theory, coding (and pattern coding) and contact sheets are key tools of this research. Contact sheets were used to keep a record of each respondent and interview as the research progressed. It also enabled the researcher to cross-check and compare with different interviews and compare issues as they arose. Open coding was also employed once the data had been collected to aid the creation of concepts and patterns. (A detailed description of the coding procedure used can be found in Appendix 2).

The most appropriate form of coding for this investigation was found to be 'open-coding' as the first analytic step. Open coding is used when the data requires the exposition of the thoughts, ideas, opinions and meanings so that the theory and concepts can begin to be developed. Without this first step, further analysis is not possible (Strauss & Corbin, 1998; Flick, 1998). This enabled the researcher to work towards generalisations and theory generation. When carrying out the open coding at the start of the process, it was necessary to have constant access back to the data, which had been gathered in contact-sheet form and transcripts.

The next step was to break down the data into different parts and compare it for similarities and differences to form categories and subcategories. Sometimes many codes resulted and therefore the objective was to categorise and sub-categorise as much as possible, so that some form of pattern could emerge. When coding, it also helps to code

line by line, sentence by sentence or paragraph by paragraph, so as to limit the bias of the researcher's opinions or motives (Flick, 1998).

In this process, it was important to be mindful of a number of important issues that could bias the effectiveness of data-gathering and analysis. Flick (1998) warns that some researchers may be involved in interviews in a 'co-elaborated' manner, and information-gathering may not be a priority. There is also the danger of not using pre-established instruments of analysis, resulting in difficulty when trying to code the words of their respondents (Miles & Huberman, 1994).

When analysing words or sentences, it is useful to apply the open coding technique suggested by Strauss & Corbin (1998) which involves listing all of the possible meanings of different phrases and words, comparing them and categorising them. The emphasis is on validating the categories from early on in the research process by constantly making comparisons.

The particular method of sampling for this research and analysis is detailed above (in section 4.4.1), explaining the reasons for qualitative sampling. The lower the number of cases of respondents' data to be analysed, the more in-depth the analysis can be, because of the time required. It is a balance of finding the necessary patterns and understanding them and having enough data (from enough respondents).

Each focus group, interview and observation was tape recorded, with the explicit consent of each respondent. It was decided early on in the research process not to take notes, but to tape record each session, so as to have the flexibility and freedom to spontaneously explore ideas and concepts as they arose. It also enabled the researcher to steer the discussion with more concentration and ease. The transcripts of the taped sessions were written up very shortly after each focus group, interview and observation, so that ideas, issues and concepts were fresh in the researcher's mind. A disadvantage is that tape recording can be lengthy to transcribe, but the benefits of re-listening and, in some respects, re-living the moment, outweighs this.

4.7 Conclusions

This chapter outlined the methodological approach chosen for a study of internet shoppers, conducted with the objective of gaining improved understanding of online consumer behaviour when purchasing sensory products. The research design focuses on an important group of internet users - working women who have experience of

internet shopping (e-MORI, 2004; NOP, 2001; BBC Online Network, 2002; Taylor Nelson Sofres Interactive (TNSI), 2002.)

The chapter outlined the focus of the research detailing the aims and objectives and the related research questions. Its central conjecture is that the advent of online channels such as the internet, has profound implications for current understanding of consumer behaviour. Initial research indicates that existing models such as the TCDP model (Blackwell et al. 2001), grounded in observations of consumer behaviour in traditional physical stores contexts, do not appear to fully describe observed internet consumer behaviour (Ambaye, 2003). Thus, deriving models appropriate to internet consumer behaviour, needs to be rooted in observations of 'e-consumer' behaviour, in e-shopping contexts.

Current approaches in consumer behaviour studies were briefly referred to and reasons for the qualitative approach adopted were outlined. In particular, a research framework aligned to Grounded Theory principles was described, along with analysis frameworks rooted in principles of Scenario-Based Analysis. In connection to the data gathering process, three different qualitative techniques aimed at aiding triangulation were detailed: focus groups, interviews and observation.

Chapter 5 discusses the main outcomes of applying this framework and describes in general the main themes that arose from the data. The findings are summarised and compared to predictions of the TCDP model. The implications of these findings for the utility of the TCDP model are also discussed further.

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CHAPTER 5: ANALYSIS

5.0 Introduction

Chapter 4 presented the research framework for studying the behaviour of internet consumers at close quarters. The present chapter discusses the main outcomes of applying this framework and describes in general the main themes that arose from the data. The findings are summarised and compared to predictions of the traditional CDP (TCDP) model.

The chapter begins by reviewing the analytical framework utilised in the research (section 5.1). This describes how coding techniques were applied to empirical data derived from respondents during focus groups, observations and interviews in order to identify emergent themes. Strauss & Corbin (1998) describe coding as *'representing the operations by which data are broken down, conceptualised, and put back together in new ways. It is the central process by which theories are built from data'*.

Section 5.2 summarises the key themes that emerge from this analysis in respect to apparel purchasing behaviour on the internet (APBI). The implications of these findings for the utility of the TCDP model are discussed in section 5.3 with a focus on the activities which occur in three key stages: Information Search, Pre-purchase Evaluation, and Purchase. A key observation made is that many activities and events on the internet, which the TCDP model suggests occur only in particular stages, may actually occur across several stages at nearly the same time. Here, the notion of 'parallel stages' or 'overlapping stages' where two or more stages may sometimes overlap, is introduced.

A further observation, detailed in section 5.4, is that consumers' initial motivations and needs can strongly influence the overall pattern of behaviour across all stages of the TCDP model, either on the internet or in a traditional setting. The notion of 'modality of needs' in consumers' behaviour is introduced to describe this aspect. Section 5.5 develops this idea further using the notion of 'shift-in-modes' to describe the observed behaviour that consumers' objectives can change during a given purchasing cycle. The implications for these observations are discussed in section 5.6.

The chapter concludes that the TCDP model, in its most general form, is a useful starting point for describing internet consumers' likely behaviour under limited conditions. However, a number of important contradictions are apparent between predictions of the TCDP model

and the behaviour of 'real' internet consumers. These findings are utilised in chapter 6 as the basis for the proposal of major changes to the TCDP model.

5.1 Applying the Analytical Framework: An Overview

Chapter 4 made the point that data capture methodology and analysis are closely inter-twined. It detailed the qualitative capture methodology and provided a brief overview of the analytical framework, comprising Scenario-based Analysis and Grounded Theory (GT).

It was argued that best practice in qualitative research is for analysis to start as soon as the investigation begins in order to enable the investigation to focus upon and test new ideas as they emerge. This ongoing interplay between data collection and analysis, a key distinguishing feature of leading qualitative research approaches (including GT), has proved to have clear benefits. Firstly, in helping reduce data sizes, thereby increasing manageability, and secondly, in providing a funnel effect for moving between coded data and evolving themes (see Exhibit 5-0). The need for relying on two different analytical approaches for the same data set was explained as stemming from the differing objectives encompassed by the overall research objectives. The first and third objectives being about 'theory testing', and the second being about theory development.

The techniques described in Chapter 4 are used to aid careful investigation of the interplay and dependencies existing between factors and mechanisms which were observed. As Flick (1988) notes, the researcher's task in the context of GT is get close to the subject matter in order to identify emergent patterns and issues that drive the interplay between observed factors and mechanisms.

A key analytical technique within Grounded Theory was described, comprising coding (pattern coding) and contact sheets. In regards to Scenario-based Analysis, the notion of using 'real' context to test the object of interest (in this case the TCDP) was also described. The following sections give examples of how these techniques were applied to the data and the key themes that emerged. The overall schema for the research, already detailed in chapter 4, is shown in Exhibit 5-0 below with the Open and Selective Coding and Scenario-Based Analysis included, indicating where it was applied. The key emergent patterns of the data are described in the following sections.

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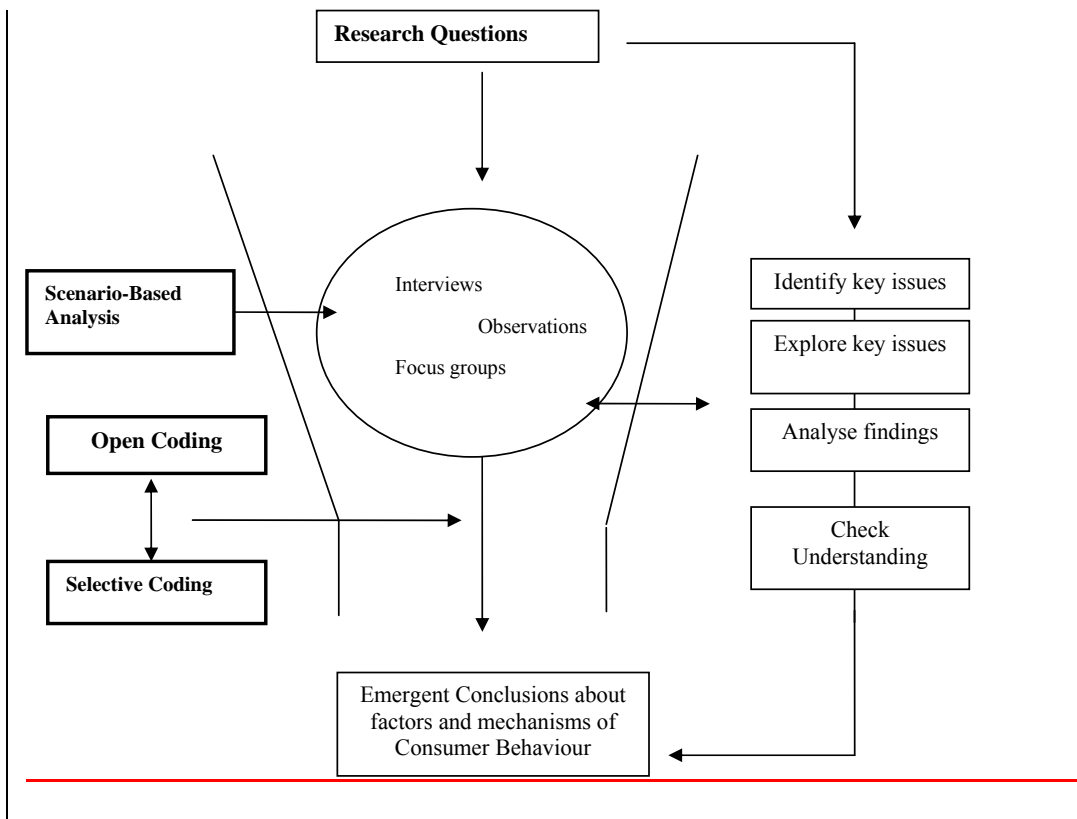
Exhibit 5-0: The Triangulation Approach Implemented

5.1.1 Overview of Analysis Techniques in Practice: Scenario-Based Analysis

A brief overview of the Scenario-Based Analysis was given in Chapter 4 and this section now details a little more about how this was applied to the data in question.

Scenarios are described by Carroll et al. (2000) to be '*stories about people and their activities...which highlight goals suggested by the appearance and behaviour of the system; what people try to do zith the system; what procedures are adopted, not adopted, carried out successfully or erroneously; and what interpretations people make of what happens to them.*' Dzida & Freitag (1998) equally state that '*scenarios can be employed in analysis and design to serve both the illustrating and the context of envisaged usage (users' perspectives)*'.

To successfully carry out a scenario with a respondent or respondents, they need to become the actors or agents in the story, who have a goal or an objective. In this case, the respondents are the agents with a goal to achieve which is to make a purchase on the internet. Scenarios

equally need to have a plot which includes sequences of actions and events – for this research this becomes the TCDP model's stages.

Carroll (2000) points out that it is important to make sure that the use of the system or in this case, the purchase process, makes the use in the scenario explicit. By doing this, it can help focus the attention on the assumptions about people (respondents) and their tasks. 'Scenarios allow the marriage of the subjunctive and the present tense' (Carroll, 2000).

The Scenario technique was applied to each focus group, observation and interview. During the focus groups, different scenarios based on the TCDP model were included in the guideline questionnaires to encourage respondents to talk through their experiences when shopping on the internet. This enabled the researcher to cross check themes as they emerged in the focus groups with the respondents in interviews and observation. Equally it provided data that could be analysed more concisely after all of the sessions had been carried out.

The analysis of the data emanating from the scenario-based questions was carried out through transcripts being examined and utilised in conjunction with open and selective coding to enable a clearer organisation of the data. This was done by comparing the findings with the TCDP model, the results of which are detailed in Chapter 6.

Caroll's (2000) technique of using scenarios is particularly pertinent to the analysis in question as he suggests using various questions to prompt claims regardsing various stages of action. This helped secure a clearer vision of the overall decision-making process during each stage of the purchasing process.

5.1.2 Overview of Analysis Techniques in Practice: Open and Selective Coding

Section 4.5.2 in chapter 4 outlined the data-coding schema used to organise gathered data and to identify emerging themes. 'Open coding' was selected as the main type of coding to be used, because of the exploratory and subjective nature of the research focus. Each focus group, interview or observation had the same set of codes applied to its data. (Full versions of the transcripts and guidelines for the focus groups, interviews and observations can be found in Appendix 1).

A first set of 'open codes' were devised, based on the main research questions. A first set of general coding was applied to draw out the main themes from the transcripts. This

involved listing all of the possible meanings of different phrases and words, then comparing and categorising them, thus enabling theory and concepts to be developed. 'Open coding' also has the benefit of enabling the researcher to capture thoughts, ideas and opinions as the research progresses (Flick, 1998; Strauss & Corbin, 1998). Once each transcript had been coded in this way, further codes were generated for similar phrases and notions that emerged. These were then categorised into subgroups of themes and theories which enabled a first attempt at identifying emerging patterns.

CODE	RESPONDENT'S WORDS
Pre-knowledge	If I want to buy a Next outfit, I just log onto Next.co.uk because I know the brand
Information Search	I look on the internet to see what is available, it quicker with the search engines to find the information I need.
General browsing	I browse the internet to see what different styles are in.
Impulse buying	I have bought stuff on the internet when I wasn't looking for anything in particular because the price was really good.

Exhibit 5-1: Example of line-by-line coding

To enable a more general and complete view of the patterns as they emerged, a 'line-by-line' coding technique was used (Charmaz, 1995). This also allowed the resercher to elaborate a deeper understanding of the data by *'refrain(ing) from inputting your motives, fears or unresolved personal issues to your respondents and to your collectd data'* (Charmaz, 1995). Exhibit 5-1 above gives an example of how this 'line-by-line' technique was utilised for the research in hand. This enabled the researcher to start with open coding using a line-by-line technique.Once the concepts and theories were established, 'selective coding' was utilised as a tool to further explore the relevant factors and issues that arise from the initial open coding.

From the initial stages, the researcher noted reflections and remarks in the margins of the transcripts and notes taken during or after each interview. These were also included in the final analysis of the data.

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Finally, once these patterns became apparent, it was then possible to put together a small set of generalisations to cross-check theories with the data. These are summarised in section 5.1.3.

During the focus groups, observations and interviews, questions were introduced to guide and probe various issues and to ensure a correct understanding of the respondents' experiences. Respondents were encouraged to discuss how they made decisions about purchasing sensory products on the internet. These opinions and words were then transcribed into text, which was then in turn coded and sub-coded (open coding followed by selective coding). (The finalised questionnaires can be found in Appendix 1).

During the observations, two techniques were conducted. In the first, questions were interposed during the purchase process to follow up issues raised during the focus groups. In the second, the user was asked to simply go through the purchasing process, verbalising the steps they were carrying out according to cognitive walk-through-principles. In relation to both types of observations, follow-up questions were also conducted, about a week after the observation, to determine their experience and opinions of the delivery and consumption stage, i.e. their decision processes online.

5.1.3 General findings summarised

In general, a key issue for respondents in regards to buying apparel on the internet was the interplay between their needs and how the internet appeared to ease access to satisfying that need. This manifested itself from the outset, depending on the consumers' needs, for instance:

- Respondents knew they had a need and what to look for (brand and product) and where to find it on the internet:

  > "If I want to buy a Next outfit, I just log on to Next.co.uk, because I know it [well]" (R3 – see Appendix 1)

- Respondents had some idea of a need, but used the internet for searching different e-retailers:

  > "I look on the internet to see what is available. It's quicker with search engines." (R7 – Appendix 1)

- Respondents were just browsing the internet and had no conscious knowledge of a need:

  > "I like going clothes shopping online to see what's changed, what fabrics and

The main issues which were emergent were about the purchasing process on the internet and the different types of buyer on the internet. These have been coded and categorised as shown in Exhibit 5-2 below, with the main codes indicated on the right.

Bargain Seeker	**BS**
Browser	**B**
Planner	**P**

Prior Knowledge Buyer	PKB
Functional Buyer	FB
Impulse Buyer	IB
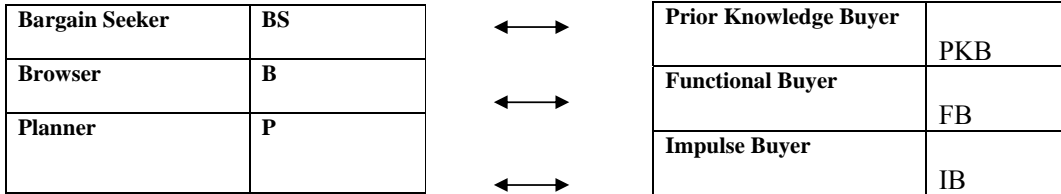
Exhibit 5-2: Types of Internet Buyer

The analysis of the focus groups, observations and interviews indicated certain types of internet shopper identified during the focus groups: Planner (P), Bargain Seeker (S), Browser (B), Impulse Buyer (IB), Functional Buyer (FB), Prior Knowledge Buyer (PKB). These were selectively coded to show 6 different types of shopper (see Exhibit 5-2 above).

Further analysis narrowed these down into 3 types of basic shoppers on the internet. The first three: P, BS and B could be incorporated into PKB, FB and IB respectively (outlined in Exhibit 5-1 above). A planner usually has prior knowledge of what to buy and where to buy it and shops with a purpose. A bargain seeker is looking for something functional but at a good price and it is therefore possible to be incorporated it under the same umbrella as a functional buyer or even a prior-knowledge buyer. A browser has not set out to buy anything, but if they do, it is most likely on impulse.

The main underlying motivations for shopping online are shown in general. These represent the respondents' key motivations expressed during the focus groups, interviews and observations. These are discussed in more detail in section 5.1.4. (The coded transcripts can be found in Appendix 1).

The main codes that emerged are summarised in Exhibit 5-2 below. The 3 main emergent categories that were repeatedly apparent were respondents':

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- **Underlying Motivations (UM)**

- **Key Decision Processes (KDP) and,**

- **Problems with Sensory Products Online (CPO).**

A. Underlying Motivations (UM)

The UM code was given to reasons for shopping on line, such as: lack of time to shop; the respondents had shopped online before and were confident with it; less effort required than going to a traditional store. It also reflected a belief that there were better prices online; lack of choice or the required specialist product not available in other channels including the high street. It also reflected a feeling that they would not find the right product for a variety of reasons including that respondents were a larger, smaller or different size than the standard sizes offered. Some respondents found it more fun to shop on the internet and felt it was easier to engage and complete the purchasing process in a shorter period of time. Others specified that wider availability of products online; their desire to browse and sometimes buy impulsively online were key motivators. Some respondents reflected that they like to browse online simply to get ideas and prices and then go to the high street stores to try items out or on before purchasing in the high street or the internet-depending on price and availability. (Coded data for these observations can be found in Appendix 2).

B. Key Decision Processes When Shopping Online (KDP)

The KDP code was given to any issue relating to the key decision making process when shopping online: issues such as how advertising online can influence decisions – online banner advertising, 'flashing signs' to distract consumers as they browse.

High street store media can be more persuasive or invasive than online stores and more easily influence consumers as they browse – displays or demonstrations by sales staff or even recommendations can sway consumers more readily than a banner online that can be ignored. Equally, trying on a garment or testing a product in-store can also heavily influence a potential customer. However, online there are no available staff to help with queries immediately – sometimes a message can be sent via email or a consumer can chat virtually with a sales representative, but usually the response is not immediate and the product is not available to touch or try out.

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Online purchasing doesn't suffer with overcrowding or queuing, whereas traditional stores sometimes do – however, slow downloading of images and difficult navigation are also a problem for some online consumers.

Credit card security online is still an issue with most consumers and the variety of payment methods in a traditional store are preferred.

Some respondents said they preferred to shop online because they felt more in control (these were mainly 'planners' - see Exhibit 5-2 below) because there were no 'invasive' sales personnel, no peer pressure or family with them. However, other respondents complained about getting easily interrupted when shopping online and 'abandoning shopping carts' to answer the phone, door bell, or family/colleague interrupting.

C. Sensory Products Online (CPO)

These codes were applied to anything that related particularly to sensory products (see glossary) being purchased online. For respondents, the image online was of utmost importance, due to the fact that they were unable to touch or try out products, and when the images were slow to download this gave rise to frustration, and sometimes abandonment.

Navigating through the web to find the appropriate product was also an issue – particularly for newcomers to shopping online. Some were apprehensive of using the internet to find what they needed, others, even those with experience, still had problems finding the appropriate website.

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CODES	UM **Underlying Motivations for Purchasing Online**	KDP **Key Decision Processes when Shopping Online**	CPO **Sensory Products Online**
ISSUES ARISING **DURING FOCUS** **GROUPS,** **INTERVIEWS** **AND** **OBSERVATIONS**	**Lack of Time**	**Media influences such as online banner**	**Technical – slow loading images**
	Shopped online before	**advertising can influence consumers'**	**Web navigation a problem for newcomers**
	Effort	**decisions but in a less physical way than**	**Delivery – not always straightforward**
	Bargain seeker	**High street stores**	**Need to touch and try on**
	Lack of choice in high street	**Touching, trying on and POS in high street store**	
	Specialist product required	**can influence consumers**	
	Can't find product in high street	**No available sales assistants online**	
	Sizing a problem, more choice online	**Overcrowding and queuing**	
	Fun/easy	**Payment methods online a problem**	
	Availability	**Like browsing online – more in control**	
	Impulse buy	**Not being able to touch or try on online a problem**	
	Likes browsing on web but buys in high street	**Credit card security still an issue**	
		Interruptions when online	

Exhibit 5-3: Main Codes Derived From Data

Delivery was a very important factor – this is where the product is finally consumed and it is decided whether or not it is as expected. This is not always straightforward, due to many issues mentioned in previous chapters, such as incorrect products, incomplete deliveries, late deliveries etc. Again, under this code, the fact that sensory products ideally need to be physically interacted with (touched, tried on, viewed) was noted.

Given these general coding of the overall themes, more precise attention was given to the task of applying the TCDP model decision processes to the processes of the respondents when making a purchase online.

Without directly asking questions that may have been leading, the resercher asked probing and prompting questions out during the focus groups, interviews and observations to attempt to understand how the respondents progressed through the shopping process. The results of this, including the general findings above are detailed in the next section.

5.2 Key Observations

Overall the results suggest that the respondents did not find the internet necessarily the most effective or the most enjoyable channel for shopping for apparel. That there was no general consensus on this point may not be surprising, bearing in mind that apparel purchase in its own right is a highly subjective process. It is not like buying a CD or a book. This is also reflected in that it appears that there is a considerable difference in terms of the influencing factors for making purchasing decisions on the internet as opposed to the traditional retail outlets (high street stores, shopping malls and mail order). In general, respondents felt that in regards to the internet, the shopping process was the most important part of the equation. The ease of carrying out a purchase, immediate product advice and not needing to return items were seen as essential to a problem-free process.

From this, the main observation that was concluded was that there were some fundamental differences in the decision making process of the online consumer which were not addressed by the TCDP model. In particular, the type and complexity of a product necessarily influences the process and consumers views of its appropriateness.

The research showed that online consumers go through similar decision making processes to traditional consumers, however, with the fundamental difference being that the internet enables them to conduct some of the stages defined in the TCDP to occur nearly simultaneously or not at all.

Moreover, it was also observed that whereas the TCDP simply identifies a unifying notion of need in the consumer which drives the whole consumption process, on the internet it appears to be different. The research has identified the possible existence of three distinctions in terms of needs (pre-knowledge driven, function driven or impulse driven). The consumer may start out with one of three types of needs.

Moreover, on the internet, such needs exhibited by users can also be changed as the consumer carries out the shopping process (shift in modality): i.e. the consumer starts out by looking for a pair of Levi's jeans, but sees another brand that is cheaper, that they prefer. In addition,

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they may also be tempted by a promotion that is on offer with the different brand of jeans and buy a pair of boots to match that they had always wanted. Their need has changed from what they set out to buy: it has shifted from one mode of purchase to another..

These fundamental differences observed have been summarised into three thematic categories: *overlapping stages*, *modality of needs* and *shift in modes.* These observations are described in general in the next three sections and in more detail in Chapter 6.

5.3 Overlapping Stages

This section discusses three key aspects of the traditional CDP model in relation to observations made in this research. It concludes that, although internet consumer's actions in the most general sense appear to be somewhat consistent with those outlined by the CDP model, there are fundamental differences which are not easily explained. In particular it details important differences which were observed in regards to:

- Information search and pre-purchase evaluation
- Pre-purchase evaluation and purchase

5.3.1 Information Search

Blackwell's CDP model suggests that when a consumer wants to search for information, it is based on a 'like for like' criteria with the intention of reaching a plausible shortlist. In a traditional store, this is an interactive process where consumers can interact with sales personnel, and physically appraise the product of interest. In the case of the internet, the assumption cannot be made that products will be described by merchant sites according to a set criteria, useful for making a comparison.

Observations suggest that this stage and the next stage (pre-purchase evaluation) seem to overlap in different situations, depending on the extent of the search and the time the consumer has available to search. For example, quick and effortless searches and comparisons (evaluations) are possible. In other words, the consumer can search and make pre-purchase evaluations at the same time, however, maybe with less information than if they were making a purchase in a traditional store. The comparative data available online is limited to the information given

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by the e-retailer. It is a one-way information search. One respondent's point of view showed this clearly:

'Online, you are restricted like a horse with blinkers. Your choice is dictated by what you see online only. In a store, you can go to different parts of the shop at a moment's notice and you can see things displayed in a better way.' (R35 - see Appendix 1)

The immediacy of being able to interrogate sales assistants in respect of the missing pieces of information is not available on the internet, for example, unless the consumer is able to send an email or use an online 'chat session'.

5.3.2 Pre-Purchase Evaluation

This stage and the previous stage may also occur simultaneously or nearly simultaneously. The pre-purchase evaluation can be carried out by a consumer online instantaneously, as all of the information required may be there on various web-sites and can therefore help them make a decision to purchase: *'I can check all of the prices and styles online and make a decision much more quickly than if I had to go and look in different high street stores.' (R 28 – see Appendix 1)*

5.3.3 Purchase

The Information Search and Pre-purchase stages therefore can also lead to a purchase being almost immediate, although obviously not simultaneous.

It began to be evident, when considering these three stages for the internet (information search, pre-purchase evaluation and purchase), that there were some fundamental differences in the decision making process for consumers purchasing on the internet. Other differences became apparent when these issues were probed during the focus groups, interviews and observations. These were issues such as the modality of the decision making process and the shift of this modality, which are further explained in the next two sections.

5.4 Modality of Needs

The TCDP (Blackwell et al., 2001; Mowen & Minor, 2001; Wilkie, 1994) suggests that regardless of the type of need established in the Need Recognition stage, consumers move through three subsequent stages in a sequential manner (Information Search, Pre-purchase *114*

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Evaluation and Purchase). Observations suggest that, in the case of the internet, such three phases are apparent only in certain limited conditions of Need Recognition. Other conditions were observed where these three stages are combined into two, and even one stage, depending on the outcome of the Need Recognition stage. This modality is not clear in the traditional CDP model (see Exhibit 6-1 in Chapter 6).

One of the main findings is the discovery of direct linkage between the initial motivation for consumers shopping on the internet and the resulting observed behaviours. Three such linkages identified by this research, and referred to as 'modes', are explored in more detail in section 5.4.1 below. Here, 'modes' here are intended to mean the way a consumer proceeds through the decision making process, dependent on their intention at the starting point or the **Need Recognition** stage. These modes appear to be the key 'modes' of purchasing behaviour for online shopping which emerged from this research.

5.4.1 Mode A – Pre-Knowledge Driven

Respondents knew they had a need and what to look for (brand and product) and where to find it on the internet:

> *A consumer has previously bought a pair of Levi's 501 jeans in a particular size and fabric online, and would like to purchase it again. They know the website, the price and the retailer's service policy and therefore have previous-knowledge (knowledge-driven).*

5.4.2 Mode B – Function Driven

Respondents had some idea of a need, but used the internet for searching different e-retailers:

> *A consumer has bought a pair of unbranded jeans before in a particular size, but would like to purchase a different style and has seen some advertisements for some well-known brands and decides to look for more information online. The consumer searches for a product that will fulfill a function (a pair of jeans for a particular purpose) rather than for a brand or style which they may have bought before.*

5.4.3 Mode C – Impulse Driven

Respondents were just browsing the internet and had no conscious knowledge of a need:

> *A consumer is browsing the internet, possibly looking for a product or not really looking for anything in particular. Their eye may be caught by a website or an* 115

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advertising banner showing a pair of Levi's jeans at half their normal price. Even though the consumer does not really need a pair of Levi's, the offer is too good to miss. They decide to buy them impulsively.

These modes are discussed and compared in more detail with the Blackwell (2001) CDP model in chapter 6 (section 6.2.2 and Exhibit 6-1).

5.5   Shifts in modes

Once the consumer has started out in a particular mode, they may not always proceed in a linear fashion. In CDPl, it is suggested that the consumer progresses from one stage to the next, once that stage is completed: i.e. if the consumer has finished the Information Search stage and gathered the information they need, they then progress to Pre-purchase Evaluation and do not search for more information.

It is therefore possible that the consumer may start out in one mode (as described above in 5.4) and 'shift' to another mode further down the line (see Exhibit 6-2 in chapter 6). If this occurs, it is usually at the information search stage, when the consumer has gathered all of the necessary information, to make an informed decision. It is then that the consumer's initial need may change. For example, a consumer may have a particular need, but whilst browsing on the internet for a particular product, an advertising banner attracts their attention for a different product and they buy on impulse. They therefore started out in one mode (function-driven) and then shifted to another mode (impulse-buy).

> *"I think about clothes (which clothes to buy) a lot, but I sometimes buy impulsively. For example, when I am looking for one thing, I buy another." (R35 - see Appendix 1)*

These three key observations (overlapping stages, modality of needs and shift in modes) are discussed further in section 6.2 of chapter 6.

5.6 Implications for the Traditional CDP Model

The previous sections have compared and contrasted the differentiations between the observations made and how CDP would describe such scenarios to occur by the CDP model.

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The key findings indicate some fundamental differences in the observed decision making process of the online consumer which do not appear clear in the traditional CDP model.

The traditional CDP model makes a key assumption that the average consumer goes through processes which are clearly defined and succinct (i.e. information search, pre-purchase evaluation of alternatives or purchase). In practice, observations of online shoppers suggest that such behaviour is only one of many possible. For example, it was observed that in certain situations, consumers appear to reduce these three CDP stages to two (see chapter 5). For instance, where someone is intent on buying a particular brand of jeans, but at the lowest price possible, they will move from web site to web site until they have found what they consider to be the cheapest. This is an example of where the search and pre-purchase evaluation occur simultaneously. The implications of this initial research indicates that there may be a need to develop a CDP model specifically for the internet.

The following sections discuss the three key stages in the purchasing process and compares and contrasts the assumptions underlying each of the three stages of the CDP model to the observations of purchasing experiences online. Exhibit 5-4 below is a summary of this discussion.

5.6.1 Information search

Blackwell's model assumes that when a consumer wants to search for information, it is based on a 'like for like' criteria with the intention of reaching a plausible shortlist. In a traditional store, this is an interactive process where consumers can interact with sales personnel, and physically appraise the product of interest. In the case of the internet, the assumption cannot be made that products will be described by merchant sites according to the same criteria.

The interaction with the product at this stage is a factor which can change the consumers' decision early on. Being able to touch and try out a product can occur at this stage or at the next stage, or both. However, physical interaction is limited when shopping online.

The immediacy of being able to interrogate sales assistants in respect of the missing pieces of information is not available on the internet, unless the consumer is able to send an email or use an online 'chat session'.

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5.6.2 Pre-purchase Evaluation of Alternatives

This stage and the previous stage (information search) seem to overlap in different situations, depending on the extent of the search and the time the consumer has available to search. On the internet, for example, quick and effortless searches and comparisons are possible. The comparative data is however limited to the information given by the e-retailer.

5.6.3 Purchase

There is an assumption that the activity of interacting with a retailer may lead to the choice of a different retailer or product. In traditional stores, this involves in-store choices where factors such as sales persons, product displays, electronic media and point-of-purchase advertising influence decisions. In the internet equivalent, the degree of immersive experience of consumers has yet to achieve levels of richness implied in this stage. With the exception of software products and music, it is not possible to try out products and therefore be distracted into making alternative choices. It is also not likely that online sales personnel can actively influence buyers' behaviour.

Additionally, there appeared to be a higher level of dissatisfaction amongst the respondents with internet shopping compared to traditional shopping at this stage. This was manifested by the high return rates due to a direct consequence of a mismatch between customer expectation and the actual features of the product which was received. Respondents purchasing on the internet often returned items due to receiving a different size, poorer quality or a different colour than expected.

To summarise, it can be seen that the influencing factors that determine successful progression from one stage to another are substantially different when comparing the internet versus traditional shopping experience.

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TCDP STAGE	INFLUENCING FACTORS FOR TRADITIONAL RETAILING	INFLUENCING FACTORS FOR THE INTERNET
Information Search	*Energy exerted to find information can be quite high.* *Rich information availability.* *Potential for environmental influences (store atmosphere, POS information, sales-personnel, other product information).* *Immediate feedback on appropriateness of product (tactile qualities, fit, colour, drop, quality).*	*Limited physical interaction possible with the product (visual and textual information only).* *Further information on products is limited to other channels such as online 'chat' sessions, telephone conversations and email.* *Difficult to find common comparative criteria from different retailers for similar products. For ex. sizes, styles, colours can vary depending on culture, retailer, country.*
Pre-purchase Evaluation of Alternatives	*Levels of effort required to collect comparative information such as price, performance, quality, aesthetics, tactile/sensory data, customer service.* *Distance, time, effort and budget required to obtain product.* *The in-store experience: is it trust inspiring?*	*Unavailability of physical information for making an evaluation i.e. quality, fit, colour etc.* *Difficult to compare if common criteria are not available from different retailers for similar products. (sizes, styles, colours - standardisation not there).* *Further information on products not immediately available. Interaction with product or sales-personnel not on demand.* *Quick and effortless comparisons are possible.*
Purchase	*Service encounter can have an impact on decision to continue with the purchase (short queues, helpful sales-personnel, methods of payment, stock availability, relaxing POS environment).*	*The quality of service encounter on the internet is governed by the interactive experience of the user with the website (ease of navigation, information availability, data security, graphics, returns policy, delivery terms, and cost).* *Inability to interact with the product or sales-personnel.* *It is a linear process, where the consumer's choices are not as flexible as in a traditional store.* *Limited payment methods (usually credit card – security concerns).*

Exhibit 5-4: A Table for Comparing Retailing on the Internet Versus Traditional

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5.7 Conclusions

The research undertaken gave rise to several issues which have been analysed and incorporated into a revised CDP model specifically aimed at understanding consumer's attitudes when shopping on the internet.

This chapter started out by outlining the main analytical framework which used a variety of codes applied to the data. This helped to categorise and isolate the emergent themes at different stages. The main findings were outlined in section 5.2, which predominantly indicated three main differences required in the traditional model to be usable for the internet: *overlapping stages*, *modality of needs* and *shifts in modes*. It concludes with a discussion of the implications for the traditional CDP model.

The research results suggest that the CDP model, in its most general form, is a useful starting point for describing internet consumers' likely behaviour under circumscribed conditions. These conditions are where the consumer has a generally defined notion of product or service they desire. Many other scenarios have been identified where a number of important contradictions are apparent between predictions of the CDP model and the behaviour of 'real' internet consumers. The notion of modality is introduced to describe such unaccounted for scenarios.

In chapter 6, the notion of modality is further explored and a model is proposed which presents the concepts which emerged from this research.

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CHAPTER 6: ELECTRONIC CONSUMER DECISION PROCESS (eCDP) MODEL

6.0 Introduction

Chapter 6 builds upon the conclusions made in chapter 5 about internet consumer behaviour to propose changes to the traditional CDP model. A revised consumer decision model, the so-called eCDP (Electronic Consumer Decision Process) model is proposed and described in detail.

6.1 summarises the three key components of the eCDP model. These are, the observed overlapping stages, the modality of consumer needs and the notion of shifts in modalities.

Section 6.2 elaborates on the notion of *overlapping stages* while 6.3 details the *notion of modality* and *shift in modality* in the decision-making process of consumers (see also section 5.4). The *notion of modality* details further distinctions which emerged from the analysis including Pre-knowledge Driven, Function-driven and Impulse Driven. These are referred to as Mode A, Mode B and Mode C, respectively. The third key component, *shifts in modalities* (changing from one mode to another during the decision making process) is also described in this section.

Scenario-based analysis is used to demonstrate the key functions and distinctions of the eCDP model, relative to the CDP predictions in sections 6.3 and 6.4. The analysis is applied to two possible (hypothetical) scenarios involving two different sensory products online: cars and cosmetics. In section 6.5 the eCDP model is illustrated using a further scenario with a 'real consumer' making an online purchase for a pair of trousers. Section 6.6 discusses the overall implications.

6.1 Key findings: An Electronic CDP Model (eCDP)

The proposed model referred to as the eCDP model (the Electronic Consumer Decision Process Model) is focussed on addressing observed problems with 5 of the 7 stages found in the traditional CDP model. It attempts to take explicit account of findings made in chapter 5 relating to fundamental differences between predictions of the CDP model and the empirical observations made.

Need Recognition **MODE A** *Pre-Knowledge-driven* Knows brand and type of product, searches on limited criteria such as price and delivery	**Need Recognition** **MODE B** *Function-driven* Knows product type only, for example a pair of jeans	**Need Recognition** **MODE C** *Impulse-driven* Need established impulsively as a result of interacting with a web-site
Information Search Reliant on efficiency of the search engines to find appropriate web-sites and E-retailers. May still search in physical stores	**Information Search** Reliant on efficiency of the search engines to find appropriate web-sites and E-retailers. May still search in physical stores.	**Information Search** Reliant on efficiency of the search engines to find appropriate web-sites and E-retailers. May still search in physical stores
Pre-Purchase Evaluation Carried out at the same time as Information Search. Evaluating E-retailers/Web-sites only. Likely to happen with Info. Search simultaneously.	**Pre-Purchase Evaluation** Comparative evaluative attributes are not salient online. Can happen simultaneously with Infomation Search.	**Pre-Purchase Evaluation** Comparative evaluative attributes are not salient online. Can happen simultaneously with Infomation Search.
Purchase Abandoning shopping cart is easier than in traditional stores. Purchase can be delayed or aborted much more easily.	**Purchase** Abandoning shopping cart is easier than in traditional stores. Purchase can be delayed or aborted much more easily.	**Purchase** Abandoning shopping cart is easier than in traditional stores. Purchase can be delayed or aborted much more easily.
Consumption Level of satisfaction with product determines which mode consumer will use next time	**Consumption** Level of satisfaction with product determines which mode consumer will use next time	**Consumption** Level of satisfaction with product determines which mode consumer will use next time

Exhibit 6-0: Overlapping stages and Modes in the eCDP model

The three main differences in between the traditional CDP model and the eCDP model are 1) overlapping stages, 2) modality of needs and 3) shifts in modes.

Exhibit 6-0 shows the how silmultaneous stages and shifts in modes occur in the eCDP model. Here, Exhibit 6-0 shows the **Need Recognition** stage in the proposed model as having broadly

similar functions to those of the traditional CDP model (Exhibit 6-1 below) in that it is a stage about the consumer establishing what it is that they require.

```
┌──────────────────────────────────┐
│        Need Recognition          │
└──────────────────────────────────┘
                 │
                 ▼
┌──────────────────────────────────┐
│      Search for Information       │
└──────────────────────────────────┘
                 │
                 ▼
┌──────────────────────────────────┐
│ Pre-Purchase Evaluation of Alternatives │
└──────────────────────────────────┘
                 │
                 ▼
┌──────────────────────────────────┐
│             Purchase             │
└──────────────────────────────────┘
                 │
                 ▼
┌──────────────────────────────────┐
│           Consumption            │
└──────────────────────────────────┘
                 │
                 ▼
┌──────────────────────────────────┐
│    Post-Consumption Evaluation    │
└──────────────────────────────────┘
                 │
                 ▼
┌──────────────────────────────────┐
│            Divestment            │
└──────────────────────────────────┘
```
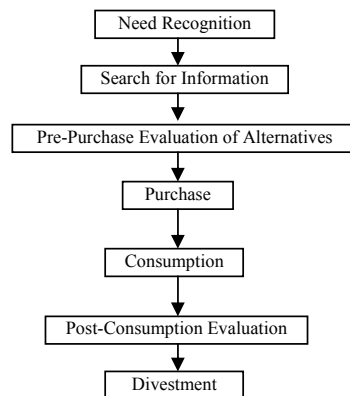
Exhibit 6-1: How Consumers Make Decisions for Goods and Services
(Blackwell et al., 2001)

Exhibit 6-2 below, shows in detail Blackwell et al.'s (2001) Need Recognition stage(section 3.3, chapter 3 gives a fuller description of the traditional Need Recognition stage). It doesn't however show how the fundamental differences exist between eCDP and CDP.

Section 6.1.2 deals with the Need Recognition stage in more detail. Prior to doing so, section 6.1.1 below addresses some generalised effects of the internet on the CDP model, relating to how subsequent stages occur and how they interrelate with each other.
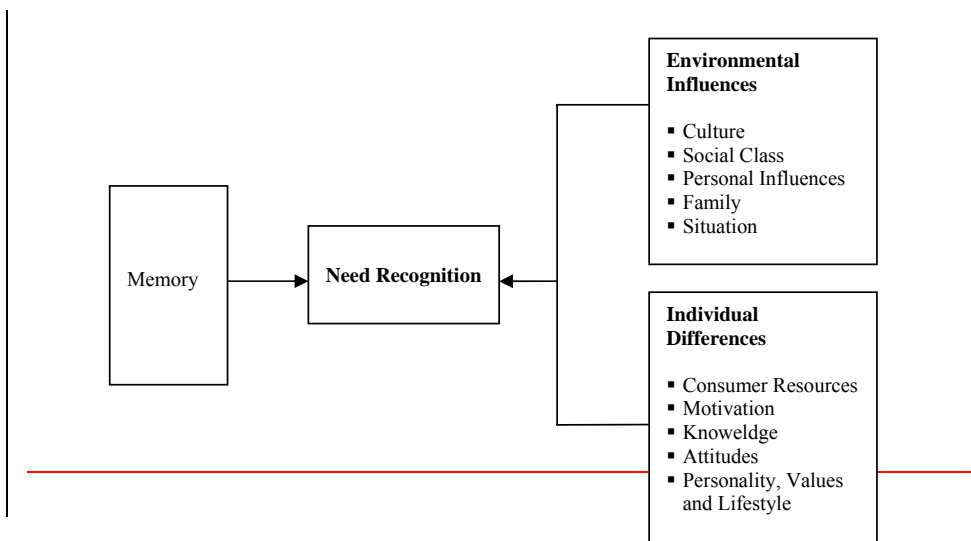
Exhibit 6-2: Need Recognition (Stage 1)
(Blackwell et al., 2001)

6.1.1 Generalised effects of the Internet on Purchasing and Consumption stages

In general, when a consumer reaches the **Purchase** and **Consumption** stages on the internet, several factors become apparent, which are not likely in a traditional store.

At the purchasing stage, it is easier to abandon the purchase ('abandoning shopping cart') with no embarrassment and with the e-retailer not being aware of the lost purchase (and reasons for it). The consumer can easily abandon their purchase without being influenced by a sales assistant to think again, or to be tempted by something else at the check-out, as sometimes happens in traditional stores. This is quite common amongst internet consumers (De Kare Silver, 1998; Greenspan, 2004) and is a topic of particular interest to e-retailers because it can determine why, how and where they are losing customers.

Equally of interest is the issue of how the consumer may pay for their goods – most web sites limit payment to paying by credit card (no cash, cheques or invoicing is generally permitted). Some consumers do not trust the security of the internet and are reluctant to make purchases

A Consumer Decision Process Model for the Internet

over the internet with a credit card in case of fraudulent transactions being billed to them (McGann, 2004).

The caveat is that the consumer is however very dependent on the information provided by the web-sites visited and will not benefit from other information that could be obtained by interacting more deeply with a retailer

At the **Consumption** stage, the level of satisfaction with the service and product determines whether they will buy (either on impulse or through pre-knowledge) on the internet again.

This is also determined by the ease with which they made the purchase (limited options of payments on the internet) and the ease of delivery (or not), how much money they really saved and how they were able to return the product if they needed to.

Finally there may also be an impact on the **Consumption** stage, as a result of a particular mode. Dependent on the satisfaction level with the product, the consumer may make the decision (not always consciously) which mode they will employ the next time they make a purchase online. For example, if the consumer is happy with a particular brand of jeans - in a particular colour, size and style, which they bought over the internet with ease, and the product arrived on time and fits - then the next time they will start out in the Pre-knowledge Mode.

These are very general factors which were noted with regards to consumers' behaviour on the internet in the **Purchase** and **Consumption** stages of the CDP model. The following section describes in more detail the three key differences between the CDP model and the eCDP model, which are apparent during the first three stages: **Need Recognition, Information Search** and **Pre-purchase Evaluation.**

6.2 Fundamental Variances between CDP and eCDP

Apart from the generalised effects described in 6.1.1 above, other observed differences can be grouped into three categories: overlapping stages, modality of needs and shift in modes. These three categories are discussed in more detail in the next 3 sections (see also Chapter 5 sections 5.3/5.4/5.5).

Finally, a further distinction that is made in the eCDP model is the introduction of the notion of intrinsic versus extrinsic criteria to describe measures which consumers apply when purchasing

products. Intrinsic criteria are attributes of products such as size, colour, material, weight, build quality and length. Extrinsic criteria relate to parameters affecting those choices which consumers make about products including affordability, peer influences, personal preferences such as colours and style. It is helpful to keep these distinctions in mind during the discussions contained in the following sections.

6.2.1 Overlapping Stages

The traditional CDP model makes a key assumption that the average consumer goes through processes which are clearly defined, directional and distinct (i.e. information search, pre-purchase evaluation of alternatives or purchase – section 3.2). In practice, observations of the respondents in this research suggest that such behaviour, while possible, is only one of a number possible. Observations suggest, that under certain conditions, respondents may consolidate two CDP stages to one (some examples are given in section 5.3). For example, someone intent on buying a particular brand of jeans, but at the lowest price possible, may move from web-site to web-site in search of the cheapest.

In the context of Blackwell et al.'s traditional CDP model, one would have to make an assumption that the purchaser will first complete a series of visits to the web-sites to collect the required information and then will analyse the information as a separate activity. In reality, it is possible for an individual, equipped with a level of pre-knowledge about pricing or other important parameters, to make the decision of what to buy on the spot - because they already had requisite knowledge to do so. This is an example of where the information search and Pre-Purchase evaluation stages can occur nearly simultaneously. Chapter 5 has noted that it is possible that further research may yet reveal other occurrences of overlapping stages.

6.2.2 The Notion of Modes in the Need Recognition Stage

The second main observation relating to the Need Recognition stage, involves the existence of three differentiated modes in the way respondents initiated their purchasing activity (Exhibit 6-1 below). The notion of 'modes' reflects observed variances to the Need Recognition stage of the traditional CDP model. In the latter, this stage is where the consumer commences the purchasing process with a clear view of what it is they would like to buy.

In contrast, the observations made suggest that the Need Recognition Stage can actually be more complex. Three possible variations have so far been identified within this stage: Mode A

(pre-knowledge driven); Mode B (Function driven) and Mode C (impulse driven). These modes reflect the various ways that a consumer can engage in the purchasing process, depending on the contingencies encountered. Some of these contingencies involve pre-knowledge of brands and types of products, others may involve less tangible criteria that may only emerge during the purchasing process itself. Thus, depending on the mode in which the consumer first engages into the purchasing process, it is likely that their experiences in the later stages may vary markedly.

The next three sections describe the differing purchasing experiences that a consumer may go through depending on what mode they are initially engaged into.

6.2.2.1 MODE A: Pre-Knowledge Driven

This mode is where the criteria for purchasing are fairly clearly defined in the mind of the consumer. That is the consumer knows what they are looking for. For example, the consumer may know which brand and/or type of product they would like to purchase (e.g. they may have bought this product before and been satisfied with it). There may therefore only be the need to search on limited additional criteria and the selection can be narrowed down to parameters such as best price and delivery.

In the context of internet purchasing, the impact of engaging according to Mode A is reflected in subsequent stages of the CDP model. For example one possible impact is that the **Information Search** and **Pre-Purchase Evaluation** stages are more likely to occur nearly simultaneously (see also section 6.2). This is because the consumer may recognise fulfillment of the specified intrinsic and/extrinsic criteria without having to go through a rigourous interplay between distinct activities focused on Information Search and Pre-Purchase Evaluation as CDP suggests. Observations of consumers showed that this can easily be achieved on the internet with the help of search engines and browsing of web-sites.

Following through to the next stages, at the **Purchase** stage, the consumer is now able to buy the product. Specific differences from the traditional CDP in regards to this stage are discussed in section 6.1.1 above. The discussions below indicate that consumers engaged into this mode at the outset are likely to make decisions quicker and with fewer complications than in Modes B or C.

6.2.2.2 MODE B: Function-Driven

This mode is observed when a consumer knows only what sort of product is needed, such as a suit shirt, but has not yet established specific criteria intrinsic to the product such as for example its style or material. The whole purchasing process is therefore driven by the need for the function provided by the product: it must be a shirt that is smart and goes well with a suit (maybe colour and or style are also known). Essentially, Mode B is similar in its characteristics to the **Need Recognition** stage of the traditional CDP model in that the consumer has limited pre-concepts about what they are likely to buy.

Therefore the effective conduct of the subsequent stage, **Information Search**, is very critical to the successful completion of the purchasing process. The success of this stage is in turn very much dependent on efficiency of search engines, technology, software and power of computers used to access to quality information. The latter is very dependent on the quality of information provided by the web-sites visited as deeper interactions with a retailer are often not possible. Ease of access and navigation also play a large part in whether a consumer lands on a particular e-retail web-site. Ideally, the consumer hopes to avoid lengthy searches and expects instant information. If this is not forthcoming, they may abandon their purchase online and not progress to the next stage.

In the next stage, the **Pre-Purchase Evaluation** stage, the consumer compares and contrasts the information obtained. A number of issues can arise which affect progress to the next stage. For example, information given to the consumer by each e-retailer is not always comparable due to differing web-site designs or differences in descriptions of products in relation to sizing and styles offered by e-retailers. The problem of standardization of sizes is a general one but can affect more acutely on-line purchasers. For example, sizing labels such as Small, Medium and Large often have different thresholds depending on the retailer. Additionally, styles, lengths and colours are quite difficult to represent accurately online. In a traditional store the consumer has the option to try on the garment.

The consumer is now able to buy the product. As for Mode A the observed consequences of Mode B do not have special consequences for the **Purchase** stage.

6.2.2.3 MODE C: Impulse Driven

This mode is used to describe the observed phenomenon when a consumer does not recognise a need per se, but is made aware of a need or develops a desire for a product: this may be as a

result of visiting a web site or an advertising banner on the internet. Thus the consumer is engaged into a purchase process for a product on impulse. Often it is 'a bargain too good to miss' even though they may not have needed the product in the first place. Whereas in traditional stores, the notion of impulse buying appears to be a more recognisable phenomenon. (Blackwell et al., 2001 - CHECK). Mode C, therefore introduces a new differentiation to the CDP **Need Recognition** stage, since 'impulse buying' is not explicitly accounted for.

Having been engaged into this mode, the consumer may decide to conduct further research into the offer before making a purchase. The main consequence of Mode C is that the consumers' product selection criteria during the **Information Search** stage can become highly modified and biased by such an external source. With the consequence that the consumer begins to measure other competitor products according to such criteria. This leads to the **Pre-Purchase Evaluation** stage likely to be completed in a shorter time than compared to mode B (Function-Driven). The data also suggests that consumers, once engaged into this mode, will end up purchasing the product which initially influenced them.

The consumer is now able to buy the product. As for Mode A and B the observed consequences of Mode C do not have special consequences for the **Purchase** stage.

6.2.3 Shifts in Modality

As explained in section 6.2, the eCDP model introduces an additional perspective to the traditional CDP model in the form of modalities of behaviour in the Needs Recognition stage. These indicate modes of engagement into the purchasing process entered into by a consumer.

However, observations also indicate that it is also possible that the consumer may start out in one mode and 'shift' to another mode further down the line (see Exhibit 6-1 below). If this occurs, it is usually at the Information Search stage, when the consumer has gathered key necessary information, to make an informed decision. It is then that the consumer's initial needs may change. This notion is referred to as a *'shift in modality'*.

For example, a consumer knows they want to buy a pair of standard Levi's jeans in their known size, as they have perhaps purchased a pair before or at least tried one on in the past. The consumer is in Mode A: Pre-knowledge. They know the price and know which websites to look at to obtain the jeans. However, while searching for the appropriate web site, an

advertising banner pops up for another very popular brand of jeans, which they also know of and like. It is offered at a very low price, and the consumer may decide to change their mind and purchase the other brand instead. The shift has been from Mode A to Mode C – Impulse Driven. The consumer impulsively changed their mind for another product.

Need Recognition	Need Recognition	Need Recognition
MODE A *Pre-Knowledge-driven*	**MODE B** *Function-driven*	**MODE C** *Impulse-driven*
Knows brand and type of product, searches on limited criteria such as price and delivery	Knows product type only, for example a pair of jeans	Need established impulsively as a result of interacting with a web-site
Information Search Reliant on efficiency of the search engines to find appropriate web-sites and E-retailers. May still search in physical stores	**Information Search** Reliant on efficiency of the search engines to find appropriate web-sites and E-retailers. May still search in physical stores.	**Information Search** Reliant on efficiency of the search engines to find appropriate web-sites and E-retailers. May still search in physical stores
Pre-Purchase Evaluation Carried out at the same time as Information Search. Evaluating E-retailers/Web-sites only. Likely to happen with Info. Search simultaneously.	**Pre-Purchase Evaluation** Comparative evaluative attributes are not salient online Can happen simultaneously with Infomation Search.	**Pre-Purchase Evaluation** Comparative evaluative attributes are not salient online. Can happen simultaneously with Infomation Search.

Exhibit 6-3: The eCDP Model (B) - Shifts in Modes of Purchasing Behaviour for Online Shopping

Another type of shift may also occur, which is to do with the product itself. For example if the product is a sensory product to start with, such as an item of apparel, it can become a simpler product, through prior experience. If a consumer has bought an item of clothing from a particular retailer, then a repeat purchase makes that item a simple product to purchase on the internet, because they know what to expect and where to purchase it from. Thus the quality and type of information highly influences the shift.

6.3 Testing the eCDP model against real and imagined scenarios

In the following sections, the eCDP model is tested against a number of scenarios. Two of these are hypothetical and one involves real user data. One of the hypothetical scenarios is that proposed by Blackwell et.al involving the purchase of a car by a consumer referred to as 'Joe College' to demonstrate how their CDP model functions. In the same way, Joe is used to demonstrate the workings of eCDP. The main difference to Blackwell's scenario is that the user has the additional option of making an internet purchase, thereby making it more true to life.

The second hypothetical scenario is used to demonstrate how the eCDP model can be applied to the purchase of products which possess increased levels of complexity by virtue of reliance on less tangible and standard criteria. 'Jane Beautiful' is a character interested in purchasing body perfume.

In terms of the real user data to which the eCDP is applied to a respondent from one of the observations carried out for this research. It concerns an ABC1 working woman, who was observed purchasing a pair of black trousers. In this case, the observation was made according to the guidelines described in chapter 4, and the framework applied post-hoc to this data. A follow up discussion was used to fill in the gaps with the subject in respect to the eCDP model.

During the following sections the traditional CDP is applied to the hypothetical and real scenarios. In each section the traditional scenario is followed by applying the online version, through the eCDP. In all cases, the consumer is referred to as 'stepping on' (connecting and searching on the internet) and 'stepping off' (abandoning or disconnecting from the internet to go to a physical retail store).

6.3.1 Scenario 1: eCDP Applied to Purchasing a *Car Online – 'HYPOTHETICAL'*

Here a scenario developed by Blackwell et al. (2001) involving the purchase of a car online by a college student (Joe College) is described. Blackwell et. al make the assumption of purchasing through regular bricks and mortar channels (such as a dealership). This outcome is not ruled out in the use made here. Rather, Joe has more choice. The following sub-sections outline how the eCDP model would deal with this scenario.

6.3.2 Stage One: Need Recognition

The first scenario is detailed below in Exhibit 6-4 (Blackwell et al., 2001), where a college student has a need to purchase a car: **Need Recognition**. This is then compared to the eCDP model in subsequent sections, entitled **Modes A, B and C**.

> Joe College, a university student, is driving to class, when his car breaks down in the middle of the road. Smoke pours out from underneath the hood, and hissing sounds rise from the engine. A local mechanic examines the car, fixes it temporarily, but suggests that Joe look for a new car. Joe has a **problem** – he needs to obtain some form of reliable transportation – and has entered the consumer decision-making process. He returns home and sees his neighbour, who just bought a new Passat. After talking about his predicament, he sits in the new car and inhales that sigh-invoking new car scent, which only increases his desire to buy a car. He closes his eyes and visualises himself driving through campus in a Porsche 911 – but desires and needs aren't always the same. While we don't always get what we desire, we usually manage to get what we need. Joe College has just begun the purchase process for a car.

Exhibit 6-4: Stage One - Need Recognition
Extract of a scenario in Blackwell et al.'s (2001) Traditional CDP model

6.3.2.1 MODE A: eCDP: Pre-Knowledge Driven – Need Recognition

If the college student decided he needed to purchase a car and he knew he wanted a Porsche 911, that was burgundy red and leather seats, and it was within his budget, then he would be in Mode A, pre-knowledge driven. His need would be very clearly defined..

6.3.2.2 MODE B: eCDP: Function Driven – Need Recognition

As the situation is explained in the scenario above (Exhibit 6-3), the student is actually in Mode B of the eCDP model. His need is function-driven: he needs some form of reliable transportation, because his car has broken down. He doesn't know exactly which model and which make. He has some 'desires' to purchase a Porsche 911, but this may not be within his budget.

6.3.2.3 MODE C: eCDP: Impulse Driven – Need Recognition

If we suppose that the college student hadn't broken down, but was just browsing the internet. An advertising banner may pop up with a special offer for financing a Porsche 911 at a reasonable rate that he can afford, including a trade-in price discount for his old car. This makes him think of the small problems he has been having lately with his current car and he

decides to take up the offer. The student's behaviour would then fit into Mode C – Impulse-
Driven.

6.3.3 Stage Two: Search for Information

Once the need recognition stage has occurred, the student will start to look for information:
this is the **Search for Information** stage. Blackwell et al.'s (2001) scenario for a traditional
situation is detailed in Exhibit 6-5 below. This is then compared to the eCDP model in
subsequent sections, entitled **Modes A, B and C**.

> Joe College has begun his quest for information. To his surprise, he begins to notice dozens
> of television and magazine ads about autos and begins to digest them. He can afford to
> spend up to $6,000 on a used car and decides to search the classifieds ads in the newspaper
> and the car dealers' websites for options. He talks to friends about their cars – what features
> they like best, how satisfied they are with the performance, and where they bought them.
> After a few days of searching, he has gathered enough information on models that he can
> afford, including who sells them, how much they cost, mileage, gas, and so on.

**Exhibit 6-5: Stage Two – Search for Information. Scenario from Blackwell et al.'s
(2001)**

Once the mode of the **Need Recognition** stage mode is set, the consumer tends to follow the
same mode path. Although, as mentioned in section 6.2.3 above, sometimes a shift in
modality occurs, where the consumer passes from one mode to another at the **Information
Search** stage in the decision making process.

6.3.3.1 MODE A: eCDP: Pre- Knowledge Driven – Information Search

If the student knows which car he wants and that he can afford it, this mode suggests that he
would go on to Stage 2 – **Information Search** and Stage 3 **Pre-purchase Evaluation** at the
same time. This is because he has all of the background knowledge about the car and he is not
likely to be swayed by other offers and other brands. His need is pre-established: he has
decided he needs to purchase a Porsche 911, which is burgundy red and has leather seats. The
information that he will search for and evaluate online can be done quickly (due to the nature
of searching online), and providing he has the relevant information about delivery times,
colours and service offers that are available with his chosen car, he will go on to purchase the

car. He knows the car, maybe he has even test-driven one before, or driven a friend's car, and therefore is confident to carry on to the purchase stage.

The student may decide to test drive a car just to confirm his decision, in which case, he has to go to a physical dealership, and does not continue through the eCDP model solely on the internet. (Exhibit 6-2.). This shows that the student may 'step off the internet' to go to a physical dealer.

There is still the remote possibility that he may be influenced by a better offer, if the advertising is in the right place at the right time on the web-sites that the student is looking at – modality shift (section 6-2 above). He may then proceed to another mode path (say Mode C: Impulse Buying) because he made a shift to a totally different car due to a better offer that saves him money or includes more features.

6.3.3.2 MODE B: eCDP: Function Driven – Information Search

The student in the above scenario starts off in this mode, because his car breaks down and he therefore needs a new one - his need is function-driven. Once this need is established he goes on to Stage Two - **Search for Information**, where he begins to look at advertising and gather information. The eCDP model suggests that because he is now only purchasing on the internet, it is difficult to make a decision purely on the information provided by websites. He would probably still feel the need to physically see and touch cars, discuss options with dealers, peers and family, to get enough information to make a complete evaluation.

The student may decide to test drive a car just to confirm his decision, in which case, he has to go to a physical dealership, and does not continue through the model solely on the internet. (Exhibit 6-2.). This shows that the student may 'step off the internet' to go to a physical dealer.

6.3.3.3 MODE C: eCDP: Impulse Driven – Information Search

Under this path, the student acts similarly to Mode B, whereby he is reliant on the information given to him by the web-sites. He is not looking for a car, but his attention has been caught by an advertising banner. He now has to make a decision based on the information provided to him by this web-site. It is quite difficult to make a decision purely on the information provided. He may therefore still discuss options with dealers, peers and family, to get enough information to make a complete evaluation. The student may decide to test drive a car just to

confirm his decision, in which case, he has to go to a physical dealership, and does not continue through the model solely on the internet. (Exhibit 6-2 – Shift in Modes.). This shows that the student may 'step off the internet' to go to a physical dealer.

6.3.4 Stage Three: Pre-purchase Evaluation of Alternatives

At this stage the student collates all of the information he has gathered in the **Search for Information** stage. The Blackwell et al. (2001) model's scenario is outlined in Exhibit 6-6 below. This is then compared to the eCDP model in subsequent sections, entitled **Modes A, B and C**.

After searching for information and compiling a list of models and requirements, Joe begins to compare his alternatives. He evaluates specific models based on a set of attributes he compiled earlier, including safety, reliability, price, warranty, gas mileage, and number of beverage holders. He also considers things like how he will feel owning and driving the car and evaluates where he might buy the car, comparing the various dealers and the atmosphere each one provides. Although he feels some pressure to make a decision, he has access to his father's car for a few weeks while he finds a car to match his needs and financial constraints; therefore, he takes his time to evaluate thoroughly all the information and alternatives at this stage. The list narrows to a few alternatives, and he prepares to buy one of them.

Exhibit 6-6: Stage Three – Pre-Purchase Evaluation of Alternatives
Extract of a scenario in Blackwell et al.'s (2001) Traditional CDP model

6.3.4.1 MODE A: eCDP: Pre- Knowledge Driven – Pre-Purchase Evaluation

The **pre-purchase evaluation of alternatives** stage and **information search** stage can happen at the same time. The student has most of the information already and can evaluate the alternatives concurrently. He can make a decision about where he would like to purchase the car. As shown in Exhibit 6-3 (Shift in Modes), the student may decide to test drive a car just to confirm his decision, in which case, he has to go to a physical dealership, and does not continue through the model solely on the internet (he may 'step off the internet').

6.3.4.2 MODE B: eCDP: Function Driven – Pre-Purchase Evaluation of Alternatives

The student may now make his evaluation of the alternatives he has discovered. He may or may not have 'stepped off' the internet to find out the information he required (although it is most likely that he will have needed to physically see and drive the car).

6.3.4.3 MODE C: eCDP: Impulse Driven– Pre-Purchase Evaluation of Alternatives

The student may now make his evaluation of the alternatives he has discovered. He may or may not have 'stepped off the internet' to find out the information he required (although it is most likely that he will have needed to physically see and the car).

6.3.5 Stage Four: Purchase

At this stage, the student now enters the **Purchase** stage and has made the decision to purchase a particular model of car, from a particular dealer, as shown in Blackwell et al.'s model in Exhibit 6-7 below. This is then compared to the eCDP model in subsequent sections, entitled **Modes A, B and C**.

After evaluating his choices, the university student is ready to buy a car. But before he makes the purchase, he must choose an auto dealer. He walks into the first and browses. A good salesperson would convert the browse into a buy. A bad salesperson might convert an intended purchase into a lost sale. The student knows he wants a reliable, four-door, preferably red car that is priced under $8,000 and that he can afford to pay $300 per month. Many things can kill the deal right now and cause him to leave the dealership without purchasing a car. If the student has credit card problems, a good dealer will find a way to make the car affordable either with a lease option or by extending the number of payments. If the dealer doesn't have the right model, colour and accessory package in stock, the purchase process can die. That's why dealers carry hundreds of thousands of cars in inventory. The student finds a used VW Jetta that he likes and can afford, and he buys the car.

Exhibit 6-7: Stage Four – Purchase
Extract of a scenario in Blackwell et al.'s (2001) Traditional CDP model

6.3.5.1 MODE A: eCDP: Pre- Knowledge Driven – Purchase

In the eCDP model, the student now knows which car he wants to buy. He now must choose a dealer, and inputs his criteria into various dealers' websites. At this stage, there is no physical interaction with a salesperson on the internet and it is therefore not very easy to influence the student's decision (contrary to the example above Exhibit 6-7). It is easier for the student to

abandon the shopping process on the internet than it would be in a dealership. This is called 'abandoning shopping cart' and can happen for a number of reasons, including: the phone ringing, someone knocking on the door, a colleague interrupting (if at work), technological breakdown (slow loading website, unable to find correct information online, computer not working etc.) or simply not having the time to finish the transaction.

6.3.5.2 MODE B: eCDP: Function Driven – Purchase

The student in this mode is ready to purchase a car and starts to look at different dealers on the internet. As in mode A, this is all done on the internet and there is no physical interaction with a salesperson. The student can therefore easily 'abandon his shopping cart' due to interruptions and technological failures.

6.3.5.3 MODE C: eCDP: Impulse Driven – Purchase

The student in this mode is ready to purchase a car and may look at different dealers on the internet or just accept the offer made to him by the advertising banner he has seen. As in mode A and B, this is all done on the internet and there is no physical interaction with a salesperson. The student can therefore easily 'abandon his shopping cart', due to interruptions and technological failures.

6.3.6 Stage Five: Consumption

At this stage the student has made his purchase and had delivery (or picked up) his car: this is when **Consumption** occurs. The example below in Exhibit 6-8 shows Blackwell et al.'s (2001) model for traditional retailing. This is then compared to the eCDP model in subsequent sections, entitled **Modes A, B and C**.

As Joe College drives his new car out of the dealer's lot, he thinks "What have I done?" He gets a sinking feeling in his stomach, while his brain searches for reasons to justify his purchase decision. The auto dealer that sold him the car understands what the student is feeling and will follow up with a letter in a few days assuring him he made a good decision. (Luxury car buyers might receive free road-side service or leather registration portfolio to relieve their post-purchase concerns). As for the student, as each problem-free day passes, he feels better about his decision and the process. The car performs well and gets good gas mileage – and his girlfriend like it, too. Buying a car wasn't so bad after all. In fact, if he had to do it again, he would probably go back to the same dealer and buy another car made by the same manufacturer.

Exhibit 6-8: Stage Five – Consumption
Extract of a scenario in Blackwell et al.'s (2001) Traditional CDP model

A Consumer Decision Process Model for the Internet

6.3.6.1 MODE A: eCDP: Pre- Knowledge Driven – Consumption

After the student has purchased the car over the internet, he has to await delivery or go to pick it up. This is when consumption occurs. If he has to wait a long time for delivery or something goes wrong with the delivery, he may feel differently about purchasing a car on the internet next time. The quality of after-sales service will also influence his decision about purchasing on the internet next time.

6.3.6.2 MODE B: eCDP: Function Driven – Consumption

This is similar to Mode A, where if he has to wait a long time fore delivery or there is a problem with the delivery or the car when it arrives, he may feel differently about purchasing a car on the internet next time. The quality of after-sales service will also influence his decision about purchasing on the internet next time.

6.3.6.3 MODE C: eCDP: Impulse Driven – Consumption

This is similar to Mode A, where his consumption experience (how he feels about the delivery and the car once it arrives) may alter his perception of buying a car on the internet next time. The quality of after-sales service will also influence his decision about purchasing on the internet next time.

6.4 Scenario 2: eCDP Applied to Purchasing *Cosmetics Online – 'HYPOTHETICAL'*

To test the eCDP model, a traditional scenario was tested with a hypothetical consumer purchasing some cosmetics as an instance of a sensory product. This was compared to how they might carry out a purchase of cosmetics online.

6.4.1 Stage One: Need Recognition

The first traditional scenario is detailed below in Exhibit 6-9 where a female consumer, Jane Beautiful, recognises that she has a need to buy some new perfume: **Need Recognition**. This is then compared to the eCDP model in subsequent sections, entitled **Modes A, B and C**.

Jane has run out of perfume and needs some for a party she is going to on the weekend. She has a need and a desire to try a new perfume just introduced on the market by a famous film star, although thinks it might be expensive.

Exhibit 6-9: Stage One - Need Recognition - Traditional Store Scenario

6.4.1.1 MODE A: eCDP: Pre-Knowledge Driven – Need Recognition

Jane has a need and a desire to purchase some new branded perfume. She knows the brand, has maybe tried it or smelt it before and the most likely places to buy it from in traditional stores. She thinks however that it might be expensive and could maybe get it cheaper on the internet.

6.4.1.2 MODE B: eCDP: Function Driven – Need Recognition

In the eCDP model, Jane's behaviour would fit into this mode if she didn't know which brand she wanted or where to get it from. She perhaps has a desire to buy a new branded perfume, but her budget is not sufficient.

6.4.1.3 MODE C: eCDP: Impulse Driven – Need Recognition

Jane may be just browsing the internet looking for some clothes for the party she is going to and an advertising banner pops up with information about a new branded perfume by a famous film star. She then remembers that she is running out of perfume and the price seems very reasonable, and decides to go ahead and buy some perfume.

6.4.2 Stage Two: Search for Information

Once the need recognition stage has occurred, the student will start to look for information: **Search for Information**. The'Jane Beautiful' scenario for a traditional situation is detailed in Exhibit 6-10 below. This is then compared to the eCDP model in subsequent sections, entitled **Modes A, B and C**.

Jane begins to search for information and looks at the retail outlets who sell the famous film star brand she is interested in and visits the stores to test the perfume. Sometimes she has an allergic reaction to certain cosmetics, so she only tries a small spray on her arm. She remembers from past experience too, that the scent of the perfume can change after a while, so it needs time to evaluate a perfume. She gathers information from her friends and family about what they think of the scent as well.

Exhibit 6-10: Stage Two – Search for Information - Traditional Store Scenario

Once the mode of the **Need Recognition** stage mode is set, the consumer tends to follow the same mode path. Although, as mentioned in section 6.3 above, sometimes a shift in modality occurs, where the consumer passes from one mode to another at the **Information Search** stage in the decision making process.

6.4.2.1 MODE A: eCDP: Pre- Knowledge Driven – Information Search

Jane knows which brand of perfume she would like to purchase. She may therefore step out of this mode at this stage (see Exhibit 6-3 – Shift in Modes) to test the perfume in a physical store, to check she likes the scent and that she is not allergic to it. She can then ask questions of the sales assistants and see the packaging and the bottle it comes in.

She may have tested this perfume previously when shopping in a physical store and know the scent and know she is not allergic to it. She will therefore continue to search on the internet for the best price, best delivery and whether it comes with an additional gift (REF CHECK). If she continues to search on the internet, she will be evaluating the product and price at the same time (stage 2, **Search for Information** and stage 3 **Pre-purchase Evaluation** therefore occur nearly simultaneously)

6.4.2.2 MODE B: eCDP: Function Driven – Information Search

Jane is not sure of the perfume she would like to buy, but is attracted by the new brand of perfume recently introduced on to the market by a famous film star. As she has never tested this new brand and would like to try out others, and may be allergic to it, she decides to go to the physical store and test it for herself before deciding (as in Exhibit 6-3 – Shift in Modes).

She may have tested this new branded perfume previously and others when shopping in a physical store and know their scent and knows she is not allergic to them. She will therefore continue to search on the internet for the best price, best delivery and whether it comes with an additional gift (for example).

6.4.2.3 MODE C: eCDP: Impulse Driven – Information Search

Jane is just browsing the internet and looking for reviews about a new film that has just been released and her attention is caught by an advertising banner for a new perfume by a famous film star. Jane remembers her perfume is running out and she would like to buy some more.

She decides to go to a physical store to test it for herself. She may have tried the perfume before or a friend of hers wears it and she likes it, so she decides to go ahead and buy it.

6.4.3 Stage Three: Pre-purchase Evaluation of Alternatives

At this stage Jane collates all of the information she has gathered in the **Search for Information** stage. Jane's traditional scenario is outlined in Exhibit 6-11 below. This is then compared to the eCDP model in subsequent sections, entitled **Modes A, B and C**.

> Jane has now visited a few different stores to test the branded perfume and decides she likes the scent, even after a few hours. She has not had any reaction to it and begins to evaluate which retailer is offering the best price.

Exhibit 6-11: Stage Three – Pre-Purchase Evaluation of Alternatives – Traditional Store Scenario

6.4.3.1 MODE A: eCDP: Pre- Knowledge Driven – Pre-Purchase Evaluation

If Jane is searching solely on the internet, his stage and **Information Search** happen at the same time. If she does not continue through the model solely on the internet, but 'steps off the internet' to go to a physical store, then these stages happen sequentially.

6.4.3.2 MODE B: eCDP: Function Driven – Pre-Purchase Evaluation of Alternatives

Jane may now make her evaluation of the alternatives she has discovered. She may or may not have 'stepped off' the internet to find out the information she required (although it is most likely that she will have needed to smell the scent or test for allergic reaction, if she has not used this particular perfume before).

6.4.3.3 MODE C: eCDP: Impulse Driven– Pre-Purchase Evaluation of Alternatives

Jane now makes her evaluation of the alternatives she has discovered. She may or may not have 'stepped off the internet' to find out the information she required (although it is most likely that she will have needed to smell the scent or test for allergic reaction, if she has not used this particular perfume before).

6.4.4 Stage Four: Purchase

At this stage, the student now enters the **Purchase** stage and has made the decision to purchase a particular model of car, from a particular dealer, as shown in Blackwell et al.'s model in Exhibit 6-12 below. This is then compared to the eCDP model in subsequent sections, entitled **Modes A, B and C**.

Jane now selects a retailer and goes to purchase the branded perfume. She checks with the sales assistant whether there are any new offers for that particular brand and whether there are any 'freebies' that come with it. The sales assistant informs her that there is an offer of buying some body cream by the same brand at half price if she purchases the perfume. Jane remembers she is low on cream and decides this is a good idea. She tests the cream for texture and includes it in her purchase. She hasn't brought her credit card with her and asks if she can pay by cheque. This is not a problem. She leaves the store with her perfume and cream.

Exhibit 6-12: Stage Four – Purchase – Traditional Store Scenario

6.4.4.1 MODE A: eCDP: Pre- Knowledge Driven – Purchase

In the eCDP model, Jane has confirmed that she wants to buy the branded perfume. She now must choose an e-retailer that sells this perfume. At this stage, there is no physical interaction with a salesperson on the internet and it is therefore not very easy to influence Jane's decision (contrary to the example above Exhibit 6-11).

It is easier for Jane to abandon the shopping process on the internet than it would be in a physical store. This is called 'abandoning shopping cart' and can happen for a number of reasons, including: the phone ringing, someone knocking on the door, other interruptions, technological breakdown (slow loading website, unable to find correct information online, computer not working etc.) or simply not having the time.

6.4.4.2 MODE B: eCDP: Function Driven – Purchase

In this mode Jane is ready to purchase the perfume and starts to look at different e-retailers on the internet. As in mode A, this is all done on the internet and there is no physical interaction with a salesperson. Jane can therefore easily 'abandon her shopping cart'.

6.4.4.3 MODE C: eCDP: Impulse Driven – Purchase

In this mode Jane is ready to purchase a perfume and may look at different dealers on the internet or just accept the offer made to her by the advertising banner she has seen. As in

mode A and B, this is all done on the internet and there is no physical interaction with a salesperson. Jane can therefore easily 'abandon her shopping cart'. As Jane is in the Impulse mode, she did not anticipate that she would be buying something and doesn't have her new credit card on her, she only has a cheque book and therefore cannot purchase the perfume online.

6.4.5 Stage Five: Consumption

At this stage Jane has purchased the branded perfume: this is when **Consumption** occurs. The example below in Exhibit 6-13 shows what would happen in traditional retailing. This is then compared to the eCDP model in subsequent sections, entitled **Modes A, B and C**.

As Jane leaves the store, she thinks "What have I done?" She gets a sinking feeling in her stomach, while her brain searches for reasons to justify her purchase decision. She may have spent more than she intended to on the perfume, but she liked the scent and as more people comment on her lovely perfume, she feels better about her decision and the process. Buying branded perfume wasn't so bad after all. In fact, if she had to do it again, she would probably go back to the same retailer and buy another perfume of the same brand.

Exhibit 6-13: Stage Five – Consumption – Traditional Store Scenario

6.4.5.1 MODE A: eCDP: Pre- Knowledge Driven – Consumption

Once Jane has purchased her perfume over the internet, she has to await delivery. This is when consumption occurs. If she has to wait a long time for delivery or something goes wrong with the delivery (for example, if the perfume doesn't arrive before her party on the weekend, or the wrong perfume is delivered, she will be very disappointed), she may feel differently about purchasing perfume on the internet next time.

6.4.5.2 MODE B: eCDP: Function Driven – Consumption

This is similar to Mode A, where her experience of consuming the product may alter her perception of buying on the internet for the next time. If she has to wait a long time for delivery or something goes wrong with the delivery (for example, if the perfume doesn't arrive before her party on the weekend, or the wrong perfume is delivered, she will be very disappointed), she may feel differently about purchasing perfume on the internet next time.

6.4.5.3 MODE C: eCDP: Impulse Driven – Consumption

This is similar to Mode A, where the experience of consuming the product will affect how she perceives the whole experience for the next time. If she has to wait a long time for delivery or something goes wrong with the delivery (for example, if the perfume doesn't arrive before her party on the weekend, or the wrong perfume is delivered, she will be very disappointed), she may feel differently about purchasing perfume impulsively on the internet next time.

6.5 Testing the eCDP with 'real users'

Having tested the eCDP model with two hypothetical scenarios that demonstrated the factors and mechanisms involved in its operation, this section focusses on putting the model through its paces using data from real users captured according to the methodological framework described in chapter 4. This scenario concerns an ABC1 working woman, who was observed purchasing a pair of black trousers. She was briefed only with the advice that she could consider purchasing using the internet- it was not a requirement to do so.

6.5.1 Scenario 3: eCDP Applied to Purchasing Apparel Online (Trousers)

To test the eCDP model, an online scenario was tested with a consumer purchasing a pair of trousers as an instance of a sensory product.

6.5.2 Stage One: Need Recognition

A scenario is detailed below in the following sections where a female consumer, Respondent 14 (R14), recognises that she has a need to buy a new pair of trousers: **Need Recognition**. The sections below take the consumer through the proposed eCDP model's modes and looks at how she progresses through the stages.

6.5.2.1 MODE A: eCDP: Pre-Knowledge Driven – Need Recognition

In this case R14 knew what type of trousers she wanted: a pair of black flared trousers for work. She had a retailer in mind who she knew sold on the internet, and, although she had never purchased on the internet before from this particular retailer, she had been to their store. This consumer therefore started out in the Pre-knowledge Driven Mode A.

6.5.2.2 MODE B: eCDP: Function Driven – Need Recognition

In the eCDP model, R14 would fit into this Mode if she only knew that she wanted a pair of trousers for work, but had no further criteria in mind.

6.5.2.3 MODE C: eCDP: Impulse Driven – Need Recognition

R14 would fit into this Mode if she wasn't looking for trousers for work, but just browsing through different websites looking for something else and an advertising banner caught her eye for a pair of smart trousers.

6.5.3 Stage Two: Search for Information

Once the need recognition stage had occurred, R14 starts to look for information.

6.5.3.1 MODE A: eCDP: Pre- Knowledge Driven – Information Search

R14 started by searching on the internet for the web-site for the retailer she knew; so that she could check their prices, availability and delivery service. She knew they had the sort of black trousers she had in mind, because she had previously tried a pair on a few weeks prior during a shopping trip for something else.

In fact, R14 finds what she wants very quickly, but decides to check prices on a few other web-sites, just to make sure that she cannot find it any cheaper. She is happy to pay the price advertised on the web site because it is in her budget and she knows the product will probably meet her criteria for quality and fit. In this case therefore, stage 2, **Search for Information** and stage 3 **Pre-purchase Evaluation** occur nearly simultaneously.

6.5.3.2 MODE B: eCDP: Function Driven – Information Search

R14 would fit into this mode if she wasn't sure of the sort of trousers she was looking for and didn't know of any retailers on the internet. She would have to take her time to research this and possibly even visit a physical store to try a few on.

6.5.3.3 MODE C: eCDP: Impulse Driven – Information Search

If R14 had impulsively followed a link for an advert for a pair of smart black trousers on offer, she might still decide to check similar products on other websites to compare prices and styles. She may even decide to go and try some trousers on in a physical store.

6.5.4 Stage Three: Pre-purchase Evaluation of Alternatives

Having searched for information in physical stores, web-sites and other sources of information, including friends and family, the consumer can now make an evaluation about which product to buy.

6.5.4.1 MODE A: eCDP: Pre- Knowledge Driven – Pre-Purchase Evaluation

R14 combines this stage with the Information Search stage because she has most of the information she needs and is very likely to buy from the e-retailer she first looked at.

6.5.4.2 MODE B: eCDP: Function Driven – Pre-Purchase Evaluation

If R14 was in this mode, she would now have to weigh all of the criteria up and try to make a decision. She may find she needs to visit more web-sites, speak to more people who have purchased online before, or try some more trousers on in a physical store, before making her decision.

6.5.4.3 MODE C: eCDP: Impulse Driven– Pre-Purchase Evaluation

If R14 had followed up the special offer for smart black trousers, she may also feel the need to weigh up the alternatives and search other web-sites further, check with friends and family and try a pair on in a store before making her decision.

6.5.5 Stage Four: Purchase

This stage is where R14 had made her mind up which trousers she was going to buy from which e-retailer and carries out her purchase.

6.5.5.1 MODE A: eCDP: Pre- Knowledge Driven – Purchase

As R14 knew what she wanted from the outset and which retailer she preferred, she arrived at this point quite rapidly. She makes her selection, fills in the delivery details and is offered a time slot for delivery. She accepts one and pays by credit card.

6.5.5.2 MODE B: eCDP: Function Driven – Purchase

If R14 managed to search and find the item she required, it would have taken a little longer than mode A. She would make her selection and pay by credit card in the same way as Mode A.

6.5.5.3 MODE C: eCDP: Impulse Driven – Purchase

R14 could perhaps arrive at this stage quite rapidly, depending on how much she needed to research other offers. She would progress through this stage much as if she was in Mode A or B.

6.5.6 Stage Five: Consumption

For this stage to happen, particularly if the consumer has bought a product on the internet, the consumer must have received the product and used it.

6.5.6.1 MODE A: eCDP: Pre- Knowledge Driven – Consumption

When R14 received the trousers, she tried them on and was quite happy with her purchase as they were what she expected. The delivery had arrived on time and without any extra charges.

6.5.6.2 MODE B: eCDP: Function Driven – Consumption

If R14 had been in Mode B, this stage would have been very similar to Mode A, except she may not have been sure what to expect of the product.

6.5.6.3 MODE C: eCDP: Impulse Driven – Consumption

If R14 had been in this mode, it would have been very similar to the other 2 modes, with maybe the only difference being she may not have been sure what to expect of the product.

The consumer in this case seemed to follow the predicted modes and stages of the eCDP. She didn't shift in mode, but did carry out **Information Search** and **Pre-purchase Evaluation** nearly simultaneously.

6.6 Implications and discussion

As the overall aim of this research was to attempt to better understand how consumers interacted with internet-based retailing technology so as to contribute an improvement in that interaction. More specifically, the particular investigation carried out here aimed to improve understanding of internet consumer behaviour processes and to communicate this understanding through an improved consumer decision process model.

One of the key aims of this research was provide empirically based insight into the factors and mechanisms driving user behaviour and to model that behaviour. This has enabled

identification of gaps between predictions of the traditional CDP model and the observed realities of internet consumer behaviour.

These overall findings have been shown above to form the beginnings of a new consumer decision process model for the internet – the eCDP model. This attempts to reconcile the traditional CDP model with the observed realities, providing a better insight into the behaviour of internet apparel consumers.

This model can be used to further understand a new area of consumer behaviour: online consumer behaviour, which, due its recency, hasn't been fully investigated empirically.

6.7 Conclusions

Chapter 6 has built upon on the findings in chapter 5 to detail a revised model entitled the eCDP model (Electronic Consumer Decision Process Model). The analysis in chapter 5 concluded that there are areas of the traditional model that do not work well for describing consumer's decision making process on the internet. The problem areas identified in chapter 5 concerned mainly the first four stages of the traditional model (Need Recognition, Information Search, Pre-Purchase Evaluation and Purchase).

Chapter 5 also concluded the need to revise the traditional CDP model in order to reflect the needs of internet based retailing. It recommended a number of key amendments which would achieve this objective. The eCDP model proposed in chapter 6 incorporates novel notions relating to the concepts of overlapping stages, modality and shift in modes discussed briefly in chapter 5.

The derived model is illustrated and validated through application to four different scenarios of purchasing sensory products on the internet. In each of the scenarios, the three key notions are illustrated and compared and contrasted with the traditional CDP model. This exercise has had the benefit of showing the utility and the viability of the proposed model. Nevertheless, work is required to further verify more rigorously the eCDP model.

CHAPTER 7: CONCLUSIONS

7.0 Introduction

This thesis contributes to the ongoing debate, that the advent of emerging digital retail channels such as the internet, is influencing consumer behaviour. It points to the general consensus that this new phenomenon is transforming the retailing experience from multiple dimensions including technical, social and psychological perspectives - the details of which we do not yet fully understand. It enters this debate through its main conjecture that it is important to question whether it is sufficient to assume that the internet shopping experience is simply an analogue of the traditional so-called 'bricks and mortar' experience.

It argues that traditional assumptions about consumers, embodied in existing consumer decision models, need to be revamped in significant ways to reflect the realities of the internet shopping experience. Developing internet retailing solutions without reference to this context, can have immense risks in usability and technology terms. Systems which consumers find difficult or unsatisfactory to use are likely as a result. It argues that these risks can be improved through the development of alternative, empirically-grounded consumer decision models better suited to describing something more like real behaviour of internet consumers.

The research sets as its overall objective to contribute to improving this situation. It conducts a series of empirical investigations aimed at exposing the salient elements of the decision processes which consumers go through when shopping online. This is made operational by a research design aimed at identifying, classifying and representing the key dimensions underlying processes and mechanisms of internet consumer behaviour. As such, apparel is selected as a 'sensory' product to enable a clearer illustration of possible differences between traditional and online shopping behaviour. The design includes an intent to validate these findings against existing notions of consumer behaviour, rooted in traditional 'bricks and mortar' contexts.

7.1 Overview of the Thesis

To this end, the first part of the investigation (chapters 1, 2 and 3) set out to put the issue in context by exploring existing literature relating to internet retailing as a process, its

relationship to traditional retailing and the role of consumer decision models. As an instance of the latter, it focussed its attention, amongst others, on the CDP model (Blackwell et al., 2001), derived primarily for use in describing consumer behaviour in 'bricks and mortar' retail contexts.

This survey revealed a number of interesting points. A key finding was the general notion that internet consumer behaviour cannot simply be treated as an analogue of traditional internet consumption. Another finding was the paucity of a body of literature in regards to empirical work in this area, focussed on theory development. Thus, at the time of writing, no internet-consumption based consumer models were identified. Even less apparent was literature relating to empirical research on apparel purchasing on the internet. Arguably, this is not surprising, as it is a relatively new area. In general, there appeared to be little work aimed at improving understanding of how internet consumers behave, what factors, issues and mechanisms are of importance and which of these are differentiated to those found in traditional retailing.

In chapters two and three of the thesis, grounding concepts relevant to consumer behaviour were introduced and explored. These were placed into the context of recently published literature on consumer behaviour, in general, and online retailing for the apparel industry in particular. The utility made of existing knowledge in retail marketing, its importance to apparel retailers and marketing researchers alike, were also explored.

The exploration revealed that the adoption of online retailing has brought to the fore many novel issues which are hardly mainstream concerns in traditional so-called 'bricks and mortar' retailing - for both retailer and consumer alike. For instance, important issues such as payment methods, in-store customer service and physical interaction with the products (touch, feel, see, taste) hardly figure. These, which have little significance in the traditional context, become very significant in an online context. Thus retailing for products possessing easily defined attributes (so-called simple products) such as software, CDs and computer hardware, is more complex on the internet than in traditional channels. Online retailing can become more complex when dealing with the retailing of so-called 'sensory products' involving more sophisticated decision-making processes. Some examples of sensory products cited throughout previous chapters included products such as clothing, perfumes, homes, cars and even certain types of fresh food, where the decision to purchase is often based on less tangible factors.

The particular instance of sensory products this investigation focussed upon, is that of *clothing*. The retailing of clothing, more formally referred to as ***apparel retailing***, (see Chapters 1 and 2) has been one of the least dynamic areas within online retailing both in terms of sales activity and research. Although many reasons have been put forth by researchers and commentators alike to explain this, there is a growing consensus that the root causes may lie in the need for improved understanding of how online consumers behave. This emerging area has been referred to as the study of apparel purchasing behaviour on the internet (APBI).

Chapter 4 provided a roadmap to explore and address the thesis objectives. It focussed upon and articulates the aims of the research, and constructed the methodological framework to achieve these aims. It detailed a proposal for a qualitative research design aimed at conducting an empirical study, at close quarters, of internet consumers. The resulting approach relied on a combination of approaches centred on Grounded Theory (Glaser and Strauss, 1967) for theory building and Scenario Analysis (Carroll, 2000) for theory corroboration. These were applied in conjunction with a number of data collection and analysis techniques to process observations of consumers, consumer focus groups and consumer interviews.

A sample group of respondents (working women, in the ABC1 social group, aged between, 18 – 45) were selected from 3 different sources (Brunel University Staff, Berkhamsted Adult Education Centre and several personal contacts). The respondents made up 6 groups of 7 people for the focus groups, and a further 5 respondents for the interviews and 5 for the observations.

These were carried out over a period of approximately 2 months

In as much as the research design aims specifically to collect data which would ultimately form the basis for a new or modified consumer decision process model, it can be characterised as being about theory building. However, because it starts out by considering the validity of assumptions of an existing model, it is also about theory corroboration. The decision to focus as a subject of study on the purchase of more sensory types of products (apparel), although adding to the complexity of study, was necessary because the issues encountered were likely to be a superset than those for simpler products. Thus a richer domain was uncovered than would have been found by considering a more general and easily manageable area (from a research design perspective). This in turn aided the generalisability of results.

Chapters five and six form the second part of the investigation, where analyses of the data collected were conducted with the objective of identifying emergent properties of how consumers behave on the internet.

Chapter five presented the analytical framework and the preliminary findings. These offer clear indications that the traditional CDP model does not appear to be sufficient to help in the understanding of APBI. It underpinned this by identifying emergent properties about how internet consumers were observed to behave.

Based on these findings, Chapter 6 proposed a revised CDP model for the internet, coined the Electronic Consumer Decision Process model (eCDP). This model is fundamentally different to those before it, in that it is based on the premise that it does not contend its own universal applicability to all types of retailing channels. Rather it is aims specifically to describe consumer interactions in an internet context. Three new emergent properties of consumer behaviour identified in Chapter 5 attempt to modify the traditional way of looking at consumer behaviour. These are notions of: *overlapping stages*, *modality* in consumer behaviour at the Need Recognition Stage and *shifts in modes*. The workings of the proposed model and its fit with observed realities were illustrated through scenario corroboration (Carroll, 2000) using real and hypothetical data. Blackwell et al.'s (2001) hypothetical example of a student purchasing a car; a hypothetical example of a woman purchasing perfume and a real example of a woman purchasing a pair of black trousers taken from this research.

7.2 Implications for Traditional versus Internet Consumer Behaviour

In this thesis the overall aim has been to attempt to understand the consumer's side of the story and therefore to investigate consumer behaviour. However, throughout, retailers' and manufacturers' sides of the story have also been briefly referred to as they are unavoidably linked and therefore need to be taken into consideration. Due to resource and time constraints, this investigation has not considered this in detail.

Moreover, certain issues worth noting have arisen to do with comparing traditional and internet retailing: internet channel conflict and multi-channel comparison models.

Internet channel conflict is where internet and traditional channels destructively compete against each other when selling to the same markets (Lee, Lee & Larsen, 2003; Schoenbachler

& Gordon, 2002). For instance, Wal-Mart and Home Depot warned Black & Decker that they would take its products off their shelves should Black & Decker start selling its products online. This is a new phenomenon which has arisen since the development of retailing online and is a serious problem for some retailers. However, since this deals primarily with the retail side of the story, it was not considered in detail in this thesis.

Multi-channel comparison models (Schoenbachler & Gordon, 2002; Lee, Lee & Larsen 2003), also to do with the retailers' side of the story, were briefly considered as they dealt with consumer behaviour and looked at how they chose a channel to make purchases. (This is discussed in more detail in Chapter 2.)

Interestingly, these models use some aspects of the traditional CDP model (lifestyle factors, demographics, past experience) and some of the issues outlined in this thesis (familiarity with the brand, security online, past internet experience and return behaviour). As discussed in Chapter 2, this multi-channel strategy is a complex one and needs to consider the fact that consumers now have more power, given that they have more choice of channels.

Shopping cart abandonment, or 'failure to complete a purchase' (Kaufman-Scarborough & Lindquist, 2002), is also another term which has appeared since the advent of online shopping. Certain factors which have been identified with shopping cart abandonment are issues such as: slow load times, inability to locate certain items, incomplete information, lack of human-interaction, failure with account setups, or simply some consumers may never have intended to complete a purchase online.

Other issues which are generally perceived as disadvantages of the internet, as opposed to traditional outlets have also been confirmed by this research, such as: shopping cart abandonment, credit card security (and limited ways of paying online), access to the internet, technology problems and slow download times,

7.3 Discussion

Throughout this investigation, sensory products were chosen (i.e. needing more that just eyes and ears to be able to make a purchasing decision –such as perfume, clothing and cars) (Fenech & O'Cass, 2001; Levin, Levin & Heath, 2003)) - to enable a complete understanding of the possible difficulties of purchasing online. By choosing a product which is sensory, or

'experience goods' (Levin, Levin & Heath, 2003), it enabled a fuller comparison between online and offline decisions being made by consumers attempting or making a purchase.

Findings by De Kare Silver (2001) suggest a possible explanation of why some products sell better than others do. Typically goods such as grocery and household goods which are usually bought every week (replenishment goods) have most success selling online. Goods which are not bought as frequently, and appear to have a more complex reasoning behind the purchasing decision, are therefore more difficult to sell over the internet.

Another important point suggested by Stein-Wellner (2001) and Greenberg (2000), confirmed during this research, is that people actually like shopping in physical stores, browsing in malls, touching and trying things on and feeling the goods and the atmosphere. However, this 'window shopping' often doesn't lead to a purchase.

Several authors have attempted to make comparisons between online and offline shopping (Broekhuizen & Jager, 2004; Kaufman-Scarborough & Lindquist, 2002; Lee et al., 2003; Levin et al., 2003; Schoenbachler & Gordon, 2002), as discussed in Chapter 2, but these have been mostly quantitative, with a fleeting mention of consumer's underlying motivations when purchasing online.

This thesis has attempted to go beyond just a comparison and has examined the underlying motivations of online consumer decision processes. In doing so, it has emerged that there appear to be some fundamental differences in the way consumers make decisions when purchasing online. This, coupled with the existing 'known' risks of online shopping (see 7.3.1), has contributed to the proposal for the eCDP (Electronic Consumer Decision Process) model.

7.3.1 Risks and Disadvantages of the Internet

Certain risks and disadvantages have contributed to a reluctance of some consumer to purchase goods in general over the internet. Jameson (2002), McGann (2004) and TNSI (2002) point to concerns over '*cyber security'*, citing 6 out of 10 consumers thinking about reducing their online shopping due to the worry about payment security among internet consumers and '*the need to feel goods before buying*'.

A recent survey by PricewaterhouseCoopers (NUA, 2000) also found that respondents felt that the inability to try on clothes or to feel the quality of the material were a problem when

purchasing clothes over the internet. Returning products, privacy of personal information, inefficient search engines and the total cost of buying clothes (higher than in physical outlets) were also problems which potentially need to be addressed.

This investigation incorporated these factors when analysing the TCDP model (the Traditional Consumer Decision Process model) and constructing the eCDP model.

7.3.2 Other Sensory Products

This investigation has used the term sensory products - products that require more than 2 of our 5 senses to make a purchasing decision – and has taken apparel as an example of a sensory product being purchased on the internet. Another sensory product which has been mentioned in this thesis, but not researched in depth, is perfume. It would be very interesting to investigate further how consumers perceive the possibility of online purchase of such a sensory product. Goods such as cosmetics and perfume – '*experience goods*' - where direct experience with the product is necessary (Levin, Levin & Heath, 20003) or where '*tactile senses*' count (Stein-Wellner, 2001) are more difficult to sell on the internet. According to De Kare Silver (2001), products such as perfume and apparel are types of products that needs to be '*touched/tasted/smelt*' and therefore more difficult to be marketed to an online consumer. Fenech & O'Cass (2001) and Lindstrom (2000), suggest that a significant weakness of the internet is the fact that it can realistically only reproduce two of our five senses: sight and sound.

When a consumer needs to make a decision to buy products that are about colour and smell '*in the vacuum of cyberspace*', it make s the decision process a lot more complex (Stein-Wellner, 2001). DigiScents (a technology design company) provide a little hope as they have recently designed a product called iSmell Personal Scent Synthesizer, which allows internet users to smell what they are looking at online: '*It's a speaker-size peripheral device that you plug into your computer. Imagine an inkjet printer that's loaded with various scent cartridges instead of ink. When the device receives the right code from a web site, it emits the smell according to the formula. This will help consumers in the market for fragrance shampoo, and any kind of cosmetic*.' (Stein-Wellner, 2001?)

7.4 Findings

So far, as seen in Chapter 2, some research has been published in general with regards to consumers' reluctance to purchase apparel via the internet. This suggests that it may be due to

certain cultural issues intrinsic to the fashion industry, both from the point of view of the consumer and the retailer. Consumers are used to the purchasing in a physical retail outlet and like to try things on and feel the texture of the garments. However, Bhatnagar, et al. (2000) state that there is little conclusive evidence to explain the reluctance of some consumers not to purchase on the internet.

The overall aim of this research was to attempt to better understand how consumers interacted with internet-based retailing technology so as to contribute an improvement in that interaction. More specifically, the particular investigation carried out here aimed at improving understanding of internet consumer decision processes and to communicate this understanding through an improved consumer decision process model specifically aimed at online purchases.

One of the key aims of this research was provide empirically based insight into the factors and mechanisms driving user behaviour and to model that behaviour. This has enabled identification of gaps between predictions of the traditional CDP model and the observed realities of internet consumer behaviour.

These overall findings have been shown in Chapters 5 and 6 to form the beginnings of a new consumer decision process model for the internet – the eCDP model (Electronic Consumer Decision Process Model). The analysis in chapter 5 concluded that there are areas of the traditional model that do not work well for describing consumer's decision making process on the internet. The problem areas identified in chapter 5 concerned mainly the first four stages of the traditional model (***Need Recognition, Information Search, Pre-Purchase Evaluation and Purchase***).

Chapter 5 also concluded the need to revise the traditional CDP model in order to reflect the needs of internet based retailing. It recommended a number of key amendments which would achieve this objective. The eCDP model proposed in chapter 6 incorporates novel notions relating to the concepts of ***overlapping stages***, ***modality*** and ***shift in modes***: The notion of ***overlapping stages*** is where two stages happen almost simultaneously; ***modality*** details further distinctions which emerged from the analysis including ***Mode A: Pre-knowledge Driven, Mode B: Function-driven*** and ***Mode C: Impulse Driven***. The third key component, is ***shifts in modes*** (changing from one mode to another during the decision making process).

In Chapter 6, the derived model is illustrated and validated through itsapplication to 3 different scenarios of purchasing sensory products on the internet. In each of the scenarios, the three key notions are illustrated and compared and contrasted with the traditional CDP model. Two of the scenarios are hypothetical, with a consumer purchasing a car and perfume (online and offline). The third is a 'real consumer' making an online purchase for a pair of trousers (taken from this research).

This attempts to reconcile the traditional CDP model with the observed realities, providing a better insight into the behaviour of internet apparel consumers.

This model can be used to further understand a new area of consumer behaviour: online consumer behaviour, which, due its recency, hasn't been fully investigated empirically. This exercise has had the benefit of showing the utility and the viability of the proposed model. Nevertheless, further work is required to verify more rigorously the eCDP model.

7.5 Contributions of the Research

A critical review of recent literature on consumer retailing on the internet forms the basis of the first, small, but useful contribution of the research. This focuses on the possibility of correlation between inappropriate consumer behaviour models currently in use and the continuing problems faced by internet apparel shopping. To be clear, it does not argue simple causality but linkage between the two.

Prior to the conduct of this research, many commentators had indeed already observed that online apparel retailing has proved to be somewhat a disappointment. Others had also pointed out the need to better understand the needs of consumers. However, few had rigorously explored the appropriateness of existing consumer behaviour models developed in traditional retailing contexts to online retailing. In doing so, this research rises above conjecture, opinion or informal analysis, giving it the foundation for serious debate.

The second contribution of the research is methodological. So far researches have borrowed from other fields and have used a loose collection of generic techniques for the study of consumer behaviour. This research constructs and adopts an integrated methodological orientation. This orientation enables theory building and theory testing of empirical data in an internet context. The research is thereby enabled to tap into salient factors and mechanisms driving user behaviour with a view to modelling that behaviour.

Thirdly, this approach was successfully tested on a sample of female consumers, from an ABC1 social group, who are internet consumers while purchasing apparel online. The particular integrated methodological orientation innovates in combining proven qualitative data collection and analyses techniques under a Grounded Theory framework. It attempts triangulation rigour to be provided through the use of Scenario Based Analysis (Carroll, 2000). Triangulation is also provided by the use of multiple data sources including observations, focus groups and interviews. This broad-based qualitative approach was refined as the research progressed and distinctions emerged.

The research methodology which has been developed enables identification of important factors and mechanisms, not previously identified, which were incorporated into a revised CDP model, resulting in the eCDP model (Electronic Consumer Decision Process Model). The eCDP model enabled the use of three new modes to be used in the research analysis, which is therefore the 4th contribution. These are: simultaneous stages, modalities (Function-driven, Impulse-driven and Pre-Knowledge-driven modes) and shifts in modes.

The results suggest that the traditional CDP model, in its most general form, is a useful starting point for describing internet consumers' likely behaviour only under highly artificial conditions. These conditions are where the consumer has pre-defined notions of a product or service they desire. A number of scenarios were identified where a number of important contradictions are apparent between predictions of the traditional CDP model and the behaviour of 'real' internet consumers. The notion of modality is introduced to describe such unaccounted for scenarios.

Lastly, the eCDP model provides a structured way to investigate the internet shopping experience of more than just an analogue of the traditional bricks and mortar experience.

7.6 Future Work

Improving understanding of how consumers interact with internet apparel retailing systems has been the main aim pursued by the investigation. The eCDP framework consolidates and illustrates much of what has been learned by this investigation. Its potential value as the basis for conceptual and practical analysis tools would be the scope of any future work. However, a number of practical issues stand in the way of acheiving this potential.

Firstly, generalisation of results is an issue here, as it is in much qualitative research. It must be remembered that the assumptions underlying the proposed model were derived on the basis of a small sample of representative consumers and in the specific area. In particular, the

model considered the conjunction of apparel, cosmetics and cars as complex products with consumers consisting of working women from the ABC1 social group.

Secondly, qualitative research is still improving, especially in relation to the fact that it should be easier to map similarities between the low numbers of cases or respondents investigated with a wider sample required to reach a generalisation. Less equivocal generalisibility will require more extensive investigation of the key founding concepts and assumptions within the model. In particular, more work needs to be done in terms of expanding the sample base to more categories of consumers. More work also needs to be done to explore consumer attitudes to purchasing other types of complex products. It may also be important to revisit the particular issues separating complex and simple products, as defined in this thesis. Many authors (De Kare Silver, 1998; Lindstrom, 2000; Vrechopoulos, 2001) have suggested approaches to improve these through a variety of methods. It would be interesting, if similar results could be achieved using different techniques.

Thirdly, the principle which has motivated and guided this research is that a better model of how users behave will lead to better system design. However, staged behavioral models such as eCDP, although useful to illustrate key concepts and issues, can often prove to be too generic for practical use. That is, the utility of the model to the needs of particular groups of stakeholders is not as strong as one would like, without much additional work. More development and customisation will be needed to ensure that the three most obvious beneficiaries from such a model (retailers, developers and marketeers) would readily benefit from the model. In a practical sense the ultimate hope of the research is to make technology that serves consumers better. For instance, assuming the key elements of the proposed model pass muster, the next stage would involve the development of design guidelines and evaluative tools to assist design and development. Improved understanding would enable retail specialists to design systems that meet users needs more effectively, reducing costs and improving predictability of implementation success. It would enable them to systematically combine qualitative cultural issues involved in online retailing with more practical ones such as system usability and requisite functionality.

However, as was mentioned in Chapter 1, it was not within the scope of this investigation to attempt to attain this ultimate goal. Rather, the investigation has attempted to take a number of small first steps, which when taken together, define the scope of the investigation as one of building a better theory about how consumers interact with online retailing systems.

Perhaps a further test for the eCDP model would be to attempt to find the flaws in the model by applying real scenarios that don't fit the model.

Other interesting developments from this research might be the possibility of investigating more fully the retailer's side of the story. This could perhaps take the form of building on existing findings of multi-channel research and incorporating the consumer's point of view.

7.7 Conclusions

Chapter 7 provides a consolidation of the activities and achievements of the research. It describes the aims and objectives of the research, the activities carried out and the results achieved. It has described how the thesis has focused on improving the underlying processes and mechanisms of consumer behaviour when purchasing online.

It concludes by listing key achievements including the proposal and conduct of a novel empirical investigation approach into consumer behaviour and the proposal of an Electronic Consumer Decision Process model (eCDP) as a result. Finally, it outlines the issues and concerns which emerged from the conduct of the research and which need to be addressed in future.

APPENDIX 1: RESEARCH DESIGN- DATA COLLECTION TECHNIQUES

1.0 Introduction

Chapter 4 outlined an approach to researching consumer behaviour on the internet. The chapter described that a qualitative approach will enable the investigation of how an existing traditional consumer decision process model might be applied to online behaviour. Focus groups, interviews and observations were carried out with a sample group of working women who purchased sensory products online.

The findings discussed in chapters 5 and 6 point to the need to revise our understanding of consumers as we know them. It appears that there are different behavioural patterns which occur online, which do not in traditional settings. These findings may contribute to the development and improvement of web-sites, marketing and retail support for online consumers.

The following sections describe the procedural aspects of the investigation described in Chapter 4 as it was implemented on the ground. Section 1 introduces the subject of consumer behaviour.

1.1 The Subject

Consumer behaviour research is a vast and complex subject, with many different areas and divergent perspectives. Minor & Mowen (2000) attempt to sum it up as *"the study of the buying units and the exchange processes involved in acquiring, consuming and disposing of goods, services, experiences and ideas"*. Within this vast domain, the specific area of focus of this thesis is the study of consumer behaviour on the internet. This is further delimited by focussing on women consumers' buying behaviour in relation to the purchase of apparel. This specific area of focus is significant in many ways, including the fact that women are rapidly becoming a major user group in internet shopping.

1.1.1 Interpretivist Methodological Framework

Even the most basic elements of consumer behaviour can involve a wide variety of factors and mechanisms- a substantial number of which are highly subjective in nature. Thus its study is far from trivial or procedural. Nevertheless, as for any other research endeavour, the key issue to be overcome is how to accurately gather this data and analyse it appropriately to produce useful results.

As chapters 2 and 3 highlight, internet based retailing has experienced phenomenal growth worldwide in the last 4 – 5 years (Forrester, 2003). A recent survey by MORI (2001) shows how shopping on the internet is becoming more popular and how women make up an important percentage of these consumers - 23% of women as opposed to 30% of men currently shop on the internet in the UK (e-MORI 2004). According to their statistics, these "E-shoppers" make up just over a quarter of the (UK) population (26%) (e-MORI, 2004). Thus this particular social group is also more likely to use the internet for purchasing sensory products such as apparel (Mora & Gray, 2001; NOP, 2001). Consequently, in terms of sampling the research design focuses upon working women (who are in the ABC1 social group, aged 15 – 45) most likely to be internet shoppers

A key task for the investigator is to gain insight into how people behave when shopping on the internet, and in the process identify the role of a variety of factors including consumer motivation, social grouping, occupation, as well as prior established purchasing habits and lifestyles. From these it is hoped to gain improved understanding about the mechanisms which operate on such influencing factors to lead to the observed behaviour patterns.

Given the particularities of apparel shopping described in chapters 3, 4 and 5 and the known difficulties faced by most online users (Ambaye 2003, De Kare Silver, 2001; Lindstrom, 2000), it becomes necessary to adopt a qualitative methodological framework, sensitive to such issues.

1.1.2 Data Collection Techniques

The traditional research methods used for studying consumer behaviour include: experimentation, observations, interviews and focus groups. The experimentation method was not selected due to the fact that it may not produce the correct results as the aim is to attempt to understand consumers in a real situation. Instead a combination of the other three was used to both provide redundancy checking and depth of information. As the discussion above indicates, these are readily compatible with the chosen GT interpretivist conceptual framework. Chapter 4 describes, how the research aim is not to attempt to understand a 'cause and effect' in the positivist sense, but a reasoning behind different purchasing decisions on the internet. Each of these dealt in turn in the following sections.

2.0 Focus Groups

Focus groups enable a group of consumers (usually 8 - 12 people) to share their ideas, beliefs, experiences, opinions and attitudes about a certain topic freely amongst each other with a facilitator, with the objective of encouraging open discussion. Issues that arise can be discussed to a deeper level and explored in more detail within the group (Barbour & Kitzinger, 1999). This technique is generally understood to be useful for exploring how points of view are constructed and expressed and is particularly suited to the study of attitudes and experiences around specific topics.

Focus group studies can be anything from three to over fifty. However, this will depend on the subject, the participants and the time and resource limitations. As statistical representation is not the aim of most focus group research, most researchers employ 'qualitative sampling' to obtain diversity and compose a structured rather than random sample (Barbour & Kitzinger, 1999) (as discussed in section 4.6.1 above). The main source of information for developing the theory is through interviews, and focus groups are particularly suited to Grounded Theory (Dick, 2002).

Barbour and Kitzinger (1999) define focus groups as: 'group discussions exploring a specific set of issues, where the group is focused in that is involves some kind of collective activity – such as viewing a video, examining a single health promotion message or simply debating a set of questions'. The group leader encourages participants to talk to each other, discuss the topic amongst themselves, giving their experiences and points of view.

Focus Group research differentiates itself from other discussion groups such as brainstorming session, (where there is little preparation), nominal groups, (which are specially convened rather than naturally occurring groups, Delphi groups (involving selected panel of experts responding to results from complementary research). Focus groups are employed to observe the process of prioritisation and decision-making and to dig deeper at issues that are pertinent to the research question (Flick, 1998).

2.1 Design Considerations

Barbour and Kitzinger (1999) define focus groups as: 'group discussions exploring a specific set of issues, where the group is focused in that is involves some kind of collective activity – such as viewing a video, examining a single health promotion message or simply debating a set of questions'. Krueger & Casey (2000) note that Focus Groups have the benefit of enabling the exploration of issues and concerns in an open forum and that this has the benefit of assisting the identification of emergent themes.

In this research the focus groups were made up of 6 groups (one pilot and 5 further groups) with 7 respondents in each. This enabled an easy involvement in the discussions by all participants. Morgan (1997) suggests that '2 eight-person focus groups would produce as many ideas as 10 interviews'. Each group was moderated by an interviewer, whose role was to guide the interview without steering it, and to encourage all participants to voice their views. 'The interviewer must be flexible, empathetic, objective, persuasive and a good listener.' (Denzin & Lincoln, 2000; Flick, 1998).

The selection of the sample of respondents for the focus groups is designed to enable a homogenous group of women to share their experiences with others who had similar lifestyles (working, in the ABC1 social group, who had access to the internet) This therefore would increase dimensions related to the research questions so that they could be easily compared (Flick, 1998; Krueger & Casey, 2000).

2.2 Planning and Implementation

Barbour & Kitzinger (1999), Flick (1998) and Krueger & Casey suggest that the planning and implementation aspects of focus groups can be broken down into a number of stages. In this case four key phases were utilised: Explanation, Introduction, Discussion and Conclusion. Each focus group was designed to last approximately one hour and a half.with a specific set of

guidelines so that research questions should be amply covered. Following the guideline of Flick (1998), Krueger & Casey (2000) and Morgan (1997), focus group sizes were kept to a maximum of 7 each. As a an important part of the preparations toward successful conduct of the focus groups, there was a concerted effort to ensure enough respondents could be recruited and to enable convenient times so that all members can participate. This included putting up notices on notice boards, sending email circulars within the organisation and passing the word around generally. Finally, all focus groups were tape-recorded with the consent of the respondent to facilitate the transcription of the sessions afterwards.

a) **Explanation Phase**

At the outset, a brief outline of what will happen and what is expected of each respondent during the group discussion is given by the moderator. The moderator also confirms that the respondents are

b) **Introduction Phase**

Before diving into the discussion, in order to 'break the ice' personal introductions are made by each respondent to put them at ease. In this case, it became obvious to many that many came from similar backgrounds and phases.

c) **Discussion Phase**

To initiate the discussion, the moderator will set the repondents a scenario, termed as a 'dicusssion stimulus' and asks their opinions (Flick,1998). In general, a light-hearted or comic theme, with which the respondents will be familiar, is the best start.

d) **Conclusion Phase**

At the conclusion of the discussion, the moderator will thank all participants and explain what their views will be used for.

The output from the focus group sessions includes the following:

- *Moderator notes*
- *Audio Tapes and Transcripts*

The derived information from this set of data includes the coded analysis table for the given focus group.

2.3 Focus Group guidelines

Krueger & Casey (2000) suggest the use of a guideline to facililitate the smooth conduct of focus groups. This also helps in ensuring that the information gathered is somewhat more structured than it would be otherwise. An example guideline used in focus group No. 3 (FG3) is shown below. It will be noticed that that the guideline is comprised of actions for each phase and the core questions to be put to the respondents.

GUIDELINE FOR FOCUS GROUP NO. 3 (FG3)

Explanation Phase

The whole session should take a maximum of 1 and half hours. If you have no objections the session will be tape-recorded purely to enable the results to be written up afterwards. I will use the data for academic research purpose only, to better understand shopping habits on the internet as well as in traditional stores. At this point I ask if any queries arise and address them as appropriate.

Introductions

So that we can know who each of us are can we start by introducing ourselves. My name is …….., I work in ………..and live in …………

Discussion:

Q1: Have you ever bought anything online?

Q2: What items were they?

Q3: How do you buy from traditional stores? (shopping habits)

Q4: How do you buy online?

Q5: What's the difference between internet and catalogue shopping?

Q6: what about the actual purchase – paying for your items online ?

Q7: Restrictions?

Q8: Are deliveries a problem?

Q9: If you could return your clothes locally to the local branch, would this help?

Q10: Do you plan ahead for clothes you want to buy?

Q11: Do you ever buy on impulse – if so, how?

Q11a: Did you check other prices and companies?

Q12: Experience of traditional store shopping versus online?

Brands mentioned bought:

- *Conclusion Phase*

  At the conclusion of the discussion, the moderator will thank all participants and reiterate how the data collected will be utilised.

At the end of each focus group session, the researcher transcribed the taped session and consolidated this with any written notes that were recorded. An example of this is shown below.

2.4 Example Data capture from Focus Groups

Below is an example transcript (from focus group 3 - FG3) to give a general idea of how the data was captured:

Group No.3

Present:
Antonia (R15)
Ajibola (R16)
Sharma (R17)
Sophie (R18)
Dilly (R19)
Kaveeta (R20)
Sarah (R21)

7 working women aged between 15 – 45.

Q1 Have you ever bought anything online?

R15: 'No, but I have gone as far as putting items in my shopping trolley, mostly books, some electronics.''Because of credit card security, I come from a cash society.'

R16 – R21 (except R15): Yes

Q2 What items were they?

R16: Books, CDs, Videos
R17: Airline tickets only. I had my credit card debited by an unknown company last year and I don't trust any unknown companies. I only trust reputable brand names who can guarantee credit card safety and state it on their website. I got my money back after 6 months, but it knocked my confidence in the security of credit card use on the internet.
R18: Airline tickets, books (credit card security OK with AMAZON and airline companies)
R19: CDS, books and videos
R20: Books
R21: Airline tickets

Q3 How do you buy from traditional stores? (shopping habits)

R16: I don't window shop, and rarely go down the high street for things like clothes. I have a couple of personal shoppers who travel around the world and buy what they know I like and will suit me for work. I do that for all my work clothes. In the last 8 years I have only once bought clothes from the high street (last Christmas). I bought 15 items and ended up returning about 13. It is OK to try things on in the shop, but it is different when you wear them, sit down in them walk around in them.

R18: I am not really keen on buying clothes online. I buy my clothes from fashion design outlets in Italy when I go there. Because I am a small size (English size 8) I can fit into them, they only need shortening. The shop I buy them from do this for free. I pay £20 for clothes worth about £2000! I also know the quality will be good. The same with shoes.

You don't get this service from high street stores. Because of my small size, I don't shop online, I don't think they would have anything to fit me.

I would probably only buy things for the house online.

R20: The only clothes I have ordered online are from Next. This is only because I have seen the directory and know the shop really well. It is only if I am strapped for time. I don't think I would with any other company because what you see is not always what you get. I also can't be bothered with sending it back either. With Next I know I can take it back to the shop. I use it for convenience mainly, but do feel uncomfortable ordering clothes online. Sizes too are confusing, even with Next, because they put American sizes on some things.

R19: M&S are different from other retailers too.

R15: when I want to shop and need something, I enjoy the experience of shopping, time to be on my own without kids screaming and wander around window shopping. Shopping online doesn't offer that same pleasure.

R16: An afternoon off Shopping with a friend or your mum is nice.

R17: Going shopping and having a cup of coffee with a friend and buying personal things, like clothes or jewelry. I would never buy jewelry online for example.

R15: When I shop I don't want to shop online because I can't take them back. Even in normal shops, I don't like shopping for clothes. I don't try things on in the shop, I just take them home and if they don't fit, I wait a while to take them back.

R20: Price is not an issue really. You can get terrific bargains on the high street. Not online. Top brands or outlets are not really what I am looking for. Even fashion outlets are expensive.

R21: I like to buy branded clothes because of the quality. You know you will keep a simple well made jacket for years. Apart from the kids who buy brands to show off the labels, I buy clothes for myself and the quality. I couldn't imagine buying a Ferregamo online. I would only buy it if I could go in the shop and feel and see the quality. I have never had to return a top designer label item of clothing.

R19: You can't see the quality or try things on online, so I prefer to buy in the high street.

R16: It is a pleasure shopping in the high street, not the same as online.

R15: I don't plan to buy anything in advance, I just think, 'oh I am looking a bit dowdy these days, I need a new jumper'.

R17: I do! For a party, I don't like wearing the same thing twice to a party.

R18: If it's a big do, I know well in advance and can plan what to wear and what I need. New shoes etc.

It fills me with dread – what am I going to wear? It is all about getting your hair done and nails etc.

Cheap regular shopping is what I did when I was younger (undergraduate) to less frequent but more expensive shopping for timeless items that will last and will never date. For example, half a dozen classics you have in your cupboard, 'the little black dress'.

R19: I don't ever think of going on the internet specifically, except for now I know Next is online, I may go and check that out! I usually go for brands, MANGO is the business now! They do small sizes too and are good quality.

R15: My key criteria is quality and I don't know if I can get this online, so I won't risk it.

R21: I make the special effort for certain things to travel to where I can get it. For example make up. I wear MAC make up and know the only place I can get it is Selfridges. So I travel to Oxford Circus to get it.
I like the experience too – the buzz of Oxford Circus and all the people, I might even bump into someone I know.

R17: Shops like Selfridges and Harrods – people like to go there because of the experience and the atmosphere.

R19: The brands I like often don't go online because of the risk of diluting their image and their brand name being sold in other countries under their market price.

R20: I shop in other countries, for example America, because I know that I can get branded quality clothes much cheaper which will last. I stock up for 2 years in advance.

R21: Spain aswell – I have relatives there and I ask them to get me specific items for me before I go or to send them to me.

R15: Not even basic tshirts – I still need to try things on.

R1: One size clothes either, everyone is different.

R18: I don't even buy for my husband online. He does for himself sometimes. Work shirts, basic items which you have bought before in the high street and you know will be good quality. Once you know your size and once you have bought once from one company, they update you and he buys again because he is happy with it. Thomas Pink is his preferred brand, but the stripe looked different when it arrived. He still kept it though.

R19: Sometimes you spend all day in front of the computer and you need a break, you don't want to do your shopping online aswell. Going out for an afternoon as a social outing aswell as a shopping trip.

R20: Delivery is also a problem because you have to wait in for it and returns aswell. Or you have to go to the main post office, not just your local post office.

R21 & R17: Personal shoppers are good. This can't be done online. You give them a budget and tell them what you are looking for and they search in the store and come back to you. They do the leg work. Harvey Nics or Selfidges do this. If you have limited time this is good.

Q4: How do you buy online?

R15: If I know what I want, for example I bought some make-up online a few months ago, because I know the brand and colours I like because I have bought them before in Boots, I only bought it online because I could get it cheaper. If I didn't know the product, I probably wouldn't have bought it. I would have had to be very cheap otherwise!!!

R16: I like to buy things that I have bought and tried on before in traditional stores, but often I am not keen to pay over the internet because of credit card security, so I won't do it very much.

R18: I often know what I want more or less, and I might try a few things on in a high street store and then get on the net to search for a few more ideas. If I find what I want online, I might buy it. I also am not too keen on buying online with a credit card – if there was another system of vouchers or something like that, I would probably do it more to save time.

R21: I need to have someone to advise me usually, if it is an expensive item, I like to ask the staff questions about guarantees or returns etc.

Q5: What about the actual purchase – paying for your items online ?

R18: Like I said, I think alot of people are worried about credit card fraud. I certainly am. You have more choice in a high street store and you feel more secure. Even credit is offered for purchases in high street shops. I am not sure if this is available online.

R20: I am worried too, I had extra items added to my card once and it took me almost 18 months to get it sorted. I am reluctant to give it out over the phone either. I might do it for large amounts to travel companies, but only those I know well.

Q6: What's the difference between internet and catalogue shopping?

R16: I have done catalogue shopping in the past. On the internet you can only pay by credit card. With catalogues you have a choice of how to pay and you can pay monthly if you need to. There's the security issue aswell on the internet with credit cards.

R18: With the catalogue, there's a bit of paper which guarantees return of your product and refund of your money. And it is easy to return.

R20: Sometimes what they have in the catalogue and on the internet, they don't have in the store, because it is only for the catalogues or internet.

R21: I am not comfortable either buying online. I have had a terrible experience with delivery of books. I buy other stuff but not clothing online.

The way they show it, the material and colours it looks great on the slim models, but I can't visualize it on me.

R17: Or they are not even on models, you just get a very small picture. You can't gauge exactly what it's like in terms of quality.

R18: Or even the colour.

R19: The time to download images (heavy graphics) takes a long time, especially if you are at work. It costs time and often money if you are paying for the connection at home.

R15: Depends how you are paying for your access. I don't browse at home because I am paying for the call. It suits me because I only use it for email.

If I sat there trawling through sites for fashions, I wouldn't be able to pay for the fashions anyway!

R16: I pay a flat charge monthly and I will sit there for and hour or two at a time, because it is not charged call.

R18/19: I don't browse at work because we have restricted websites

R15: You have to wait in for deliveries and I can't during the week because I work. It is annoying.

R18: I had some major problem with this. I bought some books and didn't want them. They were an editor's choice that I didn't ask for and when I wanted to return it. They billed me and sent me red tickets. There was no return policy. But in the end I sent them back. The book was heavy and it cost a lot to return it. Who pays for this?

R19: Depends on the carrier. Some will leave it with a neighbour or put a note through your door. Others will just ring once and drop in your front garden (providing you have one!).

Yes

R21: There is a shoe shop that you can order shoes online to be sent to your local store and then you can try them on there. That is good. My nearest one is Watford though! I don't mind because I have trouble getting the right shoes because I have very small feet – size 2 especially for work shoes it is difficult! Trainers are not a problem – I can buy kids trainers. If there was a reliable website it would be great.

I also bought shoes online with no problems.

R20: The clothes and shoes need to be a brand I know online and with catalogues (La Redoute). I have been using catalogues for 2 years now.

R19: La Redoute is a good brand.

R17: Yes I have seen their stuff, but not bought anything.

R19: when I have bought on the internet it has been clothes for a particular activity (sports). I have found that when I have been to a small company, they have gone out of their way to be helpful. Larger companies don't bother, because they know they can sell their products anyway.

R16: If you need something now, you know where to get it and you go down to the shop straight away.

R17: Half and half really. Sometimes it's impulse shopping, sometimes I need something, like for a wedding or something, I will plan what to get and where.

R18: When I go on the internet I know what I am looking for. Good quality brown boots to go with my new suit in this style and I know the price I am looking for. With outdoor equipment, you know what you need and what's available in the shops. Where can I get it cheapest?

R15: For me it's the other way around. I look on the internet to see what is available and which stores stock it and then go and see it in the store. It's quicker with the search engines.

R21: For clothes I go to the shops. The things I know are cheaper on the internet, like books and CDs. The internet has a delivery charge which adds to the price anyway. Good deals and offers don't seem to be available on the internet.

R19: I haven't had that experience with sports equipment. The difference in price was that much less online that the delivery charge didn't matter.

R20: It depends what you are looking for I suppose. Casual trousers are better in the high street.

R18: If you are looking for something specific or specialist, you would probably find better online. High street shops only stock generic stuff, your average casual clothes. You would find 5 shops stocking basic white t-shirts, a variety of trousers or skirts etc. If you need a particular type of wet suit… better to look online.

Q11: Do you ever buy on impulse – if so, how?

R18:I did once, because I was looking at Robbie Williams website and saw a special offer. I wasn't really thinking of buying a CD, but the offer of 2 for the price of 1,so I went on to the website link and bought 2 cds. I know his music, so I knew what to expect. I could also listen online too.

R21: I got a special offer in the post with P&O for a discount for booking online. I used it for a day trip last Christmas, I had to go onto their website and put in the promotional code. I hadn't intended to go to France, but this was too good to miss.

Q11a:Did you check other prices and companies?

R21:Yes, but I just searched quickly online, because I knew that prices are usually a lot higher at Christmas.

Q12: Experience of traditional store shopping versus online?

R15: I like going clothes shopping to see what's changed, what fabrics and colours are in. Buying on the internet is more to do with price, the best value, what's in stock, especially if I want something specific.

R20: Yes, I like to browse and have a look at what's available online before going into the physical shops.

Brands mentioned bought:
Next Petite (not online)
M&S (not online)
Dorothy Perkins
Evans

3.0 Semi-Structured Interviews

Interviews can be one to one over the telephone, face to face, by mail or internet, either with

respondents taken from the focus groups to check over their responses and their

understanding, or with other respondents who fit the sample. Questions will be asked with the aim of confirming or defining trends already identified.

In-depth interviewing falls into three types of category: the informal conversational approach, the general interview guide approach and the standardised open-ended interview.

Interviews can be one to one over the telephone, face to face, by mail or internet, either with respondents taken from the focus groups to check over their responses and their understanding, or with other respondents who fit the sample. Questions will be asked with the aim of confirming or defining trends already identified.

3.1 Design Considerations

A series of interviews were conducted with an independent sample of consumers. These consisted of 5 individual interviews designed to explore issues and themes that were emergent from the focus groups. This assisted the researcher to attain a more in-depth understanding and to validate the effectiveness of the focus group results.

A 'semi-structured' interview approach was utilised. According to Morgan (1997), this form of interviewing is open and flexible, allowing the researcher to probe more deeply into unclear issues. It also has the benefit of being easily combined with focus groups and observations. In particular, following up focus groups with interviews enables the researcher to gain depth and detail on topics that were only broadly discussed in the group interviews. A general interview with a list of guide questions was the preferred course for the interview as this flexibility enabled the interviewer to probe certain issues as they arose or act upon certain emotional factors apparent when face to face with a respondent. (Denzin & Lincoln, 2000, Flick, 1998).

In general, the interview process was one of posing open-ended questions to be answered freely by the interviewee. Equally, the interviewer had guideline questions, the order of which were decided during the interview. The interviewer also was sensitive to determine where to probe more deeply and where to let the interviewee run freely with their opinions and when to bring them back to the guidelines. (Denzin & Lincoln, 2000; Flick, 1998).

3.2 Planning and Implementation

Krueger & Casey (2000) suggest that the planning and implementation of interviews should

have a degree of rigour. A clear understanding of the goals and objectives for the interviews are necessary. Including issues that emerged in the focus groups and from the research questions was key (Morgan, 1997). Equally important were the concerns that similar respondents should take part to ensure a uniform sample across the board. The output from the interview sessions includes the following:

- *Questionnaires*
- *Audio Tapes and Transcripts*

The derived information from this set of data includes the coded analysis table for interviews.

3.3 Interview guidelines

To enable the researcher to explore key issues that emerged from the focus groups, a list of guideline open-ended questions were refined following the completion of the focus groups.

An example questionnaire is shown below:

Q1 Have you ever bought anything online?

Q2 What items were they?

Q3 How do you buy from traditional stores? (shopping habits)

Q4:Do you start out with a clear idea of what you want to buy?

Q5:Do you have a general need and go out to look for something ?

Q6:Do you go out just to browse with no real intention of buying (do you ever buy on impluse?)

Q7: How do you buy online?

Q8: Do you set out to buy something with an exact idea in mind?

Q9: Do you have a general need and go out to look for something ?

Q10:Do you go out just to browse with no real intention of buying

Q11:Do you research prices and other products online or in the high street for example?

Q12: What about the actual purchase – paying for your items online ?

Q13: Restrictions?

Q14: Are deliveries a problem?

Q15: If you could return your clothes locally to the local branch, would this help?

Q16: Experience of traditional store shopping versus online?

Q17: What's the difference between internet and catalogue shopping?

3.2.4 An Example Interview

Interviewee 2-I2 is a female, aged 35, and a PA in education. She responded to an email circular by telephoning the enclosed number. I returned her call, described briefly the objectives of the research and she consented to being interviewed. We set an appointment and a venue.

Below is an example transcript (from interview number 2 – I2) to give a general idea of how the data was captured:

Q1 Have you ever bought anything online?

Yes.

Q2 What items were they?

Music CDs and a jumper (once)

Q3 How do you buy from traditional stores? (shopping habits)

I usually go out to buy something if I need a new pair of trousers or top for a party or special occasion. I have certain stores that are my favorites and I go there first to try stuff on and see what's in at the moment.

Q4:Do you start out with a clear idea of what you want to buy?

Usually I have a fairly good idea of what I want to buy, but sometimes, I just browse. I like to plan ahead and budget, so I usually have something in mind. I like to buy well known brands because I know the quality will be high.

Q5:Do you have a general need and go out to look for something?

Yes, usually, I know more or less what item of clothing I want and I then go and look in all of my favourite stores until I find what I want.

Q6:Do you go out just to browse with no real intention of buying (do you ever buy on impluse?)

Rarely, but if I do it is with my friend or my mum to help them buy something and I will look at the same time. I have bought on impulse once when I was with my mum, because there was this outfit that was reduced in the sales and I knew I would never get it again!

Q7: How do you buy online?

I am online alot of the time because I have broadband at work. I do alot of personal admin and banking online. I occasionally search the clothing websites I know of and might look at the prices and items they offer compared to my favourite high street stores. I have only once bought a jumper online and that was because I needed a new top and wanted something warm. It took a bit of searching, but as I didn't have time to go out to look it was quicker online. I wasn't too happy with the quality because I couldn't feel it before I bought it. But it washes quite well. I would have liked to find out more about their other colour options, but they were out of stock. I also couldn't find out much about alternative delivery options and had to phone up the company to get a convenient time and to ask them to deliver it to work.

Q7a – Do you think that you searched first and then thought about buying something before actually physically going online and giving your credit card details?

I think that it was probably not as clear cut as that. I needed a jumper and had most of the information I needed before starting to find one. Once I had checked a few websites out and found what I wanted I just went ahead and bought it. If I had had more time, I might have not bothered to go online, but just gone out to the shops.

Q8: Do you set out to buy something with an exact idea in mind?

Usually no, because I am at work and just browsing.

Q9: Do you have a general need and start by looking online for something ?

Yes, sometimes, but I usually know which brands I am looking for.

Q10:Do you go online just to browse with no real intention of buying

Yes, because I am online most of the time at work. I might check out some new offers or new styles in my spare time or while on the phone waiting to get through.

Q11:Do you research prices and other products online or in the high street for example?

Yes, unless it is something I have bought before and know the price, where to get it and am happy with it.

Q12: What about the actual purchase – paying for your items online?

Well, I used to be worried about credit card security, but I haven't ever had any problems. I had a friend who bought stuff from the States with her card and was charged twice. I usually only buy from the UK. In a high street store the payment options are numerous – cheque, credit, cash, debit card, voucher etc….

Q13: Restrictions?

I don't like to buy things I haven't physically seen or touched. In a high street store, you can also try things on or out – the quality is what I am worried about online, the same as mail order.

Q14: Are deliveries a problem?

I suppose I am used to it now, but you can't have things delivered the same day – so when you buy something you have to wait at least 4 days before you see the product. I therefore have to plan well in advance if I want to buy something online – especially in case I have to return it.

Q15: If you could return your clothes locally to the local branch, would this help?

I suppose if I had time. But then, I would have probably gone there in the first place if it was that close by. I generally go by brands and retail chains because I know their sizing and what is going to fit me, as well as quality.

Q16: Experience of traditional store shopping versus online?

I think that traditional will stay around for a long time. The internet is like mail order, an alternative for people who don't have time or anywhere nearby to go to the physical store. I think its great for convenience, but unless you are sure of the quality and the sizing, and you don't need it immediately, then the internet is fine.

Q17: What's the difference between internet and catalogue shopping?

Like I said, it is a different way of shopping. Mail order is probably better in that you can always look at the catalogue and phone up to make an order – in fact you can probably ask more questions via mail order than online. With mail order you are restricted to one catalogue and you then have to go out or search online to look for alternatives. Mail order also offer better payment methods, credit and long term payment which you can't get on the internet.

Q18:Brands mentioned bought online:

My favourite brands are Next and Marks & Spencer.

4.0 Observations

Two key observation techniques were combined to capture observational data: Process Monitoring and Cognitive walk-through.

4.1 Walk-Through

Derived from cognitive psychology (Newell & Thomas, 1972), the 'walk-through' technique is extensively used in HCI in order to gather data about the underlying decisions the user is taking while using the system ((Preece, 1993). This is a useful means of data capture often using a sample of representative users,

As utilised here, the observer gathered data by asking the subject to verbalise their thought processes and actions as they went about the business of shopping online (see the guideline questionnaire in section 4.3 below). Consumers were asked to describe the questions raised in their minds, the plans and strategies underlying as well as the inferences they were making from what they were seeing onscreen. The resulting descriptions known as Thinking Aloud Protocols (Nielsen, 1993) are used for analysis.

4.2 Process Monitoring

Wilkie (1994), details an approach to observational techniques which he calls Process Monitoring. Elements of this approach were found to be suitable for investigating consumer behaviour on the internet due to the focus on capturing the interaction process. This focuses on capturing the decision process itself, as it occurs, and can be carried out in three different ways:

A. Verbal monitoring methods

This method requires the consumer to discuss his/her thought processes when making a decision as it occurs. The researcher can either accompany the consumer on a shopping trip ask them to think back and discuss their decisions after they have made a purchase.

B. Physical monitoring methods

This is usually represented by an Information Display Board (IDB) where the array of information available to the consumer is displayed on a physical board or chart in the for of a matrix of slots. The consumer is informed that he/she can make a purchase decision

in any product category and can obtain any information required simply by physically selecting it form the chart. This allows the researcher to see how many slots the consumer consults and in what order before making a decision. (Wilkie, 1994).

C. Observational monitoring methods

This method can take the form of an 'eye-camera', where the consumer's eye path is recorded when confronted with various product labels or IDB displays. This is less popular than the previous methods, due to cost considerations (only one consumer can be observed at a time) and the observation of physical movements does not reveal much about the thinking processes carried out.

The investigator chose to use verbal monitoring methods and a variation of the observational monitoring methods (A and C above) (see section 4.4).. The verbal monitoring method enabled the researcher to talk through the decision process of the consumer as he\she was making a purchase online. This was done by asking relevant questions as the consumer passed from one website to another, observing their reaction and listening to their opinions as they were offered choices. A and C above, were combined with the cognitive walkthrough approach, as appropriate, in order to ensure rigourous tracking and recording of user-interface and technology related session events.

4.3 Observations in Practice

All the observation sessions were generally carried out with consumers taking the observer through their typical shopping experience on the internet. The observer, watched, listened and asked questions along the way (shadowing). Whenever possible the subject articulated the reasons why.

Once the focus groups and interviews had taken place, 5 observations were carried out. This involved a selected respondent attempting to purchase a sensory product online, while the researcher passively observed what was happening. At the end of the 'shopping session' the respondent discussed their opinion of how they had bought or tried to buy online.

Each focus group, interview and observation was tape recorded, with the explicit consent of each respondent, to enable the researcher to remain 'hands-free' during the sessions and to be able to refer back to the results afterwards for analysis.

4.4 Design Considerations

In conjunction with the use of focus groups and interviews, 5 observations were carried out. These observations carried out were in the form of so-called 'cognitive walkthroughs'(Newell & Thomas, 1972) with the respondents, discussing their shopping experience on the internet as it was occurring. Data from a *Walk-Through* session may be converted to quantitative form, or it may be used to provide a qualitative summary of phenomena and problems experienced when users performed specific tasks (Mack et al., 1987). One approach involves the gathering of data by asking users to verbalise their thought processes and actions as they use the system. Users may be asked to describe the questions raised in their minds, what plans and strategies they are using, and the inferences or knowledge they are using to perform particular tasks (Mack et al., 1987). The resulting descriptions, sometimes known as *Verbal* or *Thinking Aloud Protocols,* represent the data used in the analysis of an interaction session (Nielsen, 1993). Sometimes video recordings are used if the evaluator is interested in capturing contextual information in addition to a user's utterances, including background sounds and operations, interruptions, activities of the user on screen and keyboard, and even the users eye movements (Preece, 1993).

In addition, simple participant observation was utilised when appropriate (Sperschneider & Bagger, 2003). Flick (1998) explains that the main features of participant observation are that the researcher '*dives headlong onto the field, observes from a member's perspective'*. Equally, this technique has two aspects to it: firstly, to enable the researcher to become a participant by gaining access to the field and, secondly, to be able to focus on the key research questions at hand. This technique enables a more natural gathering of data by gathering data on a larger range of behaviours, a greater variety of interactions with the participants and a more open discussion of the research topic (Morgan,1997).

4.5 Planning and Implementation

The subjects for observation were contacted via e-mail and responded to arrange times. It was key that the respondents take part in the observation not too long after the interviews and

focus groups, because the researcher still had the issues and emergent themes fresh in the mind.

A scenario was set with each observation respondent. The scenarios which were observed concerned the online purchase of a pre-agreed item. In certain cases, the researcher discussed the shopping experience on the internet as it was occurring, in the others participant observation was utilised.

In the latter, the researcher passively observed what was happening taking notes where appropriate. At the end of the 'shopping session' the respondent described their thoughts and motivations. Each session was tape-recorded, with the prior consent of each respondent. This enabled the researcher to remain 'hands-free' in order to take notes during the session. Tape recording also was key to enabling the researcher to refer back to the session during post observation analysis.

In each session, the participants were given £20 to spend and then these were followed up a week or two later to determine their post-purchase experience once the product had been delivered. Approximately a half hour per interviewee was budgeted to allow them to search and make a purchase online. The output from the observation sessions includes the following:

- *Observation log sheets*
- *Questionnaires*
- *Audio Tapes and Transcripts*

The derived information from this set of data includes the coded analysis table for the given observation.

4.6 Observation guidelines Sheet

A guideline log sheet was utilised to ensure that relevant data were noted systematically once an observation session started. This was utilised for both 'participant observation' and 'cognitive walkthroughs'. This is shown below in Exhibit A-1.

The log sheet is used to record unstructured **events** taking place during each task scenario, based on 5-minute slots. Extra pages are added as required to record more detail for specific

events or to record events taking place outside of the 30-minute expected duration of the online shopping experience. Some guidelines keys include:

- **Type** of event: can include ; Browsing (**B**), Search (**S**), Follow-ups (**F**), Rejection (**R**), Start Purchase Process (**PS**), Complete Purchase Process (**PC**),
- **Description**: describing each action noted and. and recording what triggered it.
- **Comments**: providing own comments with respect to the observation, (e.g. technology problems, web-site design, style issues).
- **Time**: recording the duration of each event (e.g. Browsing = 25mn) (e.g. Completing Purchase Process= 10mn).
- **Subject**: identifying individuals using a code rather than names.

	Events taking place during an Observation session				Subject
	Type	**Description**	**Comments**	**Time**	
00-05					
05-10					
10-15					
15-20					
25-30					
35-40					

Exhibit A-1: Observation log sheet.

In both types of observations questions were asked during and post-observation. An example guideline questionnaire for observations is shown below.. The questionnaire is designedto be flexible, with the possibility of probing, expanding and digressing if necessary in relation to a particular issue of interest:

Observation questions:

Q1 Have you ever bought anything online before?

Q2 What items were they?

Q3 How do you buy from traditional stores? (shopping habits)

Q4: How do you usually buy online?

Q5: Do you have an idea of an item of clothing you would like to buy online today?

Q6: (If yes) Do you know where to look for it?

Q7: (If no) can you explain how you are going about looking for something?

Q8: (Ask pertinent questions to how the interviewee is searching, problems encountered and take notes about method of searching and purchasing).

Q9: Do you ever feel tempted by the other offers you see online? Have you ever bought on impulse?

Q10: What do you feel about only receiving your delivery in a few days time?

Q11: Can you let me know once you have received the product and I will ask you a few more questions? Thank you.

Q12: Note which product and brand was bought.

Q13: Follow up two weeks later to find out how delivery and consumption occurred.

Q14: Would you do it again?

4.6.1 Example Data capture from Observation Questionnaire

Below is an example transcript (from observation number 3 – O3) to give a general idea of how the data was captured:

Q1 Have you ever bought anything online before?

Yes, about 6 months ago. I didn't have much luck though because it took 3 weeks to be delivered and then I had to return it because it didn't fit.

Q2 What items were they?

A pair of jeans, from M&S, but they were too big.

Q3 How do you buy from traditional stores? (shopping habits)

I usually go to traditional stores if I want to buy clothes, purely because I can try things on. I can also get it straight away.

Q3a: Did you have a general idea of what you wanted to buy or do you sometimes know exactly?

I generally know that I need to get some new clothes and have an idea of where I can go to buy them.

Q3b: Do you ever buy on impulse?

Yes, if I go to the shops in my lunch break and I see a bargain too good to miss, I might buy it.

Q4: How do you usually buy online?

I don't usually go online to buy, but to search for prices and styles. I usually look at books and CDs to buy online and I've bougt videos before online. Usually I know what to expect with videos and books, although I did have to return a video once because the quality was very bad. I'm also reluctant to buy clothes because I don't know what the quality and size will be like.

Q5: Did you already have an idea of the particular item of clothing you wanted to buy online today?

Well, I wanted to buy a pair of black trousers, I felt that Debenhams have a website that I'd like to try.

Q6: (If yes) Do you know where to look for it?
I think if I put Debenhams in the search engine and it should come up with the Debs website. (Does so). Look, it has come up with it and there are other clothing retail sites that have come up too. I might have a look at those if I don't find what I want.

Q7: (If no) can you explain how you are going about looking for something?

Q8: (Ask pertinent questions to how the interviewee is searching, problems encountered and take notes about method of searching and purchasing).

(Website takes a while to load up) This is slow, I get annoyed sometimes and click onto something else if it takes too long. There we are (Debenhams website comes up) – gosh this is not straightforward, there is a lot to choose from. Ladies clothing is what I want. Loads of different kinds of trousers…maybe I'll see what these are like closer up, if I click on it, does the picture get bigger? Yes, hmm, there isn't a picture of someone wearing them. I wonder if they are the sort of trousers I am looking for, does it give lengths? Yes, but how do I know how baggy they are? Hmm. I think I will go back and try another website, these seem quite expensive, plus there is the delivery charge to pay.

(Clicks back and clicks on Marks & Spencers website). This might be better, although M&S are generally more expensive than Debs….

(Website comes up quickly) That's quick, now womenswear, how much were Debs' black trousers? I think they were £40. If M&S have a sale, the price might be better.There we are (the womenswear section comes up with choices of tops, trousers, suits and a plus size section too). Trousers is what I want. Oh, they are not all being worn by a model either, some you can see what they will be like on. I can't tell the quality or feel of the fabric, but it tells me what fabric they are made from. The prices are better too – look even some at £19.50 and £16.50!

I saw something just then about free delivery if I spend over £30, tempting….I could get a top to go with the trousers and not pay the delivery. I think I might do that if I can find a top. Let's put these trousers into my shopping basket, size 14, long, colour black. Now if I click back to the previous page I can see the tops. If I choose tops, hey this is good, there is a big selection. It may take a while to trawl through this. What are the prices like? Oh, nothing under £15 – what if I look at another section, sports for instance. There are a few here for £10 – £15, yes I think I'll go for one of these. I 'll put it in my basket and then where do I find out about the free delivery. (Chooses a pink top in size 14 and adds it to her shopping basket).

Oh, here we are, look it says there is a promotional code I need. I 'd better click on this to find out more. I need to put in this promotional code when I get to the checkout and submit page. It doesn't say whether

the total amount including delivery is £30 or if what I am buying needs to be at least 30 and then delivery is waived. I presume it's that. Let's try, I'll go back to my shopping basket. How do I do that? I had better put another item in to be able to find my basket and then I can delete it later (does so). There, I have 2 pairs of trousers and I only want one. I'll delete this and what is the total? It gives me the total with the delivery. Do I want that? I want to know what it is without the delivery. Oh well. It looks like I chose a top that is too cheap – £10, because the total is £29.50. I probably won't get free delivery with that. I'll have to go back and change my choice. The only reason I took an extra top was to get the free delivery. I can't be bothered because the next price up was £15.

Let's just try with this £10 top and the promotional code and see what happens. (Inputs all of the information necessary on the payment page). This is the bit I hate, filling in the forms and giving out personal information. I know it is necessary so that they can deliver to the right place, but I resent having to give out my email and phone number. Even if there is a little box to click to say I am not interested in promotional offers, someone somewhere will get hold of my address and send me stuff.

Let's see what it says about the free delivery. There is nowhere to put in the code yet. Maybe on the payment page. No, look at that, I have to put in my credit card details before I can put in the code and see the total delivery charge. That is wrong. I should be able to see how much my total is before giving out my card details.

I don't know if I can cancel my order later if I give my details now and the delivery is not free. I think I will forget the top and just go with the trousers. Or should I go back and change the top. I wish I could just ask someone, but there is no one to ask. Perhaps in the FAQ page, if there is one. Let's see. Here we go, 'help'. Oh, nothing much here. 4 FAQ. There is a contact number or email that I can use, but I can't be bothered. I think I will risk it and order the top and trousers in the hope that delivery will be free.

(Goes back to payment page and proceeds to put in the details of her credit card). Oh no, I have just seen that they can deliver between 8am and 6pm. I can't take a whole day off work to wait in. Maybe I can get it delivered to work. Here we are, there is an option. I'd better do that, although I don't think there is anyone on reception at 8am. Maybe the security guard can take it. I'll have to have a word with him.

There – shall I press the submit button? OK. Done, just as I thought, the delivery has been charged. There is a confirmation page and an email will be sent confirming my details. I think I will reply to that email and ask whether they can waive the charges as I spent £29.50! I don't know if it is worth all the hassle though.

Q9: Do you ever feel tempted by the other offers you see online? Have you ever bought on impulse? (Yes, this just happened)

Q10: What do you feel about only receiving your delivery in a few days time?

I am not too bothered because I don't need it immediately. The only worry I have is that I might not be happy with it when I try it on because I haven't been able to hold it up or feel the quality and maybe their size 14 is small. I usually try 4 or 5 pairs of trousers on in shops before I find one I like.

The other thing is that I am just worried they might try to deliver at 8am and no one will be there. I suppose they will try again the next day.

Q11: Can you let me know once you have received the product and I will ask you a few more questions? Thank you. Yes.

Q13: Follow up two weeks later to find out how delivery and consumption occurred.

Met interviewee again two weeks later. The delivery had been delivered on schedule, but the interviewee was not happy with the trousers because they were too small. She had the option of going into a store to change them or to re-order online. She opted to go back to the store. The top was fine, but she said the price was expensive as the quality was not the best.

Q14: Would you do it again?

I don't think I would buy online again, at least not clothes. I need to try them on first. I think I might research to see prices first and then go into the shop. The prices in the shops are not always the same as online though.

APPENDIX 2 : RESEARCH DESIGN- ANALYSIS TECHNIQUES

1.0 Overview of Qualitative Analysis Approaches Used

The discussions above and those in chapters 4 and 5 underline the complexities involved in attempting to gain an-depth understanding of consumer behaviour. For instance, it has been highlighted that the factors and mechanisms involved can often be tenuously based on peer admiration, psychological and social forces. Equally difficult, is how to overcome the analytical problems. Once the data has been collected, the interpretation must be meticulously applied, so as not to make in appropriate or incorrect generalisations. As described in Chapter 4, the over arching data collection and analysis framework is that of Grounded Theory (GT). This is dealt with in more detail in the next section.

2.0 Grounded Theory

Chapter 4 described how the chosen research framework, Grounded Theory, closely aligned to an Interpretivist tradition, can bring benefits. Described as *"the understanding of group action and interactions with an inevitable interpretation of meaning made by the social actors and by the researcher"* (Miles & Huberman, 1994), its key strengths and weaknesses were examined in section 4.3.2 (chapter 4).

Strauss & Corbin (1998) define Grounded Theory as '*a theory that was derived from data, systematically gathered and analyzed through the research process'* The researcher begins with a research situation and attempts to understand the various roles within that situation. This can be done through observation, conversation or interview, following most qualitative research methods (Dick, 2002). . This approach is one of an '*understanding [of] group action and interactions with an inevitable interpretation of meaning made by the social actors and by the researcher*' (Miles & Huberman, 1994).

Grounded Theory (GT) has many aspects which point to its appropriateness for this particular investigation. The first is that it provides a reasonable means of handling many of the detailed methodological issues related to the study of individuals and groups at close quarters (see section on focus groups (4.5.2). The second aim of this research, is to move from such a

deeper understanding of consumers' perceptions and behaviour to modelling that behaviour. GT has a good potential to enable the researcher to follow such a path because it aims to provide a meaningful guide to action at each stage from data collection to theory building. Another reason to implement GT that it appears to have an inherent flexibility where the data collection times and methods can be varied as the study proceeds and this can provide confirmation that the researcher's understanding is correct. (Miles & Huberman, 1994). Equally, reliability is ensured due to the constant interplay between the data collection and analysis (Flick, 1998; Myers, 1997). Additionally the use of triangulation can improve reliability through 'cross-checking' of theories with two or more techniques. (Denzin & Lincoln, 2000). In summary, 5 main points are key to GT:

a) Theoretical sampling
b) Constant comparison (circularity)
c) Data collection techniques
d) Coding & memo-ing for analysis
e) Emergence

a) Theoretical sampling

Where the selection of samples changes or emerges 'as the research progresses' to further increase diversity in useful ways (Dick, 2002). Flick (1998) contends that this is only feasible *'as a strategy if the consequence is appreciated that not all interviews are completed in the first stage and the interpretation of the data starts only after interviewing is finished.'* As the theory emerges it points to more appropriate groups of respondents who would be useful to interview.

b) Circularity

A function of the researcher comparing data set to data set and later on in the process with the theory (Dick, 2002). In Exhibit 4-1 below, Flick (1998) outlines the circularity particular to Grounded Theory, as opposed to the traditional linear model used in research (generating a theory and hypothesis, followed by operationalisation, sampling, collecting data, interpretation and finally validation). These stages are usually all carried out one after the other and not overlapping. In Flick's model, he shows how there is a constant comparison between the collection and interpretation which equally impacts the samples that are selected.

## c) Data collection techniques (see Appendix 1 above)

Most data collection methods can be used for GT (Pandit, 1996) and focus groups are particularly suited to it (Dick, 2002).

d) Coding and memoing for analysis

Strauss & Corbin (1998) suggest that coding in the case of GT should be theoretical, where the coding is done on '*on the basis of concepts and how they vary according to their properties and dimensions and not just sticking to one case'*. This enables the researcher to apply the similarities and variations to different categories/samples and a clearer picture should emerge.

e) Emergence

The key characteristic of GT is that the purpose of the investigation is to build theory, not just working with a single case and then proceeding to the next one (Strauss & Corbin, 1998). In other words, the first case can teach the researcher something about the other cases. The idea is to move from the specific to the general and this 'emerges' as the research progresses.
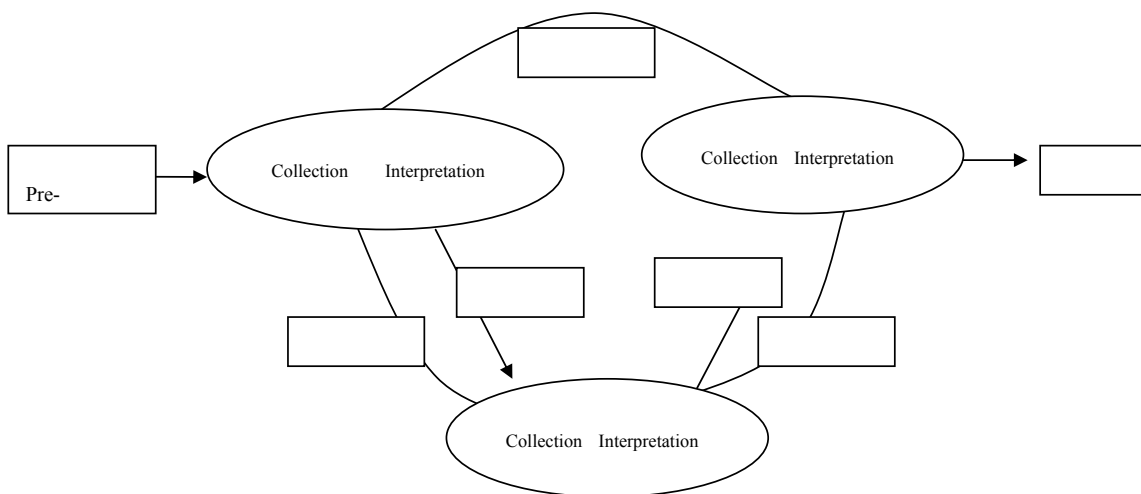
Exhibit A-2: Circular Model of the Research Process (Flick, 1998)

2.2 Consumer Interaction Codes for observations and interviews

The main issues which were emergent were about the purchasing process on the internet and the different types of buyer on the internet. These have been coded and categorised as shown in Exhibit A-1 below, with the main codes indicated on the right.

Bargain Seeker	**BS**	←→	**Prior Knowledge Buyer**		PKB
Browser	**B**	←→	**Functional Buyer**		FB
Planner	**Pl**	←→	**Impulse Buyer**		IB

Exhibit A-3: Types of Internet Buyer

The analysis of the focus groups, observations and interviews indicated certain types of internet shopper identified during the focus groups: Planner (Pl), Bargain Seeker (BS), Browser (B), Impulse Buyer (IB), Functional Buyer (FB), Prior Knowledge Buyer (PKB). These were selectively coded to show 6 different types of shopper (see Exhibit 5-2 above).

Further analysis narrowed these down into 3 types of basic shoppers on the internet. The first three: P, BS and B could be incorporated into PKB, FB and IB respectively (outlined in Exhibit A-3 above). A planner usually has prior knowledge of what to buy and where to buy it and shops with a purpose. A bargain seeker is looking for something functional but at a good price and it is therefore possible to be incorporated it under the same umbrella as a functional buyer or even a prior-knowledge buyer. A browser has not set out to buy anything, but if they do, it is most likely on impulse.

The main underlying motivations for shopping online are shown in general. These represent the respondents' key motivations expressed during the focus groups, interviews and observations.

The main codes that emerged are summarised in Exhibit A-2 below. The 3 main emergent categories that were repeatedly apparent were respondents':

- Underlying Motivations (UM)

- Key Decision Processes (KDP) and,

- Problems with Sensory Products Online (CPO).

A. Underlying Motivations (UM)

The UM code was given to reasons for shopping on line, such as: lack of time to shop; the respondents had shopped online before and were confident with it; less effort required than going to a traditional store. It also reflected a belief that there were better prices online; lack of choice or the required specialist product not available in other channels including the high street. It also reflected a feeling that they would not find the right product for a variety of reasons including that respondents were a larger, smaller or different size than the standard sizes offered. Some respondents found it more fun to shop on the internet and felt it was easier to engage and complete the purchasing process in a shorter period of time. Others specified that wider availability of products online; their desire to browse and sometimes buy impulsively online were key motivators. Some respondents reflected that they like to browse online simply to get ideas and prices and then go to the high street stores to try items out or on before purchasing in the high street or the internet-depending on price and availability.

B. Key Decision Processes When Shopping Online (KDP)

The KDP code was given to any issue relating to the key decision making process when shopping online: issues such as how advertising online can influence decisions – online banner advertising, 'flashing signs' to distract consumers as they browse.

High street store media can be more persuasive or invasive than online stores and more easily influence consumers as they browse – displays or demonstrations by sales staff or even recommendations can sway consumers more readily than a banner online that can be ignored. Equally, trying on a garment or testing a product in-store can also heavily influence a potential customer. However, online there are no available staff to help with queries immediately – sometimes a message can be sent via email or a consumer can chat virtually with a sales representative, but usually the response is not immediate and the product is not available to touch or try out.

Online purchasing doesn't suffer with overcrowding or queuing, whereas traditional stores sometimes do – however, slow downloading of images and difficult navigation are also a problem for some online consumers.

Credit card security online is still an issue with most consumers and the variety of payment methods in a traditional store are preferred.

Some respondents said they preferred to shop online because they felt more in control (these were mainly 'planners' - see Exhibit 5-2 below) because there were no 'invasive' sales personnel, no peer pressure or family with them. However, other respondents complained about getting easily interrupted when shopping online and 'abandoning shopping carts' to answer the phone, door bell, or family/colleague interrupting.

C. Sensory Products Online (CPO)

These codes were applied to anything that related particularly to sensory products (see glossary) being purchased online. For respondents, the image online was of utmost importance, due to the fact that they were unable to touch or try out products, and when the images were slow to download this gave rise to frustration, and sometimes abandonment.

Navigating through the web to find the appropriate product was also an issue – particularly for newcomers to shopping online. Some were apprehensive of using the internet to find what they needed, others, even those with experience, still had problems finding the appropriate website.

GENERAL THEMES:

UM **Underlying Motivations for Purchasing Online**	KDP **Key Decision Processes when Shopping Online**	CPO **Sensory Products Online**
Lack of Time	Media influences such as online banner	Technical – slow loading images
Shopped online before	advertising can influence consumers'	Web navigation a problem for newcomers
Effort	decisions but in a less physical way than	Delivery – not always straightforward
Bargain seeker	High street stores	Need to touch and try on
Lack of choice in high street	Touching, trying on and POS in high street store	
Specialist product required	can influence consumers	
Can't find product in high street	No available sales assistants online	
Sizing a problem, more choice online	Overcrowding and queuing	
Fun/easy	Payment methods online a problem	
Availability	Like browsing online – more in control	
Impulse buy	Not being able to touch or try on online a problem	
Likes browsing on web but buys in high street	Credit card security still an issue	
	Interruptions when online	

Exhibit A-4: Main Codes Derived From Data

2.3 Example of Coding in Focus Groups

Below is an exapmle of the transcript coding from one of the focus groups:

Group 3

Present:
Antonia (R15)
Ajibola (R16)
Sharma (R17)
Sophie (R18)
Dilly (R19)
Kaveeta (R20)
Sarah (R21)

working women aged between 15 – 45.

R15: 'No, but I have gone as far as putting items in my shopping trolley, mostly books, some electronics.''Because of credit card security, I come from a cash society.'
R16 – R21 (except R15): Yes

Q2 What items were they?
R16: Books, CDs, Videos
R17: Airline tickets only. I had my credit card debited by an unknown company last year and I don't trust any unknown companies. I only trust reputable brand names who can guarantee credit card safety and state it on their website. I got my money back after 6 months, but it knocked my confidence in the security of credit card use on the internet.
R18: Airline tickets, books (credit card security OK with AMAZON and airline companies)
R19: CDS, books and videos
R20: Books
R21: Airline tickets

Q3 How do you buy from traditional stores? (shopping habits)
R16: I don't window shop, and rarely go down the high street for things like clothes. I have a couple of personal shoppers who travel around the world and buy what they know I like and will suit me for work. I do that for all my work clothes. In the last 8 years I have only once bought clothes from the high street (last Christmas). I bought 15 items and ended up returning about 13. It is OK to try things on in the shop, but it is different when you wear them, sit down in them walk around in them.
(P1) (FB) (PKDM)

R18: I am not really keen on buying clothes online. I buy my clothes from fashion design outlets in Italy when I go there. Because I am a small size (English size 8) I can fit into them, they only need shortening. The shop I buy them from do this for free. I pay £20 for clothes worth about £2000! I also know the quality will be good. The same with shoes.
You don't get this service from high street stores. Because of my small size, I don't shop online, I don't think they would have anything to fit me.
I would probably only buy things for the house online.
(P1) (FB) (PKDM)
R20: The only clothes I have ordered online are from Next. This is only because I have seen the directory and know the shop really well. It is only if I am strapped for time. I don't think I would with any other company because what you see is not always what you get. I also can't be bothered with sending it back either. With Next I know I can take it back to the shop. I use it for convenience mainly, but do feel uncomfortable ordering clothes online. Sizes too are confusing, even with Next, because they put American sizes on some things.
(FB) (FDM)
R19: M&S are different from other retailers too.
R15: When I want to shop and need something, I enjoy the experience of shopping, time to be on my own without kids screaming and wander around window shopping. Shopping online doesn't offer that same pleasure.
(B) (FB) (FDM)

R16: An afternoon off Shopping with a friend or your mum is nice.
R17: Going shopping and having a cup of coffee with a friend and buying personal things, like clothes or jewelry. I would never buy jewelry online for example. (B) (FB) (FDM)
R15: When I shop I don't want to shop online because I can't take them back. Even in normal shops, I don't like shopping for clothes. I don't try things on in the shop, I just take them home and if they don't fit, I wait a while to take them back.
(IB) (B) (IDM)
R20: Price is not an issue really. You can get terrific bargains on the high street. Not online. Top brands or outlets are not really what I am looking for. Even fashion outlets are expensive.
(BS) (IB)

R21: I like to buy branded clothes because of the quality. You know you will keep a simple well made jacket for years. Apart from the kids who buy brands to show off the labels, I buy clothes for myself and the quality. I couldn't imagine buying a Ferregamo online. I would only buy it if I could go in the shop and feel and see the quality. I have never had to return a top designer label item of clothing.
(PKB) (PKDM)
R19: You can't see the quality or try things on online, so I prefer to buy in the high street. (FB) (FDM)
R16: It is a pleasure shopping in the high street, not the same as online.
R15: I don't plan to buy anything in advance, I just think, 'oh I am looking a bit dowdy these days, I need a new jumper'. (IB) (IDM)
R17: I do! For a party, I don't like wearing the same thing twice to a party. (Pl) (FDM) (PKDM)
R18: If it's a big do, I know well in advance and can plan what to wear and what I need. New shoes etc.
It fills me with dread – what am I going to wear? It is all about getting your hair done and nails etc.
Cheap regular shopping is what I did when I was younger (undergraduate) to less frequent but more expensive shopping for timeless items that will last and will never date. For example, half a dozen classics you have in your cupboard, 'the little black dress'. (Pl)
R19: I don't ever think of going on the internet specifically, except for now I know Next is online, I may go and check that out! I usually go for brands, MANGO is the business now! They do small sizes too and are good quality. (FB)
R15: My key criteria is quality and I don't know if I can get this online, so I won't risk it. (Pl)
R21: I make the special effort for certain things to travel to where I can get it. For example make up. I wear MAC make up and know the only place I can get it is Selfridges. So I travel to Oxford Circus to get it.
I like the experience too – the buzz of Oxford Circus and all the people, I might even bump into someone I know. (PKB) (PKDM)
R17: Shops like Selfridges and Harrods – people like to go there because of the experience and the atmosphere. (B)

R19: The brands I like often don't go online because of the risk of diluting their image and their brand name being sold in other countries under their market price.
R20: I shop in other countries, for example America, because I know that I can get branded quality clothes much cheaper which will last. I stock up for 2 years in advance. (Pl)
R21: Spain aswell – I have relatives there and I ask them to get me specific items for me before I go or to send them to me. (Pl)
R15: Not even basic tshirts – I still need to try things on. (FB) (FDM)
R1: One size clothes either, everyone is different.
R18: I don't even buy for my husband online. He does for himself sometimes. Work shirts, basic items which you have bought before in the high street and you know will be good quality. Once you know your size and once you have bought once from one company, they update you and he buys again because he is happy with it. Thomas Pink is his preferred brand, but the stripe looked different when it arrived. He still kept it though. (PKB) (PKDM)
R19: Sometimes you spend all day in front of the computer and you need a break, you don't want to do your shopping online aswell. Going out for an afternoon as a social outing aswell as a shopping trip. (B)
R20: Delivery is also a problem because you have to wait in for it and returns aswell. Or you have to go to the main post office, not just your local post office.
R21 & R17: Personal shoppers are good. This can't be done online. You give them a budget and tell them what you are looking for and they search in the store and come back to you. They do the leg work. Harvey Nics or Selfidges do this. If you have limited time this is good.(PKB) (PKDM)

Q4: How do you buy online?
R15: If I know what I want, for example I bought some make-up online a few months ago, because I know the brand and colours I like because I have bought them before in Boots, I only bought it online because I could get it cheaper. If I didn't know the product, I probably wouldn't have bought it. I would have had to be very cheap otherwise!!!(PKB) (PKDM)

R16: I like to buy things that I have bought and tried on before in traditional stores, but often I am not keen to pay over the internet because of credit card security, so I won't do it very much. (PKB) (PKDM)
R18: I often know what I want more or less, and I might try a few things on in a high street store and then get on the net to search for a few more ideas. If I find what I want online, I might buy it. I also am not too keen on buying online with a credit card – if there was another system of vouchers or something like that, I would probably do it more to save time. (PKB) (PKDM)
R21: I need to have someone to advise me usually, if it is an expensive item, I like to ask the staff questions about guarantees or returns etc. (FB) (FDM)

2.4 Example of Coding of Interviews

Below is an example of coding applied to the transcript of one of the interviews:

INTERVIEW NO. 2

Q1 Have you ever bought anything online?
Yes.

Q2 What items were they?
Music CDs and a jumper (once)

Q3 How do you buy from traditional stores? (shopping habits)
I usually go out to buy something if I need a new pair of trousers or top for a party or special occasion. I have certain stores that are my favorites and I go there first to try stuff on and see what's in at the moment.

Q4:Do you start out with a clear idea of what you want to buy?
Usually I have a fairly good idea of what I want to buy, but sometimes, I just browse. I like to plan ahead and budget, so I usually have something in mind. I like to buy well known brands because I know the quality will be high. (B) (Pl) (PKB) (FB)

Q5:Do you have a general need and go out to look for something?
Yes, usually, I know more or less what item of clothing I want and I then go and look in all of my favourite stores until I find what I want.

Q6:Do you go out just to browse with no real intention of buying (do you ever buy on impulse?)
Rarely, but if I do it is with my friend or my mum to help them buy something and I will look at the same time. I have bought on impulse once when I was with my mum, because there was this outfit that was reduced in the sales and I knew I would never get it again! (IDM)

Q6: What about online?
I see offers for some great bargains when I am browsing and am often tempted. It depends if I have the time to take it further. I once did for a CD that was on special offer, I was looking at clothes and thinking about buying something for a party, funnily enough, then I saw this offer on a brilliant CD I couldn't resist. (SIM)

Q7: How do you buy online?
I am online alot of the time because I have broadband at work. I do alot of personal admin and banking online. I occasionally search the clothing websites I know of and might look at the prices and items they offer compared to my favourite high street stores. I have only once bought a jumper online and that was because I needed a new top and wanted something warm. It took a bit of searching, but as I didn't have time to go out to look it was quicker online. I wasn't too happy with the quality because I couldn't feel it before I bought it. But it washes quite well. I would have liked to find out more about their other colour options, but they were out of stock. I also couldn't find out much about alternative delivery options and had to phone up the company to get a convenient time and to ask them to deliver it to work. (FDM)

Q7a – Do you think that you searched first and then thought about buying something before actually physically going online and giving your credit card details?

I think that it was probably not as clear cut as that. I needed a jumper and had most of the information I needed before starting to find one. Once I had checked a few websites out and found what I wanted I just went ahead and bought it. If I had had more time, I might have not bothered to go online, but just gone out to the shops.(FDM)

Q8: Do you set out to buy something with an exact idea in mind?

Usually no, because I am at work and just browsing. (B)

Q9: Do you have a general need and start by looking online for something ?

Yes, sometimes, but I usually know which brands I am looking for. (FDM)

Q10:Do you go online just to browse with no real intention of buying

Yes, because I am online most of the time at work. I might check out some new offers or new styles in my spare time or while on the phone waiting to get through. I don't like to have to buy stiff at the last minute, so I like to keep informed. (B)

Q11:Do you research prices and other products online or in the high street for example?

Yes, unless it is something I have bought before and know the price, where to get it and am happy with it. I usually go out to buy something with a general idea in mind, with an open mind. (FDB) (FDM)

Q12: What about the actual purchase – paying for your items online?

Well, I used to be worried about credit card security, but I haven't ever had any problems. I had a friend who bought stuff from the States with her card and was charged twice. I usually only buy from the UK. In a high street store the payment options are numerous – cheque, credit, cash, debit card, voucher etc….(P)

Q13: Restrictions?

I don't like to buy things I haven't physically seen or touched. In a high street store, you can also try things on or out – the quality is what I am worried about online, the same as mail order.

Q14: Are deliveries a problem?

I suppose I am used to it now, but you can't have things delivered the same day – so when you buy something you have to wait at least 4 days before you see the product. I therefore have to plan well in advance if I want to buy something online – especially in case I have to return it.(R)

2.5 Example of Coding of the Observations
Below is an example of coding applied to the transcript of one of the observations:

Start t=0	FDM,B	Starts to browse
	B	
	B	'I'd like to buy some trousers, but not sure which type or where to buy them'
	B	
Research	B	
	B	
	B	
	S	'I think I will look at the websites I know of'
	S	
	E	(In response to question Q9a): 'I've seen something interesting – I think I will have that as well'
½ time mark		
	IDM,S	'I need to look at the other options…

Codes for Focus Groups, Interviews and Observations:

PKDM= Pre-Knowledge Driven Mode
FDM = Function Driven Mode
IDM = Impulse Mode

B = Browse
S = Search
E = Evaluate
SP = Start Purchase
P = Purchase
R = Reject/Return

3.0 Scenario Analysis

According to Carroll (2000), scenarios are stories about people and activities. Scenarios have been used in a wide variety of disciplines and activities ranging from risk assessment in the financial sector, software development (Jacobson1995), change management, national security , environment and many other contexts.

Muller, Hallewell Haslwanter & Dayton, (1997) suggest that one of the key purposes for using scenarios is in order to perform *'usage guided testing of systems'*. By that is meant the testing of a system against various scenarios, all or some of which may be hypothetical. In this context scenarios can be brief narratives of envisaged uses of a system from an end-user viewpoint. In so doing it provides the benefit of eliciting and validating user requirements (Kazman et al., 2001). The practical benefits are reduced time, reduced costs, and increased flexibility because the props (be they the software in question or its context of use) do not need to be fully constructed.

In the context of this research we utilise scenarios in a similar way. Similarities exist in that what is being abstracted in the scenarios is the likely interaction between two key elements of usual interest to systems developers: a user and a system. The former is an assumed model of a consumer (CDP or eCDP) and the assumed characteristics of an internet based retailing system. Thus it is more akin to the simulation of the system at an architectural level.

The choice of scenarios was limited by the need to include those scenarios offered by Blackwell and et. al to illustrate the workings of the CDP model. These scenarios are offered by them to illustrate consumer behaviour relative to traditional retailing channels. There was a need to construct other scenarios that would be appropriate to the internet retail channel. Such scenarios were derived using empirical data of internet consumers captured during observations, focus groups and interviews. In addition personal experiential data also informed the plausibility of the scenarios finally chosen.

The approach taken is very loosely in line with the five steps outlined by Kazman et. al (2001) for performing Scenario Based Architectural Analysis (SAAM). The prescribed steps co-opted from SAAM are highlighted below. Here, it is important to take on board that SAAM is only used as a reference model and not as a rigorous analytical framework. This overall process was carried out a number of times starting with the CDP and subsequently for the

emergent eCDP models. As an 'aide memoire' we have called this systems MAMS (Model Analysis Method using Scenarios):

MAMS process

- **Step 1: Describe the candidate Model**: CDP and eCDP consumer decision models in flow chart form
- **Step 2: Develop and Validate Scenarios:** This is about arriving at the kinds of interaction scenarios the model must support if it is to be considered representative of the real situation. These were made as realistic as possible in terms of complexity while appealing to the commonsense. The construction and validation of the scenarios was informed by empirical data derived from interviews, focus groups and observations.
- **Step 3: Perform Scenario Evaluations:** Each ohe models was exercised through the defined scenarios to identify key issues in terms of 'commonsense gaps' and problems. The underlying assumptions of the models relative to the issues were studied in relation to these issues for a given scenario.
- **Step 4: Reveal Scenario Interactions:** The key issues identified relative to each of the XY number of scenarios for a given model are compared and contrasted with each other. Some of the problems and characteristics identified were common to all scenarios, others were unique. Where there is commonality, probably means that the model needs to change to accommodate the scenario. Where there aren't both the scenario and the model are looked at closely again.
- **Step 5: Change Model:** Consider which changes required to the model will work and justify these choices.
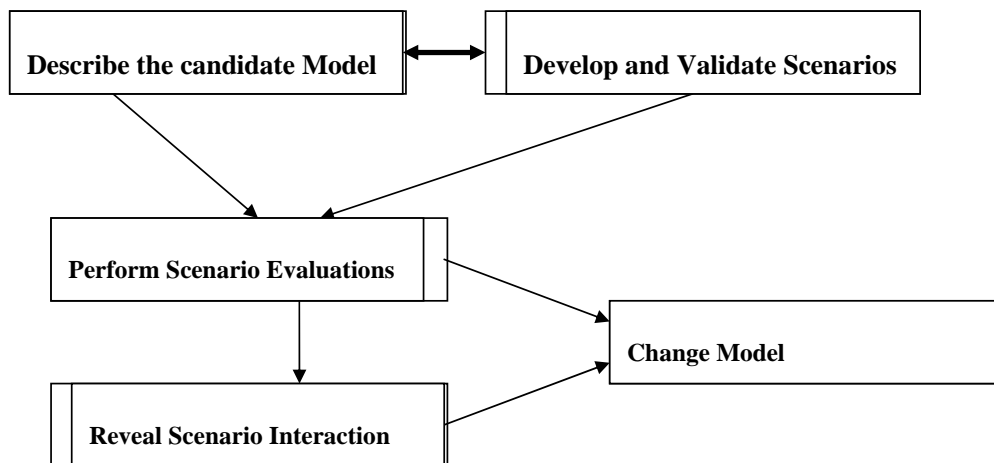
Exhibit A-5. Adapted from Kazman et.al. (2001), activities and dependencies in scenario-based analysis

Because the process is an iterative one, the changes enacted to the model are subjected to the above process again and again until a satisfactory interplay between model and scenarios is achieved. This is illustrated in Exhibit XY below. This process can be seen in chapter 5 and 6.

3.1 Scenario Construction

As a result of consumer interviews, observations and focus groups four new scenarios were constructed. The proposed MAMS method was utilised in order to evaluate both Blackwell's CDP model (Chapter 5) and the proposed eCDP model (Chapter 6). The fifth scenario is not empirically grounded (in the context of this research) and was adapted directly from Blackwell et al. as an initial benchmark to compare CDP with eCDP.

	Description
Scenario 1	The consumer knows exactly what they want to buy. They know the product, the style, the brand, the size, price and have probably bought or tried out the product before. They are equipped to buy with pre-knowledge and experience. They are not too bothered about conducting a comprehensive search process aimed at finding alernatives. Once they have located the product in mind, the intention is to purchase quickly and use or consume the purchase. Such a consumer has a high likelihood of being satisfied with their purchase.
Scenario 2	The consumer knows that they have a need for a type of sensory product (clothing or a unique artefact such as jewelry for example), but not exactly the style, colour, fabric, price or size. The product is probably not something they have bought over the internet or tested out before. They are interested in conducting a detailed search and evaluation to make sure they get a good deal. They are also likely to take their time to come to a decision. As they have never bought such a product on the internet before, we are not able to predict their satisfaction level. Four situations are possible, highly satisfied, satisfied, unsatisfied, highly unsatisfied
Scenario 3	The consumer is browsing on the internet, not looking for anything in particular but their attention is caught by an offer they cannot refuse. Depending on their experience, knowledge and enthusiasm levels about the product, they may make a decision to purchase almost immediately. On the other hand, there may be no pre-knowledge so, they may take time to search to confirm that the offer is really a 'must have'. Again we are not able to predict their likely satisfaction level. Four situations are possible, highly satisfied, satisfied, unsatisfied, highly unsatisfied.
Scenario 4	The consumer knows they have a need for a type of sensory product (as in scenario 2 above). However, as they are searching for it, they are accosted by a 'must have' offer (perhaps in the form of banner) for a different product they hadn't even thought of buying. They therefore decide to buy the product on offer instead. This product may be different to that originally conceived in terms of functional attributes (such as IT instead of clothes) or it may be different in terms of aesthetic attributes (such as colour, texture or material). It may also be in a different budget category. Their consumption of the product will determine their level of satisfaction of the product. Four situations are possible, highly satisfied, satisfied, unsatisfied, highly unsatisfied.
Scenario 5	The consumer has a need, searches for the product required, then makes a short-list. After a which he one to buy. Once consumption occurs their satisfaction of the product is determined. Their consumption of the product will determine their level of satisfaction of the product. Four situations are possible, highly satisfied, satisfied, unsatisfied, highly unsatisfied. From Blackwell et al. (2001).

Exhibit A-6 Test Scenarios

In each of the above scenarios there are a number of common assumptions or props. These include:

- The artefact to be purchased is a so-called 'sensory product' (see Chapter 3),

- The purchaser is a female,

- The purchase process is enacted through a computer connected to the internet,

- User interface usability is similar in all scenarios in regards to website or PC operating system

As can be seen in chapters 5 and 6, different uses were made of the scenarios. In chapter 5, the scenarios, once developed, enabled the testing of the CDP model and the identification of elements which required change. As a result, three key concepts are introduced into the CDP model; *simultaneous stages, modality, and shifts in modality*. Chapter 6 presents the modified CDP model, referred to as eCDP which incorporates these changes.

In both cases, the interaction between the scenarios and the proposed model informed the investigator of 'gaps' and disagreements between the realities projected by a model and 'real life' data. Whenever such issues were discovered both the scenario and the model were analysed to understand where the inconsistencies and problems lay.

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