BUYING BEHAVIOUR OF SOUTH AFRICAN INTERNET USERS

by

PIETER GERHARDUS MOSTERT

Submitted in fulfilment of the requirements for the degree of

DOCTOR COMMERCII (MARKETING MANAGEMENT)

in the

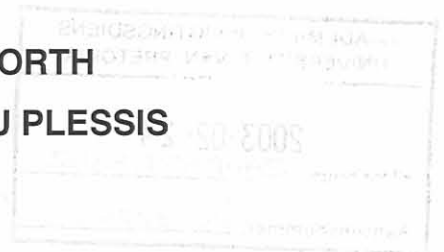## DEPARTMENT OF MARKETING AND COMMUNICATION MANAGEMENT

FACULTY OF ECONOMIC AND BUSINESS SCIENCES

at the

UNIVERSITY OF PRETORIA

PROMOTER: PROFESSOR E J NORTH
CO-PROMOTER: PROFESSOR P J DU PLESSIS

PRETORIA   MAY 2002

This thesis is dedicated to my wife, Lauren.

ACKNOWLEDGEMENTS

I would like to express my sincere appreciation to the following people:

- To my wife, Lauren, for your willingness to make sacrifices during the times that I could not be with you. Your love and support is a great encouragement;

- My parents, Gert and Annie Mostert, for your unconditional love and support. Thank you for always believing in me;

- My godparents, John and Rita Agenbag, and my grandfather, Pieter Slabbert, for your love, interest and support;

- Prof E J North and Prof P J Du Plessis, my promoters, for your time, patience and guidance. You ensured that this will be an unforgettable journey;

- Dr Mike van der Linde and Ms Nina Strydom for assisting me with the research results;

To the Creator of all things, for affording me the opportunity and giving me the ability to complete this study.

SYNOPSIS

The consumer decision-making process is well documented in marketing theory, where it provides a framework for marketers to understand how consumers evaluate and select among different alternatives to ultimately purchase a specific product or service. Specific influences on the process have also been documented to sensitise marketers to consider individual differences and environmental influences that could impact on the decision-making process.

In South Africa, however, documented scientific research regarding consumer behaviour and decision-making when considering buying via the Internet is limited. Marketers who either sell their products or services via the Internet or provide Online product and service related information should be conversant with the various behavioural concepts and theories that form the basis for consumer behaviour and decision-making.

The primary objective of this study was to determine the buying behaviour of South African Internet users by using the Internet as an information source and buying channel.

Differences between Internet shoppers and non-shoppers, when viewing the factors they consider when deciding to purchase via the Net, were also established. The issue whether the period of Internet usage influenced the decision to buy via the Net was also addressed. Furthermore, the influence of the period of Internet usage on whether Internet users search Online for product and service information prior to purchasing from non-Internet based sellers was explored. Finally, the study showed the influence of different demographic variables on the decision to purchase via the Internet and considered the influence of demographic variables on product and services categories respondents purchased from and consider purchasing from in the future.

The data for the research was gathered through a structured, self-administered questionnaire that was completed by 1 005 respondents who logged onto a Website specially created for the purpose of the research project.

Results from the research indicated that as the period of Internet usage increases, the percentage of Internet shoppers increases and the percentage of non-shoppers decreases. It was also found that Internet shoppers and non-shoppers consider different factors when deciding to purchase Online. Another main finding from the study was that the majority of Internet shoppers and non-shoppers search for (or consider searching for) product and service information on the Internet prior to purchasing from non-Internet based sellers. One of the main conclusions is that not all product and service categories will be sold equally successful via the Internet. It could also be concluded that gender, household language, gross monthly household income, highest qualification and population group influence whether or not respondents have purchased via the Net before.

The applicability of traditional consumer decision-making models was subjected and compared to the findings of this study and the conclusion is that the Internet environment indicates differences, which must be considered in predicting future consumer buying behaviour.

Recommendations for future research include: the influence of brands on whether shoppers purchase Online; what the magnitude of the monetary value spent on products and services are in South Africa; and the development and testing of a consumer buying model for Internet shoppers.

CONTENTS

Page

CHAPTER 3:   THE CONSUMER DECISION-MAKING PROCESS

CHAPTER 6:   RESEARCH METHODOLOGY

LIST OF TABLES

Page

LIST OF FIGURES

Page

CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

In the Marketing field of study, the consumer decision-making process has in the past been documented as comprising of a distinct series of steps. First, the consumer has to be aware that a need exists, followed by the search for alternatives to satisfy the identified need. Once alternatives have been identified, the consumer will compare the possible alternatives in terms of attributes or other values of importance. From the evaluated alternatives, the consumer will purchase a preferred product or service. The decision-making process is usually concluded by a post-purchase evaluation phase that will result in either satisfaction or dissatisfaction with the chosen alternative (Solomon, 1996: 268; Assael, 1995: 80; Engel, Blackwell & Miniard, 1995: 142-143; Peter & Olson, 1990: 171; Runyon & Stewart, 1987: 26; and Engel & Blackwell, 1982: 23.)

Considering the well-documented decision-making process, Richardson (2001: 137) predicts that the Internet will have an enormous impact on how consumers make buying decisions. The time and cost of searching and evaluating alternatives and negotiating terms are being driven lower and lower. Through the Internet consumers find that they no longer have to accept fixed prices for products and services and through the click of a few buttons the lowest priced, highest quality product can be found.

Before the Internet became a reality, consumers were often frustrated by having to make ill-informed decisions on products and services they wished to acquire. Sinha (2000: 44-45) supports this statement by stating that obtaining information was time consuming and required a great deal of effort from the consumer. Some information was available in the form of newspaper advertisements, flyers

and brochures, but this information could often not be used since it was outdated. An item on sale today may not be on sale tomorrow; the consumer may take the effort to visit a store without being aware that the store is out of stock or sales people may not be able to provide the consumer with correct information. It was therefore difficult for the consumer to compare a variety of products and to compare prices for different products, often with different attributes.

Considering the above scenario, it is clear that the Internet has brought many advantages to the consumer, enabling knowledgeable consumers to make more informed decisions and purchases. According to Sinha (2000: 44), advantages to the consumer include the availability of free information, easily obtainable from the Internet. The search for information is reduced to a few effortless keystrokes, where collecting the same information traditionally would require considerably more time and energy. The Internet also offers a wealth of information on product features, quality of products and reliability of different suppliers. Prices for products are available from various outlets and can be compared in real time at various Online price comparison sites, by the click of a few buttons. Prospective buyers can even read about purchasing experiences of others who have already purchased the product from a specific outlet. Not only are the product choices discussed but often the retail outlet provides the consumer with peace of mind for an intended purchase.

Sinha (2000: 44) continues by stating that the influence of the Internet, specifically the availability and ease of obtaining product information, features, quality and prices, is also assisting the Online consumer with traditional, "Offline" purchases. Consumers are more knowledgeable about products they wish to purchase and have a better understanding of how prices are determined by sellers. This information assists the consumer to apply more pressure to the traditional retailers to reduce prices and cut high profit margins.

The Internet represents some major threats to companies and pressure is placed on manufacturers and retailers as a result of the wealth of information available on virtually all products and services. According to Sinha (2000: 44-45), companies are not able to build brands for their products, which would have resulted in price premiums as well as high profit margins. The availability of manufacturing cost makes it more difficult for the retailer to impose high price premiums, and consumers are demanding lower profits generated by retailers due to their knowledge obtained from the Internet.

Lohse & Spiller (1998: 82-85) add to the view expressed above by identifying a number of factors influencing Internet store traffic that affect the Online seller. The first noticeable factor is the merchandise selection available Online. Internet sellers often do not offer as wide a variety of merchandise as that offered by traditional sellers, which lead to disappointed consumers. In addition to the lack often experienced in terms of variety, consumers can also not interact with the product as with paper catalogues. Sellers therefore need to be pro-active by offering hyperlinks to more detailed information on products and product testimonials.

Service is a second factor that should be considered by sellers on the Internet. Lohse & Spiller (1998: 82) suggest that the Internet has placed operational pressure on companies, where consumers demand continuous, useful communication, across geographic barriers (worldwide shipping, multilingual sites), 24 hours a day, 365 days a year. Service required by consumers includes sales information, support for merchandise selection as well as answers to frequently asked questions. Consumers also need information on the companies they are dealing with, their history, background, credit, return, and payment policies, equipping them with the knowledge on the credibility of the organisation they are dealing with and providing their credit cards details. The latter is especially important for new companies operating solely on the Internet.

Sellers of products and services on the Internet should also consider the importance of convenience to the consumer, including Online store layout and ease of use with regard to the site being visited. General help functions may assist the consumer to find a particular function or information when visiting a site for the first time. Convenience features may also assist with management of consumer expectations, for example including a status indicator, updating consumers on the status of a transaction or time remaining for down-loading of large files.

The checkout process is also of importance since most checkout processes are relevant only to a specific site. If the checkout process is too long or confusing to the consumer, sales will be lost. Lohse & Spiller (1998: 84) continue by pointing out that in a real department store, it is easy to undo a purchase by simply telling the sales person that you have changed your mind and will only take part of your purchase. On the Internet executing this simple function is often difficult and may result in all products considered for purchase being discarded, forcing the consumer to start with his selection process all over. Information of importance to the consumer, for example items out of stock, delivery time and cost, may also be omitted when purchasing Online, resulting in unhappy consumers.

The final factor to be considered is store navigation. Every seller's page has to have consistent navigational links to enable the consumer to move around in the site. This need is highlighted due to product searches executed on the Internet that will link the consumer directly to the end product page. If there are no navigation links on the end product page, the consumer may not be able to browse the rest of the Online store to find other products of interest.

Lohse & Spiller (1998: 81) continue by expressing the opinion that understanding the consumer is of extreme importance to Online marketers, since the Internet offers a number of dimensions that need to be considered to evaluate the success of an Online operation. Internet sellers should not presume that

consumers do not want a specific product based only on the fact that a product is not selling. Attention should be given to the relationship between sales and the user interface since this may discourage consumers to purchase products Online. Links to related information, limited menus, poorly designed navigation and structured World Wide Websites as well as difficulty to obtain or compare information on the same screen all have adverse effects on Internet shopping.

From the above discussion, it is clear that marketers need to understand the consumer to be successful on the Internet. In order to gain knowledge about consumer behaviour, marketers should place specific emphasis on consumer decision-making and buying behaviour, since knowledge obtained about the way consumers choose products will ensure more focused strategies to purchase a marketer's product as opposed to that of a competitor. Phau & Poon (2000: 102) support this view by stating that markets can be served more effectively and profitably if Internet marketers understand the underlying reasons for differences in consumer choices.

From a South African perspective, considering the relative low level of penetration by Internet users, the economic dichotomy of the country and the low levels of Online purchases, it is especially important for both the local and international marketer to understand the dimensions of decision-making and buying behaviour of the South African Internet user.

1.2   DEFINING THE AREA OF RESEARCH

This study will focus on household Internet users in South Africa. Before setting the objectives for this study it is important to look at the broader context of the South African Internet user market.

1.2.1 A South African perspective of Internet access and usage

Media Africa.com (2000: 13) provides a history of the South African Internet and indicates that the Internet was introduced to South Africa during the late 1980s through the efforts of researchers at various Universities in South Africa. The more technically inclined members of the public followed by accessing the Internet by means of electronic Bulletin Boards in the beginning of the 1990s. More than 150 Bulletin Board operators were operational by 1994, offering at least e-mail access in South Africa. The first commercial Internet Service Providers emerged late 1993, offering services to corporate clients followed by the first consumer Internet Service Providers in 1994.

Aggressive marketing campaigns by several newcomers to the Internet Service Provider market resulted in the Internet reaching a critical mass of consumers in South Africa, marked by rapid growth during the period October 1997 to December 1998. Media Africa.com (2000: 6) continues by indicating that following the period of rapid growth, the growth in the South African Internet market slowed down significantly during 1999 with expectations that this trend would continue during 2000.

It can therefore be concluded, according to Media Africa.com (2000: 13), that if 1998 was considered the year of critical mass for the Internet in South Africa, 1999 was the year of maturity, followed by a year of consolidation during 2000. This historic perspective as well as the somewhat pessimistic view of the future of Internet access in South Africa is justified by a number of inhibitors to Internet growth in the South African economy. According to BMI (2000b: 26) the three most prominent factors causing this are the current telecommunication monopoly, the population distribution and economic dichotomy.

a) **Telecommunications monopoly:** Due to the fact that South Africa has only one fixed line telecommunications network provider, namely Telkom, the

availability of alternatives is reduced and no pressure can be applied to Telkom to meet market expectations. Internet services provided are characterised by slow response times and substandard quality, causing frustration to Internet users.

b) **Population distribution:** The provision of telecommunications and Information Technology infrastructure is hampered by high costs due to the relatively large geographical size of South Africa with a relative small population concentrated in a few metropolitan areas. In addition to the factors influencing telecommunications and Information Technology, the distribution of products purchased Online is also hampered by the distances between the major metropolitan areas, often resulting in distribution not being economically feasible.

It should however be noted that the high concentration of people in the major metropolitan areas such as Gauteng, Western Cape and KwaZulu-Natal could be a driver for localised service offerings, which could prove economically viable.

c) **Economic Dichotomy:** South Africa is characterised by elements of both first and third world economies and is often referred to as a "digital divided" country. On the one hand of the economy, South Africa has sophisticated information technology and financial infrastructures with an established middle class and on the other hand the country is characterised by large numbers of poor people living in areas with only the most rudimentary infrastructure. Very limited benefits are derived from the Internet and e-Commerce by this "third world" component and it will take decades to cross the bridge between the first and third world components and to substantially improve the ratio between the two worlds. It should be noted that although the third world component will benefit, they will not be the drivers of either the Internet or e-commerce.

In contrast with the limiting factors to Internet access, it should be stressed that the main driver in the South African Internet market currently is the fact that the number of users are growing. Of even greater importance from a marketing point of view, is that Internet users are also spending more time using the Internet. BMI (2000b: 25) remarks that as users get more exposure to the Internet they are gradually starting to do transactions via the Internet, thereby decreasing perceived risk concerns in terms of the security of Online transactions.

In addition it should be stated that an optimistic view of the future of the Internet in South Africa, expressed by BMI (1999: 3), is that it will ultimately become a reality for the majority of consumers. This will occur as education levels rise, as the younger generation becomes exposed to information technology in schools and as the Internet becomes more ubiquitous in public places as well as in the working environment.

1.2.2 Structure of South African Internet users by access method

The predominant Internet access methods available to South African users are via corporate networks (by means of leased lines), academic networks and dial-up access via modems and personal computers. Dial-up access includes users accessing the Internet from home, small-office-home-office (SOHO), businesses and Internet cafés.

While this study will focus on the buying behaviour of household Internet users in South Africa, it is important to first consider the size of the overall Internet market and access methods in South Africa. The discussion in Section 1.2.2 is based on the findings of Media Africa.com (2000: 8-42), unless otherwise stated.

In contrast with the limiting factors to Internet access, it should be stressed that the main driver in the South African Internet market currently is the fact that the number of users are growing. Of even greater importance from a marketing point of view, is that Internet users are also spending more time using the Internet. BMI (2000b: 25) remarks that as users get more exposure to the Internet they are gradually starting to do transactions via the Internet, thereby decreasing perceived risk concerns in terms of the security of Online transactions.

In addition it should be stated that an optimistic view of the future of the Internet in South Africa, expressed by BMI (1999: 3), is that it will ultimately become a reality for the majority of consumers. This will occur as education levels rise, as the younger generation becomes exposed to information technology in schools and as the Internet becomes more ubiquitous in public places as well as in the working environment.

1.2.2 Structure of South African Internet users by access method

The predominant Internet access methods available to South African users are via corporate networks (by means of leased lines), academic networks and dial-up access via modems and personal computers. Dial-up access includes users accessing the Internet from home, small-office-home-office (SOHO), businesses and Internet cafés.

While this study will focus on the buying behaviour of household Internet users in South Africa, it is important to first consider the size of the overall Internet market and access methods in South Africa. The discussion in Section 1.2.2 is based on the findings of Media Africa.com (2000: 8-42), unless otherwise stated.

1.2.2.1 Corporate users

The estimate of South African corporate Internet users, accessing the Net by means of leased lines, grew from 700 000 in 1998 to 980 000 individuals in 1999 with Internet access (often only e-mail access) through corporate networks.

Closer examination of the growth trend in the corporate access market during the first six years of corporate Internet access in South Africa indicates two growth spikes, the first during 1995 and the second in 1997. Table 1.1 indicates year-end figures (and projected totals) for corporate Internet users for the period 1994 to 2004.

TABLE 1.1: CORPORATE INTERNET USERS

Year	Corporate users	Percentage growth
1994	25 000	
1995	65 000	160%
1996	150 000	114%
1997	350 000	133%
1998	700 000	100%
1999	980 000	40%
2000	1 274 000	33%
2001	1 555 000	21%
2002	1 788 000	15%
2003	2 056 000	15%
2004	2 467 000	25%

Source: Adapted from Media Africa.com (2000: 40)

The growth spike during 1995, where growth took place at 160%, can be attributed to 12 new Internet Service Providers entering the market with aggressive efforts to promote access. The corporate access market experienced the second growth spike during 1997, growing at 133%, when e-commerce arrived in South Africa, compelling hundreds of companies to address the Internet challenge.

Table 1.1 clearly indicates the declining growth rate of corporate Internet users from 1998 and the expected declining rate up to 2003. It is expected that 2004 will show a greater growth rate than the preceding three years, growing by 25% to a total of 2 467 000 corporate Internet users.

The higher expected growth rate for 2004 can be attributed to expectations of a second fixed line telecommunications Network Provider, in competition to the current Telkom monopoly, which will stimulate growth.

1.2.2.2 Academic users

The largest portion of academic Internet users comprises of individuals accessing the Internet at universities, technikons and research institutes through Uninet. Uninet, to be replaced by TENET (Tertiary Educational Network of South Africa), offer Internet access to all 21 universities plus one satellite campus, 14 of the 15 technikons and 13 research institutes in South Africa.

Schools accessing the Internet boosted the academic Internet access market more strongly during 1999 than in any of the previous years. A total of 500 schools are connected to the Internet of which 285 obtained access via Uninet.

The number of Internet users accessing the Internet from Uninet-linked institutions was estimated at 250 000 for 1999. This figure is considered reliable since Uninet serves a total of 600 000 users with between 30% and 40% students and 85% of all personnel using their access. Privately funded schools account for approximately 30 000 more users, bringing the total academic user base to 280 000.

Table 1.2 indicates the year-end totals (and projected totals) for academic users as well as the percentage growth and potential growth for the period between 1994 and 2004.

TABLE 1.2: ACADEMIC INTERNET USERS

Year	Academic users	Percentage growth
1994	60 000	
1995	100 000	66%
1996	125 000	25%
1997	150 000	20%
1998	200 000	33%
1999	280 000	40%
2000	360 000	28%
2001	425 000	18%
2002	470 000	11%
2003	510 000	9%
2004	540 000	6%

Source: Adapted from Media Africa.com (2000: 36)

From Table 1.2 it is clear that the projected growth for academic Internet users will decline in future and that the number of users will grow from 470 000 at the end of 2002 to 510 000 at the end of 2003.

1.2.2.3   Dial-up users

Dial-up users can be defined as users connecting to the Internet by means of a modem on the basis of subscription or pre-paid contract with an Internet Service Provider.

Table 1.3 provides year-end totals (and projected figures) for dial-up subscribers for the period 1994 to 2004.

TABLE 1.3: DIAL-UP INTERNET USERS

Year	Dial-up subscribers	Percentage growth
1994	15000	
1995	33 600	155%
1996	79 700	137%
1997	196 620	146%
1998	366 235	86%
1999	560 000	53%
2000	782 000	40%
2001	1 040 000	33%
2002	1 300 000	25%
2003	1 560 000	20%
2004	2 028 000	30%

Source: Adapted from Media Africa.com (2000: 28)

The number of users accessing the Internet by means of dial-up modems grew from 360 000 at the end of 1998 to 560 000 at the end of 1999. This represented growth of 53% and is significantly lower than the growth in 1998 of 86%. This declining growth rate is expected to continue during 2002 where it is predicted that the base will grow to 1 300 000, representing 25% growth. The slow-down rate of dial-up users is expected to continue at least until a second fixed line Network Operator is established in competition to Telkom.

It should be noted that the figure of 15 000 Internet users at the end of 1994 includes 10 000 users with e-mail access by means of electronic Bulletin Board Systems.

The figures included in Table 1.3 only indicate the number of actual subscriptions in the dial-up market and do not take into account that there may be multiple users of the Internet. These additional users may include multiple family members utilising the same account with a number of mailboxes. In addition to family members, small businesses may also have multiple users where one central account is held with multiple mailboxes for key employees.

The figures provided for dial-up users can be considered a true reflection of the dial-up market since a significant portion of dial-up users at home also have corporate or academic access. It is therefore assumed that the "double counting" of corporate and home users is evened out by multiple usage of home accounts.

1.2.2.4 Total South African Internet market by access method

In summary of the South African Internet user base by access method, Table 1.4 provides details of historic access information together with predictions up to 2004 for corporate, academic and dial-up users. The total number of Internet users is also indicated together with historic and projected growth trends.

TABLE 1.4: SOUTH AFRICAN INTERNET USERS BY ACCESS METHOD

Year	Corporate users	Academic users	Dial-up subscribers	Total	Percentage growth
1994	25 000	60 000	15000	100 000	
1995	65 000	100 000	33 600	198 600	98%
1996	150 000	125 000	79 700	354 700	78%
1997	350 000	150 000	196 620	696 620	96%
1998	700 000	200 000	366 235	1 266 235	81%
1999	980 000	280 000	560 000	1 820 000	44%
2000	1 274 000	360 000	782 000	2 416 000	33%
2001	1 555 000	425 000	1 040 000	3 020 000	25%
2002	1 788 000	470 000	1 300 000	3 558 000	18%
2003	2 056 000	510 000	1 560 000	4 126 000	16%
2004	2 467 000	540 000	2 028 000	5 035 000	22%

Source: Adapted from Media Africa.com (2000: 42)

Table 1.4 clearly shows the declining growth rate of Internet users in South Africa from 1998 and projected up to 2003. As discussed earlier, the introduction of a second Fixed Line Telecommunications Network Operator in competition to the monopoly of Telkom will be responsible for the expected increased growth during 2004, as indicated above.

Figure 1.1 depicts a graphical presentation of the growth of South African Internet users for corporate, academic and dial-up users as well as the total Internet user base. Interesting to note is that although the growth rate of Internet users is declining, overall growth is still positive and show a significant increase in the number of Internet users.

FIGURE 1.1: SOUTH AFRICAN INTERNET USERS BY ACCESS METHOD
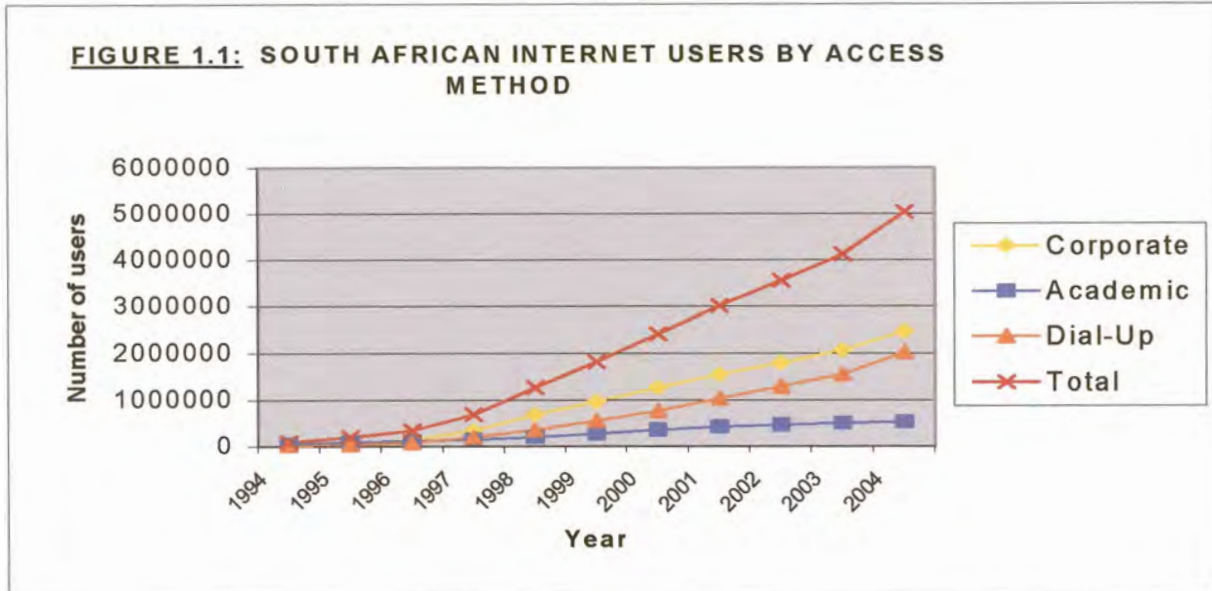
It should also be mentioned that satellites possess another method of Internet access to South Africa. Subscriber figures are however still very low and satellite providers need to achieve a critical mass within a short period of time before posing a challenge to other access methods. Media Africa.com (2000: 43) expects that satellite would not, at least for the foreseeable future, overtake traditional access methods.

1.2.3 Definitions of terminology

For the purpose of this study, a number of terms need to be clarified by means of definitions and a short explanation. In addition to terms used throughout this study, a number of concepts are defined and explained to clarify the fit of the

Internet and World Wide Web within the broader literature of electronic commerce and electronic business (or simply e-commerce and e-business).

E-commerce and e-business are two concepts that are often used interchangeably in literature. According to Greenstein & Feinman (2000: 2) and Bothma (2000: 39) there is however a difference between the two terms, where e-commerce is generally considered to have a narrower focus than e-business. The term e-commerce is restricting as it does not fully encompass the true nature of many types of information exchanges, whereas e-business implies the integration of all activities Online and thereby automating all functions of the organisation as a whole.

Watson, Berthon, Pitt & Zinkhan (2000: 1) refer to electronic commerce in the broad sense as the use of computer networks to improve organisational performance.

A formal definition by Watson et al. (2000: 1) suggests that **e-commerce** involves the use of information technology to enhance communications and transactions with all of an organisation's stakeholders (including customers, suppliers, government regulators, financial institutions, managers, employees, and the public at large). Greenstein & Feinman (2000: 2) add to the above definition by including the selling and buying of products and services that require transport, either physically or digitally, from location to location.

According to Bothma (2000: 38-39) e-commerce comprises of three broad categories or different types of business groupings on the Internet, namely Business-to-Consumer (B2C) e-commerce, Business-to-Business (B2B) e-commerce and Consumer-to-Consumer (C2C) e-commerce.

The first category according to Bothma (2000: 131), **business-to-consumer** e-commerce (and the focus area of this study), often referred to as e-tailing, refers to marketing and selling to individual consumers Online.

The second category, **business-to-business** e-commerce refers to businesses conducting business transactions with other businesses Online. Included in B2B e-commerce are Online procurement, supply chain management, customer relationship management and fully integrated inter-company e-business systems.

The last category, **consumer-to-consumer** e-commerce, refers to consumers conducting business or interacting with other consumers Online, usually facilitated by an independent third party.

Two other classifications of e-commerce that should be mentioned, although not of the same magnitude as the preceding three categories, are government-to-business or administration-to-business, and government-to-consumer or administration-to-consumer e-commerce.

The **Internet** (or simply the **Net**) is defined by Bothma (2000: 3) as a world-wide interconnected network of computer networks. Clark (in Richardson; 2001: 67) elaborates on the definition of the Internet by viewing the Net as a decentralised network of computers that communicate over a variety of phone and data lines provided by the government, phone companies and private organisations.

Bothma (2000: 3-4) provides greater detail of the concept of the Internet by stating that the Net comprises of six components. These components, namely e-mail, Newsgroups, Telnet, File Transfer Protocol, Internet Relay Chat, and the World Wide Web are briefly described below.

The first component, **e-mail**, which is what the Internet is most commonly used for, is a form of digital message that can be sent between two or more computers via the Net.

Newsgroups represent a collection of more than 30 000 discussion groups that function on an e-mail type bulletin board basis and cover a wide range of different topics.

The third component, **Telnet**, refers to a way of connecting a computer through the Internet to a remote computer located elsewhere in the world in order to enable the connected computer to become a terminal of the remote computer.

File Transfer Protocol (FTP) is a set of protocols determining how files are uploaded and downloaded between two computers connected across the Internet.

The **Internet Relay Chat (IRC)** refers to an interactive, real-time, chat service where two or more individuals can communicate with each other using a text-based messaging service.

The last component of the Net, and the focus area of this study, namely the **World Wide Web** (or simply the **Web** or the **WWW**) implies the way of organising and viewing the information on the Internet and it provides a user-friendly graphical environment to work in. More simplistically, Bothma (2000: 11) refers to the Web as a way of looking at and organising the information on the Internet.

Clark (in Richardson; 2001: 67), supports the view expressed above by defining the Web as a multimedia (text, sound, and graphics) subset of the Internet as a whole.

For the purpose of this study, the term World Wide Web will imply the specific subset of the Internet accessed by Internet users for browsing purposes. **Browsing**, often referred to as **"surfing"**, the World Wide Web occurs when Internet users search for information on virtually any topic imaginable by means of search engines (e.g. Yahoo or Excite) or following links from one site to another. Browsing also includes specific searches for sites known to users through advertising or word-of-mouth, e.g. ABSA.co.za, Inthebag.co.za and Amazon.com.

The term **Online** will imply all actions executed on the Internet and include e-mail and browsing as well as electronic transactions such as placing of orders, paying for products and services purchased and corresponding with vendors electronically.

1.3   OBJECTIVES OF THE STUDY

The primary objective of this study is to determine the buying behaviour of South African Internet users by using the Internet as an information source and buying channel.

The following are secondary objectives that will contribute towards achieving the primary objective:

i)   determine the factors Internet shoppers and non-shoppers take into account when considering whether or not to purchase via the Internet;

ii)   for non-Internet shoppers, determine whether or not they will purchase via the Internet in the future and which product and service categories they consider purchasing from;

iii)   for non-Internet shoppers not considering to purchase via the Internet in the future, determine whether or not they would consider purchasing via the Internet if more, well-known South African businesses offer products and services via the Internet;

iv)   for current Internet shoppers, future Internet shoppers and non-Internet shoppers who do not consider to purchase via the Internet in the future, determine whether or not they use the Internet as information source to search for product and service information prior to purchase from non-Internet based sellers;

v)   for current Internet shoppers, determine the relationship between the length of time being an Internet user and factors considered before purchasing Online;

vi)   for current Internet shoppers, determine the product and service categories they currently purchase from and the product and service categories they consider to purchase from in the future via the Internet;

vii)   determine the relationship between the demographic variables of Internet users and the decision whether or not to purchase via the Internet, as well as the product and service categories they currently purchase from and consider purchasing from in the future.

1.4   CONTEXT OF THE STUDY

As defined in the objectives set in Section 1.3, this study will focus on factors influencing the consumer decision-making process that leads to buying behaviour for household Internet users in South Africa. Due to the focus of the study, only the decision-making process and buying behaviour of South African Internet users will be researched to derive a better understanding of consumer

behaviour as well as the decision-making process of the South African Internet user.

The decision was made to focus on household Internet users and to exclude corporate as well as business users and factors influencing their decision-making processes. The reasoning behind excluding these users is based on the fact that this study will attempt to provide insight into the buying behaviour of the consumer and to focus on the business to consumer and not the business to business Internet offerings.

Important to note is that although the study focuses on the consumer, and by implication household Internet access, many academic and corporate users may access the Internet from these networks and purchase products and services in their capacity as an individual consumer. It is important to note, for the purpose of this study, that these users will be excluded from the study and that only Internet users who access the Internet from home will be considered. Respondents limiting their Internet usage to e-mail only will also be excluded from the study.

This study places no limit on age, gender, income, language, education level, race or ethnic group. The only limit enforced by the study is that respondents participating in the study have to have Internet access, regardless of the length of time, and that users should engage in browsing activities.

1.5   IMPORTANCE OF THE STUDY

The study will examine existing theory on consumer decision-making and buying behaviour via another, non-traditional, medium (i.e. the Internet) and the importance thereof can be highlighted by the views expressed by three leading research companies in South Africa.

BMI (1999: 3) states that the Internet has become one of the key measurements of a country's progress towards "superhighway status" in the information age. This statement is supported by Media Africa.com (2000: 55) that expresses the opinion that in reality the Internet has become a crucial tool for remaining competitive in a global market.

BMI (2000a: 7) points out that although the South African Internet market is relatively small, the business to consumer market is a viable and profitable segment. However, key to Online success is an understanding of consumers' Online behaviour, preferences and concerns. The proper profiling and monitoring of consumers is of critical importance to enable the marketer to convert "browsers" into "shoppers", and more importantly into regular shoppers.

Webchek (1999:21) supports this view by stating that understanding customer needs and wants significantly enhances the chance for success in the Internet environment. If companies don't understand their customer needs and wants, it will be more difficult to know where to focus their energy, effort and capital. It is also likely that companies will have to make significant, often expensive, changes to Websites after launch, and that they will not be able to obtain the returns they expected.

From the opinions expressed above, it is clear that understanding the South African Internet user decision-making process and buying behaviour is a critical factor for success in this market.

The study will provide a theoretical basis for the consumer decision-making and buying processes together with the application of existing theory on the Internet user. Once the theoretical basis has been established, the study will aim to provide insight into the buying behaviour of South African Internet users through empirical research. The results from the study will contribute to the field of knowledge in a number of ways.

116082242
615456833

Firstly, the results will provide a better understanding of the application of traditional theory on consumer decision-making and buying behaviour with regards to Internet users. The differences and application of existing theory will be highlighted and conclusions will be made to the relevance of existing theory and models when applied to the Internet.

Secondly, the findings of the study will provide insight into the decision-making and buying behaviour of the Internet user. The findings will offer perspectives of both Internet shoppers and non-shoppers and will offer an analysis of reasons why some Internet users shop Online while others don't engage in shopping activities.

From the analysis, the study will offer the marketer with insights on how to approach the Internet user to prompt purchase behaviour. Deductions from the study will also empower marketers to understand why some Internet users do not engage in Online shopping activities and will assist them to draft Internet strategies that will convert surfers to shoppers.

Finally, the study will also assist the traditional channel manager to gain insight into the decision-making and buying behaviour of Internet users and may assist with strategies to address current shortfalls of the Internet, that will result in Internet shoppers returning to traditional means of shopping.

1.6   DEMARCATION OF THE STUDY

By focusing on the usage and buying patterns of South African Internet and Web users, meaningful insights can be obtained that will assist with the execution of the empirical aspect of this study. This section will provide valuable input to this study by providing information on the South African Internet and Web user.

1.6.1 South African household Internet and World Wide Web users

In order to derive at the number of South African Internet and World Wide Web users, it is important to first understand the methodology that was used in order to determine an accurate number of users, which will be used as the basis for this research study. In order to determine the number of Internet and World Wide Web users that access the Net from home, it is important to first determine how these users can be broadly identified, what devices they use to access the Internet and what percentage of Internet users access the Web.

1.6.1.1 Living standard measurement

The Living Standard Measurement (LSM), of which one measurement is income per household, divides the population of South Africa into 10 categories. Table 1.5 indicates the average monthly income per household for each of the 10 LSM groups, total income for each LSM group and the size of each LSM group as a percentage of total income for all LSM groups.

TABLE 1.5: LSM CATEGORIES AND HOUSEHOLD INCOME (2001)

LSM	Average monthly household income	Total income per LSM group	As a percentage of total income
LSM 1	R 748	R 150 348 000	0.4%
LSM 2	R 895	R 873 520 000	2.3%
LSM 3	R 1 113	R 1 531 488 000	4%
LSM 4	R 1 595	R 2 261 710 000	5.9%
LSM 5	R 2 289	R 3 110 751 000	8.1%
LSM 6	R 3 731	R 5 227 131 000	13.6%
LSM 7	R 5 495	R 4 412 485 000	11.5%
LSM 8	R 7 407	R 4 362 723 000	11.4%
LSM 9	R 9 743	R 6 849 329 000	17.8%
LSM 10	R 13 406	R 9 598 696 000	25%
Total		R 38 378 181 000	100%

Source: SAARF Workshop (January 2002)

Tables 1.5 above and 1.6 below provide details of the South African population by means of LSM groupings according to income and quantify the number of

households per LSM category. As will be discussed later in this section, there is a noticeable correlation between the LSM group, income and Internet usage.

For the purpose of this study, the findings in Tables 1.5 and 1.6 will be considered when identifying the LSM groups from which respondents will be selected to participate in the empirical research study.

Table 1.6 indicates the number of households for each of the 10 LSM categories together with the percentage of each LSM group as a percentage of the total number of households.

TABLE 1.6: NUMBER OF HOUSEHOLDS BY LSM CATEGORY

LSM	Number of households	Percentage of total number of households
LSM 1	201 000	2.1%
LSM 2	976 000	10.2%
LSM 3	1 376 000	14.4%
LSM 4	1 418 000	14.9%
LSM 5	1 359 000	14.2%
LSM 6	1 401 000	14.7%
LSM 7	803 000	8.4%
LSM 8	589 000	6.2%
LSM 9	703 000	7.4%
LSM 10	716 000	7.5%
Total	9 542 000	

Source: Adapted from SAARF Workshop (January 2002)

Figure 1.2 provides details of Internet access per LSM group. It is important to note that information could only be obtained for 1999, where eight LSM groups as opposed to the current 10 groups were identified.

It is clear from Figure 1.2 that 34% of the LSM 8 group has Internet access. The Internet access penetration drops significantly to 13% for LSM 7 and even further to 3% for the LSM 6 group.

FIGURE 1.2: PERCENTAGE OF HOUSEHOLDS WITH INTERNET ACCESS (1999)
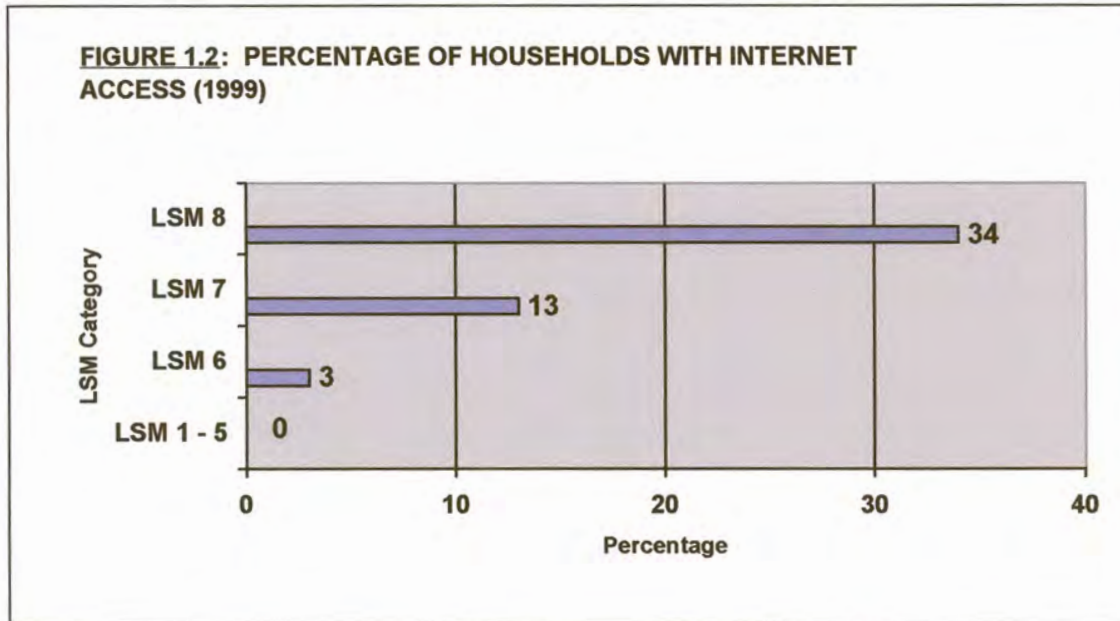
Source: BMI (2000b: 98)

The graphical presentation of Internet access per LSM group portrayed in Figure 1.2 also supports the influence of the economic dichotomy of South Africa (discussed under Section 1.2.1 in Chapter 1), where there is no Internet penetration in households for LSM groups 1 to 5.

The information in Table 1.7, South African household Internet and World Wide Web users and devices (1998 – 2003), is of particular interest for this research study since it indicates in detail how the Internet and World Wide Web users for South African households are determined. Details are provided of the Personal Computers installed base in South African households, the percentage of the installed base that access the Internet, alternative access devices, active Internet users per household, as well as the total for both Internet and total World Wide Web users.

It should be noted that Table 1.7 represents data from BMI (1999: 32) and is somewhat different from Media Africa.com (2000: 15-30), used as projections in Section 1.2.2. A possible reason for the difference in Internet user numbers may

be because the report from BMI (1999: 32-41) includes alternative access devices, not considered in the Media Africa report. A second factor, which would most probably attribute greater user numbers, is that the BMI (1999: 32-41) report based Internet figures on actual number of users per household, whereas Media Africa.com (2000: 15-30) only considered subscriptions per household to compensate and lessen the effect of double counting of corporate and academic users from home.

For the purpose of this study, the user numbers from BMI (1999: 32-41) will be used as focus is placed on actual user numbers of the Internet and World Wide Web at home and will include multiple users, thereby including users with alternative access methods. Table 1.7 indicates totals (and projected totals) at the end of December for each specified year.

TABLE 1.7: **SOUTH AFRICAN HOUSEHOLD INTERNET AND WORLD WIDE WEB USERS AND DEVICES**

	1998	1999	2000	2001	2002	2003
Access devices						
Personal computer installed base	731,650	902,104	1,015,939	1,091,982	1,178,976	1,247,495
Percentage personal computer use Internet	49%	62%	73%	76%	79%	85%
Number of personal computers use Internet	358,593	558,583	736,730	828,290	935,409	1,056,891
Alternative access device installed base	977	9,946	34,320	110,107	277,882	514,978
Total access devices	359,570	568,528	771,050	938,397	1,213,290	1,571,869
Percentage growth		58%	36%	22%	29%	30%
Internet/World Wide Web users						
Average number of active Internet users per household	1.5	1.7	1.9	2.0	2.0	2.0
Average number of access devices per household	1.1	1.2	1.2	1.3	1.5	1.7
Ratio of users/devices	1.4	1.5	1.5	1.5	1.3	1.2
Total Internet users	501,541	840,124	1,182,833	1,391,991	1,588,922	1,839,653
Percentage Internet users use World Wide Web	99%	99%	99%	99%	100%	100%
Total World Wide Web users	496,526	831,723	1,171,005	1,378,071	1,588,922	1,839,653
Percentage growth		68%	41%	18%	15%	16%

Source: BMI (1999: 32)

Following from the number of Internet and World Wide Web users, attention should be moved to knowledge on the buying patterns of these users. By gaining insight into buying patterns, also considering what they are least likely to buy, will prove valuable input to defining the area of research for this study.

1.6.2 South African Internet user buying patterns

In order to research and define South African Internet users, it is important to understand how often the Internet is accessed and how much time is spent on the Net.

1.6.2.1 Internet usage patterns

An analysis of the frequency of Internet access from home shows that more than 60% of users access the Net at least daily. A further 29% make use of the Internet two to three times a week and 2% access the Net monthly.

Figure 1.3 indicates the frequency of Internet access at home.

FIGURE 1.3: FREQUENCY OF INTERNET ACCESS AT HOME

At least daily 60%

Two to three times a week 29%

Once a week 7%

Once every two weeks 2%

Monthly 2%
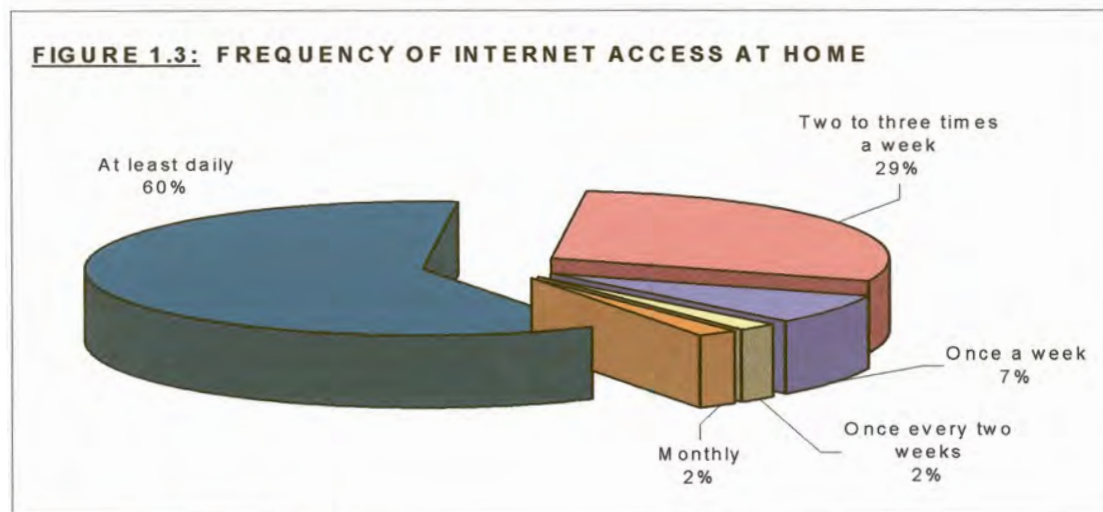
Source: BMI (2000a: 38)

By only focusing on how often the Net is accessed may provide misleading information about South African Internet users. In order to determine buying

patterns, it is important to also consider time spent Online by users at home. Figure 1.4 below indicates the amount of time spent Online by South African Internet users.

FIGURE1.4: HOURS SPENT PER WEEK ON THE INTERENT AT HOME
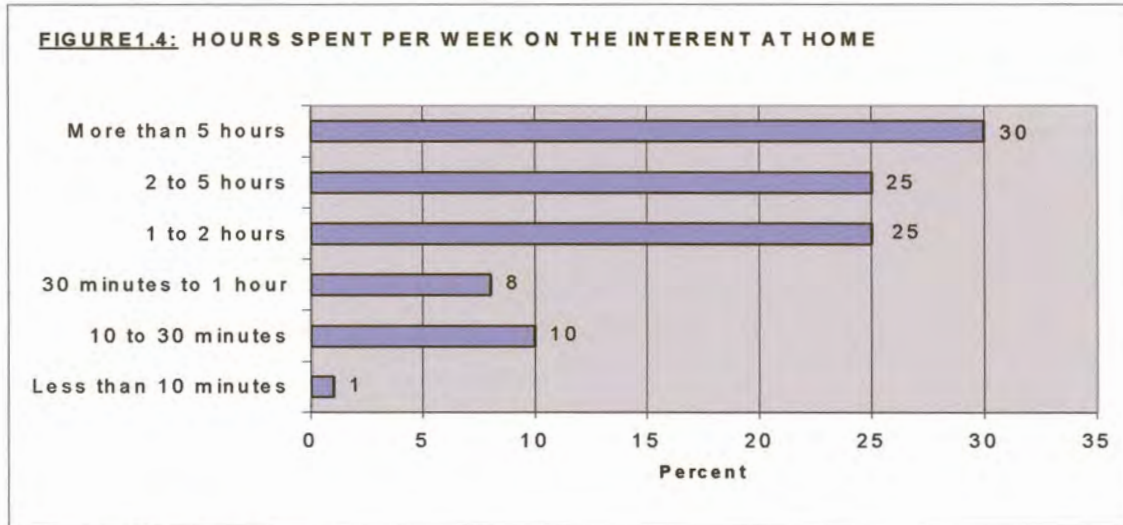
Source: BMI (2000a: 40)

From the information provided in Figure 1.4 it can be concluded that the Internet is becoming an integral part of home routines in homes accessing the Net. This conclusion is supported by the fact that, for homes with Internet access, Net users spend almost as much time surfing the Web as they do listening to the radio. Table 1.8 indicates the time spent per week by South African Internet users on different media.

TABLE 1.8: WEB USER TIME SPENT ON DIFFERENT MEDIA

Media medium	Hours spent per week
Watching Television	13.6 hours
Listening to the radio	9.3 hours
Surfing the Web	9.2 hours
Reading books	6.7 hours
Reading newspapers	4.1 hours
Watching videos	3.3 hours
Reading magazines	3.2 hours
Going to the cinema	2.5 hours

Source: Webchek (1999: 34)

1.6.2.2   Online shopping

According to Webchek (1999: 53), South African Internet users have identified a number of aspects regarding Online shopping that they consider important with regards to Internet shopping. In order of importance, the eight most important aspects of Online shopping considered are:

- Security
- Reliability
- Convenience
- The ease of finding the product Online
- Speed of Internet access
- Price of the item
- Ability to make more informed purchase
- No pressure from a sales person

The reason for listing the factors considered to be important, is that users may be discouraged to purchase via the Internet if the seller does not consider these factors.

BMI (2000a: 60-61) estimates that 33% of South African Internet users purchase products and services Online. This represents a growth of 120%, up from 15% in 1999. The majority of Internet shoppers tend to purchase annually (37%) or at least monthly (47%). These shoppers are most probably new Internet users or first time buyers. Eleven percent can be regarded as weekly shoppers and five percent shop at least daily.

According to BMI (2000a: 68-69), Online shoppers purchase almost equally from both local (48%) and international (52%) shopping sites. The most important reasons for purchasing from International shopping sites are due to specialist goods not being available in South Africa (65%), greater choice and selection (45%), products are cheaper (32%) and better service (22%).

Figure 1.5 provides details of the ten most frequent purchases made by South African Internet users.

FIGURE 1.5:   TOP 10 ITEMS BEING BOUGHT ONLINE
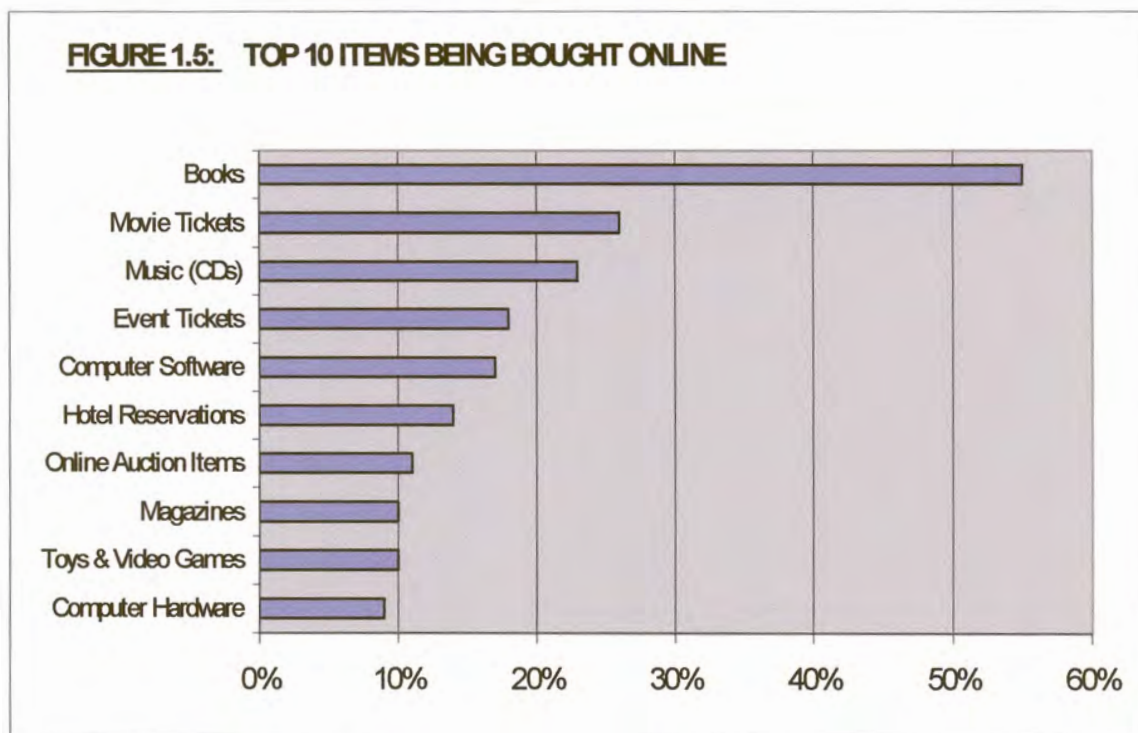
Source: BMI (2000a: 62)

Other products and services of significance bought Online, with more than four percent of shoppers buying these items, are:

- Online Education and Courses (8%)
- Shares (7%)
- Unit Trusts (6%)
- Videos and DVDs (6%)
- Airline Tickets (4%)
- Car Hire (4%)
- Art and Collectibles (4%)

Products and services purchased by less than four percent of Internet users include electronic goods, news and publications, Online classified items, sporting goods, insurance, Internet access and smart handheld devices and motor vehicles to name but a few.

From a marketing point of view, and especially for the purpose of this study, it is important to consider products that the South African Internet users would never buy Online. If users are not inclined to buy a specific category of products, valuable marketing spend may be wasted in pursuing the Internet as primary sales channel or even alternative sales channel. By noting Internet consumer intentions not to purchase, the seller may adapt marketing as well as advertising and promotions strategies to better reach their target market.

The BMI (2000a: 65-66) findings on what products South African Internet users will never buy is shown in Figure 1.6.

FIGURE 1.6: **RANKING OF ITEMS THAT ONLINE SHOPPERS WOULD NEVER BUY ONLINE**

Item	Percent
Adult Entertainment	42
Motor Vehicles	37
Clothing	30
White Goods (Fridges, etc.)	29
Furniture	27
Jewellery, Watches	27
Art & Collectibles	26
Car Parts	26
Pet Supplies	26
Food (Take Away)	24
Groceries (Food Items)	24
Groceries (Non Food)	23
Insurance	23
Health & Beauty Products	22
Pharmaceuticals, Medicine	22
Sporting Goods	21
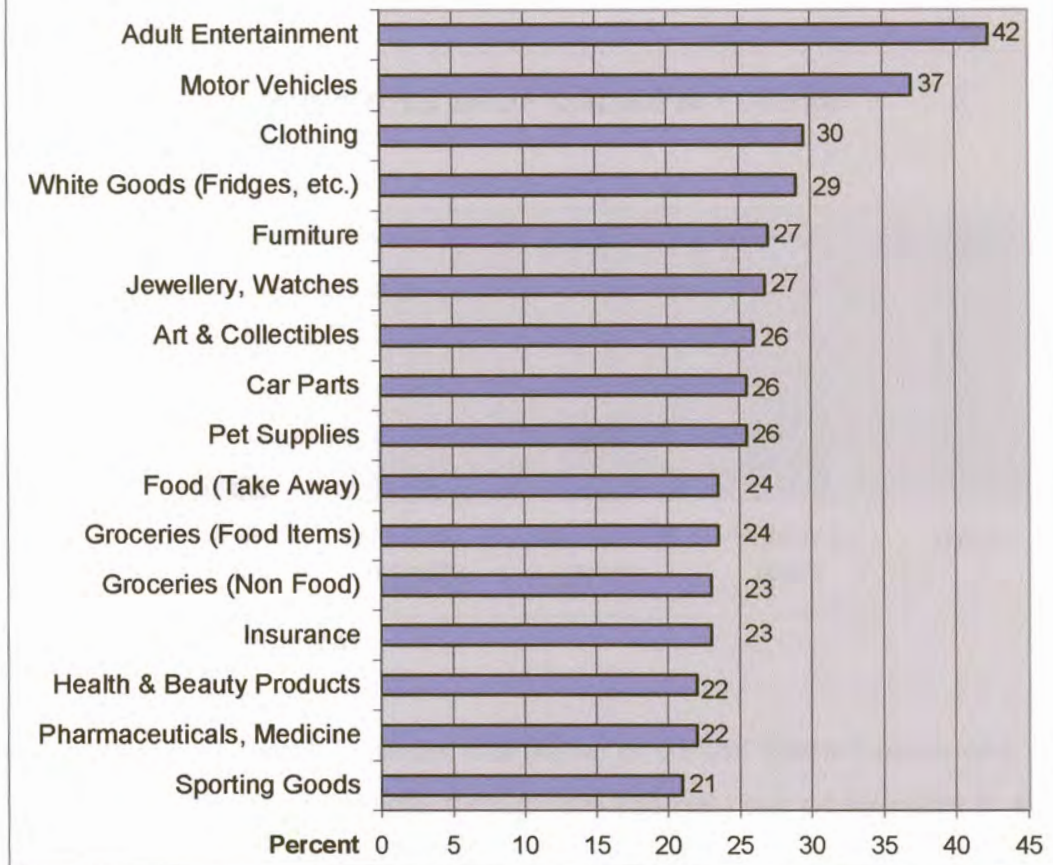
Source: BMI (2000a: 65)

Important to note is that the results portrayed in Figure 1.6 do not imply that no Internet users will ever buy the listed items. It should be understood that to sell these items through the Internet will require more effort and possibly more marketing spend to persuade customers to purchase these items. These findings can also inspire marketers to sell their products and services to an identified niche market through clever marketing campaigns.

More importantly than the items Internet consumers will not buy, and information about the South African Internet user applicable to all marketers who are considering selling their products and services through the Internet, is taking into

account future spending trends. Figure 1.7 shows the shopping intentions of Internet users who currently don't purchase through the Internet.

FIGURE 1.7: PLANNING TO SHOP ONLINE IN FUTURE

Source: BMI (2000a: 74)

As indicated in Figure 1.7, almost half (46%) of current Internet users who do not purchase products and services through the Internet have no intention to ever do so. A further 22% will only purchase within two years.

These findings are significant for marketers intending to sell their products through the Internet to South African Internet users. Marketers therefore need to understand the concerns and reasons for not shopping and need to address these concerns if they intend to be successful with Internet offerings.

According to BMI (2000a: 75) the primary reasons why South African Internet users do not shop, or intend to shop Online, are security concerns, (51%), users being comfortable with current shopping and banking methods (36%) and privacy concerns (32%). Other noteworthy reasons are that they will not get enough use to justify it, reliability of Internet service, expensive Internet subscriptions and

telephone costs, speed of Internet services and not enough knowledge to make use of it.

From the above discussions, it is clear that in order to be a successful seller of products and services on the Internet, marketers will have to understand consumer decision-making and buying behaviour. It is not only important to understand what factors influence consumers to buy, but also to understand what products they will not consider buying and the reasons why. With greater knowledge about consumers, sellers to South African Internet users will be able to draft more effective and profitable strategies to meet needs expressed by these users.

1.7   OUTLINE OF THE STUDY

This research study is divided into eight chapters. **Chapter one** provided an introduction to the study. The area of research has been defined as well as the necessity to execute the study flowing from identified problems, which act as motivation to execute the study. The objectives for the study were set and the demarcation of the study was presented.

Chapters two, three and four present the theoretical base of the study. **Chapter two** focuses on the comprehensiveness of consumer behaviour by examining a number of consumer behaviour models.

Chapter three provides a detailed discussion on the consumer decision-making process documented in marketing literature by focusing on the various stages of the process together with the influences that affect the different stages.

The influence of the Internet on the consumer decision-making process is considered in **Chapter four** and a consumer decision-making model applied to the Internet is discussed.

The problem statement for the study is highlighted in **Chapter five** and the hypotheses for the study are formulated.

The research methodology that will be used in the study is outlined in **Chapter six**. The first part of this chapter provides a theoretical overview of the research methodology applied in the study. The second part provides insight into the sample selection and statistical techniques to be used.

Chapter seven is dedicated to analysing the results obtained from the empirical phase of the study. The statistical results are provided, interpreted and discussed and the main findings from the research-phase of the study are highlighted. The hypotheses formulated for the study (Chapter 5) will also be accepted or rejected in Chapter seven.

The final chapter, **Chapter eight**, summarises the major findings from the study and draws a number of conclusions. The chapter ends by highlighting the limitations of the study and provides recommendations for future research.

CHAPTER 2

CONSUMER BEHAVIOUR THEORY

2.1   INTRODUCTION

Chapter 1 provided an overview of the area of research for this study, by identifying, among others, the objectives of the study together with the importance attributed to the study.

This chapter will focus on the area of consumer behaviour by first considering a number of human behavioural models and the commonalities thereof with consumer behaviour, impacting the marketing field of study. Once the human behavioural models have been addressed, the chapter will focus on models of consumer behaviour.

Section 2.2 of this chapter will provide an overview of consumer behaviour, followed by models of human behaviour in Section 2.3. Section 2.4 will represent the main discussion of Chapter 2 by focusing on the definition, purpose and value of models of consumer behaviour. The chapter will be concluded with a short summary in Section 2.5.

It is important to note that this chapter will provide an overview of consumer behaviour theory and that an Internet perspective on consumer behaviour, and more specifically consumer decision-making, will be provided in Chapter 4.

2.2   AN OVERVIEW OF CONSUMER BEHAVIOUR

This section focuses on the consumer behaviour field of study and will explore the origin of a consumer focus in marketing. Since the term "consumer" will be used and quoted from all the sources consulted in this chapter, it is important to

first define the term "consumer". Walters (1974: 4) provides such a definition by stating that: "A consumer is an individual who purchases, has the capacity to purchase, goods and services offered for sale by marketing institutions in order to satisfy personal or household needs, wants, or desires."

As will be noted from the definition above, referral is made to an individual. Therefore, one should first focus on human behaviour, since consumer behaviour, according to Walters (1974: 6), represents a subset of human behaviour (discussed in Section 2.3). Human behaviour, therefore, "… refers to the total process whereby the individual interacts with his environment" (Walters 1974: 6).

Human behaviour encompasses every thought, feeling or action by people. This implies that every thought, motive, sensation and decision that is made every day, is classified as human behaviour. Belch & Belch (1990: 91) provide a link between human behaviour and consumer behaviour, by stating that consumer behaviour has been defined as the study of human behaviour in a consumer role. Consumer behaviour, according to Walters (1974: 6), represents specific types of human actions, namely those concerned with the purchase of products and services from marketing organisations.

Having defined human behaviour and accepted that consumer behaviour is founded in human behaviour, the focus in Section 2.2.1 will be on consumer behaviour.

2.2.1 Defining consumer behaviour

Walters (1974: 7) defines consumer behaviour as: "… the process whereby individuals decide whether, what, when, where, how, and from whom to purchase goods and services."

Mowen (1993: 6) provides a different definition by explaining 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". This definition focuses on buying units in an attempt to include not only the individual but also groups that purchase products or services.

Schiffman & Kanuk (1997: 648) define consumer behaviour as: "The behavior that consumers display in searching for, purchasing, using, evaluating, and disposing of products, services, and ideas." Schiffman & Kanuk (1997: 6-7) elaborate on the definition by explaining that consumer behaviour is, therefore, the study of how individuals make decisions to spend their available resources (time, money, effort) on consumption-related items. It includes the study of what, why, when, where and how often they purchase and how they use the purchased product. In addition, it encompasses all the behaviours that consumers display in searching for, purchasing, using, evaluating and disposing of products and services that they expect will satisfy their needs.

According to Schiffman & Kanuk (1997: 6-7), two different types of consumers can be distinguished, namely personal and organisational consumers. Personal consumers purchase products and services for personal or household use or as a gift to someone else. Personal consumers, therefore, purchase for final consumption. Organisational consumers on the other hand purchase products and services to run an organisation, including profitable and non-profitable organisations, government organisations and institutions.

This chapter and this study will focus on the individual, personal consumer, who purchases products or services for personal and family use.

A final definition of consumer behaviour, by Engel, Blackwell & Miniard (1990: G-4), states that: "those actions directly involved in obtaining, consuming, and disposing of products and services, including the decision processes that

precede and follow these actions". More recent descriptions or definitions (which in essence do not differ from the above) can be found in Arnould, Price & Zinkhan (2002: 5) and Peter & Olson (2002: 6).

The definitions provided above should provide sufficient clarity on the concept of consumer behaviour. Section 2.2.2 will provide greater clarity on the origin and importance of consumer behaviour, especially from a marketing point of view.

2.2.2 The origin and importance of consumer behaviour

According to Engel et al. (1990: 22) and Schiffman & Kanuk (1997: 8), consumer behaviour is regarded as a relatively new field of study with no historical body of research of its own. The concepts of the development, therefore, were heavily and sometimes indiscriminately borrowed from other scientific disciplines, such as psychology (the study of the individual), sociology (the study of groups), social psychology (the study of how individuals operate in groups), anthropology (the influence of society on the individual) and economics.

From a marketing perspective, consumer behaviour most probably became an important field of study with the development of the so-called marketing concept. Assael (1995: 5) emphasises the influence of the marketing concept in marketing by stating that, according to the marketing concept, marketers first need to define benefits sought by consumers in the marketplace, followed by the drafting of marketing plans supporting the needs of consumers.

The marketing concept was formulated during the 1950s and although it seems logical, marketers never considered the concept thereof earlier. Assael (1995: 8) provides two reasons why marketers did not use the concept earlier. The first is that marketing institutions were not sufficiently developed to accept the marketing concept prior to the 1950s. Advertising and distribution were geared for the mass production and mass marketing strategies of that time. The

implementation of the marketing concept requires diverse facilities for the promotion and distribution of products that will meet the needs of small, diverse market segments. The production and marketing focus before the 1950s was therefore concerned with economies of scale.

The second reason for not pursuing the marketing concept prior to the 1950s can be attributed to the lack of a need to do so. The effects of the Depression resulted in very little spending power of consumers, attributing to the lack of interest in consumer behaviour. The Second World War, immediately after the Depression, contributed to the lack of interest in consumer behaviour since product scarcities were the order of the day. With the lack of competitive pressure, manufacturers could sell whatever products they manufactured. The marketing approach for this era, according to Schiffman & Kanuk (1997: 10), is called a production orientation, where consumers purchased what was available, rather than waiting for what they wanted.

The production orientation was followed by a selling orientation, where marketers attempted to sell products that they unilaterally decided to produce. The assumption of this orientation, according to Schiffman & Kanuk (1997: 10), was that consumers were not willing to purchase products, unless they were actively and aggressively persuaded to do so. The selling orientation did not consider consumer satisfaction, leading consumers to communicate negatively regarding the product by means of word-of-mouth if they were not satisfied with it.

In the early 1950s marketers realised that they could sell more products more easily by offering products to those consumers they assumed would purchase them. Through this approach, organisations considered consumer needs and wants, leading to the formulation of the marketing concept.

As can be seen from a historical perspective, it is important for any organisation to acknowledge consumer needs as a key to success for both survival and profit

generation in a modern economy with multiple products per competitor and multiple competing distribution points.

The importance of understanding consumer behaviour can most probably be summarised in a simple, yet powerful, statement by Assael (1995: 3): "Consumers determine the sales and profits of a firm by their purchasing decisions. As such, their motives and actions determine the economic viability of the firm".

To be a successful seller of products and services (as can be concluded from the statement above), organisations need to understand consumer needs and behaviour and draft their marketing strategies to incorporate such behavioural needs of consumers.

Section 2.2 provided an insight into the consumer behaviour field of study. Before addressing models of consumer behaviour in Section 2.4 (insight to the factors influencing consumers in the purchase process), models of human behaviour will be discussed in Section 2.3, providing greater clarity regarding the way in which human beings behave.

2.3   MODELS OF HUMAN BEHAVIOUR

According to Kotler (in Gould, 1979: 33), it is an extremely difficult task to uncover the reasons why people buy, as they are subject to many influences. One reason is that humans are greatly influenced by their psyche, which eventually leads to overt purchase responses.

Runyon & Stewart (1987: 694-695) explain the theory of human behaviour by stating that it represents the beliefs held regarding the nature of human beings as well as the causes of their behaviour. Human beings can therefore be viewed from many perspectives. If, for instance, human beings are viewed from an

economic perspective, marketers may attempt to influence them with economic incentives. If, however, viewed from a social theory perspective, marketers may attempt to influence people through appeals to group norms, references and values.

According to Runyon & Stewart (1987: 695), in discussing models of human behaviour, it is important to note that the models proposed are viewed as being an incomplete description of human beings, where different models may be appropriate for different marketing situations. Despite the above view, models of human behaviour provide valuable input to consumer behaviour, since they attempt to provide insights into why human beings, and therefore consumers, rationalise purchase decisions.

To provide a clearer understanding of human behaviour, four models will be discussed together with marketing applications based on the findings of Kotler (in Gould, 1979: 34-46). The models of human behaviour discussed below are the Marshallian economic model, the Pavlovian learning model, the Freudian psychoanalytical model and the Veblenian social-psychological model. In addition to these four models, the theory of Maslow's hierarchy of needs will be discussed to provide a perspective on the importance of understanding the influence of needs and motivation on consumer behaviour.

2.3.1 The Marshallian economic model

According to the Marshallian economic model, individual buyers will spend their income on goods that will offer the greatest satisfaction, depending on their taste and the relative prices of goods.

The antecedents for the Marshallian theory can be traced back to both Adam Smith and Jeremy Bentham. In accordance with a doctrine of economic growth developed by Smith, man is said to be motivated in all his actions by self-interest.

Bentham, who viewed man as carefully calculating and weighing expected pains and pleasures of every contemplated action, refined this view. By the time Bentham's theory was applied to consumer behaviour late in the 19th century, the "marginal-utility" theory of value was formulated independently and almost simultaneously by Walras in Switzerland, Menger in Australia and Jevons and Marshall in England (Kotler, in Gould; 1979: 35).

The theoretical work of Alfred Marshall, who was the consolidator of the classical and neo-classical tradition in economics aimed at realism, is founded in his method to examine the effect of change in a single variable, for example price, when all other variables were held constant, based on simplified assumptions. In the quest for greater realism, Marshall "reasoned out" consequences of the provisional assumptions and modified his assumptions in subsequent steps.

Marshall's methods and assumptions have been refined to the Modern Utility Theory, where the economic man maximises his utility and does this by carefully calculating the "felicific" consequences of any purchase. Runyon & Stewart (1987: 695) add to the discussion by stating that Marshall used money as the common denominator of psychological needs, where the value of satisfying a specific need could be equated and compared with other needs in terms of cost.

Marketing applications of the Marshallian model

The value of the Marshallian model for the purposes of behavioural science can be viewed from a number of different viewpoints (Kotler, in Gould; 1979: 35-36). One point of view is that the model is tautological and therefore neither true nor false. The model is also not very informative because it simply portrays the buyer as acting in his best interest.

A second view is that the model provides logical norms for buyers who want to be "rational", therefore it is a normative rather than a descriptive model of

behaviour. The consumer is not likely to employ an economic analysis for all purchases, but is rather selective in using an economic theory. A consumer may therefore not use the economic principles for choosing between two low-cost products but may apply an economic analysis when deciding to purchase a new house or car.

A third view is that economic factors should be included in any comprehensive description of buying behaviour, since economic factors operate, to a greater or lesser extent, in all markets.

The Marshallian model provides a number of useful behavioural hypotheses. The first hypothesis offered is that the lower the price of a product, the greater the sales will be for that product. A second hypothesis is that the lower the price of a substitute product is than that of a specific product, the greater the sales of the substitute product will be.

Third, the sales of a product will be higher, provided it is not an inferior product, if the real income is higher. The last hypothesis states that greater volumes of sales will follow as promotional expenditure is increased.

It should be noted that these hypotheses are intended to describe the average effect and do not attempt to class all individuals' actions as continuously calculating the economic impact during purchase decisions.

As a final comment to the Marshallian model, it can be concluded that economic factors alone cannot explain all variations in the sales and buying process and also that the fundamentals of how brand and product preferences are formed are ignored in this theory. The model offers a useful frame of reference for analysing only a small portion of the consumer's psyche.

2.3.2 The Veblenian social-psychological model

The Veblenian social-psychological model of human behaviour is based on the findings of Thorstein Veblen, who received his training as an orthodox economist and evolved as a social thinker through the influence of the science of social anthropology.

According to this model, man is perceived to be a so-called "social animal", where man conforms to norms of its larger culture and to more specific standards of subcultures and face-to-face groups in which humans operate (Kotler, in Gould; 1979: 41). In essence this implies that human behaviour and needs are moulded by present group memberships.

Based on the theory of the model, Veblen hypothesised that, for the so-called leisure class, a great portion of economic consumption is influenced and motivated by prestige seeking and not on needs or satisfaction. Veblen placed specific emphasis on emulative factors that would influence people when purchasing conspicuous products, for example cars and houses or even less expensive items, such as clothes.

The model is criticised as it is perceived by more modern perspectives to be overstated. For example, not all people consider the leisure class to be a frame of reference and many people aspire to the social class immediately above their current social class. In addition to the above, more affluent people of the society would rather underspend than overspend on conspicuous items since they would rather "fit in" than "stand out".

A final comment on the model is that although Veblen was not the first investigator to comment on the influence of social class on human behaviour, the incisive quality of his observations inspired further investigations.

Marketing applications of the Veblenian model

The importance of the Veblenian model, according to Kotler (in Gould, 1979: 42), to the marketer is that, in order to determine the demand for products, the most important social influences impacting on such product demands should be determined. Important for the marketer to consider is the impact of different social influences, which include social class, subculture, reference groups and face-to-face groups.

2.3.3 The Pavlovian learning model

The well-known Pavlovian theory of learning has its origin in the experiments of the Russian psychologist, Pavlov, who conducted his experiments by ringing a bell each time before feeding a dog. Pavlov soon discovered that he could induce the dog to salivate by ringing the bell regardless of whether or not food was offered to the dog. From this experiment, Pavlov could conclude that learning occurred due to a process of association and that a large component of human behaviour was conditioned in this way.

Experimental psychologists, focusing on rats and other animals and eventually human beings, continued Pavlov's mode of research. The objective of laboratory experiments was to explore phenomena such as learning, forgetting and the ability to discriminate. The result of the research led to a stimulus-response model of human behaviour, based on four central concepts, namely drive, cue, response and reinforcement. Before briefly discussing these concepts, it should be mentioned that O'Shaughnessy (1992: 116) explains that according to Pavlovian theory, also called classical conditioning, there has to be a connection between some stimulus and a true reflex reaction.

The four central concepts of the Pavlovian theory are briefly discussed below.

a)   **Drive:**   In the Pavlovian learning model, drive, also referred to as "needs" or "motives", implies strong stimuli internal to the individual, which activate action.   Two types of drives are distinguished by psychologists, namely primary physiological and learned drives.   Primary physiological drives refer to basic individual factors, such as hunger, thirst, pain, cold and sex. Learned drives, which are derived socially, include factors such as co-operation, fear and acquisitiveness.

b)   **Cue:**   According to the model, a drive is very general and a particular response is impelled only in relation to a particular configuration of cues. Cues are furthermore perceived as weaker stimuli in the individual and the environment and will determine where, when, and how a subject responds. As an example, an advertisement for coffee may act as a cue, which stimulates the thirst drive.   The response will be influenced by this cue as well as other cues, for example time of day and availability of other thirst-quenchers.

c)   **Response:**   Response implies the reaction to the configuration of the cues. It should, however, be noted that the exact configuration of cues will not necessarily generate the same response.   The same response depends on the degree to which the experience was rewarding.

d)   **Reinforcement:**   A rewarding experience will result in the reinforcement of a particular response. It is therefore implied that the tendency is formed where the same response will be repeated when the same configuration of cues appears. If, however, a learned response or habit is not reinforced, the habit may eventually be extinguished, since the strength of the habit decreases.

Important to note is that, in contrast to extinction, forgetting occurs when learned associations weaken due to non-use and not because of the lack of reinforcement.

Marketing applications of the Pavlovian model

The Pavlovian model makes no claim to provide a complete theory of consumer behaviour due to the omission of interpersonal influences, perception and the subconscious influences considered to be important phenomena. The model does, however, contribute to marketing by providing insights to the marketer concerning consumer behaviour and advertising strategy.

An example of the usefulness of the model for the marketer would be the introduction of a new brand into a highly competitive market. The organisation may attempt to form new habits for its new brand by extinguishing existing brand habits. A challenge to the organisation will be to persuade consumers to try the new brand by deciding between using strong and weak cues. Although strong cues, for example samples of the product, may be the more expensive alternative, it often is the desired approach to target markets characterised by high brand loyalties. Also of importance, considering the reinforcing component of the model, is that sufficient quality should be built into the brand to create a positive experience. In addition to the above, it may be useful to determine the most effective cues in leading brands.

The second area in which the Pavlovian model offers insight, according to Kotler (in Gould, 1979: 38), is in the form of guidance for advertising strategy. The model emphasises the repetition in advertising since a single exposure is very likely to be a weak cue, hardly able to sufficiently arouse the individual's consciousness to inspire the drive as discussed in the model. Repetition in advertising also has two desirable effects (Kotler, in Gould; 1979: 38). Repetition (or frequency of association, according to Belch & Belch, 2001: 125) firstly

combats forgetting and secondly provides reinforcement since the consumer becomes selectively exposed to advertisements of the product after purchase.

As closure to the value of the model offered to marketing, guidance is provided to advertising copy, since in order to be effective, an advertisement should arouse strong drives in a person. Marketers should therefore identify the strongest product-related drives, for example hunger may be identified for candy bars and status for motor vehicles.

2.3.4 The Freudian psychoanalytical model

The well-known Freudian model of human behaviour, according to Kotler (in Gould, 1979: 39), is regarded to have a profound impact on 20th century thought, although it is labelled as being the latest in a series of philosophical "blows" to which man has been exposed in the past 500 years. Freud attacked the idea that man reigned over his own psyche, whereas preceding philosophical views by Copernicus and Darwin respectively destroyed the view that man was at the centre of the universe and opposed the idea that man was considered a special creation.

Kotler (2000: 172) summarises the theory by stating that Freud assumed that the psychological forces shaping people's behaviour are largely unconscious, resulting in people not being able to fully understand their own motivations.

Kotler (in Gould, 1979: 39) provides more detail on Freudian theory by explaining that, according to the theory, the child enters the world driven by instinctual needs that cannot be satisfied by itself. The child quickly and painfully realises its detachment from the world and at the same time its dependence on it. Through blatant means, including supplication and intimidation, the child attempts to use others to satisfy its needs.

Freudian theory further propagates that, as human beings grow, their psyche (called the id) remains the source for strong urges and drives. Solomon (1996: 134) adds by stating that the id is oriented toward immediate gratification, forming the "partly animal" portion of the brain. A second part, called the ego, develops into a conscious planning core where outlets for drives are uncovered, responsible (according to Solomon, 1996: 134) for mediating between the id and the superego. The superego, the final concept of the model, is responsible for the channelling of instinctive drives into socially acceptable outlets in order to avoid the pain associated with guilt and shame, referred to by Solomon (1996: 134) as the individual's conscience.

The urges that human beings feel, especially sexual urges, cause shame and guilt and are therefore repressed from the conscious. A person therefore develops defence mechanisms, for example rationalisation and sublimation, resulting in either the denial of such urges or the transformation thereof into acceptable social expressions. According to Freud, these urges are never eliminated or under perfect control and sometimes emerge, vigilantly, as slips-of-the–tongue, in dreams, in neurotic and obsessive behaviour or eventually in mental breakdowns where the ego is not capable to maintain the balance between the oppressive power of the superego and the impulsive power of the id.

A possible impact of the model, in practical terms, is that since the individual is not able to understand its own behaviour, it is even more difficult for the casual observer to understand such behaviour. For example, if a person is asked why a certain expensive vehicle is bought, the reply may be that the deciding factors were speed, comfort and appearance. At a deeper level, the reasons may include to impress others or to be young again. At an even deeper level, the motive for the purchase may be attributed to an attempt to achieve substitute gratification for unfulfilled sexual urges.

The Freudian model has been refined a number of times. Changes include the three parts of the psyche, where it is regarded as theoretical concepts rather than actual entities as well as the extension of the behavioural perspective to incorporate cultural and biological mechanisms.

Kotler (in Gould, 1979: 40) continues by stating that instead of focusing on sexual urges in psychic development, like Freud who focused on oral, anal and genital stages together with possible fixations and traumas, other philosophers refined the theories of Freud. For example, Adler focused on the desire for power and the manifestation thereof in superiority and inferiority complexes; Horney emphasised cultural mechanisms and Fromm and Erickson stressed existential crises in personal development.

In conclusion, it should be noted that the philosophical divergencies, as mentioned above, greatly enriched and extended the interpretative value of the Freudian model to a wide range of behavioural phenomena.

Marketing applications of the Freudian model

Kotler (in Gould, 1979: 40) suggests that the most important marketing implication of the Freudian model that marketers should note, is that consumers are motivated by both symbolic and economic-functional product concerns. For example, the change of a bar of soap from a square to a round shape has probably more a sexual than functional connotation. A more practical example may show that an advertisement for a cake mix, depicting little effort and labour involved, may alienate housewives since the easy life may cause a sense of guilt.

The importance of the model can also be viewed from a research perspective. While direct observation and interviewing can be used to obtain more superficial characteristics, for example age, gender and family income, these methods of

research cannot be used for establishing the mental state, which is believed to be deeply "buried" within an individual.

A final benefit to marketing researchers is that motivational research can offer beneficial insights and inspiration in terms of advertising and packaging. Belch & Belch (2001: 112) support this view by stating that insights gained from motivational research can often be used as a basis for advertising messages aimed at deeply rooted feelings, hopes, aspirations and fears of consumers. Such emotional appeals are often more effective than rationally based appeals.

2.3.5 Maslow's hierarchy of needs

Maslow's well-known hierarchy of needs, although not classified as a model of human behaviour, provides valued input to the theory of consumer behaviour, since it provides theory on the motivation of human beings based on a hierarchy of human needs. The importance of motivation and needs within the study of consumer behaviour will be noticed when the models of consumer behaviour are discussed later in this chapter. Important to note, as will be seen in Chapter 3, is that the theory of the consumer decision-making process commences with the identification or recognition of a need, therefore underlying the importance of considering the hierarchy of needs theory by Maslow.

According to Schiffman & Kanuk (1997: 95-96), Maslow's theory postulates five basic levels of human needs, ranging from lower-level (biogenic) needs to more important, higher-level (psychogenic) needs. Consumers, therefore, seek to first satisfy lower-level needs before attending to higher-level needs.

Only once a lower-level need is satisfied, will a new (higher-level) need emerge, motivating the consumer to fulfil such a need. The process continues, leading the consumer to aspire to the fulfilment of higher-level needs, each time higher than the need before. Loudon & Della Bitta (1993: 334) support this view by

stating that the most basic motives would cause the greatest influence on consumer behaviour until they are adequately satisfied. Tischler (1999: 274) adds by stating that the individual, once freed from a lower order concern, not only can, but also will begin to explore higher order needs. It should be noted that there is some overlap between the different levels of needs, since no need is ever completely satisfied. The major motivator within the individual is therefore the lowest level of need that remains unsatisfied.

The hierarchy of needs theory proposed by Maslow comprises five distinct levels (Belch & Belch, 2001: 110; Kotler, 2000: 172; Churchill & Peter, 1998: 143 and Schiffman & Kanuk, 1997: 97), namely physiological needs, safety and security needs, social needs, ego needs and self-actualisation. Figure 2.1 provides a graphical view of the different levels of needs, clearly indicating the hierarchy from lower to higher-level needs.

FIGURE 2.1: MASLOW'S HIERARCHY OF NEEDS
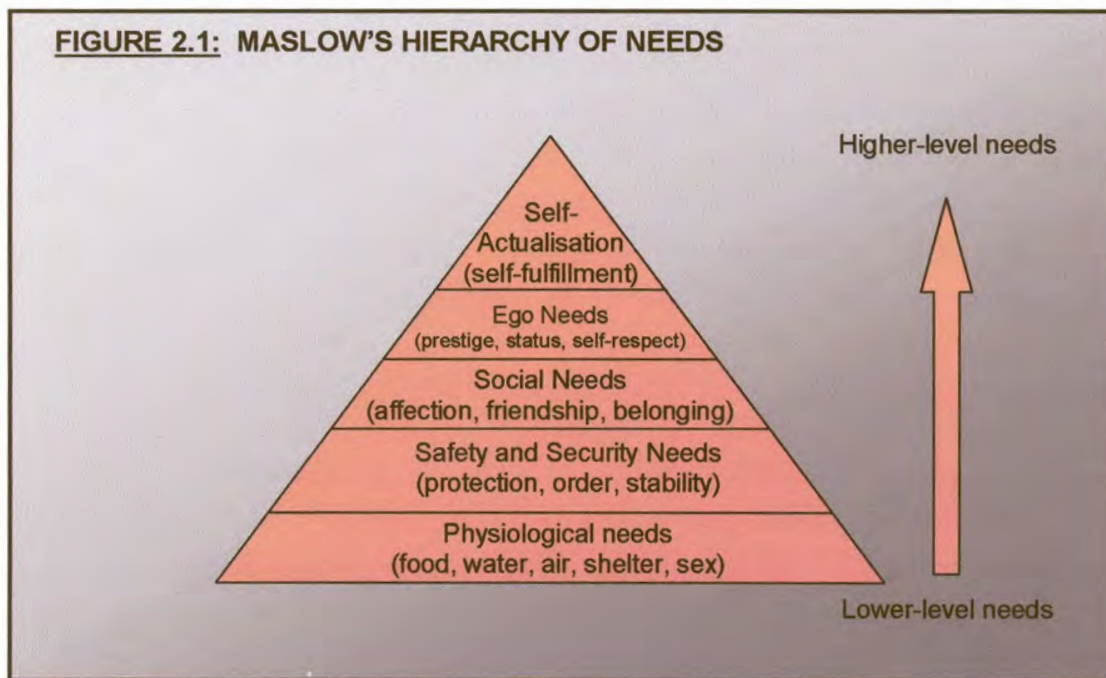
Source: Compiled from Shiffman & Kanuk (1997: 97) and Solomon (1994: 92)

Each level, as portrayed in Figure 2.1, will be briefly discussed to differentiate between the levels. **Physiological needs** represent the most basic needs that are required to sustain life and include food, clothing and shelter. **Safety and security needs** concern more than physical safety and include order, certainty and control over the environment and own life. The third level, **social needs** (referred to as affiliation needs by Churchill & Peter, 1998: 143), refers to needs such as friendship, love, affection, belonging and acceptance.

Egoistic needs (called esteem needs by Belch & Belch, 2001: 110 and Churchill & Peter, 1998: 143) comprise inwardly-directed needs (for example concerned with the individual's need for success, independence, self-acceptance and personal satisfaction with something well done) and outwardly-directed needs (including, for example, the need for reputation, status and prestige). The final and highest level of needs is that of **self-actualisation**, implying the desire to fulfil one's potential, becoming everything an individual is capable of becoming. Worth mentioning is that Maslow believed that most people do not satisfy their egoistic needs sufficiently, thereby keeping them from ever moving to the final, self-fulfilment needs.

Comments on Maslow's hierarchy of needs

According to Schiffman & Kanuk (1997: 100) the major problem of Maslow's theory is that it cannot be tested empirically, implying that there is no means of measuring precisely how satisfied one need must be before a next, higher need becomes operative.

Solomon (1994: 94) continues by stating that the influence thereof on marketing is somewhat simplistic since, according to the theory, consumers first need to satisfy basic needs before progressing to higher-level needs, where one product can satisfy a number of different needs. In addition to the above, Solomon (1994: 94) and Schiffman & Kanuk (1997: 100) argue that the theory may be

culture-bound, perhaps restricting it to Western culture, or even only certain Western cultures, with other cultures possibly questioning the order of levels specified by the model. For example, Eastern cultures may regard the welfare of a group to be more valued than needs of an individual.

Despite the criticism on the Maslow theory, Schiffman & Kanuk (1997: 100) believe that it is useful in marketing strategy, since it provides an understanding of consumer motivations, primarily because consumer goods often serve to satisfy each of the need levels. In addition to the above, the hierarchy offers a comprehensive framework for marketers when developing advertising appeals for their products. The theory is adaptable in two ways, firstly enabling marketers to focus advertising appeals on a need level that is likely to be shared by a large segment of the intended audience and secondly, providing input to product positioning and repositioning.

Solomon (1994: 94) indicates the relevance of the hierarchy of needs by stating that, rather than viewing consumer needs as a progression to higher-level needs, marketers should acknowledge that consumers have need priorities at different times. This view is supported by Walters (1974: 108) who states that the importance of needs to marketers is founded in the fact that motives for purchasing are established by needs.

Section 2.3 provided an overview of models of human behaviour. The following section focuses on models of consumer behaviour and will show how the shortcomings of the models of human behaviour led to the formulation of models of consumer behaviour. Chapter 3 will narrow the theoretical focus of the study by being devoted to the consumer decision-making process. Chapter 4 will provide an even greater focus (as far as the theoretical overview is concerned) by providing insights on how the Internet can possibly influence the consumer decision-making process.

2.4   MODELS OF CONSUMER BEHAVIOUR

The discussion on models of human behaviour in Section 2.3 showed attempts to explain human behaviour as well as its influence on consumer behaviour. These models had a very narrow approach in terms of their explanations of human behaviour and the impact thereof on consumer behaviour. It only focused on one subset of possible influences on behaviour, for example the Marshallian model, focusing only on the influence of financial resources on behaviour.

The shortcomings of models of human behaviour led to more complex models of consumer behaviour appearing in the early 1960s. According to Runyon & Stewart (1987: 698), models of consumer behaviour, in contrast to models of human behaviour, attempted to describe and systemise the entire purchasing process, thereby providing a guide for further study and research on the subject of consumer behaviour.

Section 2.4 will focus on the definition of models of consumer behaviour, the purpose and advantages thereof and finally, discuss a number of models of consumer behaviour together with the importance thereof in understanding consumer behaviour.

2.4.1 Defining models of consumer behaviour

Before providing a definition of models of consumer behaviour, it may be useful to first define the term "model". Schiffman & Kanuk (1997: 652) provide such a definition, namely: "A simplified representation of reality designed to show the relationships between the various elements of a system or process under investigation."

Engel & Blackwell (1982: 677) add to the above by explaining that a model is a replica of the phenomena it is intended to designate, meaning that it specifies the

elements portrayed within the model and represents the nature of relationships among these elements.

A model can therefore be viewed as a testable "map of reality" and its utility lies in the extent to which successful predictions and description of behaviour, together with underlying influences, are made possible.

A final definition, specifying models of consumer behaviour, is offered by Assael (1995: G-8): "Sequence of factors that lead to purchase behavior and hypothesizes the relationship of these factors to behavior and to each other."

The definitions above should prove sufficient in an attempt to clarify the meaning of models, and more specifically, models of consumer behaviour. Section 2.4.2 will provide greater clarity on the purpose and advantages of models of consumer behaviour.

2.4.2 Purpose and advantages of models of consumer behaviour

According to Engel & Blackwell (1982: 678), the purpose of a model, namely to guide researchers, cannot be overemphasised. A model provides the researcher with a range of appropriate variables, thereby preventing a problem often experienced, namely a narrow perspective when looking at problems.

Lilien & Kotler (1983: 205) point out that comprehensive models of consumer behaviour pose both advantages and disadvantages. The advantage of these models is that they describe complex decision-making processes, while the disadvantage can be attributed to its estimation, measurement and policy analysis.

Runyon & Stewart (1987: 698) criticise comprehensive models by stating that models are primitive and ineffective in predicting behaviour. In addition, models

often consist of little more than elaborated flowcharts, designed to reflect the various factors influencing consumer behaviour. These so-called flowcharts do not adequately evaluate the relative importance of the variables involved in the models and borrow heavily, and sometimes indiscriminately, from behavioural sciences for their theoretical base.

As a final criticism, Runyon & Stewart (1987: 698) state that contemporary models of consumer behaviour are inadequate for marketing needs. Although this expressed opinion may cause confusion regarding the relevance of consumer behaviour models, it is important to view a different perspective on the relevance of models. Engel & Blackwell (1982: 678) provide clarity regarding the relevance of models by stating that decision process models encompassing many variables cannot explain the details of consumer behaviour in every specific situation. Engel & Blackwell (1982: 678) therefore suggest that a workable model should delineate the variables associated with the consumer decision process, the general relations that exist among variables, and the general principles that express the model's ingression in particular purchase situations.

The purpose and advantages offered by models of consumer behaviour are listed below:

a) **Explanations are provided for behaviour:** Engel et al. (1990: 475) list probably the most obvious advantage - that it is possible to visually grasp what happens as variables and circumstances change;

b) **Explanatory variables are specified:** According to Engel & Blackwell (1982: 677) every person has a model of consumer behaviour in mind, whether implicit or explicit. This implies that each person has a concept of factors that shape motivation and behaviour. Without a held concept, explanation and prediction will be impossible. The distinction is made with

respect to the comprehensiveness of competing models and the accuracy with which predictions can be made;

c) **Systematic thinking is encouraged:** Runyon & Stewart (1987: 698) suggest that forcing theorists to define the relevant elements in behavioural theory, will result in systematic thinking. Lilien & Kotler (1983:204) support this view by adding that all major variables that models comprise, are identified and measured;

d) **Fundamental relationships between variables and the exact sequence of cause and effect of variables are specified:** This view by Lilien & Kotler (1983: 204) is supported by Runyon & Stewart (1987: 698), adding that by showing explicit relationships between variables, a tentative view of behavioural phenomena is offered;

e) **Research findings can be integrated into a meaningful whole:** Engel & Blackwell (1982: 677) point out that most analysts of consumer behaviour are familiar with behavioural sciences. A well-formulated model assists analysts to differentiate between relevant and irrelevant literature that is often a highly frustrating experience to examine;

f) **Evaluations are provided for performance of the system:** Part of the requirements for a good model, according to Engel & Blackwell (1982: 678) is that they describe the functional relationships between variables, resulting in the ability of the model to make behavioural predictions with some degree of accuracy;

g) **Avenues for fruitful research are revealed:** Engel & Blackwell (1982: 678) point out that carefully designed models are often the source of researchable hypotheses, since gaps in existing knowledge are easily exposed. The nature of the researchable hypotheses identified is usually

determined by the variables themselves and linkages between them. Engel et al. (1990: 475) add to the above by stating that the gaps identified could possibly even establish research priorities;

h) **A foundation is provided for management information systems:** Essential insights for marketing strategy, according to Engel et al. (1990: 475), are provided through the proper use of a model that discloses information required to understand consumer decision processes; and

i) The final advantage, offered by Runyon & Stewart (1987: 698) and supported by Lilien & Kotler (1983: 204), is that **models sometimes permit sensitivity analyses and simulations of behaviour** so that the impact of changes in variables can be explored and the implications of the model observed under different sets of assumptions.

2.4.3 Some models of consumer behaviour

The objectives of discussing various models of consumer behaviour are to attempt to indicate the evolution in thought patterns of different authors on the subject of consumer behaviour over the past years as well as to show the relevance and importance of models of consumer behaviour in the study of consumer behaviour.

In an effort to achieve the objectives stated above, a number of models of consumer behaviour will be discussed. Important to note is that the models discussed will include historic versions by the same authors, often attached in appendices, thereby attempting to show the change in thought patterns of authors as more research on the subject is conducted. The second, even more important, objective will be to indicate the relevance and importance of these models on the subject of consumer behaviour. This will be achieved by briefly discussing historic models on the subject of models of consumer behaviour, as

well as a detailed discussion on a more recent model, namely that of Engel, Blackwell and Miniard. The detailed discussion of the Engel, Blackwell & Miniard (EBM) model will show the difficulty of understanding consumer behaviour due to the many variables influencing the consumer decision process. Only by understanding the influences on consumer decision-making, will the marketer be able to draft effective strategies aimed at meeting consumer needs. Although the researcher considered a number of more recent models of consumer behaviour, it was decided to focus on the EBM model (1995 version), since the discussion in Chapter 3 will be based on this model.

The discussion below will focus on four historic models of consumer behaviour, namely Bettman's information processing model, the Nicosia model, the Howard-Sheth model and the Howard model. As stated above, the Engel, Blackwell, and Miniard will be discussed in greater detail in an attempt to indicate the factors influencing consumer behaviour.

2.4.3.1 The Bettman information processing model

The Bettman information processing model, according to Runyon & Stewart (1987: 708), attempts to model a specific field of consumer behaviour, namely information processing. Lilien & Kotler (1983: 206) add that the model provides an analytical framework for understanding consumer behaviour in an environment where choice is made by selecting between a set of alternatives. The model focuses on the information processing perspective by viewing the type of information used by consumers, how the information is evaluated and finally, how decisions are made. The Bettman information processing model is shown in Figure 2.2.

FIGURE 2.2: BETTMAN'S INFORMATION PROCESSING MODEL

Source: Bettman (1979: 17)
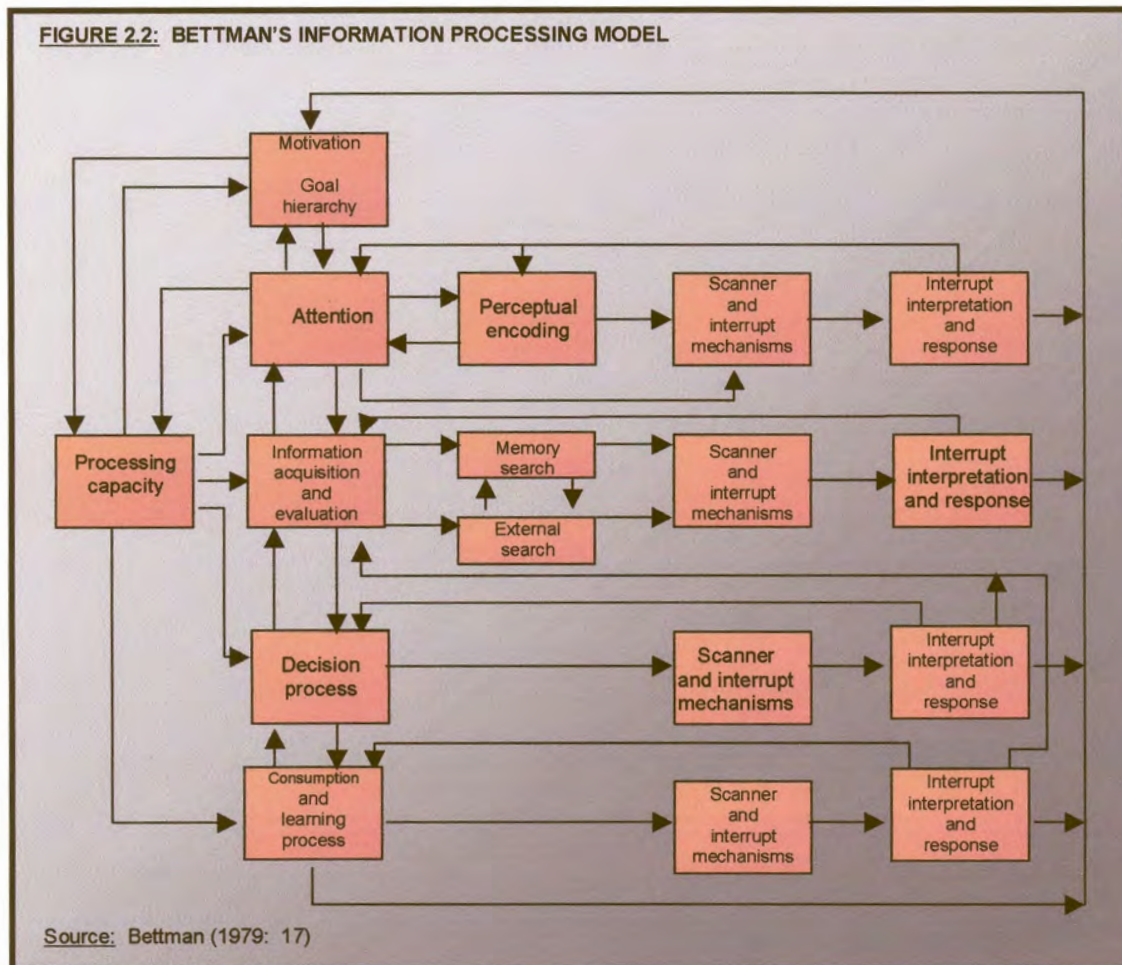
Lilien & Kotler (1983: 206) continue by stating that the model comprises two submodels, namely the basic hierarchy and the intermediate or modulating processes. Before discussing the two submodels, it is noteworthy to mention that there is no logical starting point or ending point for the process.

a)   The basic hierarchy

The first component of the basic hierarchy is motivation and goal hierarchy, serving as mechanisms to control the movement from some critical state to a desired goal or state within an individual. Runyon & Stewart (1987: 708) add that these components together with information acquisition are, at least in part, a

function of prior experience and information obtained by the consumer. Attention, the second component, comprises voluntary attention (implying the consumer's allocation of the information-processing effort) and involuntary attention.

The third component, information acquisition and evaluation, stipulates that attention is influenced by the goals pursued and therefore activates the search for information. The evaluation component of the model determines when sufficient information is obtained for the purpose of decision-making. The next component of the model, the decision process, is continuously active in the model by focusing on the comparison of possible alternatives.

The final element of the basic hierarchy, namely consumption and learning, focuses on the purchase and consumption of the product and offer a new source of information to the consumer. The final stage in the basic hierarchy will, therefore, affect the structure of future choices.

b) The intermediate process

The intermediate processes, also referred to as modulating processes, focus on four elements, namely perceptual encoding, processing capacity, memory and external search and finally, scanner and interrupt mechanisms.

The first component of the intermediate process, "perceptual encoding", comprises the interpretation process of an individual once being exposed to a stimulus. Bettman argues that this process is influenced by memory, implying the way things were, and by the stimulus itself, implying the way things are.

The implications of processing capacity, the second component, are that capacity has to be allocated to a decision task since the complete information-processing process is limited by capacity. Capacity is furthermore positively related to effort

and motivation. Runyon & Stewart (1987: 708) continue by pointing out a relation between processing capacity and education, intelligence and previous experience.

According to the memory and external search components, information may be obtained, in a choice situation, through internal search of the memory and external search, where attention and perceptual decoding is focused on stimuli outside the consumer's memory. Runyon & Stewart (1987: 710) continue by listing advertisements, other people and other sources external to the consumer as external sources. The cost of information search versus the benefits of the information, together with the availability of information, time pressure and the difficulty of the choice task, will determine the level of information search.

The final component, scanner and interrupt mechanisms, indicates that consumers are interruptible and not single-minded when pursuing a goal. The scanner monitors the environment in an effort to note conditions that may warrant changes in current actions or beliefs. By reaching a theoretical scanner threshold, an interrupt mechanism is triggered, resulting in the generation of new responses. It is therefore suggested in the model that scanner and interrupt mechanisms affect virtually the entire decision-making process.

Considering the Bettman information processing model, Lilien & Kotler (1983: 208) suggest that the model represents an attempt to develop a complete theory on the consumer choice process. Knowledge obtained from the model, beneficial for the development, presentation and timing of marketing communications, includes insight into the information consumers desire, how information is obtained and the probable processing of such information.

In addition to the above, the model offers a broad view of purchase decisions, including choices among product classes as well as competing alternatives within a specific product class. The theory of the model is therefore perceived to

position decision rules or choice heuristics within the broader concept of decision making.

The main limiting factors to the model, according to Lilien & Kotler (1983: 208), are that the model is not directly operational and does not provide quantitative support for marketing decisions. Runyon & Stewart (1987: 710) add to the above by stating that, while the schematic model suggests complex relationships involving interactions and feedback, these are not specified in the model and have not been empirically tested.

Despite the limitations, the model provides insight in terms of the structure of the process and guidance on the kind of issues that can be expected to affect and influence consumer choices. Runyon & Stewart (1987: 710) add that the model has proven useful to managers concerned with effective communication with consumers and also as a guide for further research on consumer information processing.

2.4.3.2   The Nicosia model

According to Runyon & Stewart (1987: 699), the Nicosia model provides a sophisticated attempt to show the interrelationship between attributes of the consumer, the consumer decision-making process, the marketing communication of an organisation and feedback of the response of the consumer to the organisation.

Schiffman & Kanuk (1987: 653) provide a simplistic explanation of the model by stating that it is interactive in design, where the organisation attempts to influence consumers through marketing actions and the consumers in return influence the organisation through their purchase actions (or lack of action if products are not purchased).

Runyon & Stewart (1987: 701) continue by stating that the model consists of four different fields, namely exposure of the organisation's message, search and evaluation, purchase and feedback. These four fields, together with their interaction, are visible in Figure 2.3.

FIGURE 2.3: **THE NICOSIA MODEL OF CONSUMER DECISION-MAKING**

Field one: from the source of a message to the consumer's attitude

Subfield one — Firm's attributes

Message Exposure

Subfield two — Consumer's attributes (especially predispositions)

Attitude

Field two: Search for and evaluation of means end(s) relation(s) (preaction field)

Search evaluation

Experience

Motivation

Field four: Feedback

Consumption storage

Decision (action)

Field three: Act of purchase

Purchasing behavior

Source: Nicosia in Schiffman & Kanuk (1987: 653)

The first field comprises two subfields. The first subfield represents the output of a commercial message from the organisation to the consumer in the form of advertising or other forms of promotions. For simplification purposes, the model explicitly assumes that the consumer has no previous knowledge or experience with the brand. The message from the organisation serves as input to subfield two, representing the consumer's unique psychological attributes. At this stage of the model, the consumer reacts to the message, providing input to the second field. Schiffman & Kanuk (1987: 654) indicate that the output of field one is an attitude towards the product, as a result of the interpretation of the organisation's message.

Runyon & Stewart (1987: 701) continues by stating that if the reaction or attitude resulting from field one is favourable, the consumer will search for the product and evaluate it in terms of other alternatives. Schiffman & Kanuk (1987: 654) add that the output of the second field is motivation to purchase the organisation's brand. The evaluation could, however, also lead to rejection of the brand although the model illustrates a positive response. The positive evaluation leads to purchase of the product, the third field of the model.

According to Schiffman & Kanuk (1987: 654), the final field of the Nicosia model, field four, consists of two types of feedback from the purchase experience. The first type of feedback relates to the organisation where sales data will be obtained and the second to the consumer in the form of experience, leaving the consumer either satisfied or dissatisfied. The experience obtained by the consumer relating to the product will affect the predisposition and attitudes with regard to future messages from the organisation.

Limitations of the Nicosia model according to Runyon & Stewart (1987: 701), are the questionable assumptions that the consumer has no prior knowledge or experience of the product, as well as inadequate understanding of subfield two, the influences and interrelationships among the consumer attributes. A final limiting factor is that, for repetitive decisions (considered a significant part of consumer purchases), the operation of the model is ambiguous.

Engel, Blackwell & Kollat (1978: 548) criticise the Nicosia model by claiming that the model never received the necessary elaboration and empirical support nor has it been revised to reflect changes.

In conclusion to the Nicosia model, Runyon & Stewart (1987: 701) express the opinion that despite the limitations of the model, it attempts to explicitly incorporate the marketing actions of the organisation within a model of consumer behaviour.

2.4.3.3   The Howard-Sheth model

The Howard-Sheth model of buying behaviour, according to Foxall (1990: 10), presents a sophisticated integration of the psychological and various social and marketing influences on consumer choice, into a coherent sequence of information processing. Runyon & Stewart (1987: 704) and Foxall (1990: 10) add respectively that the model attempts to explain rational brand choice behaviour within the constraints of incomplete information and limited individual capacities, and also that it provides an empirically testable description of behaviour in terms of cognitive functioning together with its outcomes.

Schiffman & Kanuk (1987: 654) explain the Howard-Sheth model (depicted in Figure 2.4) a model that explicitly distinguishes between three different stages or levels of decision-making, also referred to as levels of learning, namely extensive, limited and routinised problem-solving.

Extensive problem-solving implies that the consumer has very little or no knowledge and beliefs about brands. The consumer actively seeks information on a number of alternatives at this point due to the lack of a brand preference. Foxall (1990: 12) adds that in order to reduce brand ambiguity, the consumer is involved in a decision process and undertakes prolonged deliberation contemplating which brand to purchase or whether to buy at all.

Limited problem-solving occurs when the consumer cannot fully assess the brand differences to arrive at a preference, since knowledge and beliefs about the brands are only partially established. According to Foxall (1990: 12), other factors to be considered in limited problem-solving are that consumers have formed choice criteria, know a few brands well and favour them equally because they have already tried several brands at this stage.

FIGURE 2.4: THE HOWARD-SHETH MODEL OF BUYER BEHAVIOUR
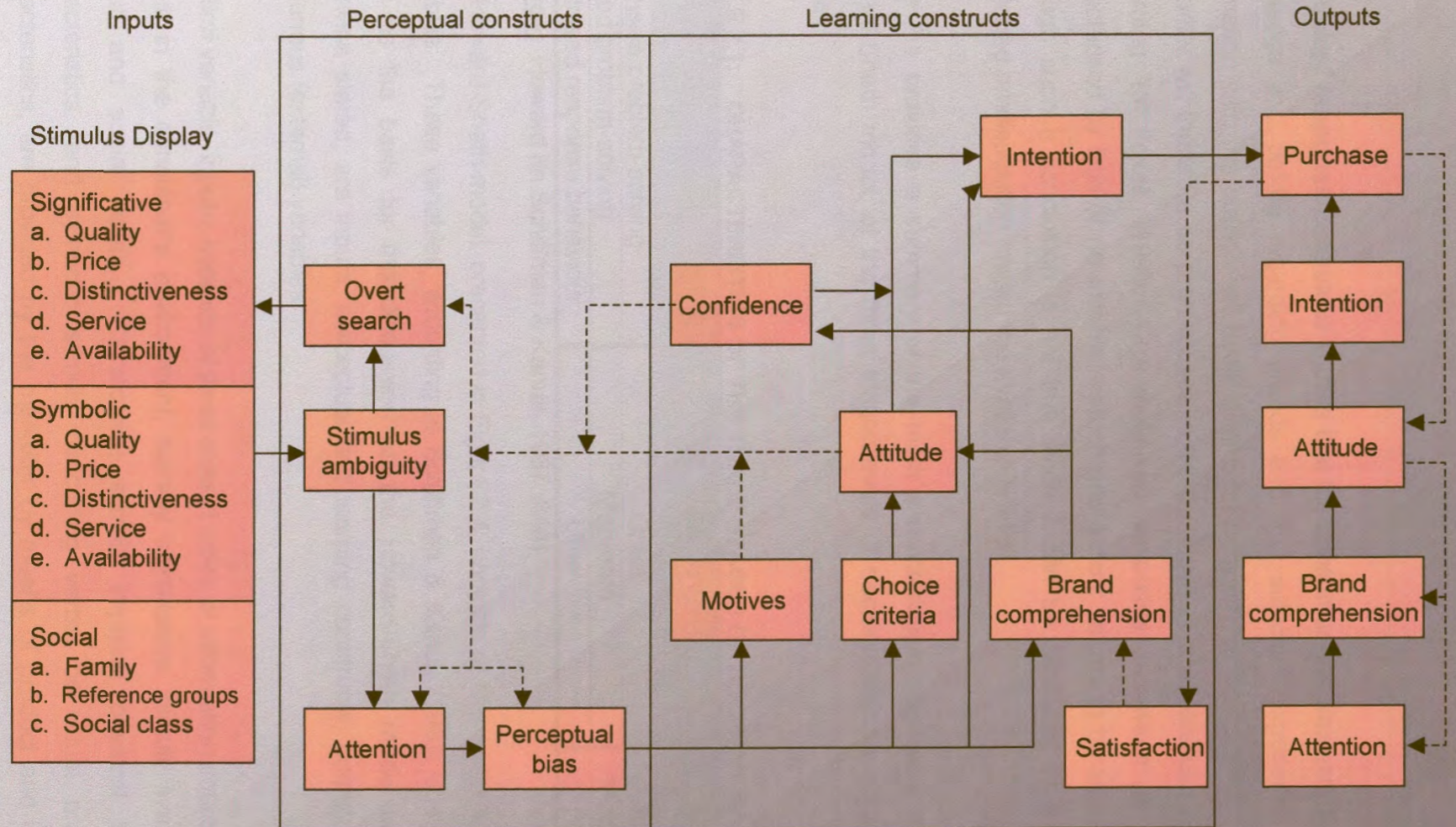
Solid lines indicate flow of information; dashed lines, feedback effects.

Source: Howard & Sheth in Schiffman & Kanuk (1987: 656)

Routinised response behaviour implies that the consumer has well-established knowledge and beliefs regarding brands and that sufficient experience and information with the brands will avoid confusion between various brands. The consumer will therefore be predisposed to the purchase of one particular brand. According to Foxall (1990: 12), routinised response behaviour is also characterised by little or no external search and almost seems to be impulsive, although such a conclusion is not true since it can be attributed to a well-developed predisposition toward the available brands.

Table 2.1 provides a summary of the main characteristics, applicable to the Howard-Sheth model, of the three stages/levels of decision-making discussed above.

TABLE 2.1: CHARACTERISTICS OF THE THREE STAGES OF DECISION-MAKING

Stage/level	Amount of information needed prior to purchase	Speed of decision
Extensive problem-solving	Great	Slow
Limited problem-solving	Moderate	Moderate
Routinised response behaviour	Little	Fast

Source: Howard (in Schiffman & Kanuk, 1987: 655)

The Howard-Sheth model, presented in Figure 2.4, consists of four major sets of variables. These variables, according to Schiffman & Kanuk (1987: 654-657), used as the basis for the discussion on the Howard-Sheth model unless otherwise stated, are inputs, perceptual and learning constructs, outputs and exogenous (external) variables.

The first variable, inputs, consists of three distinct types of information sources or stimuli in the consumer's environment, namely significative stimuli, symbolic stimuli and social inputs. Significative stimuli, implying physical brand characteristics, and symbolic stimuli, describing verbal or visual product characteristics, are provided by the marketer by means of product and brand information. Significative stimuli, according to Foxall (1990: 10), include quality,

price, service, distinctiveness and availability, while symbolic stimuli are portrayed by the mass media and sales people and influence the consumer indirectly. The third type of stimuli is provided by the social environment of the consumer and includes social class, family and reference groups. The three types of stimuli provide input to the consumer regarding the product class or specific brands.

The second variable, perceptual and learning constructs, forms the central component of the Howard-Sheth model. At this stage of the model, psychological variables are assumed to operate when the consumer is contemplating a decision. Although forming the so-called heart of the model, these constructs are treated as abstractions that are not defined operationally or directly measured.

The perceptual constructs are concerned with how the consumer receives and processes information obtained from input stimuli and other parts of the model, i.e. the function of information processing. For example, if the consumer is unclear regarding information and its meaning received from the environment, stimulus ambiguity occurs, while distortion of information received by the consumer, to match established needs or experiences, results in perceptual bias.

Learning constructs, the second component of this variable, includes the consumer's goals, preferences, criteria for evaluating alternatives, information regarding products in the evoked set and buying intentions. The proposed interaction between the perceptual and learning variables together with variables in other segments of the Howard-Sheth model ensures its distinct character.

Runyon & Stewart (1987: 704) provide additional information on the second variable, combining perceptual and learning constructs into a single term, called hypothetical constructs. These constructs are responsible for processing and

interpreting input stimuli and are characterised by the fact that changes in them can only be inferred from output variables, since they are not observable.

The third variable in the model, outputs, represents the possible response to stimuli by the consumer and includes five variables, namely attention, brand comprehension, attitude, intention and purchase.

The final variable, exogenous variables, is not depicted in the model, since it is not perceived to be directly part of the decision-making process. The reason for mentioning this variable is that it should impact on the segmentation efforts of the marketer, since the consumer is influenced by external variables. Exogenous variables considered relevant in terms of impacting on consumer behaviour include time pressure, consumer personality traits, financial status and importance of the purchase.

The value of the Howard-Sheth model, according to Runyon & Stewart (1987: 706), is that the model attempts to identify and organise major variables that may influence consumer behaviour. The model is also perceived to be dynamic in nature, since it reflects the complexity of consumer behaviour in an attempt to understand it. The consumer is portrayed to form generalisations as a guide to decision-making through an active information search from the environment by employing past experiences.

Criticism towards the model, highlighted by Runyon & Stewart (1987: 706), is that the hypothetical constructs portrayed in the model are not operationally defined in unambiguous terms and the specific interrelationships are therefore somewhat speculative.

2.4.3.4   The Howard model

The Howard model has been revised a number of times from the early 1970s to the current version published in 1994. It should be noted that the original model

by Howard (1974 version), according to Engel et al. (1978: 553), was based on revisions from the Howard-Sheth model. The model indicates the revisions that reflect insights gained from testing the Howard-Sheth model, as well as contributions of other authors who often approached consumer behaviour from different theoretical perspectives.

The 1974 version of the Howard model specifies 12 primary functional relationships (attached as Appendix 1) in such a way that it can be tested empirically. The testable equations of the Howard model ensure that the model can be evaluated in two different, yet related, ways. The model can first be evaluated metatheoretically, implying evaluation in terms of the internal structure of the theory itself. Secondly, it can be measured empirically in terms of its utility in describing real life behaviour.

According to Engel et al. (1978: 553), the 1974 version of the Howard model was revised by other authors, based on what was learned from the model. The revision was initiated due to some of the variables sited being difficult to define operationally, while other variables were difficult to measure, as well as the fact that the model presented a substantial measurement of error, resulting in a high level of noise. The result of the revision of the 1974 model by Howard was the 1977 model, showing a scant relationship to the 1969 Howard-Sheth model. The 1977 version is characterised by an increase in the predictability of the variables portrayed in the model, although noise of the data was still noted.

The 1974 and revised 1977 versions of the Howard model are shown in Appendix 2, together with the functional relationships applicable to both versions in Appendix 1. As will be noted in the testable equations shown in Appendix 1, the 1974 model lists 12 functional relationships, whereas the 1977 version lists only 11 relationships. The difference in the thought pattern of the two versions of the model is clearly visible in Appendix 2, where the models are depicted in figures.

Later revisions of the model by Howard resulted in the 1989 and 1994 versions. The Howard model that will briefly be discussed below refers to the 1989 and 1994 versions, based on the findings of O'Shaughnessy (1992:68-72) and Howard (1994: 128-161). The Howard model is illustrated in Figure 2.5.

FIGURE 2.5: HOWARD'S GENERAL THEORY OF CONSUMER BEHAVIOUR
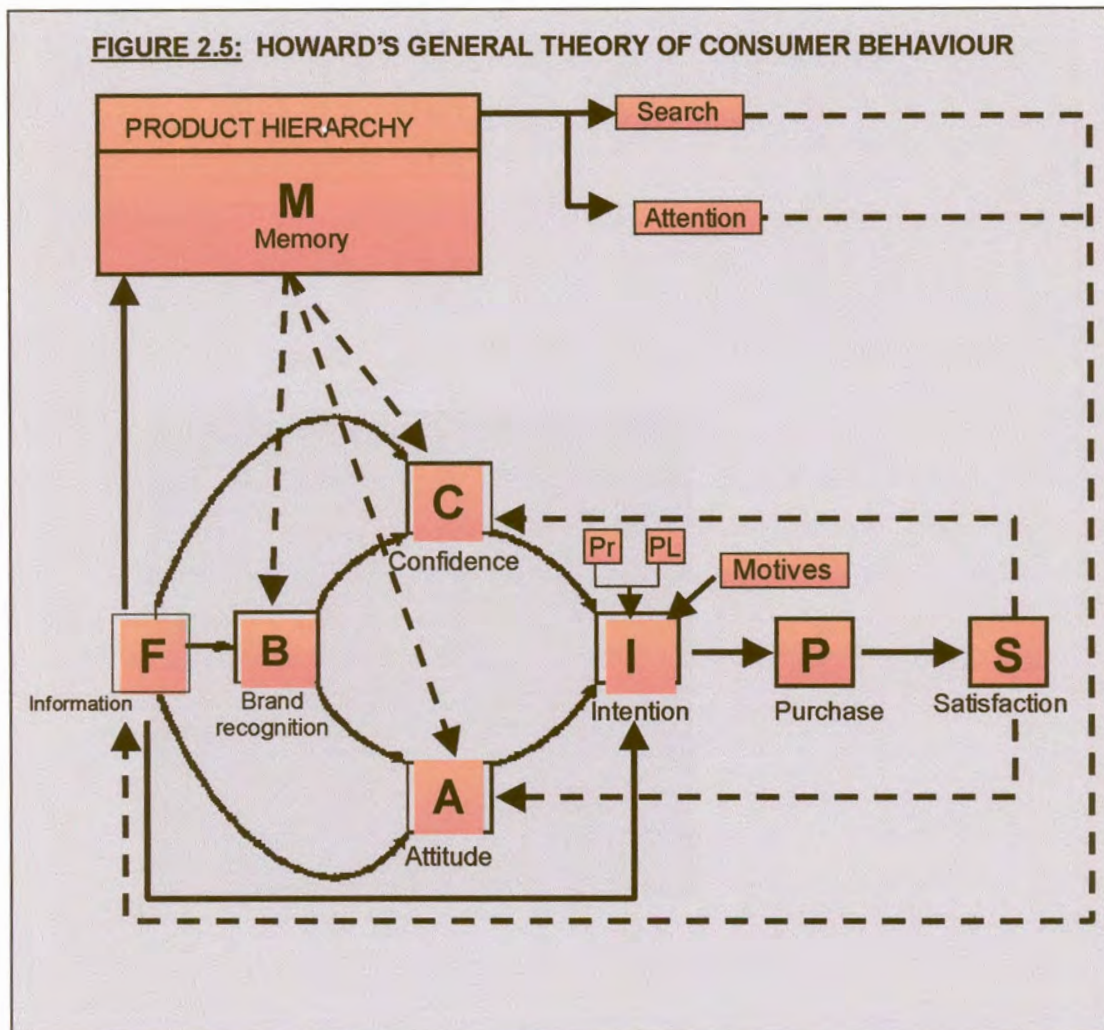
Source: Howard (1994: 158)

The Howard model views consumers to be in one of three different stages of decision-making, corresponding to the first three stages of the product life cycle. At the introductory stage of the product life cycle, the corresponding decision state is called extensive problem-solving, followed by the growth stage, referred

to as limited problem-solving, and finally at the maturity stage, the decision state is referred to as routine problem-solving.

According to the model, extended decision-making implies that the consumer has not formed a concept of either the product class or the product category. Limited decision-making implies that the consumer has a concept of the product category but has not formed a concept of new brands falling into a familiar product category.

Once the consumer has formed a concept of both the product category and all the product brands within the category, routine problem-solving applies.

As discussed above, it is clear that basic to all three decision categories is the concept of product category, defined as a group of brands viewed by consumers as close substitutes for each other. In view of the product category, Howard dismisses the utility of the product life cycle for brands. The movement from extensive problem-solving to routine problem-solving, therefore, is a movement towards a state of total understanding of a brand, although not implying that the consumer becomes an expert on brands. The consumer does, however, know the physical characteristics of the brand, leading to brand recognition, and feels confident to judge the quality of a brand. In addition to the above, the consumer knows the strengths of a brand based on the benefits thereof, as manifested in an attitude towards a brand. This so-called understanding of brands by consumers, referred to by Howard as the ABC of marketing (comprising brand recognition, attitude and confidence), constitutes brand image.

As could be seen from Figure 2.5, the Howard model portrays the consumer decision process, comprising six interrelated concepts, namely Information (F), Brand recognition (B), Attitude (A), Confidence (C), Intention (I) and Purchase (P). The six interrelated concepts will be briefly discussed to provide greater clarity on the Howard model.

Information (F) refers to the precept that is caused by stimuli, for example advertisements, where the precept is what the consumer perceives when exposed to stimuli. The precept is measured by recall, implying that information comprises of all that is recalled by the stimulus.

Brand recognition (B) involves categorisation, resulting in the consumer needing information on both the functioning of the product and the form. Brand recognition is viewed as being causally linked to both Attitude (A) and Confidence (C).

Attitude (A) towards a brand refers to the measure of the extent to which consumers expect the brand to meet certain expectations. The measure of attitude is argued to be multidimensional, where each benefit is measured in terms of its importance to the consumer and the multiplication of each weighting by the corresponding envisaged performance of the brand, resulting in the overall sum being the measure of attitude. Attitude is viewed as being causally linked to Intention (I).

Confidence (C) refers to the degree of certainty experienced by consumers regarding the correctness of their judgements about a brand and its benefits. Confidence is suggested to be causally linked to Intention (I), especially when Attitude (A) is high.

Intention (I) to purchase represents the mental stage reflecting the consumer's intention to purchase a specified quantity of a particular brand within a specified period. Intention (I) is viewed as a predictor of Purchase (P).

Purchase (P), the final interrelated concept of the Howard model, occurs once the consumer either has bought the brand or when the consumer has financially committed to purchasing the brand.

As indicated in Figure 2.5, Intention (I) is influenced by Pr and PL, defined by Howard (1994: 139) as Price (Pr) and Availability (PL). Price and availability, directly influencing Intention (I), represent the regular price of the brand and the Place (PL) where the brand can be purchased. Although price and availability are considered important influencing factors of the purchase process, these variables change often and Information (F) can therefore bypass the thinking process by directly influencing Intention (I). As depicted in Figure 2.5, Intention (I) is not only influenced by Price (Pr) and Place or availability (PL), but also by motives. Howard (1994: 159) indicates that motives represent the motives operating in each specific situation.

Drawing a conclusion from the Howard model, it should be noted that the variables impacting on consumer behaviour changes for each of the three different stages of decision-making. The discussion above provided a general overview of all the variables that could impact on the model, implying that some variables would be omitted, not changed, in the different stages of consumer decision-making.

2.4.3.5 The Engel, Blackwell, Miniard model

The Engel, Blackwell, Miniard model has its origin in decades of work on the subject of consumer behaviour by Engel, Kollat, Blackwell, and Miniard. These authors were responsible for the evolution of the model from 1968 to its present form, namely the eighth edition of their book on the subject of consumer behaviour.

Important to note, as stated by Engel, Blackwell & Miniard (1986: 27), is that the name of the model is compiled from the names of the authors, and it can therefore be concluded that the Engel, Blackwell, Miniard model is based on the same model as that of Engel & Blackwell, and Engel, Kollat & Blackwell.

Although the eighth revision of the Engel, Blackwell, Miniard model will be discussed in this section, it is important to briefly mention the evolution of the model since 1978, from the third revision by Engel et al. (1978: 554-562), to the eighth revision by Engel, Blackwell, and Miniard.

According to Engel et al. (1978: 555), the Engel, Kollat, Blackwell model (referred to as the EKB model) was a revision of a previous version of the model and had several distinct purposes, namely:

a)   the interrelationship between stages in the decision-process and the endogenous and exogenous variables which are highlighted;

b)   to clarify the relationship between attitudes and behaviour as well as the introduction of beliefs and intentions as explicit variables and the introduction of normative compliance; and

c)   to define variables with greater precision and specify functional relationship for the purpose of empirical testing.

Engel & Blackwell (1982: 686) revised the 1978 version of the EKB model and listed the same reasons for the revision as stated above. Interesting to note is that both revisions listed 16 equations and variable definitions in an effort to compare the EKB model to that of the Howard-Sheth and the Howard models.

The 1978 version of the EKB model, by Engel et al. (1978: 557-558), compares the EKB model to the 1974 version of the Howard model, whereas the 1982 version, by Engel & Blackwell (1982: 686-689), compares the EKB model to the 1977 version of the Howard model. The definitions and equations of the 1978 and 1982 versions of the EKB model are attached as Appendix 3, where the changes in the model can be viewed. In addition to the equations, the two

revisions of the EKB model presented as figures, clearly indicating the changes in the model, are illustrated in Appendix 4.

As indicated earlier, the EKB model was revisited and together with a new author, Miniard, the model became known as the Engel, Blackwell, & Miniard model (referred to as the EBM model). Two earlier revisions of the model, the 1986 and the 1990 revisions by Engel et al. (1986: 26-42 & 1990: 25-53), are indicated graphically in Appendix 4, and show the transformation of the model from 1978, the EKB model, to the 1990 version of the EBM model.

The EBM model discussed below is based on the findings of Engel et al. (1995: 147-154). Comparisons between the EKB and different versions of the EBM model will be shown in tabular form at the end of the discussion on the EBM model. It should be noted that the three authors published a 2001 version (Blackwell, Miniard & Engel), a ninth edition on consumer behaviour. Since the 1995 and 2001 versions are essentially the same model and theory, the researcher will discuss the 1995 version. Any differences between the two versions (mostly terminology) will be highlighted in Chapter 3, where the focus of the chapter is on the consumer decision-making process (based on theoretical background provided by the three authors).

The complete EBM model (1995 version) will be discussed in the remaining part of this chapter, focusing on the variables influencing consumer decision-making and the way in which they interact. The complete EBM model is shown in Figure 2.6, where a solid arrow indicates a direct relationship and a broken arrow, an indirect or feedback relationship between variables.

FIGURE 2.6: THE ENGEL, BLACKWELL & MINIARD MODEL - 1995 VERSION
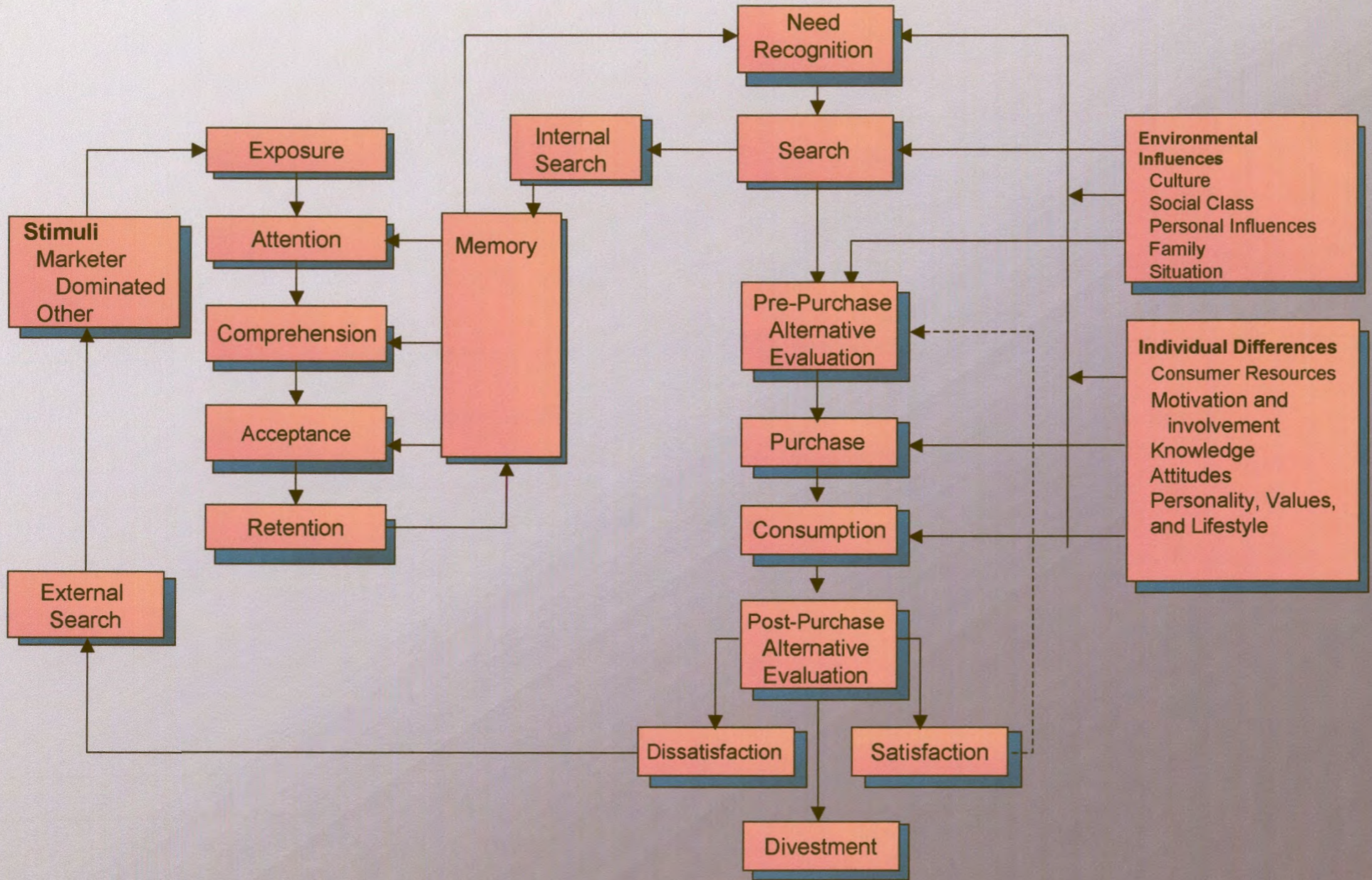
Source: Engel et al. (1995: 154)

It should be noted that the EBM model identifies three broad decision processes based on the extent of active reasoning underlying consumer behaviour, namely extended, limited and midrange problem-solving. These decision processes will be discussed in greater detail in Chapter 3 (as stated before, Chapter 3 will be based on the theory on the consumer decision-making process offered by Engel et al., 1995) and will, therefore, not be covered in more detail in this chapter.

According to the EBM model, the consumer decision-making process is influenced and shaped by a number of factors and determinants, categorised in three broad categories, namely individual differences, environmental influences and psychological processes. The three categories will be discussed below, based on the discussion provided by Engel et al. (1995: 147-154), together with the components associated with each category, in an attempt to explain the consumer behaviour and decision processes suggested by the EBM model. Before discussing the EBM model, it should be noted that an alternative view of models of consumer behaviour can be viewed in Appendix 5, where the Assael model of consumer behaviour is discussed.

A)   Individual differences

The EBM model suggests that consumer behaviour is influenced by five major categories of individual differences. These individual differences are consumer resources; knowledge; attitudes; motivation; personality, values and lifestyle.

i)   Consumer resources

Each decision situation is characterised by the involvement of three different consumer resources. First, the consumer uses time, which is valued since time is often more important to consumers than money due to the increasing lack of time in a modern society. The second resource is money or economic resource, and the third is information reception and processing capabilities. The

consumer's perception regarding the availability of these resources may affect the willingness to spend time and money on products, which causes the consumer to carefully allocate these resources due to the limited availability thereof.

ii)   Knowledge

Knowledge, defined as the information stored in memory, encompasses a wide variety of information, including the availability and characteristics of products and services.   Information contained in memory regarding products include awareness of the product category and brands within the product category, attributes and beliefs of both the product category and specific brands, and the availability of products in terms of the distribution channels and competitors selling products within these channels.   In addition to the above, knowledge regarding products also includes when to purchase, since the consumer may be aware of specials at certain times during the year and may therefore delay the purchase decision. A final component of knowledge is the information contained in memory regarding the uses and requirements to use a product. Consumers may, therefore, be aware of the uses of products, although they are not able to actually operate them.

iii)   Attitudes

An attitude can be defined as an overall evaluation of alternatives, ranging from positive to negative.   Attitudes are considered important in viewing consumer behaviour, since behaviour is strongly influenced by attitudes towards a given product or brand.   In addition to the above, attitudes influence future choice and are difficult to change, even though being a common marketing tool.

iv) Motives

Needs and motives, where need is a central variable in motivation, influence all phases of the decision process. Activated needs, defined as a perceived difference between an ideal and the present state that is sufficient to activate behaviour, lead to energised behaviour or drive that is channelled towards certain goals that have been learned as incentives. In addition to the above, it should be noted that needs fall within two categories, namely the utilitarian or functional category which has practical benefits, and the hedonic or subjective category with emotional benefits.

v) Personality

Personality, values and lifestyle encompass what is known as psychological research, where the emphasis is placed on individual traits, values, beliefs and preferred behaviour patterns that combine to characterise market segments.

Personality, defined as consistent responses to environmental stimuli, provides for orderly and coherently related experiences and behaviour. Personality is also the component that makes one individual unique from all others and provides consistency of responses.

vi) Values

Values represent an individual's beliefs about life and accepted behaviour, therefore expressing both the goals that motivate people and appropriate ways to achieve those goals. Values are classified as either being social, implying shared beliefs that characterise a group of people and thereby defining behaviour for the group that will be acceptable as "normal", or personal, responsible for defining "normal" behaviour for an individual.

vii)   Lifestyle

Lifestyle, reflecting an individual's activities, interests and opinions, represents certain patterns in which people live and spend their time and money. Lifestyle can, therefore, be viewed as the result of all the economic, cultural and social life forces that contribute to an individual's human qualities.

B)   Environmental influences

Environmental influences impacting on consumer behaviour include culture, social class, personal influences, family and the situation.

i)   Culture

Culture, from a consumer behaviour perspective, implies the values, ideas, artefacts and other meaningful symbols assisting individuals to communicate, interpret and evaluate as members of society.

According to the EBM model, the importance of culture from a consumer behaviour perspective is that it provides people with a sense of identity and understanding of acceptable behaviour within society. In addition to the above, culture influences attitudes and behaviour, including the sense of self and space, communication and language, time and time consciousness, values and norms, food and feeding habits, relationships with family, organisations and government, dress and appearance, beliefs and attitudes, mental processing and learning, as well as work habits and practices.

ii)   Social class

The second environmental influence, "social class", can be defined as divisions within society where individuals share similar values, interests and behaviours.

Social classes are differentiated by socio-economic status differences, often leading to consumer behaviour differences, for example the make of a vehicle or the favourite style of dress.

The impact of social class on consumer behaviour can often be observed when viewing consumer time spent, products purchased, where, and how they purchase products, especially since brands of products and services are associated with specific social classes.

iii)   Personal influences

Consumers are often influenced by people they associate with, where they conform to the norms and expectations of others or simply value their opinions in the buying process. This influence can either be the observation of others or alternatively the active seeking of advice, where the person providing the advice becomes an influential or opinion leader.

iv)   Family

The family is often the primary decision-making unit with different roles and functions, often resulting in simultaneous co-operation and conflict. Two behavioural roles of the family can be distinguished, namely instrumental or functional roles, involving financial, performance and other "functional" attributes, such as conditions of purchase and expressive roles, involving the support of other family members in the decision-making process by expressing the family's emotional needs and upholding of family norms.

At least five definable roles, assumed by the husband, wife, children, or other members of the household, can be distinguished in family consumption decisions. These roles are the initiator or gatekeeper, initiating family thinking about purchasing products and gathering information. There is the influencer,

the individual determining the criteria to be used by the family when purchasing products as well as identifying products that would most likely meet the criteria. Then there is the decider, the person with the financial authority, determining how the money of the family should be used and on which products or brands. The buyer is the person responsible for visiting the store, purchasing the products and bringing it home. Finally, there are the users, the individuals in the family using or consuming the product.

v)   Situation

The final environmental influence impacting on consumer behaviour according to the EBM model is that of the situation, since behaviour changes as the situation changes. The importance of considering the situation is due to changes impacting on consumers sometimes being unpredictable and erratic, for example retrenchments from work resulting in the postponement of purchases.

Situational factors can be divided into three categories, namely communication, purchase and the usage situation. Communications situations influencing consumers are, for instance, affected by marketing messages, where, for example, the impact of a television advertisement is in part determined by the programme during which it is broadcast.

The purchase situation includes elements of the information environment, for instance the availability thereof externally or internally in memory, the volume of information, determined by the number of choice alternatives as well as the number of attributes per alternative. Other aspects from the information environment influencing the purchase situation are the format, implying the manner in which it is organised, and form of information. In addition to information influences, the retail environment or store atmospherics also influence the purchase situation. Factors comprising the retail environment

include music, layout, point of purchase material, colours and crowding caused by the density of shoppers in a store.

The final situational influence, "product consumption", plays an important part in consumer behaviour, since consumers may alter their purchase patterns due to usage situations. An example of the consumption situation is where it is acceptable to drink a certain brand of wine at home, yet when with friends it may be unacceptable.

C) Psychological processes

The psychological processes in the EBM model comprise the decision-process behaviour of consumers which, together with the environmental influences and individual differences, form an elaborated consumer behaviour and decision model.

Although Chapter 3 will focus in detail on the consumer decision-making process, it is important to consider the decision process documented by the EBM model, since the discussion on this element of the model not only completes the model but also provides insight into the influence of processing ability and the complexity thereof on consumers. The decision-making process in the EBM model comprises the following components: need recognition, search for information, information processing, pre-purchase alternative evaluation, purchase, consumption and post-purchase alternative evaluation as well as divestment.

i)   Need recognition

The first stage of the decision-making process is that of need recognition, where the consumer senses a difference between what is perceived as an ideal state of affairs compared to the actual state at any given time. Need recognition is

therefore a state of desire, initiating a decision process that occurs throughout the interaction of individual differences and environmental influences.

ii)   Search for alternatives

The second stage of the decision process is that of internal search into memory to determine whether or not enough is known about alternatives to make a decision without additional information searches.   If there is not sufficient information contained in memory, consumers will engage in external search. Individual differences and environmental influences, influence external search. For example, some consumers are cautious and unwilling to purchase products without searching for extensive and detailed information, whereas others may purchase products without comparing alternatives.

External sources used when searching for information are categorised as either being marketer dominated or other.   Marketer dominated sources imply any activities by suppliers of products for the purpose of offering information or persuasion, including for example point of sale material and advertising.   The "other" external source of information in the EBM model includes for instance word-of-mouth from others, product rating and consumer reports.

iii)   Information processing

The information processing process commences when the consumer is exposed to an external search.   In the information processing process, five distinctive steps can be identified, namely exposure, attention, comprehension, acceptance and retention.

Exposure forms the first step of information processing since communication first needs to reach consumers, resulting in the activation of one or more senses and therefore the start of preliminary processing. Once exposed to information,

consumers need to allocate information processing capacity to the incoming information, or alternatively decide not to allocate processing capacity.

Attention to information will most likely occur if the incoming message and the contents thereof are considered relevant. At this stage of the process, consumers may ignore marketing dominated messages, thereby exercising their capabilities of selective attention.

During the third step of the information processing process, **comprehension**, the message to which attention was attracted, is further analysed against categories of meaning stored in memory. At this point, the marketer wishes for accurate comprehension of the message.

The goal of the marketer's message is to modify or change beliefs and attitudes held by consumers. At this stage of the information processing process, **acceptance** of an incoming message can be assumed if it has not been screened out as being unacceptable. Of importance to note with acceptance is that there will be, at least to some degree, changes in consumer beliefs and attitudes if the message was accepted.

The final step in the process is that of **retention**, where the marketer will aim to not only achieve acceptance for its information but also the storing thereof in memory for future use.

It should be noted in conclusion to the information processing process that attention to stimuli will be attracted and held only if the information is relevant to the needs and motives of the consumer. Due to the massive volume of competing messages to which consumers are exposed, only a small subset will be processed as a result of the selective information processing capabilities of consumers.

iv)   Pre-purchase alternative evaluation

At the pre-purchase evaluation phase of the EBM model, the consumer will examine products in terms of their attributes as compared to personal standards and specifications, defined as evaluation criteria.

The evaluation criteria, expressed in the form of preferred attributes, present the desired outcomes from the purchase and consumption of products. Evaluation criteria, influenced by individual and environmental influences, can therefore be perceived as becoming a product-specific manifestation of the consumer's needs, values and lifestyle.

v)   Purchase

The purchase process occurs in either a retail-type environment or through in-house shopping, and often requires the assistance of a highly skilled salesperson, although this does not necessarily imply that the decision and evaluation process is executed at the point of purchase.

vi)   Consumption and post-consumption alternative evaluation

The consumption of products has traditionally not been the concern of marketers, since the primary objective used to be to sell the product. This view has changed since marketers need to remain competitive by ensuring consumer satisfaction with the purchase and the consumption of products in an effort to retain consumers. Marketers can, therefore, learn a great deal from consumers by examining how products are consumed, noting preferences and suggestions on how to improve on products, and finally to probe into reasons why products are returned.

Dissatisfaction with the purchase and consumption of a product occurs when the consumer perceives the chosen alternative to be failing against the desired outcome. The consumer may also experience doubt with the purchase even before consumption, simply because of the presence of alternatives that also cater for the desirable features. This phenomenon is known as post-decision regret and may inspire the consumer to engage in further information search.

The importance of satisfaction and dissatisfaction with the purchase and consumption of a product is illustrated in Figure 2.6, where satisfaction provides feedback to pre-purchase alternative evaluation, assisting the consumer with future alternative evaluation and choice, and dissatisfaction which leads to external search for information.

vii)   Divestment

The final stage of the decision process model is divestment, where the consumer faces the options of disposal, recycling or re-marketing.

D)   Comparison of EBM and EKB models

As indicated at the beginning of the discussion on the EBM model, a comparison between the different versions of the EBM model and the EKB model will show the manner in which the model has evolved over more than two decades. Important to note is that the EBM was revised twice between the 1986 and 1995 versions. The reason for comparing only the 1986 and 1995 versions is because the changes identified are substantial, showing clearly the change in the model over the period of almost ten years. Table 2.2 below provides a comparison between the EKB model (1982 version) and the EBM model (1986 and 1995 versions).

TABLE 2.2: **COMPARISON BETWEEN THE ENGEL, BLACKWELL, MINIARD (1995 AND 1986 VERSIONS) AND THE ENGEL, KOLLAT, BLACKWELL MODEL (1982 VERSION)**

Variable/ Components	Engel, Kollat, Blackwell model (1982 version)	Engel, Blackwell, Miniard model (1986 version)	Engel, Blackwell, Miniard model (1995 version)
Components	Five, namely (i) input (ii) information processing (iii) decision process (iv) decision process variables, and (v) external influences	Four, namely (i) input (ii) information processing (iii) decision process; and (iv) variables influencing the decision process	Four distinct components can be identified, namely (i) input (ii) information processing (iii) decision process; and (iv) variables influencing the decision process
Variables influencing decision process	Influences shown separately in two different components of model (decision process variables and external influences)	Three identified (included under one component – variables influencing decision process), namely individual characteristics; social influences; and situational influences	Two identified under one component – environmental influences (including situation, previously separately); and individual differences (including consumer resources and combining of personality, values and lifestyle)
Comprehension (as part of information processing component)	Shown as comprehension only	Shown as comprehension / perception	Shown as comprehension only
Internal search	Included in memory	Shown separately	Shown separately
Implementation of decision (as part of decision process component)	Indicated as choice	Indicated as purchase	Indicated as purchase
Outcome of purchase (as part of decision process component)	One result shown as dissonance – feedback to external search only, no feedback to beliefs; second outcome shown as satisfaction – feedback to beliefs	Outcomes shown as satisfaction and dissatisfaction – both feeding back to beliefs	Outcome shown as consumption, leading to post-purchase evaluation, with three possible outcomes – dissatisfaction feeding back to external search only; divestment; and satisfaction providing feedback to pre-purchase evaluation
Motives	Shown separately	Included with individual characteristics (as part of variables influencing decision process component)	Included under individual differences and includes involvement by the consumer
Lifestyle	Shown separately	Included with individual characteristics (as part of variables influencing decision process component)	Combined with personality and values, all included under individual differences
Personality	Included in lifestyle	Included with individual characteristics (as part of variables influencing decision process component)	Combined with values and lifestyle, all included under individual differences
Evaluation criteria	Shown separately	Included in beliefs	Indicated as being considered before purchase as pre-purchase evaluation criteria as well as after consumption as post-purchase alternative evaluation

Variable/ Components	Engel, Kollat, Blackwell model (1982 version)	Engel, Blackwell, Miniard model (1986 version)	Engel, Blackwell, Miniard model (1995 version)
Normative compliance and information influence	Shown separately	Included with social influences (variables influencing decision process component)	Not explicitly indicated
Cultural norm and values	Shown separately (direct influence on lifestyle)	Included with social influences (variables influencing decision process component). Direct influence on all elements of decision process	Included as part of environmental influences
Reference group/family	Shown separately (direct influence on problem recognition, information search, alternative evaluation and choice)	Included with social influences (variables influencing decision process component). Direct influence on all elements of decision process	Family and reference groups (included under personal influences) included as part of environmental influences
Unanticipated circumstances	Shown separately (direct influence on choice)	Shown separately as situational influences (direct influence on all elements of decision process)	Included as part of environmental influences

Source: Compiled from the comparison of the three models by the authors: Engel et al. (1995: 154); Du Plessis (1986: 64); Engel et al. (1986: 35); and Engel & Blackwell (1982: 500).

As can be seen from Table 2.2, the most prominent differences can be noted in the components and the variables within each of the models. The most noticeable differences between the EKB and the EBM (1986 version) models are the combination of the decision process variables and the external influences (shown separately in the EKB model) into a single component, namely variables influencing decision process (as documented in the EBM model).

A second difference is that in the EKB model, where alternative evaluation and intention lead to choice, resulting in outcomes, whereas in the EBM model, intention leads to purchase, and purchase on its part leads to outcomes. A final difference, clearly identified, is that in the EKB model, dissonance (a result of outcomes) feeds back to external search only, whereas with the 1986 version of the EBM model, both satisfaction and dissatisfaction feed back to beliefs, although dissatisfaction also feeds back to external search.

Differences noted between the 1986 version of the EBM model and the 1995 version, include the variables influencing the decision process being reduced from three in the 1986 version (individual characteristics, social influences, and situational influences) to two in the 1995 version (environmental influences – including the situation, previously shown separately -, and individual differences).

Secondly, in the decision process component in the 1995 version, pre-purchase alternative evaluation directly leads to purchase and purchase leads to consumption (replacing outcomes, the result in the 1986 version). Keeping the focus on the decision process, consumption feeds into three areas, namely dissatisfaction, satisfaction and divestment (not present in the 1986 version). Interesting to note is that in the 1995 version of the EBM model, as with the EKB model, dissatisfaction (although referred to in the EKB model as dissonance) only feeds back to external search and not, as with the 1986 version, to beliefs or evaluation criteria.

2.5 SUMMARY

Chapter 2 provided a discussion on consumer behaviour by focusing on the origin of consumer behaviour from both human behaviour and human behavioural models, as well as the development of the marketing concept. The impact of the marketing concept, formulated in the 1950s, was discussed together with the practical implication thereof for not only the study of consumer behaviour but also for the marketing field of study.

Chapter 2 also considered a number of models of human behaviour. These models offered only a partial explanation of the way in which human beings and consumers behave since they focused on only a small number of possible influences that could possibly affect behaviour.

The final part of the chapter focused on models of consumer behaviour and showed how the theory has evolved over the years. The dynamic changes in these models could clearly be highlighted, especially when considering current models, that have been revised a number of times over a period of more than 20 years.

All the models of consumer behaviour attempted to explain all possible variables and influences on consumer behaviour. Earlier attempts considered the possibility to explain models of consumer behaviour by means of testable equations, often comparing a model to that of a different author.

The final model on consumer behaviour, the Engel, Blackwell & Miniard model, provided a comprehensive discussion on the possible influences on consumer behaviour, and more specifically the impact of influences on the different stages of the decision-making process. The model provided the latest thoughts on the subject of consumer behaviour and will, therefore, be used as the basis for the discussion on the consumer decision process, the topic of Chapter 3.

Chapter 3 will focus on the consumer decision-making process, namely the different stages thereof, the factors influencing each stage of the process and finally how the Internet influences both the decision-making process and the factors influencing it.

CHAPTER 3

THE CONSUMER DECISION-MAKING PROCESS

3.1 INTRODUCTION

Consumer behaviour from a marketing perspective was discussed in Chapter 2. Different models of human behaviour were briefly discussed, explaining the relevance thereof in consumer behavioural studies. The predominant objective of Chapter 2 was to form an understanding of consumer behaviour by discussing a number of different models of consumer behaviour, detailing different theories on how consumer purchase decisions are formed and influenced by external and internal factors.

Chapter 3 will provide clarity on the consumer decision-making process. The discussion commences by distinguishing different types of decision-making processes that consumers can follow. This will be followed by a detailed discussion on the different stages of the decision-making process together with the environmental influences and individual differences influencing the decision-making process.

The stages of the consumer decision-making process that will be discussed, based on the model of consumer behaviour proposed by Engel , Blackwell & Miniard (EBM)(1995 version), are need recognition, search, pre-purchase alternative evaluation and purchase and its outcomes. Three outcomes of purchase will be discussed, namely consumption, post-purchase alternative evaluation and divestment.

The consumer information-processing process, that considers how external stimuli are processed, retained in and recalled from consumer memory, is

regarded an important component of the consumer decision-making process and will be discussed in Section 3.4 as part of the search-stage.

Finally, Chapter 3 will be concluded by a summary of the main findings on the discussion of the consumer decision-making process together with conclusions that can be derived from the process.

Important to note is that Chapter 3 will focus on theoretical findings on the consumer decision-making process. The influence of the Internet on the consumer decision-making process, with specific reference to the influence on different stages of the process, will be discussed in Chapter 4.

3.2 TYPES OF DECISION-MAKING PROCESSES

The discussion on models of consumer behaviour in Chapter 2, with specific reference to the EBM model (Section 2.4.3.5), identified a number of different decision-making processes that consumers could follow when purchasing a product or service. The Assael model (Appendix 5) identified four different decision-making processes, namely complex decision-making, brand loyalty, limited decision-making and inertia, whereas the EBM model identified extended problem-solving, limited problem-solving and midrange problem-solving. In addition to the three decision-making processes listed in the EBM model, Engel et al. (1995: 155) provide an additional decision-making process, applicable to repeat purchases, namely habitual decision-making.

Section 3.2.1 will clarify the different types of decision-making processes by discussing them as a continuum ranging from high to low involvement. It should be noted that although Engel et al. (1995: 155) refer to problem-solving, the researcher decided to refer to decision-making, as used by other authors (including Assael, 1995: 19).

3.2.1 Consumer decision-making continuum

The decision-making continuum suggests that decision-making becomes more complex as consumers move from a very low level of involvement with a purchase situation to a high level of involvement. Hawkins, Best & Coney (2001: 504) note that although a continuum is formed from high to low involvement, where a number of decision-making processes can be identified, the different types of decision-making are not distinct but blend into each other. Hawkins et al. (2001: 504) continue by defining purchase involvement, considered as a key term to distinguish between the processes, as: "... the level of concern for, or interest in, the purchase process triggered by the need to consider a particular purchase".

Engel et al. (1995: 155) view the decision-making (problem-solving) process as being applicable to two situations, namely for initial purchases (comprising extended, midrange and limited decision-making) and repeat purchases (comprising repeat and habitual decision-making). The continuum of consumer decision-making is illustrated in Figure 3.1 below.

FIGURE 3.1: CONSUMER DECISION-MAKING PROCESS CONTINUUM

Extended Decision-Making	Midrange Decision-Making	Limited Decision-Making

| High | Degree of Complexity | Low |

Decision-Making Processes for Repeat Purchases

Extended Decision-Making	Midrange Decision-Making	Limited Decision-Making	Habitual Decision-Making

| High | Degree of Complexity | Low |

Source: Adapted from Engel et al. (1995: 155)

Figure 3.1 depicts the different consumer decision-making processes for initial and repeat purchases. Engel et al. (1995: 158) identify two special decision-making processes that do not fit neatly into the decision continuum, namely impulse buying and variety seeking. These two special categories of decision-making will be discussed in Section 3.2.1.3, following the discussion on initial and repeat purchases in Sections 3.2.1.1 and 3.2.1.2 respectively.

3.2.1.1   Initial purchases

Engel et al. (1995: 155) identify three different decision-making processes with initial purchases, namely extended, midrange and limited decision-making. With initial purchases, consumers often establish enduring buying patterns through extended decision-making. Limited decision-making leads to inertia-based habits where it is easier to purchase the same product than to change to a different brand. The differences between the processes will become clearer from the discussion below, focusing on extended, midrange and limited decision-making.

According to Hawkins et al. (2001: 507), Kotler & Armstrong (2001: 191) and Laroche, Saad, Cleveland & Browne (2000: 500 – 522), **extended decision-making** refers to a very high level of purchase involvement. A characteristic of extended decision-making is an extensive internal and external search for information, followed by a complex evaluation process where multiple alternatives are evaluated. The purchase of a product is likely to be followed by post-purchase doubts and the consumer will, therefore, engage in a thorough evaluation of the purchased product.

Schiffman & Kanuk (1997: 558) add to the above by stating that extended (extensive) decision-making occurs when consumers have no established criteria for evaluating either the product category or specific product brands within the product category. Consumers, therefore, need a great deal of information regarding different products and information that will assist them in establishing a

set of criteria for evaluation purposes. Engel et al. (1995: 155) continue by stating that extended decision-making occurs when the decision-making process followed by the consumer is especially detailed and rigorous. Consumers use an extended decision-making process when purchasing motor vehicles, expensive items and products and services for which the cost and perceived risk is high for making an incorrect purchase decision. Solomon (1996: 271) adds by explaining that extended decision-making is characterised by high risk and involvement by the consumer, resulting in extensive search for information from multiple sources prior to store visits.

Hawkins et al. (2001: 507) note that extended decision-making may also occur without measuring and evaluating attributes, where the criteria being evaluated by consumers are emotions, for example the decision whether or not to embark on a boat cruise for a vacation.

Engel et al. (1995: 156) suggest that all stages of the decision-making process are involved with extended decision-making, although not necessarily in any precise order. In addition to the extensive search for information and evaluation of multiple alternatives, consumers may seek additional information regarding where and how to purchase a product.

Engel et al. (1995: 156) summarise extended decision-making by stating that: ".. thought and evaluation precede the act of purchase and use because of the importance of making the right choice".

According to Engel et al. (1995: 156), **midrange decision-making** falls somewhere between extended and limited decision-making. Limited information is therefore required and can be easily found. Since a number of alternatives are available, the consumer has to evaluate and choose one option. The process usually requires limited time and deliberation and an alternative can be chosen relatively easily. An example of midrange decision-making is deciding which

movie to see, with a number of alternatives available. The information is easily obtainable in newspapers and the evaluation of the options is usually done quickly, often influenced by the opinion of a friend or an article by a critic.

According to Engel et al. (1995: 156), the final decision-making process on the continuum applicable to initial purchases is **limited decision-making**. This process of decision-making is characterised by little information search and evaluation before purchase and the consumer not having the time, resources or motivation to engage in extended decision-making. The consumer will, therefore, simplify the process by reducing the number and variety of information sources and alternatives as well as the evaluation criteria. Schiffman & Kanuk (1997: 559) add to the above by stating that for limited decision-making, consumers already have established criteria for evaluating both the product category and individual brands within the category.

Consumers will often apply a decision rule when engaging in limited decision-making, for example to purchase a brand that is recognised or alternatively to simply purchase the cheapest option available. The consumer may also decide to purchase a new brand (a "why not try it" response), resulting in brand switching.

Engel et al. (1995: 156) conclude the discussion on initial purchases by stating that for limited decision-making: "... need recognition leads to buying action; extensive search and evaluation are avoided because the purchase does not assume great importance". A competitive product, regardless how small the difference, can therefore gain temporary advantage when the consumer identifies the product at the point of purchase and decides to change brands as a result of a "why not try it" response.

3.2.1.2   Repeat purchases

Repeated purchases imply purchase decisions made over a period of time and comprise repeated and habitual decision-making.

According to Engel et al. (1995: 158), **repeated decision-making** occurs when the consumer continuously needs to make a decision regarding repeated purchases, often as a result of dissatisfaction with a previously purchased alternative. In addition to the above, repeated decision-making occurs when, for example, the retail outlet usually supported by the consumer is out of stock, or when the situation changes in some other way. The consumer now has to weigh the consequences of investing effort and time in finding another acceptable alternative.

The second decision-making process associated with repeat purchases is **habitual decision-making**, taking many forms depending on the initial decision-making process followed by the consumer (Engel et al., 1995: 158). Habitual decision-making comprises brand or company loyalty and inertia.

It should be noted that habitual decision-making is a process more likely to be followed by consumers for repeat purchases than repeated decision-making, since consumers will engage in repeat purchases on a basis of habits or routines that are formed in an effort to cope more effectively with the pressures of life.

Engel et al. (1995: 158) explain **brand or company loyalty** by stating that if a consumer has been purchasing the same product or service over a period of time due to satisfaction with the purchase and service received, the consumer will reward the organisation selling the product or rendering the service by means of continued support over a period of time. Belch & Belch (2001: 121) support this view by stating that brand loyalty refers to the preference for a particular brand that results in its repeated purchase. An example of brand or company loyalty is

where a motor vehicle owner is satisfied with the maintenance service received from a dealer and will, therefore, reward the dealer through continued support. Brand loyalty, the objective of any marketer, can be extremely difficult to change. Hawkins, Best & Coney (1995: 425) add to the above by stating that competitors to brands that consumers purchase out of habit, based on brand loyalty will battle to convince these consumers to change brands to that of the competitor.

The second decision-making process for repeat purchases listed by Engel et al. (1995: 158) is characterised by limited brand loyalty for the product category. If any brand loyalty does exist, it usually is for a number of different brands that are all considered about equal, for example potato crisps, where a salt and vinegar flavour is preferred regardless of the brand.

Purchasing habits are therefore based on **inertia** and are considered unstable. With this decision-making process there is no incentive to switch brands although it may occur readily when prices are lowered or another brand is offering something new.

3.2.1.3   Special categories of buying behaviour

As mentioned earlier, two special categories of buying behaviour are identified by Engel et al. (1995: 158), namely impulse buying and variety seeking.

Engel et al. (1995: G-7) define **impulse buying** as: "a spur-of-the-moment purchase triggered by product display or point-of-sale promotion". Mowen (1993: 381) adds to the definition by highlighting a specific characteristic of impulse buying, namely the urge to buy something immediately. The main characteristics of impulsive buying, according to Engel et al. (1995: 159), are:

- a sudden and spontaneous desire to act accompanied by urgency;

- a state of psychological disequilibria in which a person can feel temporarily out of control;

- the onset of conflict and struggle that is resolved by an immediate action;

- minimal objective evaluation – where emotional considerations are dominant; and

- a lack of regard for consequences.

As will be noted from the characteristics of impulsive buying above, there is a presence of urgency and a high sense of emotional involvement as well as an absence of careful reasoning when compared with extended decision-making. Mowen (1993: 381) adds to the above by stating that impulsive purchases are prone to occur with diminished regard for the consequences of such purchases.

The second special condition of buying behaviour, **variety seeking**, implies that although the consumer expresses satisfaction with a current brand selection, brand switching may occur due to a motive of variety seeking (Kotler & Armstrong, 2001: 193; Engel et al., 1995: 160 and Mowen, 1993: 381). Variety seeking occurs especially for products in product categories with many similar alternatives and high purchase frequencies where the consumer may express a feeling of "tired of the same old thing".

It is clear from the discussion above that there are multiple decision-making processes leading the consumer to a specific purchase decision, depending on a number of factors influencing the different processes. The factors influencing the extent of decision-making are briefly discussed below.

3.2.2 Factors influencing the extent of decision-making

The extent of decision-making is determined by three factors, namely the degree to which the consumer is involved in the purchase, the differentiation of alternatives and time available for deliberation (Engel et al., 1995: 161).

The **degree of personal involvement** is considered the most important factor influencing the type of decision-making process. The consumer will act with deliberation to maximise the benefits and minimise the risk of a purchase and the use thereof, depending on the extent of involvement.

Involvement is furthermore a function of the person, object and situation. The starting point for involvement is always the person with underlying motives, values and needs, activated by an object that is being perceived as important in satisfying needs, goals and values. Examples of the object include a product, service and promotional message.

The significance of the object in satisfying a need is determined by the situation that differs from time to time, resulting in consideration for all three factors (person, object and situation) when reflecting on involvement. Peter & Olson (1994: 172) add that the degree of decision-making from extensive to routine purchasing behaviour depends to a great extent on the knowledge of the consumer regarding the need identified and the level of involvement with the identified need.

Assael (1995: 72) notes that consumers are most likely to be involved with a product and therefore a purchase decision if one or more of the following applies (the presence of these conditions will most probably lead to extended decision-making):

- the product purchase is important to the consumer;

- the product is of interest to the consumer;

- the purchase entails significant risks;

- the product has some form of emotional appeal; and

- the product can be identified with the norms of a group.

The **extent to which alternatives are perceived to be different,** forms the second factor determining the extent of decision-making. Extended decision-making is therefore the most probable decision-making process when alternatives are perceived as being significantly differentiated and limited and midrange decision-making when alternatives are considered to be similar.

The final factor influencing the extent of decision-making is **time availability**. The more time the consumer has available to make a purchase decision, the greater the chance is of extended decision-making. For example, a consumer deciding to purchase a new television to replace an existing older model may engage in extended decision-making, while for the same example the consumer may engage in midrange or limited decision-making when the current television breaks the day before a major soccer or rugby game.

As was noted in Section 3.2, consumers can follow different consumer decision-making processes when purchasing a product or service. The remaining sections of this chapter will provide a discussion on all the stages of the consumer decision-making process together with the factors influencing each stage in the process.

As mentioned before, the decision-making process proposed by Engel et al. (1995) will be used as the basis for the discussion. The decision-making model

(illustrated in Figure 3.2) suggested by Engel et al. (1995: 146-154), comprises need recognition, search for information, pre-purchase alternative evaluation and purchase and its outcomes. The final stage, purchase and its outcomes, comprise four stages, namely consumption, post-purchase alternative evaluation and divestment. It should be noted that other authors (including Belch & Belch, 2001: 107 and Assael, 1995: 81) view the decision-making process as comprising of five stages, although the terminology ascribed to the stages differ somewhat to that of the process offered by Engel et al. (1995: 146-154).

FIGURE 3.2: THE CONSUMER DECISION-MAKING PROCESS

Need Recognition (Section 3.3) — Perceive a difference between the actual and the ideal state of affairs

Search (Section 3.4) — Seek information from the external environment or knowledge stored in memory for potential solutions

Pre-Purchase Alternative Evaluation (Section 3.5) — Evaluate or judge competing alternatives in terms of salient beliefs about relevant consequences

Purchase (Section 3.6) — Buy the chosen alternative

Consumption (Section 3.6.1) — Decide whether or not and when to use purchased product

Post-Purchase Alternative Evaluation (Section 3.6.2) — Re-evaluate product in terms of actual performance

Satisfaction

Dissatisfaction

Divestment (Section 3.6.3) — Decide whether to dispose, recycle or resell product once used

Source: Compiled from Engel et al. (1995: 154) and Peter & Olson (1994: 158)

Before discussing the four identified stages (although purchase and its outcomes are combined, this combination includes four stages, namely purchase, consumption, post-purchase alternative evaluation and divestment), it should be noted that Engel, Blackwell & Miniard changed the 2001 version to explicitly mention the seven individual stages in the decision-making process. Although the stages have not changed, the 2001 version (Blackwell, Miniard & Engel, 2001: 70-83) uses somewhat different terminology for some stages (for example post-consumption evaluation instead of post-purchase evaluation) and, instead of combining the last four stages under purchase and its outcomes, explicitly mention the seven stages, namely need recognition, search, pre-purchase evaluation of alternatives, purchase, consumption, post-consumption evaluation and divestment. It is important to note that, although identified separately in the 2001 version, the 1995 version comprises of the same stages that are grouped together (under purchase and its outcomes).

3.3. NEED RECOGNITION

The importance of the need recognition stage within consumer decision-making is highlighted by Hawkins et al. (2001: 508), by explaining that without the recognition of a need, there will be no need to make a decision. Engel et al. (1995: 176) provide a formal definition of need recognition by describing it as: "... the perception of a difference between the desired state of affairs and the actual situation sufficient to arouse and activate the decision process".

As noticed in the definition, need recognition, also referred to as problem recognition, occurs when consumers perceive a difference between their current state of affairs and some desired or ideal state (Kotler & Armstrong, 2001: 194; Schiffman & Kanuk, 1997: 567; Solomon, 1996: 271; Engel et al., 1995: 176; Hawkins et al., 1995: 427; Peter & Olson, 1994:159).

Need recognition therefore depends on the discrepancy between the consumer's current situation and the situation in which the consumer wants to be. A need is

recognised when the discrepancy meets or exceeds a certain threshold, although this does not necessarily imply an immediate action.

For example, a consumer feeling hungry (the actual state) would like to eat (the need recognised) to satisfy the hunger (the desired state). The consumer may, however, feel like eating Nando's chicken and decide to wait until leaving for home to purchase Nando's although there are a number of fast-food outlets or café's within a short walking distance from the office (delayed action, although the need was recognised). The need recognition process is illustrated in Figure 3.3.

FIGURE 3.3: THE NEED RECOGNITION PROCESS

Source: Adapted from Hawkins et al. (2001: 510)
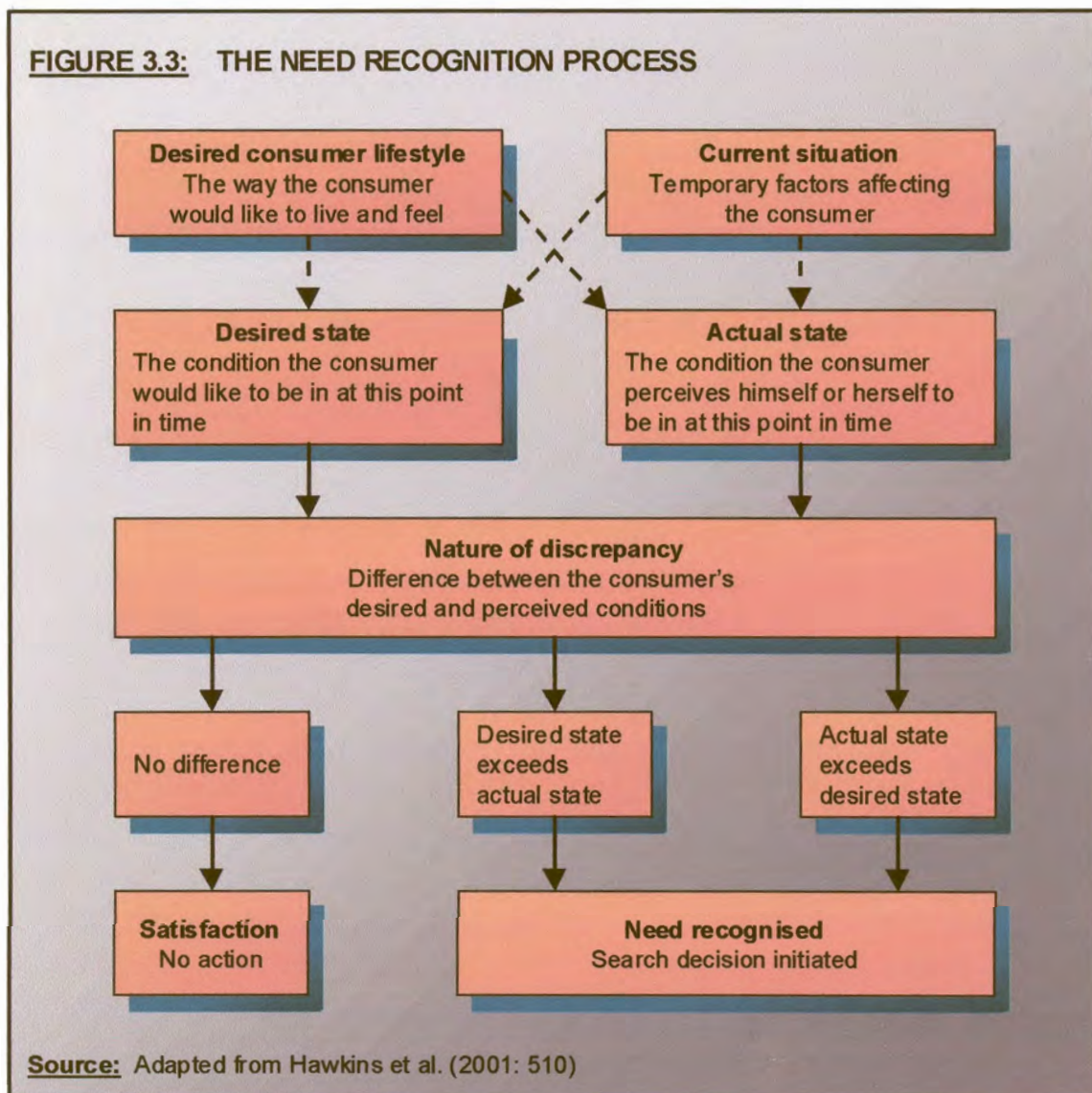
According to Engel et al. (1995: 176) two factors influence the desire of consumers to activate action once a need has been identified, namely the need has to be sufficiently important to the consumer and the solution has to be within the consumer's means. For example, if the solution to the need is above the consumer's economic means, action is most probably unlikely. Hawkins et al. (2001: 510) add to the above by stating that the magnitude of the difference between the actual and desired states will also influence the consumer's willingness to respond to the need. For example, a consumer may desire to own a motor vehicle using less than 10 litres of fuel per 100 kilometres, while still meeting certain power and aesthetic requirements. The consumer may not be willing to proceed to the next stage of the decision-making process if the current motor vehicle uses 10.5 litres per 100 kilometres, even though a discrepancy exists.

Two different types of need recognition styles can be identified among consumers (Schiffman & Kanuk, 1997: 567), namely actual state or desired state types. Actual state types refer to need identification as a result of current unsatisfactory product performance, for example a wrist-watch failing to keep accurate time. Desired state types refer to problem and need recognition for something new that may trigger the decision-making process. Hawkins et al. (2001: 511) add to the above by stating that needs can either be active or inactive, where active needs imply that consumers are aware of the need or will become aware thereof in the normal course of events. Inactive needs simply represent needs the consumer is not yet aware of.

According to Schiffman & Kanuk (1997: 567) need recognition can also be viewed as either simple or complex. Needs occurring frequently and that can be dealt with almost immediately are termed simple need recognition, for example a consumer feeling hungry and purchasing crisps at a café. Where a need develops over a period of time as the actual state and desired state move apart, complex need recognition applies. For example, a wrist-watch failing to keep the

correct time over a certain period, may result in the consumer recognising the need for a new wrist-watch.

Solomon (1996: 271) adds to the above by stating that need recognition can also be viewed as an "opportunity recognition" when the consumer's ideal state is moved upwards. For example, a consumer who has always been satisfied with the Hi-Fi at home may recognise the need for a better, high-quality Hi-Fi after listening to a better quality system of a friend.

According to Engel et al. (1995: 146-148), two categories of factors influence need recognition, namely environmental influences and individual differences. The factors influencing need recognition are illustrated in Figure 3.4 below.

FIGURE 3.4: **NEED RECOGNITION**

Environmental Influences
•Culture
•Social Class
•Personal Influences
•Family
•Situation
(Section 3.3.1.)

Memory → Need Recognition

Individual Differences
•Consumer Resources
•Motivation and Involvement
•Knowledge
•Attitudes
•Personality, Values, and Lifestyle
(Section 3.3.2)

Source: Engel et al. (1995: 148)
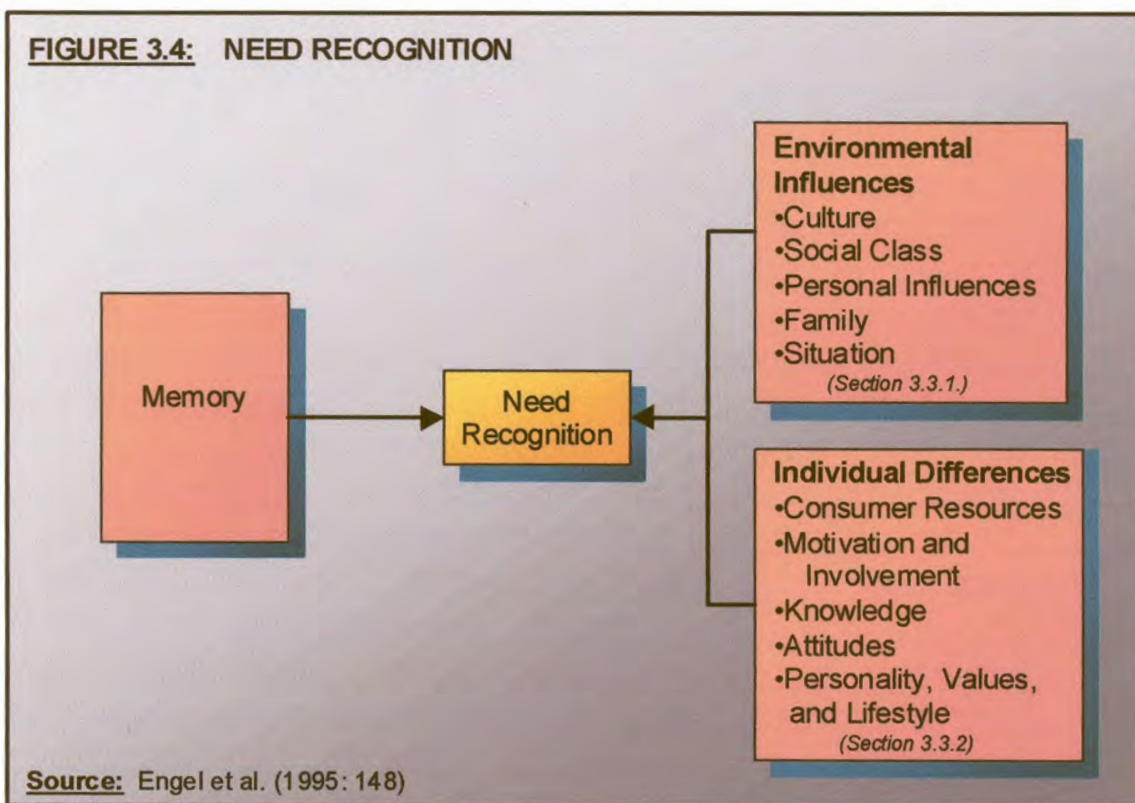
Belch & Belch (2001: 109), Solomon (1996: 272) and Assael (1995: 83) add to the factors influencing need recognition by stating that it may also be spurred by

the marketing efforts of organisations. Figure 2.6 in Chapter 2 (detailing the EBM model of consumer behaviour) showed the influence of marketing stimuli on memory, once processed. The memory component as influence to need recognition will be discussed under the second stage of the consumer decision-making process, search, when the information-processing process is discussed (Section 3.4.2). This discussion will indicate how marketing stimuli influence consumer behaviour, how they are processed, retained and recalled from memory. The two influences on need recognition will be discussed in Sections 3.3.1 and 3.3.2.

3.3.1 Environmental influences

The relevance of environmental influences in consumer decision-making, according to Engel et al. (1995: 607), is that consumers are shaped by the environments they operate and live in. In addition to the environment shaping consumers, consumers change the environment through their behaviour.

The main environmental influences shaping the consumer decision-making process are culture, social class, personal influences, family and the situation.

3.3.1.1   Culture

According to Engel et al. (1995: 615), culture has a profound impact on why consumers buy, since it affects the individual decision-making process, communication within a society and the specific products consumers purchase. More specifically, culture influences certain attitudes and behaviours, for example food and feeding habits, sense of self and space, dress and appearance, time and time consciousness, mental processes and relationships. From a need recognition perspective, culture influences product meanings through advertising and other marketing-dominated mediums, as well as other ways not influenced by marketing, yet important to the consumer.

Crotts & Erdmann (2000: 410 – 419) add to the above by stating that a consumer's culture can, for example, influence feedback to marketers regarding satisfaction and dissatisfaction. Consumers from cultures where masculine (competitive) values prevail will, for example, evoke behaviours that are assertive and judgmental and have less concern for the feelings for others. On the other hand, consumers from cultures where there is a tendency for more tenderness and sympathy towards others and where assertiveness is not a desirable characteristic, could be overtly moderate as far as providing criticism is concerned. It is therefore important for marketers to understand that culture does not only have an influence on consumer decision-making but also has an impact on the feedback they get.

Schiffman & Kanuk (1997: 406) and Solomon (1996: 539) continue with the discussion on culture by stating that culture may be perceived as the personality of a society, making it difficult to set the boundaries thereof. This view is supported by Peter & Olson (1994: 332) who define culture broadly as: "… the meaning that are shared by (most) people in a social group". Hofstede (2001: 9) provides a different view of culture by defining it as: "… the collective programming of the mind that distinguishes the members of one group or category of people from another".

Schiffman & Kanuk (1997: 406) provide a more applicable definition, considering the influence of culture specifically on consumer behaviour, namely: "… the sum total of learned beliefs, values, and customs that serve to direct the consumer behaviour of members of a particular society".

Schiffman & Kanuk (1997: 406) expand on the definition by explaining that **beliefs and values** are considered accumulated feelings and priorities of consumers regarding possessions and "things". Consumer's mental and verbal statements reflecting their knowledge and assessment of something (for example a person, brand or store) form their beliefs. Values are also seen as beliefs but

differ in a number of ways. They are relatively few, are difficult to change, are not tied to specific situations and objects, offer a guide for appropriate behaviour in accordance with the culture and are widely accepted by the members of society.

Solomon (1996: 541) and Hawkins et al. (1995: 36) clarify values by stating that they are imparted to the members of the culture, forming a widely held belief of what is desirable and preferable. Engel et al. (1995: 612) and Hawkins et al. (2001: 42) add to the above by stating that norms are derived from cultural values, forming the beliefs held by a group concerning behaviour rules for individual members. Norms, therefore, represent the rules that prohibit or specify certain behaviour in specific situations, forming the boundaries set by culture on behaviour.

Hawkins et al. (2001: 42) explain that norms are considered important in culture, since the violation thereof may result in sanctions or penalties that can vary from mild social disapproval to banishment from the group.

Customs, as highlighted in the definition provided by Schiffman & Kanuk (1997: 406), refer to overt modes of behaviour that constitute acceptable or approved behaviour within a specific situation. Customs, therefore, form usual and acceptable ways of behaving, whereas beliefs and values provide guidelines for behaviour. It should also be noted that different cultures can be distinguished through their language, symbols, myths and rituals.

According to Schiffman & Kanuk (1997: 410), language and symbols are important for any culture, since they enable the members of a society to communicate with each other through a common language. A common **language** results in shared meaning that enables true communication within a society. **Symbols**, comprising verbal and non-verbal symbols, always represent something else, for example the word "razor" will undoubtedly provide an image

in relation to the frame of reference of the reader. Verbal symbols, for example, include an announcement on television or a print advertisement in a magazine, whereas non-verbal symbols include, for example, figures, shapes, trademarks and product design. Schiffman & Kanuk (1997: 411) add to the above by stating that symbols can assist consumers in the decision-making process through product offerings and marketing appeals. For example, the price of a product or even the store where it is sold, could be a symbol of the quality a consumer can expect when purchasing a product.

Solomon (1996: 543) explains that every society possesses a set of **myths** that defines that culture. A myth refers to stories that contain symbolic elements expressing the shared emotions and ideals of culture. Four functions of myths within cultures can be distinguished, namely they assist with the explanation of the origins of existence (metaphysical), they emphasise that all components of the universe are a part of a single picture (cosmological), they maintain social order by authorising a social code to be followed by the members of a culture (sociological) and they provide models for personal conduct (psychological).

Schiffman & Kanuk (1997: 411) add by stating that **rituals** can be defined as: "... a type of symbolic activity consisting of a series of steps (multiple behaviours) occurring in a fixed sequence and repeated over time". More practically, rituals extend over a person's life cycle from birth to death and for example include christening of babies, graduations and weddings. Rituals are, therefore, rather formal and can be very public, elaborate or religious. Rituals can also be less formal, for instance painting eggs for Easter, decorating a tree for Christmas or drinking Jack Daniel's only when a favourite rugby or football team is playing. Rituals can, from a consumer decision-making perspective, lead to need recognition, for example purchasing a wedding ring, a suit for a graduation ceremony or a gift for a friend's wedding.

informal and technical learning. Formal learning implies that adults or older siblings teach young family members "how to behave". Informal learning refers to learning through imitating the behaviour of selected others, including family members and television heroes. The final method of learning, technical learning, refers to the educational environment, where teachers instruct children what should be done, how it should be done and why it should be done.

Schiffman & Kanuk (1997: 412 - 414) add to the characteristics of a culture by stating that a particular value, practice or belief has to be **shared** by a significant portion of society. The critical component enabling people to share values, customs and experiences is a common language. As discussed above, referring to cultures being learned, the family and other institutions within society (for example educational institutions and houses of worship) share held beliefs, values and customs with the young.

Schiffman & Kanuk (1997: 414) explain the final characteristic of cultures discussed in this section, namely that cultures are **dynamic**, by stating that cultures need to continually evolve to function in the best interests of a society. Examples of influences changing cultures include new technology, a shift in population, wars and adoption of customs from other cultures. Assael (1995: 456) adds to the above by stating that although cultures change as society changes, it is also permanent since parents continue to share values with their children.

It is clear from the discussion above that culture plays an important part in the purchasing behaviour and decision-making activities of consumers. The discussion showed many examples of how cultural phenomena and influences can lead to consumer need recognition. One aspect that has not been discussed is the influence of subcultures as possible influence to both consumer decision-making and need recognition. The influence of subculture and cross-culture will be discussed in more detail below.

A) Subculture and cross-culture

According to Assael (1995: 484), differences in values among groups in the same country refer to subculture and can be defined as: ".. broad groups of consumers who have similar values that distinguish them from society as a whole".

Peter & Olson (1994: 360) provide a different perspective by defining subculture as: " ... a distinctive group of people in a society who share cultural meaning". Schiffman & Kanuk (1997: 440) provide clarity on subculture by stating that members of a subculture possess customs, values and beliefs that distinguish them from other members of the same society, while still adhering to the cultural values, beliefs and behavioural patterns of the larger society.

In contrast to subculture, **cross-culture** refers to differences in values, beliefs and behaviour across countries. Schiffman & Kanuk (1997: 474) explain the relevance of viewing cross-cultural influences on consumer behaviour by stating that an analysis of the culture of other nations will provide clarity on the psychological, cultural and social characteristics of foreign consumers. An understanding of commonalities between cultures of different nations (and the differences thereof) will provide marketers with valuable information to sell products to consumers of other countries.

A number of subculture characteristics influencing consumer behaviour can be identified. According to Assael (1995: 500), these characteristics are:

- subcultural distinctiveness, implying that the more a subculture attempts to maintain a separate identity, the greater the potential influence thereof will be;

- subcultural homogeneity, suggesting that a subculture with homogeneous values is more likely to influence its members; and

- subcultural exclusion, referring to exclusion sought from society or being excluded by society, for example the Amish community in the United States.

It can be concluded from the discussion above that subcultures are present in society and that they represent groups of people with similar beliefs, values and behaviour, while still adhering to the customs and values set by the broader culture. Subcultures can, therefore, be identified in the broader society and culture by considering different categories of subculture that define such groups.

Schiffman & Kanuk (1997: 447 – 464), Assael (1995: 501 – 502) and Peter & Olson (1994: 363 –372) identify a number of subcultural categories based on geographic location, race or ethnic group, age, sex or gender, non-traditional subculture and religion.

Subcultures identified by their **geographic location** often have a sense of regional identification. An example from a South African perspective would be when referring to a person living in Cape Town as a Capetonian. Such a label ascribed to people assist with developing a mental picture together with supporting stereotypes of such a person. Considering the same example, when referring to a Capetonian the image of a laid-back, less stressed person comes to mind, especially when comparing it to the image of a Johannesburger. From a consumer behavioural point of view, these differences in subcultures based on geographical location can influence purchase behaviour and need recognition. For example, when considering the area and surrounding recreational possibilities, purchase patterns for boats and hiking equipment will be totally different for people living in Bloemfontein (very little opportunities for boats and hiking equipment), Nelspruit (great opportunities for hiking equipment and relatively small opportunity for boats) and Cape Town (excellent opportunity for boats and hiking equipment).

In South Africa **race and ethnic group** subcultures can be clearly identified, especially when considering the 11 official languages recognised in the country (the 11 languages exclude many other languages, for example Indian, Japanese and other European languages – e.g. Greek, representing other possible subcultures). Need recognition may, therefore, be influenced by different subcultural influences, for example a young working Zulu may recognise the need to purchase clothes for the family (considered appropriate cultural behaviour where the family members provide for each other's needs) whereas a young working White person may purchase clothes for personal use only (considering only personal gratification).

Different **age** subgroups of the total population of a country can form subgroups, since different purchase behaviour can often be distinguished between age groups as the demand for products and services shift during a person's life. For example ages 13 to 19 (recognising the need for a bicycle or motor cycle), ages 20 to 30 (relatively inexpensive small motor vehicle with low running costs), ages 30 to 40 (need recognised for a larger, family motor vehicle), ages 40 to 50 (more expensive, luxury vehicle) and ages 50 and above (recognise the need for a reliable motor vehicle that will last for many years). This over-simplified example shows that subcultures, based on age, can be identified that will influence consumer behaviour in terms of decision-making and purchase behaviour. Reference to consumer age groups, when discussing the influence of the Internet on the consumer decision-making process, will be made in Section 4.2 in Chapter 4.

Peter & Olson (1994: 371) are of the opinion that **sex and gender** differences comprise more than physical characteristics of men and women. Differences in behaviour can often be noticed, significantly enough to distinguish male and female subcultures, which would suggest that gender differences could impact on need recognition and decision-making processes. For example, as a general rule, women appear to be more generous and nurturing and less dominant than men. From a marketing perspective these differences should be considered.

way in which they spend their time. Solomon (1996: 432) expands on this view by stating that social class does not only influence how much money is spent with a particular purchase but also how the money is spent. Assael (1995: 358) adds by stating that the social class influences consumers indirectly and is likely to indicate common values and matching purchasing patterns.

A formal definition will provide greater clarity of what is implied when referring to social class. Schiffman & Kanuk (1997: 376) define social class as: "... the division of members of a society into a hierarchy of distinct status classes, so that members of each class have relatively the same status and members of all other classes have either more or less status". Considering the definition, Assael (1995: 357) provides particular clarity on the hierarchy within social classes by defining it as: "... the ranking of people in a society into a hierarchy of upper, middle, and lower level classes based on their power and prestige". As can be seen from the definitions above, social classes are grouped in a hierarchy ranging from high to low. Important to note is that different levels can be identified within the social class hierarchy (for example the upper-upper, upper-middle, middle, working, lower, lower-lower, etc.)

Engel et al. (1995: 681) add to the above by explaining that status groups also identify social class. **Status groups**, as an integral part of social class, reflects a community's expectations for styles of living for each class as well as the positive or negative social appraisal of honour granted to each class. Schiffman & Kanuk (1997: 376) support this view by stating that status is frequently used in social class research to identify the relevant members of each social class in terms of specific status factors. These factors or variables determining a consumer's position in the social class hierarchy include, amongst others, income, occupation, education, possessions and personal performance.

Income, together with occupation and education, are frequently used to identify and distinguish between different social classes. Hawkins et al. (1995: 130)

explain that income is viewed from a purchasing power and status perspective and can be measured in a number of ways, including individual or family income, before or after tax deductions and salary or total income. Solomon (1996: 438) adds by stating that the identification of income within a social class is very important to marketers, since it identifies the groups with the greatest purchasing power. Although income is often perceived as the single most important factor in identifying social classes, Engel et al. (1995: 683) caution that marketers should not consider to equate social class with income. As an example, although a senior personnel officer may earn a higher income than a professor of history, the professor would most probably be ascribed to a higher social class.

Schiffman & Kanuk (1997: 381), Engel et al. (1995: 683) and Hawkins et al. (1995: 130) suggest that **occupation** is the single most widely used factor in marketing to identify social class. The importance of occupation as an indicator of social class becomes clear when considering how often the question, "what do you do for a living?", is asked when people meet for the first time. The response to this question serves as a guide to infer about the life-style and, therefore, the social class of a person. Engel et al. (1995: 683) add that the work people perform greatly influences their life-styles and is the single most important basis for according honour, prestige and respect. From a marketing perspective, occupation often serves as a tool to define a market for products, for example Waterman pens for professionals or vacation resorts for executives and professionals.

Education is a third indicator of social class, often an indicator of income and occupation. Schiffman & Kanuk (1997: 383-384) explain the relevance of examining education by stating that, generally speaking, the more educated a person is, the higher the probability will be that that person receives a higher income and has a high occupational status. Hawkins et al. (1995: 129) adds by stating that education influences an individual's values, tastes and the manner in which information is processed. Education does, however, not provide a

complete understanding of buying patterns of consumers. For example, a graduate in political science may earn a total salary package of R 180 000 per annum whereas a marketing graduate, studying for the same length of time and with equal year's experience, could earn R 300 000. Although the level of education is the same (both obtaining a three-year degree), the buying power and patterns, status and social classes of the two graduates would most probably be different.

Schiffman & Kanuk (1997: 385) expressed the opinion that **possessions** have been used by sociologists as an index of social class. Engel et al. (1995: 685) support this view by stating that social class can be derived by not only looking at the number of possessions but also the nature thereof. For example, the area in which an individual's house is situated (an upper residential area, for instance a golf estate, versus a block of flats) can give an indication of the social class. In addition to the house itself, the presence of a number of furniture items and accessories in an individual's house could provide an indication of the social class the person belongs to, e.g. wall-to-wall carpets versus Oriental rugs or Defy appliances versus AEG and Siemens appliances. From a consumer purchasing and need recognition point of view, consumers may often aspire to a higher social class by purchasing items perceived to be directed at the more affluent members of society. For example, a consumer in a lower social class will purchase clothes at boutiques and spend as much money as possible on a more expensive motor vehicle to create an image of higher status.

A final factor, but by no means the final determinant, that may indicate social class is personal performance. Engel et al. (1995: 683) explain that the **personal performance** of an individual, when compared to others in the same occupation, may indicate the social class of a person. Examples of personal performance are where a certain medical professor is making the most progress in finding a cure for cancer or AIDS, or a stock-market broker achieving the best returns on investments for a considerable time period. In addition to status

obtained through occupation, a person may be perceived as being in a higher class through involvement with others in society. For example, a person from a low social class may be perceived to be of a higher status because of continued support to other less fortunate members of the same society or creating community programmes to uplift the society the person lives in.

It is clear from the discussion that many factors can influence and indicate the social class to which an individual belongs. From a consumer decision-making and specifically need recognition perspective, it is clear that social class influence can directly influence the recognition of needs and purchase behaviour. For example, an administrative clerk deciding to improve standard of living may recognise the need to obtain a degree in management sciences, resulting in a change in purchasing behaviour (purchasing the Financial Mail instead of the You magazine and purchasing a computer instead of replacing the television set for a newer model). Another example could be a person aspiring to become a professor of marketing who may recognise the need to add a study to the house instead of extending the kitchen.

The examples above indicated aspirations of people to belong to higher social class. The opposite also applies. A financial broker, for example, loosing all of the family's wealth through incorrect market forecasts, may have to sell the house in the golf estate and the family's BMW 330i and Mitsubishi Pajero, recognising the need for a smaller house in an average residential area and a Volkswagen Golf as the only family vehicle.

It is clear from the example that consumer need recognition is influenced by social class. Marketers should therefore consider social class when drafting marketing strategies.

3.3.1.3 Personal influences

As can be seen from Figure 3.4, personal influences form the third environmental influence. Personal influences from others, directly or indirectly, are one of the best forms of persuasion on consumer decision-making and purchasing behaviour (Engel et al., 1995: 716). The reason for the strong influence is based on the input from people with whom one can identify and relate to, resulting in a high credibility ascribed to people that consumers receive input from.

Engel et al. (1995: 716) explain that personal influences present two main forms, namely reference groups and word-of-mouth communication.

A) Reference groups

Reference groups serve as a frame of reference for individuals in their purchase and consumption decisions and should therefore be considered as important input to the consumer decision-making process.

Schiffman & Kanuk (1997: 323) define reference groups as: "... any person or group that serves as a point of comparison (or reference) for an individual in forming either general or specific values, attitudes, or behaviour". Reference groups are, furthermore, not limited by group size or membership nor does it require that consumers should identify with a tangible group (for example owners of small businesses or golf professionals).

Peter & Olson (1994: 384) note an interesting characteristic of reference groups by stating that an individual's reference group may be from the same or another culture, subculture or social class. Reference groups are therefore not bound by an individual's normal association groups, for example an Indian lady working with Whites and Blacks may perceive these working colleagues as her reference group.

Assael (1995: 528) clarify the involvement of a person in reference groups by distinguishing between membership and aspiration groups. **Membership groups** imply that the individual forms part of the group, for example the family or a science club. A person who would like to be part of a group, therefore not currently a member of the group, forms part of an **aspiration group**, for example a league rugby or soccer player that would like to be part of the National team.

Assael (1995: 528) continues by stating that a reference group can also be viewed negatively. An individual belonging to a group may reject the values and behaviour of the group and its members, termed a **disclaimant group** for the individual. Secondly, an individual may regard membership to a specific group as something to be avoided, called a **dissociative group**. Peter & Olson (1994: 385) agree with this view by stating that dissociative reference groups embody undesirable meanings and will act as a negative reference group that an individual would avoid dealing with.

Furthermore, primary and secondary reference groups, according to Engel et al. (1995: 717 – 718), as well as formal and informal groups can be distinguished. **Primary groups**, for example the family, refer to small groups that permit and facilitate unrestricted face-to-face interaction. A characteristic of primary groups is cohesiveness and motivated participation, resulting in similar beliefs and behaviour by the members of the group. **Secondary groups**, for example professional associations, are characterised by less comprehensive and more sporadic face-to-face interaction between members, therefore exerting less influences to shape thought and behaviour. Schiffman & Kanuk (1997: 320) explain that primary groups can be distinguished from secondary groups by considering both the perceived importance of the group to the individual and the frequency with which the individual interacts with the group.

Schiffman & Kanuk (1997: 320 – 321) and Engel et al. (1995: 718) explain that **formal reference groups** are characterised by a defined and known

membership list, a defined structure with specific roles and authority levels and specific goals. The influence of formal reference groups on individual behaviour depends on the motivation and willingness of the individual to accept and comply with the group's standards. Examples of formal groups include churches and community service organisations.

Informal reference groups, characterised as being less formal and likely to be based on friendship, can have a strong impact on behaviour if individuals within the group are motivated by social acceptance. The influence is further strengthened by a high degree of intimate and face-to-face interaction between members.

Schiffman & Kanuk (1997: 324) identify another possible reference group, **indirect reference groups**, by explaining them as groups with whom an individual does not have direct face-to-face contact, for example sport heroes, television personalities, politicians and movie stars.

As will be noted from the discussion on different reference groups, individual behaviour and decision-making can be influenced by these groups. According to Engel et al. (1995: 719) three forms of reference group influences on consumer choice can be identified, namely normative compliance, value-expressive influences and informational influences.

Normative compliance refers to the influence exerted by groups on individual behaviour through pressure for conformity and compliance. Schiffman & Kanuk (1997: 323) add by explaining that through normative compliance, general and broadly defined values and behaviour are transferred to members of the reference group. An example of normative compliance is the influence of the family on the behaviour of a child. Peter & Olson (1994: 384) add to the above, referring to utilitarian influences, by stating that changes in individual behaviour can occur when the reference group is perceived to be in charge of reward and punishment. Individuals will, therefore, comply with the guidelines and desires of

a reference group if they believe the group can control rewards and punishment, when behaviour is visible to the group and when they are motivated to receive rewards or avoid punishment.

Engel et al. (1995: 724) explain that **value-expressive influences** imply the need of an individual for psychological association with a group by accepting the norms, values and behaviour of the group, although there may not be any motivation to become a member of the group. The reasons for this can be attributed to the desire to be associated with people who are admired and respected and also to enhance image in the eyes of others.

The final influence on consumer choice exerted by reference groups is information influence. Peter & Olson (1994: 385) state that **informational influences** imply that reference groups transmit information to members about other people or aspects of the environment, including products, services and retail outlets. Information can be shared directly through words or demonstration, for example showing how a specific coffee percolator works.

It should be noted, in conclusion to the discussion on reference groups, that three factors determine the extent to which reference groups influence consumer behaviour. Schiffman & Kanuk (1997: 327) and Assael (1995: 527) list these influences as information and experience (the individual's attitude towards the group), credibility, attractiveness and power of the reference group (nature of the group) and conspicuousness of the product (nature of the product). An individual with firsthand **experience** with products and services or who can easily obtain **information** on it, is less likely to be influenced by the advice of others. On the other hand, a person without the necessary experience or finding it difficult to obtain relevant information will more likely consult others for advice.

A reference group characterised by its **credibility, attractiveness and power** can directly influence individual member attitudes and behaviour, since

individuals are more likely to be persuaded by sources with high credibility. The degree to which a product is visually or verbally **conspicuous** will determine the potential influence of a reference group. A visually conspicuous product refers to items that will be noticed by others, for example luxury and novelty products, and verbally conspicuous products are those that are highly interesting or easily described. Products that are more conspicuous will most probably be status revealing (for example clothing and furniture) and will, therefore, be purchased by considering opinions of others (often for the sake of noting the reactions of others) when seeking an opinion. Less conspicuous products tend to be privately consumed, for example canned fruit, and consumers are therefore less likely to consult a reference group.

B)   Word-of-mouth influences

Word-of-mouth is the second personal influence on consumer decision-making and behaviour. The relevance of discussing word-of-mouth is clear when considering how often consumers turn to the opinions of others, especially family and friends, regarding products and services. Word-of-mouth influences in the Web-environment will also be seen from the discussion Section 4.3.1 in Chapter 4.

Assael (1995: 634) adds to the above by stating that friends and relatives are more likely to influence consumer choice than any other source, since consumers regard family and friends as more credible and trustworthy than commercial sources. In addition, reference groups and family can reduce the risks associated with purchase decisions by providing the consumer with information regarding the product, its performance, financial information and guides for socially acceptable product purchases.

When considering word-of-mouth influences, the transmitter of information is termed the influential or opinion leader. Engel et al. (1995: 726) express the opinion that the term opinion leader should be avoided, since with word-of-mouth communication there is no hierarchical pattern of a leader and a follower.

Despite this caution, the term "opinion leader" will be regarded as implying the same meaning as "influential" since other authors (for example Hawkins et al., 2001: 240; Schiffman & Kanuk, 1997: 500; Solomon, 1996: 358; and Assael, 1995: 634 & 652 – 659) refer to the term "opinion leader". The term "opinion leader" will, therefore, be used in this study when discussing word-of-mouth influences, since the majority of references quoted refer to the term "opinion leader".

Engel et al. (1995: 726) explain that consumers will accept and respond to word-of-mouth communication when one or more of the situations and conditions listed below are present:

- the consumer is unable to make an adequately informed decision, since sufficient information is not available;

- it is difficult to evaluate a product because of its complexity;

- the person lacks the ability to evaluate a product or service, regardless of the manner in which the information is disseminated and presented;

- the credibility of other sources is perceived to be low;

- an opinion leader is more easily accessible than other sources of information, thereby saving effort and time;

- there is a strong social bond between the transmitter and receiver; and

- a high need for social approval is present.

Schiffman & Kanuk (1997: 500) add to the above by characterising word-of-mouth as interpersonal and informal, occurring between two or more people, where none of them represents a commercial selling source that would gain by selling something.

Word-of-mouth can be described as a communication flow between opinion leaders and followers in either a trickle-down, two-step flow or multistage process.

The **trickle-down process**, according to Engel et al. (1995: 726), is considered the oldest theory of personal influence and implies that lower classes imitate the behaviour of higher classes. Influence is, therefore, transmitted vertically through social classes, for example fashion and style. This process of information flow is rarely seen in economically developed countries, since the influence of the mass media and copying of fashion through mass merchandise place these kinds of items within the reach of the masses in a relatively short period of time. Trickle-down influences are far more likely to occur between peers in modern society, referred to as homophilous influences (referring to information transmission between those who are similar in age, education, social class and other demographic characteristics).

According to the **two-step flow** process, information and new ideas flow through mass media to opinion leaders, who pass the information to others and who in turn are more passive in information seeking through word-of-mouth (Assael, 1995: 636 and Engel et al., 1995: 727). Assael (1995: 636) adds by stating that the opinion leaders can be viewed as the intermediaries between the information source and other consumers, while the followers (those receiving the information from the opinion leaders) are viewed as passive recipients of information.

In contrast to the views of the two-step flow process, **multistage interaction**, referred to by Assael (1995: 637) as multistep flow of communication, suggests that both the opinion leader and the follower are exposed to mass media. Through the information obtained from mass media, the seeker of information can approach someone else, rather than the opinion leader approaching the follower in an attempt to share information. Engel et al. (1995) add that the opinion leader rarely acts as mediator for the flow of information from mass

media as with the two-step approach. Assael (1995: 637 – 638) supports this point of view by stating that, although the two-step flow is important in understanding the process of personal influence, it is not accurate in presenting the flow of information and influence for a number of reasons.

Firstly, followers are not passive, since they may initiate requests for information and obtain the opinions of others. Secondly, opinion leaders are influenced by followers, with word-of-mouth influences being a two-directional flow between the transmitter and receiver. Finally, opinion leaders are not the only receivers of information, since followers are also influenced by advertising. In addition, opinion leaders may not control the flow of information, since others (called "gatekeepers") may perform the function of introducing ideas and information to the group without influencing the group.

Schiffman & Kanuk (1997: 518) and Assael (1995: 638 – 639) conclude that the recognition in the multistage model, where opinion leaders and followers receive and transmit information, leads to four possibilities, namely a socially integrated consumer (both an opinion leader and an information seeker); a socially independent consumer (more an opinion leader than an information seeker); a socially dependent consumer (less of an opinion leader and more of an information seeker) and a socially isolated consumer (considered neither an opinion leader nor an information seeker).

From the discussion on word-of-mouth influences above, the importance of the opinion leader frequently emerges as the individual most likely to influence others. The function and influence of the opinion leader will briefly be discussed below.

Solomon (1996: 358) explains the opinion leader as a person who is able to frequently influence the attitudes and behaviour of others. Assael (1995: 652) continues by stating that opinion leaders tend to be product-specific, implying

that an opinion leader for one category is unlikely to be influential across unrelated categories with the exception of closely-related categories. For example, an opinion leader with regard to ovens may carry the influence over to microwave ovens and loose-standing stoves.

Assael (1995: 652) notes that although past research studies show that general opinion leaders do not exist, three categories of consumers suggest generalised influence across product categories, namely influencials, market mavens and surrogate consumers.

Influencials refer to individuals that are active in public and community affairs. Assael (1995: 653) suggests that influencials tend to be of higher social class and are well educated. The influence of influencials tends to be important for products and services that depend on word-of-mouth recommendations.

Assael (1995: 654) notes that **market mavens** tend to be closer to general gatekeepers than opinion leaders. Market mavens tend to hold information on many kinds of products, outlets to purchase and other information of markets. Solomon (1996: 361) supports the above by stating that market mavens tend to have a solid overall knowledge of how and where to purchase products. Schiffman & Kanuk (1997: 513) add an additional characteristic of market mavens by stating that they are keen shoppers and they enjoy sharing their purchasing experiences with others. They are, therefore, likely to influence and inform others by responding to requests from consumers regarding market information.

Surrogate consumers assist other consumers by guiding and directing them with marketplace activities, for example tax consultants and financial advisers. Solomon (1996: 361) clarifies the above by stating that surrogate consumers are hired to provide input to purchase decisions. According to Assael (1995: 654) surrogate consumers, although not perceived as general opinion leaders, play an

important role, since they often assume the decision role for consumers (therefore considered opinion leaders in their surrogate role).

In conclusion to the discussion on opinion leaders and their influence on consumer decision-making and purchase decision, it should be noted how these individuals can be identified. Engel et al. (1995: 727 – 728) list basic ways to identify opinion leaders through research, namely sociometric, key informant and self-designation. Schiffman & Kanuk (1997: 503 – 509) add, in addition to the three mentioned, the objective method.

The **sociometric** method refers to people being asked to identify other people they consult for advice or information when making a decision. When knowledgeable people are consulted to identify the opinion leaders within the society, the **key informant** method applies. By using a third method, **self-designation**, researchers can determine opinion leaders, since people are asked to what extent they have been consulted for advice. Finally, the **objective method** implies that when new products or new product information is placed with selected individuals, the resulting "web" of interpersonal communication concerning the relevant product or information is tracked.

3.3.1.4   Family

It could be seen from Figure 3.4 earlier in the chapter that the family forms the fourth external influence on need recognition. Engel et al. (1995: 742) commence the discussion on the family by explaining that the importance of studying the influence of the family or household unit, from a consumer decision-making perspective, can be attributed to two reasons. Firstly, many products are purchased by a family unit, for example both spouses (possibly including children) deciding on a new motor vehicle or house. Secondly, other members of the family may influence purchasing decisions of individuals within the family, for example the person buying food from a supermarket may be influenced to

purchase what is preferred by other family members. Martinez & Polo (1999: 461 – 481) add to the above by stating that the family is considered an important decision-making unit due to the large quantity of products and services that form part of a family's everyday life. Marketers should therefore understand family decision-making in order to implement marketing strategies.

It is important to first clarify and explain the difference between the family and a household before considering different roles in family purchases and the influence of the family on individual decision-making.

Schiffman & Kanuk (1997: 346) define the **family** as: "... two or more persons related by blood, or adoption, who reside together". Hawkins et al. (1995: 188) add to the definition by distinguishing between the nuclear and extended family. The nuclear family consists of two adults of the opposite sex living together in a socially acceptable sexual relationship with their own or adopted children. Engel et al. (1995: 742 – 743) narrow down this view by stating that the nuclear family members comprise a father, mother and children. The extended family comprises the nuclear family living together with other relatives, for example grand parents, uncles, aunts and cousins. Schiffman & Kanuk (1997: 347) add a third possible family group, namely married couples, comprising a husband and wife. As a household unit, married couples represent a married couple who has not yet started with a family or older couples who have already raised their children. Schiffman & Kanuk (1997: 347) add to the above by stating that the high rate of divorce, separation and out-of-wedlock births has increased the number of single-parent households, consisting of one parent and at least one child.

From the definition and explanation above it can be derived that the family comprises members that are related to each other by blood or marriage. Engel et al. (1995: 743) distinguish between the two possible ways in which family members are related by terming the family in which a baby is born (related by

blood) as the family of orientation, whereas the family established by marriage is called the family of procreation.

From a marketing perspective it is also important to consider the household and the influence thereof, since many people live together and although they are not married, still function as though they were. Engel et al. (1995: 743) refer to the **household** as people, related or unrelated, who occupy a housing unit. Schiffman & Kanuk (1995: 346) add to the above by stating that households may include individuals who are not related by blood, marriage or adoption and include unmarried couples, friends, room-mates or boarders.

The influence of the family on individual members can be better understood by focusing on the sociological dimensions of families. According to Engel et al. (1995: 744), three variables can be identified that can explain how families function, namely cohesion, adaptability and communication.

The emotional bonding between family members is called **cohesion**. It reflects the sense of connectedness to or separateness from other members of the family. **Adaptability** refers to the ability of the family to change its structure, roles and rules in response to situational changes and developmental stress. The degree of adaptability reflects the manner in which a family can meet challenges presented by changing needs. **Communication** portrays a facilitating dimension and is critical to movement on the other two dimensions. Positive communication skills, for example supportive comments and empathy, enable family members to share their changing needs as they relate to cohesion and adaptability, whereas negative communication skills (for example double messages and criticism) restrict the ability to share feelings and needs.
Schiffman & Kanuk (1997: 347) support the above by adding four functions performed by the family relevant to consumer behaviour, namely economic well-being, emotional support, suitable family life-style and socialisation of family members.

Five different roles can be identified within the family when purchasing products or services (Engel et al., 1995: 744 - 745). Before looking at the individual roles identified, it is important to note that two different kinds of role behaviour of the family can be identified, namely instrumental and expressive role behaviours. Instrumental roles, also termed functional or economic roles, involve performance, financial and functional attributes (for example the condition of purchase), whereas expressive roles imply the support of other family members in the decision-making process by expressing family norms and needs.

As noted above, five individual roles can be identified in family purchases, namely the initiator or gatekeeper, influencer, decider, purchaser (or buyer) and user. Important to note is that although these different roles are distinguished, they can be performed by any member of the family (husband, wife or children) and can be different for every decision. Ward & Sturrock (1998: 327 – 336) add to the above by stating that the nature of the purchase can possibly affect the roles and approaches adopted by partners within a household. The five identified roles are briefly discussed below.

The **initiator or gatekeeper** is the person in the family who thinks about purchasing new products and also gathers information to aid the decision process. The opinion of the **influencer** is sought with respect to the criteria that should be used for evaluation and also which products would most probably fit the criteria. The **decider** is responsible for the financial matters of the family and decides how and on which products or brands the family's money will be spent. The **purchaser (buyer)** is the person responsible for visiting the store, calling suppliers and physically purchasing the product and taking it home. Finally, the **user** is the person or people who consume the product.

It is clear from the discussion above that marketers need to influence all the different role players in the family decision-making process, since different roles and influences can be portrayed by any member of the family at a given time.

Schiffman & Kanuk (1997: 346) support this statement by viewing the family composition and structure as always being in transition. Needs can, therefore, be recognised by any member of the family, who will influence the decision-making process directly or indirectly.

3.3.1.5   Situational influences

Situational influences, as could be seen from Figure 3.4, form the final environmental influence affecting need recognition and the decision-making process and refer to influences that are specific to a time and place and are independent of the consumer and object characteristics (Engel et al., 1995: 794). Three situational influences can be grouped into broad categories, namely communication, purchase and usage situations.

A)   Communication situation

The communication situation refers to the setting to which the consumer is exposed, either personal or non-personal communication. Engel et al. (1995: 794) explain personal communication as conversations consumers may have with others, including other consumers and sales people. Non-personal communication refers to a broad spectrum of stimuli, including advertising and consumer-oriented programmes and publications.

In the context of television advertising, for example, many situational influences can affect the effectiveness thereof. Firstly, the presence of other advertisements during message exposure may result in the advertisement receiving little or no attention. Important to note is that consumers often use commercial breaks to interact with others in their immediate surroundings or use the time to quickly get something to eat or drink or go to the toilet. Secondly, the position of the advertisement during the commercial break can also affect the effectiveness, for example the first ad shown when the commercial break

commences may be more effective than ads shown later during the break. Thirdly, the number of ads shown can also have an impact on the effectiveness, since advertising clutter occurs when flighting more, shorter, advertisements.

Situational influences can also be observed in the programme in which an ad is shown. Consumers may be so involved in the program that they become oblivious to anything that is shown during the commercial break, for example watching a rugby test between South Africa and New Zealand. Programmes can also influence consumer's feelings and therefore affect their response to an ad shown during the programme. If the viewers are watching a sad programme, their moods may change and therefore affect the effectiveness of an ad.

Similarly in print advertising, the credibility and content of the magazine or newspaper may influence the advertising effectiveness. For example, advertisements for an outdoor watch placed in National Geographic may prove more effective due to the credibility of the source, than if it were placed in the You magazine or Bona.

From the discussion above can be concluded that the influence of the communication situation on need recognition and the decision-making process is influenced by a number of different situations. Consumers may, therefore, recognise needs while being exposed to advertisements if the surroundings (implying other advertisements, the medium and the programme) are favourable to the consumer.

The effect of advertising, and more specifically marketer-dominated stimuli, will be discussed later in this chapter when discussing search (Section 3.4).

B)   Purchase situation

The manner in which the purchase situation can influence need recognition and decision-making will be briefly discussed below. A more in-depth discussion on the actual purchase situation, together with the factors influencing it, will follow in Section 3.6 (purchase).   Engel et al. (1995: 798) note that the information environment and the retail environment influence the purchase situation.

The **information environment** refers to all the product-related information available to the consumer and is characterised by the availability of information (externally from the environment or internally contained in memory), information load (the amount of information available), information format (the manner in which the information is presented) and the form of the information (presented numerically or semantically).

The **retail environment** can influence consumer decision-making through the efforts of marketers, since it is in the control of the marketer and happens at the right place, inside the store . Marketers can, therefore, attempt through their retail environments to influence consumer choice and need recognition. Marketers can attempt to influence consumer choice in the retail environment through the use of music, store-layout, colours, point-of-sale material and sales people. Consumers may recognise a need as they visit a store through the efforts of point-of-sale material. For example, a consumer may note point-of-sale material for a new razor and recognise the need for razor-blades.

C)   Usage Situation

The usage situation refers to the setting in which consumption of the product occurs. The purchase and usage situation can often be combined, for example eating in a restaurant or watching a movie in a theatre.

Need recognition is often inspired by the usage situation. For example, while eating a curry dish in a restaurant, a consumer may recognise a need for a cold beverage.

Product usage and the factors influencing it will be discussed in Section 3.6.1 (consumption) of this chapter.

3.3.2 Individual differences

Section 3.3.1 considered environmental influences affecting consumer decision-making and specifically need recognition. The objective of this sub-section (individual differences) is to indicate the most important personal influences on consumer behaviour and consumer decision-making.

The importance of considering individual differences from a consumer behaviour perspective is that no two individuals are created the same and will therefore be influenced in the same way. By discussing a number of differences, an understanding will be formed regarding the type of influences that will impact on the consumer choice process.

As could be seen from Figure 3.4, individual differences comprises consumer resources, motivation and involvement, knowledge, attitudes and personality, values and life-style.

3.3.2.1   Consumer resources

Consumers are concerned about their time and money, both resources that have to be considered in any purchase decision. According to Engel et al. (1995: 295) three categories of consumer resources can be identified, namely economic, temporal and cognitive resources.

A)   Economic resources

Money most probably represents the most important variable, influencing whether or not people buy and what they buy. The amount of money available to consumers (including credit facilities) will determine which needs can be satisfied and to what extent.

For example, the spending patterns of a person earning R 80 000 per annum versus one who earns R 350 000 will be totally different. The person with a higher income will most probably be able to spend more money on education, security, luxury items and entertainment. Continuing with the example, the two individuals may both recognise the need to purchase a Hi-Fi and washing machine. The influence of more available financial resources to the one consumer will lead to the purchase of an AEG or Siemens washing machine and a Yamaha component Hi-Fi, whereas the consumer with less money available will purchase a Mercury washing machine and an all-in-one Aiwa Hi-Fi.

From the example above can be clearly noted that economic resources (financial means) of the consumer play an extremely important role in decision-making. Once a need has been identified, the consumer first has to determine whether money or credit is available to purchase a product that will satisfy the need. Of equal importance to the consumer is to determine how much money can be spent, since that will determine what quality and brand will be purchased.

From a marketing point of view, considering consumer behaviour, it is important to understand what comprises an individual's economic resources and how it is measured. Engel et al. (1995: 295) note that a criteria for measuring economic resources is that it should define a variable with the same meaning for everyone that will permit comparison over time and market segments. Three economic resources can be identified, namely income, wealth and credit.

Schiffman & Kanuk (1997: 55) explain the importance of considering income as influence in consumer decision-making by stating that income indicates the ability (or inability) to pay for products and services. According to Engel et al. (1995: 296), **income** refers to money earned from salaries and wages, interest earned on investments and welfare payments. Important to note is that income refers to money available and not future available income, for example pension, unless pension payments are a source of income or the only income.

From a consumer behaviour perspective it is important to consider (although the focus is on individual behaviour) the income of the family or household, since economic resources are often shared. For example, the income of one spouse may only be R 80 000. An immediate reaction is that such an individual will not be in a position to purchase luxury items, such as a BMW Z3. The other spouse, however, may earn R 500 000, resulting in the spouse with less income being able to purchase the BMW Z3 if income is shared in the family.

Engel et al. (1995: 311) explain that **wealth**, measured by net worth or assets, correlates with income. Wealthy individuals and families may recognise different needs (for example services, travel and investments) than people that are not considered wealthy. Schiffman & Kanuk (1997: 384) support this view by stating that the way in which consumers spend their money is often influenced by their values.

Credit, the final economic resource category, extends the income resource for at least a short period of time. Engel et al. (1995: 312) list an important aspect of credit by stating that the use of credit actually reduces the ability to purchase products and services in the long run, since the cost of credit in the form of interest has to be subtracted from the consumer's income. Credit, however, forms an important influence in decision-making because it enables consumers to satisfy recognised needs without having the necessary funds readily available to pay for such purchases. Schiffman & Kanuk (1997: 399) support this view by

stating that consumers with less income will probably use their credit facilities (credit cards) with a "buy now and pay later" attitude, spending money on items they may not have purchased otherwise, while consumers with higher incomes may use their credit facilities as a convenient substitute for cash.

B)   Temporal resources

Engel et al. (1995: 313) explain that consumer resources comprise two budget constraints, namely money and time.   Unlike money that has theoretically no limits, time has an ultimate constraint.   Considering the time constraints, consumers increasingly view their time as important as money due to the increasing lack thereof.   Solomon (1996: 309) agrees with the above by stating the well-known phrase: "Time is money".

Engel et al. (1995: 313) continue by stating that consumer time can be divided into three different components, namely income-producing time, committed (obligated and non-obligated) time and uncommitted (planned and unplanned) time.   Only uncommitted time, whether planned or unplanned, is considered to be leisure time.

The influence of time on consumer behaviour can be viewed from two perspectives.   Firstly, consumers may alter purchase patterns to accommodate the decrease in available time.   For example, a young professional may recognise the need to purchase more fast foods and pre-prepared meals from Woolworths rather than spending time preparing food after a busy day at work. As another example, consumers with less time available may recognise the need to spend more money on better-quality vacations rather than on luxury item goods.   Secondly, since the consumer decision-making process may require a substantial amount of time, the consumer may not be willing to spend available time searching for alternatives, comparing prices and considering different retail outlets.   The consumer may, on the other hand, enjoy shopping and spend more

time looking for alternatives and visiting many stores before choosing what and where to buy. Solomon (1995: 309) adds to the above by stating that more careful information search and deliberation occurs when consumers have more time available.

C) Cognitive resources

The last category of consumer resources, according to Engel et al. (1995: 322), is cognitive resources, referring to information processing. A formal definition of cognitive resources by Engel et al. (1995: 323) provides a better understanding of the concept: "... the mental capacity available for undertaking various information-processing activities".

In addition to money and time of consumers, marketers compete for information processing by attempting to get the attention of consumers. This statement is true, considering that the capacity of consumers to process information is limited.

As mentioned above, marketers need to get consumers to pay attention to their messages and efforts. Although attention will be discussed in greater detail in Section 3.4 (when search is discussed), it should be mentioned under this section that attention comprises two dimensions, namely direction and intensity. Direction implies the focus of attention, whereas intensity refers to the amount of capacity focused in a specific direction.

It can be concluded from the discussion above that marketers need to be aware of the limited cognitive capacity of consumers when attending to a specific message or concept. From a decision-making perspective, consumers may not recognise a need when giving attention to a particular message because of their limited processing capacity.

3.3.2.2   Motivation and involvement

Engel et al. (1995: 404) explain that motivation occurs when an individual's system is activated or aroused with behaviour directed towards a desired goal.

Engel et al. (1995: 404) continue by stating that motivation starts with need activation. As discussed with need recognition before, a need is activated when there is a discrepancy between the consumer's current state and some desired or preferred state. As the discrepancy increases, the outcome is activation of a condition of arousal referred to as drive. The urgency to respond increases as the drive gets stronger. Overt time, certain behaviour patterns prove more effective than others to satisfy needs, becoming wants.

Solomon (1996: 126) clarifies motivation by explaining it as a process that causes people to behave the way they do. The motivation process therefore commences when a need is aroused that the consumer would like to satisfy. According to the motivation process, there is a state of tension that drives the consumer to attempt to eliminate the need once a need has been activated. The desired end state represents the goals of the consumer.

From the discussion a number of concepts, such as tension, drive and need emerged that should be briefly described to form a better understanding of the relevance thereof in the motivation process. The working of these concepts in the motivation process can most probably best be shown graphically (see Figure 3.5).

FIGURE 3.5: THE MOTIVATION PROCESS

Source: Solomon (1996: 126)
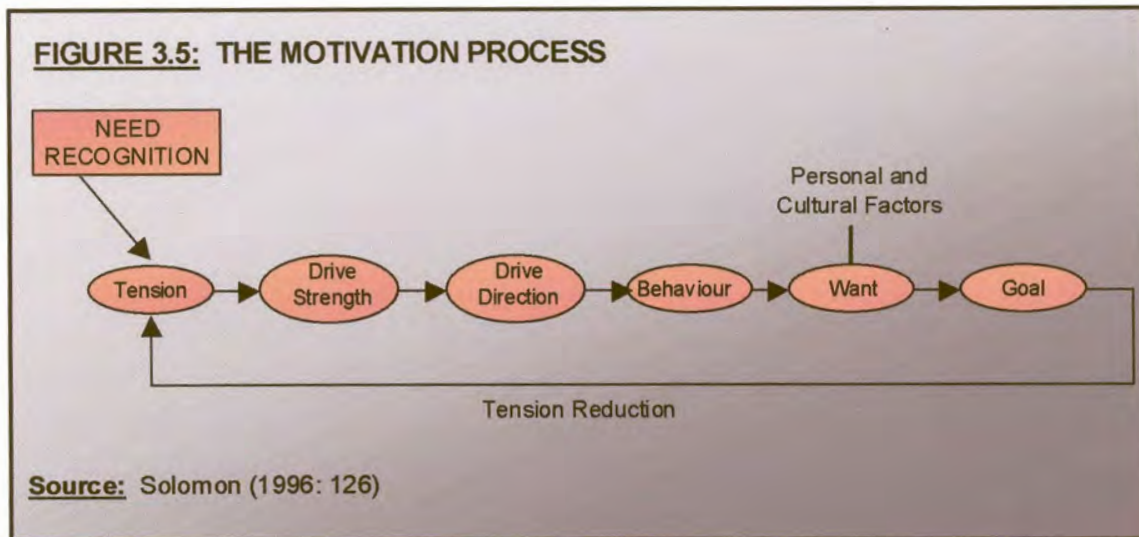
As can be seen in Figure 3.5, the motivation process always commences with need recognition and ends with a goal, representing the consumer's desired end state. Solomon (1996: 126) distinguishes between two different categories of needs, namely utilitarian and hedonic needs. Utilitarian needs refer to functional or practical benefits, whereas hedonic needs imply experiential needs that involve emotional responses.

When needs are recognised, the discrepancy between the consumer's actual and desired states creates tension. The urgency of the consumer to reduce the tension is determined by the magnitude of the tension, called "drive".

Solomon (1996: 126) continues by stating that consumer needs can be satisfied in a number of ways, influenced by amongst others the consumer's culture and experience. When all these factors are combined, a manifestation of a need is formed, called a "want". The motivation process is completed when the goal is achieved, leading to reduced tension.

Schiffman & Kanuk (1997: 83) define motivation as: "... the driving force within individuals that impels them to action". This so-called driving force is a result of an unfulfilled need. Also, the specific course of action that consumers pursue

together with the special goals are selected on the basis of cognition (their thinking process) and previous learning.

Two terms used in the discussion above, needs and goals, need to be discussed briefly to provide a better understanding of their role in motivation.

According to Schiffman & Kanuk (1997: 84) every individual has needs, comprising either innate or acquired needs. Innate needs refer to physiological or biogenic needs and include the need for air, food, water, shelter and sex. Since these needs are considered essential to sustain biological life, the biogenic needs are considered primary needs or motives. Acquired needs are learned in response to the individual's culture and environment, for example the need for power, prestige and self-esteem.

Acquired needs are, therefore, generally psychological or psychogenic and are considered secondary needs or motives, resulting from the individual's subjective psychological state and from relationships with others. For example, an executive being transferred needs accommodation (a need for shelter - a primary need). The residence selected may, however, fulfil secondary needs when a residence is selected in a golf estate (need for prestige) with a large entertainment area (to fulfil social needs).

Schiffman & Kanuk (1997: 84) describe goals as the sought-after results of motivated behaviour. It is therefore important to note that all behaviour is goal-orientated. Two different kinds of goals are identified, namely generic and product-specific goals. Generic goals refer to the general categories of goals that consumers select to satisfy needs and product-specific goals imply specific labelled or branded products that can fulfil needs.

Schiffman & Kanuk (1997: 85) continue by stating that for any need there are a number of different appropriate goals. The goals selected by consumers,

therefore, depend on their personal experience, cultural norms and values as well as the goals' accessibility in their physical and social environments.

From the discussion above can be concluded that needs and goals are interdependent where neither exists without the other. Consumers may, however, not always be as aware of their needs as of their goals. For example, a person may not recognise the need for achievement but will still strive to become the best divorce lawyer in town.

It should be noted that consumers are usually more aware of physical needs than psychological needs (Schiffman & Kanuk, 1997: 85). People know when they are thirsty or hungry and will take action to satisfy these needs. The same people may not be aware of their needs for power, self-esteem and status and will, therefore, subconsciously engage in behaviour that will satisfy these psychological needs.

Schiffman & Kanuk (1997: 86) continue by stating that motivation can be positive or negative in direction. Positive motivation refers to a driving force towards an object or condition, for example a person motivated to visit a certain restaurant to satisfy hunger needs. Positive drives are often referred to as needs, wants and desires. Negative motivation, often viewed as fears and aversions, implies a driving force away from an object or condition, for example a person impelled to stay away from motorcycle transportation to fulfil a safety need.

In addition to the above, Schiffman & Kanuk (1997: 86) distinguish between rational and emotional motives. Rational motives imply that consumers will elect goals based on totally objective criteria (for example, size, price, weight and litres per kilometre), whereas emotional motives suggest that consumers will select goals based on personal or subjective criteria (for example, fear, pride, affection and status).

Schiffman & Kanuk (1997: 87) provide clarity on the dynamic nature of motivation by stating that it is always changing as a result of changes in response to the individual's physical condition, environment, interactions with others and experiences. The constant changes in needs and goals can be attributed to a number of reasons. Firstly, needs are never completely or permanently satisfied. For example, hunger needs have to be satisfied or being a director in a company may only be temporarily satisfying a need for power, since a more senior position (with greater power) may be aspired to.

Secondly, as needs are met, new higher-ordered needs become apparent. For example, when the need for a house is met by purchasing a residential unit in a security complex, another need may emerge to gain acceptance from the new neighbours or gain recognition by serving on the Board of Trustees of the complex. The hierarchy of needs was discussed in greater detail in Chapter 2 (Section 2.3.5) when the theory of Maslow's hierarchy of needs was discussed as an influence to human behaviour.

Thirdly, success and failure influence goals. As consumers successfully achieve their goals, new and higher goals are set in an attempt to raise levels of aspiration. The successful achievement of goals, therefore, inspires consumers and gives them confidence in their ability to achieve higher goals. Finally, if the consumer is not able to achieve a specific goal or type of goal that will satisfy a need, behaviour may be altered in an attempt to achieve a substitute goal. A substitute goal, although not as satisfactory as the primary goal, may prove sufficient to prevent uncomfortable tension to the consumer.

Engel et al. (1995: 405) note in conclusion to motivation that utilitarian needs lead to consideration of objective, functional product attributes or benefits, whereas hedonic needs encompass subjective responses, pleasures, day dreams and aesthetic considerations.

3.3.2.3   Knowledge

An understanding of consumer knowledge is important from a consumer decision-making point of view, since the consumer's knowledge determines what products are bought, how much will be spend on the purchase and where and when it will be purchased.

It is important to define knowledge and distinguish between knowledge and consumer knowledge before discussing the content thereof. Engel et al. (1995: 337) define knowledge as: "... the information stored within memory", whereas consumer knowledge, derived from knowledge, can be defined as: "the subset of total information relevant to consumers functioning in the marketplace ..." (Engel et al. 1995: 337). Assael (1995: 310) adds to the above by stating that knowledge as a function organises and classifies information, therefore facilitating the consumer information-processing task.

It can therefore be derived from the definitions above that, from a consumer behaviour point of view, knowledge can be applied to specific purchase decisions.

Engel et al. (1995: 338) suggest that there are two basic types of knowledge, namely declarative and procedural knowledge. **Declarative knowledge** refers to known subjective facts, for example, eggs, water and flour are ingredients for making a cake. Peter & Olson (1994: 71) add to the above by stating that general knowledge (declarative knowledge) is concerned with consumer's interpretations of the environment, for example knowledge regarding a product category (compact discs and fast-food hamburger franchises), particular behaviour (ordering at restaurants and shopping in malls), other people (a friend or a sales person) or oneself (shy and honest).

Two categories of declarative knowledge are distinguished, namely episodic and semantic knowledge. Episodic knowledge refers to information that is bound by the passage of time, whereas semantic knowledge refers to generalised knowledge that provides meaning to a person's world and would be used, as an example, to describe a video machine.

The understanding of how subjective facts can be used is called **procedural knowledge**, for example knowing how eggs, water and flour are combined in making a cake. Peter & Olson (2002: 56) clarify procedural knowledge by describing it as knowledge about how to do things. Important to note is that facts are seen as being subjective, since the knowledge held by consumers need not correspond to objective reality. For example, a consumer may consider price as an indicator for quality although it may not necessarily be related.

Consumer knowledge can typically be viewed from three perspectives when considering consumer behaviour and decision-making, namely product, purchase and usage knowledge.

According to Engel et al. (1995: 338), **product knowledge** includes a variety of different types of information, including awareness of the product category and brands within the category, product terminology, product attributes as well as features and beliefs regarding the product category and specific brands. Peter & Olson (1995: 82) add by noting four different levels of product knowledge, namely product class, product form, brands and models.

In addition to the above, knowledge regarding price plays an important role in product knowledge, since marketers may be forced to reduce prices for their service offerings if consumers are price conscious and knowledgeable about prices charged in the market for competitive products. If consumers, however, are uninformed about relative price differences, marketers may exploit the ignorance by charging more for their products.

Purchase knowledge includes information consumers have that is necessary to obtain products and includes knowledge of where and when to purchase. A major issue that needs to be addressed during decision-making is where to purchase products. Knowledge regarding where products can be purchased directly impacts on the decision-making process. A consumer typically has to choose between different stores that will sell the selected brand.

For example, a consumer who has decided to purchase Revlon lipstick has to decide at which of the following competing stores the lipstick has to be purchased: Edgars or Red Square, Truworths, Clicks or Link Pharmacy. Once a store has been selected, the consumer needs to decide at which branch of the selected retail outlet should the lipstick be purchased. For example, the Edgars store in the local shopping mall may have a greater variety and friendlier shop assistants than the Edgars store in the centre of town. In addition to the store selection, purchase knowledge also includes information regarding where in the specific store the selected product can be found.

The decision when to purchase forms part of purchase knowledge, since consumers may decide to prolong a purchase decision based on the expectation of a future sale of the chosen product. The decision when to purchase may also be a factor when new products are launched since some consumers may not purchase new products until the prices thereof have dropped. For example, a consumer may decide to purchase a DVD player but decides to wait until more competitors enter the market, most likely resulting in price reductions.

The final perspective on consumer knowledge is that of **usage knowledge**, involving information regarding how to use a product and what is required to actually use the product. For example, a consumer may know what a welding machine is used for but lacks the knowledge to actually operate it. The importance of considering consumer knowledge regarding the usage of a product is two-fold. Firstly, consumers will be less likely to purchase a product that they

don't' know how to use or what to use it for and secondly, consumers may not be aware of different ways and situations in which a product can be used.

From the discussion above it can be derived that knowledge held by consumers could influence need recognition and the decision-making process. For example, a consumer may recognise the need for Q-20 when noting an advertisement that shows other uses for the product (including removing grease and tar from a motorcycle or removing stickers from glassware), although the consumer knew that Q-20 can be used to lubricate locks and moving parts of machinery but was unaware of the other uses of the product. During the decision-making process, the consumer (who knows about all the uses of Q-20) may decide to purchase this product (because of knowledge of the usage situations) although only a lubricant for locks is required.

3.3.2.4 Attitudes

Attitudes perform an important role in consumer behaviour and decision-making, since they represent consumer likes and dislikes (Engel et al., 1995: 362). Attitudes are therefore dominant when selecting a brand and store when purchasing products, since consumers will select what is perceived as the most favourable alternatives.

Hawkins et al. (2001: 394) define attitudes as: "... an enduring organization of motivational, emotional, perceptual, and cognitive processes with respect to some aspect of our environment". Schiffman & Kanuk (1997: 235 - 236) provide a definition more applicable to consumer behaviour by defining attitudes as: "... a learned predisposition to behave in a consistently favourable or unfavourable way with respect to a given object".

Assael (1995: 266) adds to the definition above by providing greater clarity on the influence of attitudes on consumer behaviour: "Attitudes towards brands are

consumers' learned tendencies to evaluate brands in a consistently favourable or unfavourable way; i.e., consumers' evaluation of a particular brand on an overall basis from poor to excellent". The definitions above should prove sufficient to form an understanding of attitudes and the way in which they are interpreted in consumer behaviour.

Assael (1995: 267) continues the discussion on attitudes by stating that brand beliefs, brand evaluations and intention to purchase define three components of attitudes. Brand beliefs represent the cognitive or thinking component of attitudes. Brand evaluations refer to the affective or feeling component and intention to purchase implies the conative or action component. The manner in which these three components influence attitudes are illustrated in Figure 3.6.

FIGURE 3.6:   THE RELATIONSHIP AMONG BELIEFS, FEELINGS, ATTITUDES, BEHAVIOURAL INTENTION AND BEHAVIOUR
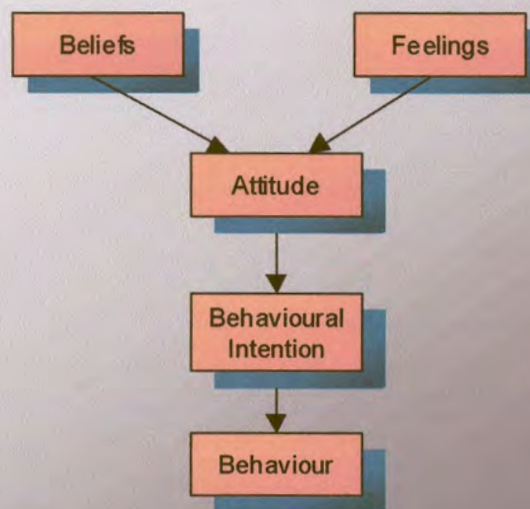
Source: Engel et al. (1995: 365)

The three components forming the so-called ABC model of attitudes – affect, behaviour and cognition - (Solomon, 1996: 160) or the tricomponent attitude

model (Schiffman & Kanuk, 1997: 239), will be briefly discussed below to form a better understanding of their influence on consumer behaviour and the way they influence consumer-decision making.

Hawkins et al. (2001: 395) explain that the **cognitive component** consists of consumer beliefs about an object. Schiffman & Kanuk (1997: 236) clarify the term "object" by stating that it should be interpreted broadly to include specific consumption and marketing-related concepts, for example product, product category, brand, possessions, product use, advertisements, people, price and retailer.

Consumers, therefore, have a number of beliefs regarding attitude objects. A consumer may have the following beliefs of a BMW 330I for example. It has a powerful engine, it is competitively priced to similar products, it is relatively heavy on fuel and is manufactured by a world-class company.

Schiffman & Kanuk (1997: 240) explain the **affective component** as comprising emotions and feelings of consumers regarding a particular product or brand. Assael (1995: 268) adds that the affective component can be viewed as one-dimensional (as opposed to beliefs being multi-dimensional), where consumer evaluations of a brand can be measured by rating a brand as either "good" or "bad" or "most preferred" to "least preferred". For example, a consumer who states, "I like Coke", is expressing the result of an emotional or affective evaluation of the product.

Hawkins et al. (2001: 398) note that since products are evaluated in the context of a specific situation, the affective reaction to a product (as well as the beliefs about a product) may change as the situation changes. For example, a consumer may believe that Coke has caffeine and that caffeine keeps one awake. Such beliefs may have a positive affective response when the consumer needs to stay awake while working on night duty. They may also have a

negative response when the consumer would like something to drink at night that won't result in staying awake.

Assael (1995: 268) continues by explaining that the **conative component** represents the consumers' tendency to act towards an object, generally measured in terms of intention to purchase. Hawkins et al. (2001: 399) explain the conative (behavioural) component by stating that a series of decisions to purchase, or not to purchase, a particular brand or to recommend that brand or other brands to others (for example family, friends and colleagues) would reflect the behavioural component of attitudes. From a marketing research point of view, the intention of consumers to purchase can, for example, be derived from some of the following statements portraying intentions: "I probably will purchase one", "I am uncertain whether I will buy one" and "I definitely will not buy one". Intention to purchase can also be established by posing a question to which consumers could respond. For example: "How likely are you to purchase a new cellular phone during the next month?" with consumers responding to one of the following measurements: "very likely", "likely", "unlikely" or "very unlikely".

It is important to understand the way in which attitudes are formed (referred to as attitude formation). Schiffman & Kanuk (1997: 258) explain that attitude formation, from having no attitude towards an object (for example a notebook computer) to having some form of attitude towards an object (for example a notebook is useful when travelling), is a result of learning. Schiffman & Kanuk (1997: 258 – 259) note three possible learning theories relating to attitude formation, namely classical conditioning, instrumental conditioning and cognitive learning theory.

Classical conditioning: Consumers often purchase new products that are associated with a brand name that is perceived to be favourable based on repeated satisfaction with other products produced by the same manufacturer. The brand name, therefore, represents the unconditioned stimulus that results in

a favourable attitude (the unconditioned response) due to repetitive purchases and a positive reinforcement from purchasing the brand. Marketers often attempt to create a stimulus generalisation from the brand name to the new product, resulting in the consumer purchasing the new product based on a positive attitude towards the brand.

The same principle is also followed by marketers whose products are endorsed by celebrities, where they attempt to create a positive attitude for the product based on the existing positive attitude towards the celebrity. For example, young tennis players may have a positive attitude towards André Agassi. Marketers may attempt to create the same positive attitude for a new tennis racquet by letting André Agassi endorse it.

Instrumental conditioning: Attitudes sometimes follow only after purchase and consumption. For example, a consumer may purchase a product without having a prior attitude towards it (for example the only brand of toothpaste sold at a holiday resort). Consumers also purchase new products from product categories in which they have little involvement, for example a consumer starting a new hobby building and painting model aircraft may purchase a brand of paints without having an attitude towards the brand. If the consumer is satisfied with the performance of the purchased brand, a favourable attitude is likely to be developed for it.

Cognitive learning theory: Consumers are likely to form attitudes (positive or negative) when solving a problem or satisfying a need on the basis of information exposure and their own knowledge and beliefs. For example, a consumer experiencing hay fever may learn that Bioforce AG sells a product that reduces the symptoms (without the accustomed drowsiness and side-effects of similar remedies), thereby creating a positive attitude towards Bioforce Echinaforce, especially if the consumer had a positive experience with other products sold by Bioforce AG.

In closure to the discussion on attitudes it should be mentioned that the formation of consumer attitudes is strongly influenced by personal experiences, influences of family and friends and direct marketing as well as mass media (Schiffman & Kanuk, 1997: 260). Consumer attitudes towards products and services are primarily formed by their **direct experience** in using and evaluating them. Marketers who recognise the importance of consumer experience in forming attitudes may offer consumers discount coupons and free samples to encourage the usage of products. Satisfaction with the usage of the product could possibly result in a positive attitude towards the product and repurchase thereof.

Family and friends could directly influence attitude formation, since many values and beliefs are learned from friends and family. For example, a child that is "rewarded" with sweets for good behaviour often retains a taste for (and positive attitude towards) sweets as an adult. **Direct marketing** efforts can favourably influence consumer attitudes through promoting products and services to niche markets by addressing very specific needs and concerns. Through market segmentation, marketers can identify groups of individuals with similar profiles and offer them highly personalised product offerings, possibly resulting in a favourable attitude towards the brand or marketer. Finally, consumer attitudes can be influenced by the **mass media** through exposure to information regarding new products, ideas, options and advertisements.

From the discussion above can be concluded that consumer attitudes are affected by a number of influences. Need recognition and decision-making can, therefore, be directly influenced by a consumer's attitude towards a product, service, brand, advertisement, seller or friends and family. For example, a consumer who receives personalised information through a direct mail campaign, may form a positive attitude towards the advertised brand, recognising it as fulfilling an unfulfilled need and purchase the advertised product.

3.3.2.5   Personality, values and life-style

As could be seen in Figure 3.4, personality, values and life-style form the final component of individual differences. Values represent the beliefs of consumers, personality the way consumers normally behave and life-style consumers' situation in life. These three individual differences will be discussed briefly below.

A)   Personality

Engel et al. (1995: 433) define personality, from a consumer study point of view, as: "… consistent responses to environmental stimuli". Schiffman & Kanuk (1997: 114) provide a more comprehensive definition of personality by defining it as: "… those inner psychological characteristics that both determine and reflect how a person responds to his or her environment". Engel et al. (1995: 433) continue by explaining that an individual's personality provides for orderly and coherently related experiences and behaviour. Personality, therefore, can be viewed as the particular pattern of organisation that makes individuals unique.

Schiffman & Kanuk (1997: 114) explain that in the study of personality, three distinct properties are of importance, namely that personality reflects individual differences, is constant and enduring and can change.

Individual differences indicate that consumer personalities differ, since inner characteristics that constitute an individual's personality are a unique combination of factors. No two individuals are therefore exactly alike. Many individuals do, however, appear to be similar in terms of a single personality characteristic, for example consumers may be described as either "high" or "low" in sociability.

Noting that consumer personalities are consistent and enduring suggests that it is unreasonable for marketers to attempt to change consumer personalities to conform to certain products. At best marketers should learn which personality characteristics influence specific consumer responses and attempt to appeal to those traits.

Although consumer personality tends to be consistent and enduring, it may change under certain circumstances. For example, an individual's personality may be changed by major life events, for instance the birth of a child, the death of a loved one or a divorce. Important to note is that the change in personality is not purely based on an abrupt change in the consumer's life but is also part of a gradual maturing process.

Engel et al. (1995: 434) note that three major theories or approaches to the study of personality have been used in consumer research, namely psychoanalytic, socio-psychological and trait-factor. Assael (1995: 379 – 382) adds an additional personality theory, namely the self-concept theory.

The psychoanalytic theory was discussed in greater detail in Section 2.3.4 of Chapter 2 where the Freudian psychoanalytical model was discussed. Briefly, the **psychoanalytical theory** suggests that the human personality system consists of three components, namely the id, ego and superego. The id represents the source of psychic energy and is concerned with immediate gratification of biological and instinctual needs. The superego acts as the ethical constraint on behaviour by representing societal or personal norms. The ego is responsible for mediating the hedonic needs of the id and the moralistic prohibitions of the superego. Assael (1995: 375) adds to the above by explaining that psychoanalytic theory stresses the unconscious nature of personality as a result from childhood conflicts.

The **socio-psychological theory** was discussed in Chapter 2 under the Veblenian social-psychological model (Section 2.3.2). Briefly, the theory recognises the interdependence of the individual and society. The individual attempts to meet the needs of society, whereas society helps the individual to achieve its goals. According to Engel et al. (1995: 434), the theory is not exclusively sociological or psychological but rather a combination of both. The socio-psychological personality theory differs from the psychoanalytic theory in two ways. Firstly, the most important determinants in shaping personality are social variables rather than biological instincts. Secondly, behavioural motivation is directed to meet these different needs.

The **trait-factor theory** provides a quantitative approach to personality, suggesting that an individual's personality is composed of definite predispositional attributes called traits. Schiffman & Kanuk (1997: 125 –126) and Engel et al. (1995: 436) define a trait as: "... any distinguishable, relatively enduring way in which one individual differs from another". Examples of personality traits include a relaxed style, sociability and amount of internal control.

Three factors delineate the trait-factor theory (Engel et al., 1995: 436). Firstly, it assumes that traits are common to many individuals and vary in absolute amounts between different individuals. Secondly, traits are relatively stable and exert fairly universal effects on behaviour despite of the environmental situation. Finally, it is assumed that traits can be implied from measuring behavioural indicators.

By focusing on trait-factor theory, marketers attempt to find a relationship between a set of personality variables and assorted consumer behaviour, such as product choice, purchase, fear and social influence, attitude change and risk taking.

Assael (1995: 379) explains that the **self-concept (or self-image) theory** suggests that individuals have a concept of themselves of who they think they are (called the actual self) and a concept of who they think they would like to be (the ideal self). The self-concept theory is, therefore, related to psychoanalytic theory, since the actual self is similar to the ego and the ideal self is similar to the superego. In addition to the actual and ideal self, the self-concept theory identifies an extended self. The three different concepts of self will briefly be discussed below.

The concept of the **actual self** implies that consumer purchases are influenced by the image they have of themselves. Consumers, therefore, attain self-consistency by purchasing products that are perceived similar to the self-concept. It is therefore suggested that there is congruence between brand image and self-image.

The **ideal self** relates to the individual's self-esteem, implying that the greater the difference is between the actual self and the ideal self, the lower the self-esteem of the individual will be. Consumer purchase behaviour could therefore be influenced by selecting products that will enhance self-esteem, for example a consumer wishing to portray a better image could purchase more formal jackets instead of windbreakers and cardigans or decide to change to a different after-shave.

The **extended self** incorporates some of the more important possessions of individuals in their self-concept, since what consumers own reflects their personalities. Assael (1995: 381) explains the correlation between personality and the extended self by simply stating that consumers are what they wear and use.

Schiffman & Kanuk (1997: 137) add two other types of self-concept, namely the social self-image (considering how individuals feel others view them) and the

ideal social self-image (representing how individuals would like others to see them).

In conclusion to consumer personality, Engel et al. (1995: 440) note that the relevance of forming an understanding of consumer personality is based on the assistance it provides to explain how different consumers behave in the decision-making process.

Assael (1995: 375) supports this view by stating that marketers can often base positioning strategies on different consumer personalities. For example, consumers that diet in an effort to conform to group norms, whereas others may diet because of internalised rather than group norms. Hawkins et al. (2001: 375) conclude that consumers will, based on their personality, purchase products that portray a specific "product personality". Consumers may, therefore, choose between different types of perfume that support personality traits, such as conservative, extravagant, sensuality or playful. The personality of brands is often portrayed in different advertisements of marketers, attempting to make consumers identify with the product personality.

B)   Personal values

Values, according to Engel et al. (1995: 442), represent consumer beliefs about life and acceptable behaviour and provide another explanation of why consumers vary in their decision-making. Values also express the goals that motivate consumers and appropriate ways to achieve those goals.

Important to note is that values can either be regarded as being personal or social. Social values were discussed in Section 3.3.1.1, where values were viewed from a cultural point of view. Engel et al. (1995: 443) continue by stating that social values differ from personal values in the sense that they define "normal" behaviour for a society or a group, whereas personal values define

"normal" behaviour for an individual. It should be noted that social values have a strong influence on personal values. As explained above, values describe goals and ways to achieve them, many of which are derived from the society in which the individual is born and lives in.

Engel et al. (1995: 444) explain that although individuals are exposed to social values of many different groups to which they belong (for example the nation, family and religion), they pick and choose from social values to develop their own values. Consumers' personal values are, therefore, ultimately not indicated by statements but by their own decisions.

C) Life-style

Assael (1995: 384) explains that life-style reflects a mode of living that is identified by how people spend their time (their activities), what they consider in their environment (their interests) and what they think of themselves and the world around them (their opinions). Engel et al. (1995: 449) support this view by defining life-style as: "… patterns in which people live and spend time and money". According to Arnould et al. (2002: 273), lifestyle suggests: "… a patterned way of life into which consumers fit various products, activities, and resources".

Assael (1995: 384) expresses the opinion that life-style variables are also known as psychographic characteristics, since attitudes, interests and opinions are considered psychologically oriented variables that can be quantified. Table 3.1 indicates a number of activities, interests and opinions that define life-style.

TABLE 3.1: SOME ACTIVITIES, INTERESTS AND OPINIONS THAT DEFINE LIFE-STYLE

Activities	Interests	Opinions
Work	Family	Personal relations
Hobbies	Home	Social issues
Social events	Job	Politics
Vacation	Community	Business
Entertainment	Recreation	Economics
Club membership	Fashion	Education
Community	Food	Products
Shopping	Media	Future
Sport	Achievements	Culture

Source: Assael (1995: 384)

Engel et al. (1995: 448) suggest that marketers need to understand the activities, interests and opinions that influence life-style, since marketers often attempt to influence consumer purchasing behaviour through life-style marketing. Marketers would therefore attempt to relate a product to everyday experiences of the target consumers by means of advertising campaigns, depicting how a specific product relates to and can be used in everyday situations.

Engel et al. (1995: 454) note that the values and life-style (VALS) programme is probably the most widely used approach to life-style marketing. Two VALS programmes can be distinguished, namely VALS 1 and VALS 2. The earlier VALS programme, VALS 1, identified three broad consumer segments based on cultural values, namely outer-directed, inner-directed and need-driven (Assael, 1995: 400 and Engel et al., 1995: 455).

According to VALS theory, outer-directed consumers are those who purchase products based on the appearance thereof and what others think. Inner-directed consumers, on the other hand, purchase products to meet their own inner wants rather than to respond to others' cultural norms. The final category, need-driven

consumers, is characterised by severely restricted discretionary income, therefore motivated to purchase what is needed rather than by choice.

VALS 2 was developed since the categories suggested by VALS 1 were considered to be too general. According to Schiffman & Kanuk (1995: 70), Solomon (1996: 589) and Assael (1995: 402), VALS 2 identified eight groups that are split into two dimensions.

The vertical dimension represents consumers' resources (money, education, self-confidence and energy). The horizontal dimension identifies the three different ways consumers see the world, namely principle-oriented consumers (guided by their views of how the world is or should be), status-oriented consumers (consider the opinions of others) and action-oriented consumers (showing a desire for activity, variety and risk-taking).

According to Assael (1995: 403), marketers have used VALS to develop market segmentation, media and advertising strategies. If demographics prove insufficient to derive market segments, marketers may decide to use VALS categorisation for market segmentation purposes. By viewing consumer life-styles, marketers can "fine-tune" marketing segmentation and marketing campaigns, since many products, although showing consumer commonalties as far as demographics are concerned (for example income), can be better positioned in accordance with consumer life-styles. For example, a marketer for expensive outdoor watches may find it far more useful to consider consumer life-styles and the categorisation proposed by VALS for segmentation purposes rather than only using demographics.

The VALS typology can also be used for media selection, since consumer life-styles often dictate the media that they are exposed to. For example, the achievers and fulfilleds seldom watch television, and when they do they will watch news programmes. Marketers can therefore decide to either advertise

during news programmes (depending on the available budget) or alternatively select other media, for example print advertising.

Marketers can also attempt to get consumers to identify with a portrayed life-style in advertising, hoping to influence purchase decisions based on association with a life-style. For example, the cigarette industry often attempts to associate its products with life-style. Virtually all cigarette marketers advertising their brands in South Africa attempt to identify a specific life-style with their brand, for example Camel portraying an outdoor, adventurous life-style.

The first stage of the consumer decision-making process (need recognition) was discussed in great detail in Section 3.3. The discussion also showed how environmental influences and individual difference influence not only the need recognition process but the entire consumer decision-making process. Section 3.4 will focus on the second stage of the process, namely search.

3.4 SEARCH

In the consumer decision-making process need recognition is followed by search, comprising acquisition of information and information processing.

Figure 3.7 provides a graphical presentation of the search process together with an indication of the sections in which the individual components of the search process will be discussed under Section 3.4 of this chapter.

As can be seen from Figure 3.7, based on the model of consumer behaviour proposed by Engel, Blackwell & Miniard (see Section 2.4.3.5 in Chapter 2), the search process is influenced by environmental influences and individual differences. These influences were covered in detail when the need recognition process was discussed. It can, therefore, be accepted that all these influences affect the search process in one way or another. A number of examples will be

referred to in an attempt to indicate the possible impact of some of these influences on the search process.

FIGURE 3.7: SEARCH

Input   **Information Processing** *(Section 3.4.2)*   **Decision Process**

- Need Recognition
- Exposure
- Internal Search *(Section 3.4.1.1)*
- Search *(Section 3.4)*
- Stimuli: Marketer-Dominated, Other
- Attention
- Memory *Section 3.4.2.5*
- Comprehension
- Acceptance
- Retention
- External Search *(Section 3.4.1.2)*

Source: Compiled from Engel et al. (1995: 149, 150 & 263)
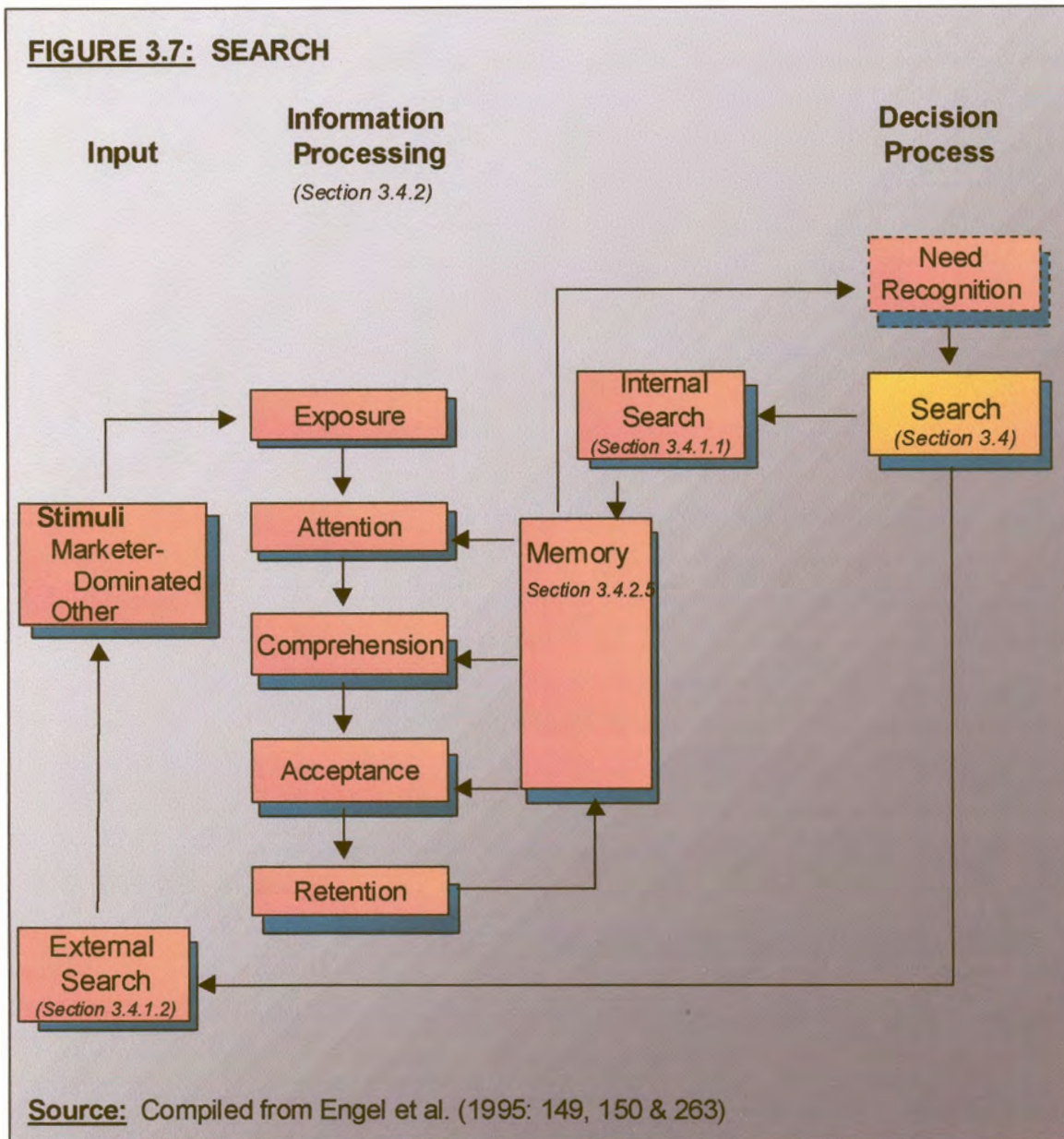
Culture and language could influence which advertisements the consumer is exposed to depending which radio station is listened to and television programmes watched. The **social class and status** of the consumer can influence which magazines are read and which television programmes watched,

which in turn has an influence on the marketing messages exposed to. For example, a person of a higher social class could possibly read National Geographic and Getaway Magazine and watch Carte Blanche, while someone from a lower class and status could read You Magazine and Personality and watch "The Bold and the Beautiful".

The **family** also influences information exposure through, for example, programmes watched on television. For example, on a Thursday night the family could watch "Seventh Heaven" in the 19h30 to 20h30 timeslot, whereas a single person could watch "The single guy" during the same timeslot. **Situational influences**, for instance time pressure, can directly influence the search process. If a consumer's fridge breaks while stocked with perishables, the consumer would most probably within a short period of time have to search for information to replace the fridge. If, however, the consumer received a substantial bonus from an employer, the consumer may engage in an extensive search for information to replace a current television set.

Individual differences can also influence the search process. For example, **consumer resources** can dictate that a consumer with more money (financial resource) could possibly purchase more expensive magazines than consumers with less money (National Geographic, Getaway, Longevity, Food and Home and House & Leisure versus only You Magazine and Personality) and watch Satellite Television in addition to National television. Consumer **knowledge** can have an important influence on the search process. If the consumer possesses substantial knowledge regarding a specific product category (for example pistols), the need for information search could be limited since information contained in memory may prove sufficient to proceed with the decision-making process.

Consumer **attitudes** could also influence the need for information search. For example, a consumer who dreads shopping would possibly also attempt to

minimise search for information. In addition to the above, if the consumer was satisfied with a previous purchase choice, the need for information search may be abolished, since the consumer will opt to purchase the same brand.

The examples indicate, in support of the model of consumer behaviour proposed by Engel, Blackwell & Miniard (1995), that all the listed environmental influences and individual differences (proposed in the model) can and do influence consumer search. The discussion below will, therefore, concentrate on the actual search process together with the components influencing the process.

Figure 3.7 indicates that the search process comprises two components, namely acquiring information (input) and information processing. These two components to the search process will be discussed in greater detail in Sections 3.4.1 and 3.4.2.

3.4.1 Acquiring information

Engel et al. (1995: 182) define search as: "... the motivated activation of knowledge stored in memory or acquisition of information from the environment". From the definition can be seen that information can be obtained either from memory or the environment. Belch and Belch (2001: 113) and Engel et al. (1995: 182) support this view by stating that search can either be internal or external in nature. Internal search refers to the retrieval of information from memory, whereas external search implies collecting information from the marketplace.

Schiffman & Kanuk (1997: 568 – 569) note an important consideration when viewing information acquisition by explaining that consumer decisions are often based on a combination of past experiences (contained in memory – internal search) and external search.

3.4.1.1 Internal search

Internal search first occurs when a need has been identified. Engel et al. (1995: 183) explain internal search by stating that it represents nothing more than a scan of the consumer's memory for decision-relevant knowledge stored in long-term memory. Solomon (1996: 275) states that through internal search consumers scan their memory to assemble information about different product alternatives. Assael (1995: 227) supports this view and adds that the process is called internal search, since the source of the information is the consumer. If sufficient information is contained in internal memory, the consumer will not continue the search process by searching for external information. Figure 3.8 indicates the internal search process and shows how the success of the search will determine the need for external search or to proceed with the decision process.

FIGURE 3.8: THE INTERNAL SEARCH PROCESS

Need Recognition

Internal Search

Determinants of Internal Search
- Existing Knowledge
- Ability to Retrieve Stored Knowledge

Internal Search Successful?

Yes — Proceed with Decision

No — Undertake External Search

Source: Engel et al. (1995: 184)
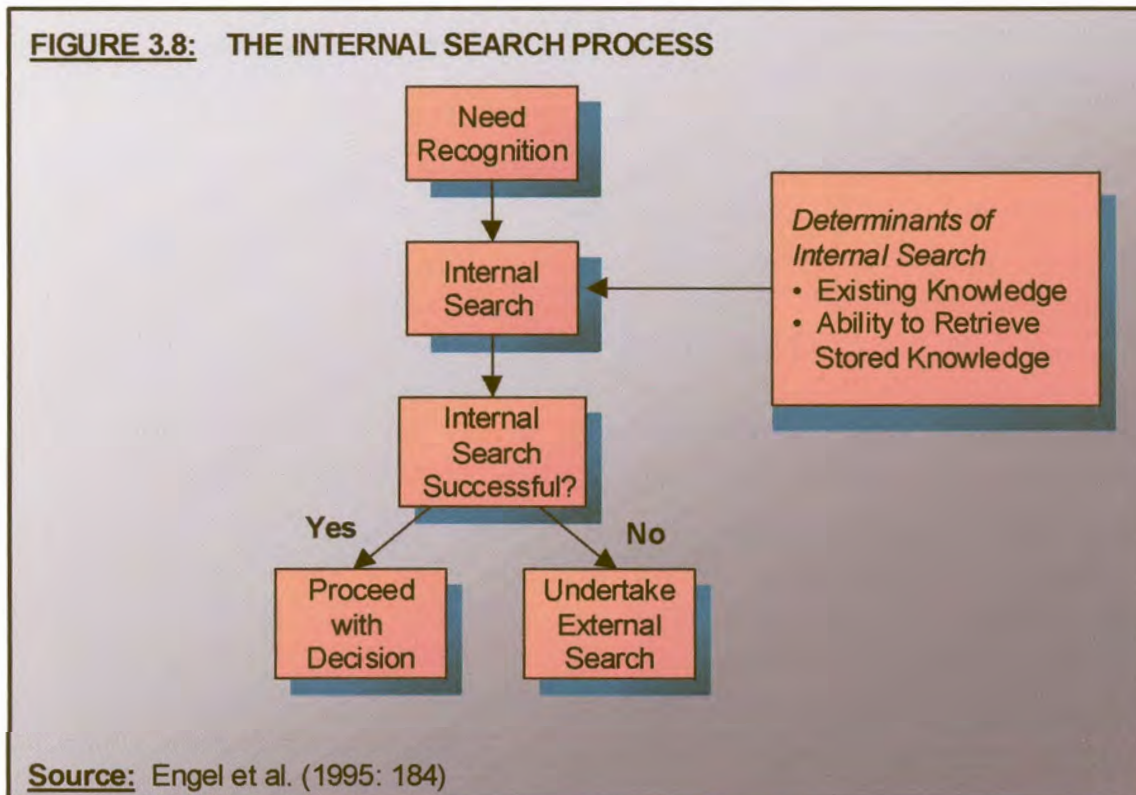
Consumers often remember a solution when fulfilling a past need and will therefore not consider obtaining external information in an attempt to satisfy a new recognised need. Schiffman & Kanuk (1997: 568) support this view by stating that past experiences may provide the consumer with adequate information to make the present choice. For example, a consumer who identifies the need to service a motor vehicle may recall the satisfactory service received from the previous service and therefore decide to use the same service outlet.

The usage of internal information depends on the quality of existing information. Consumers purchasing a product for the first time are very unlikely to possess the necessary knowledge contained in memory to be able to make a decision. Experienced consumers may also consider existing information contained in memory as being insufficient when, for example, considerable time has elapsed since the last purchase and a number of attributes associated with the product could have changed (price, new features, additional sales channels or new brands entering the market). Most probably of greater importance when considering the quality of internal information stored in memory is that consumers may forget important information from past experiences.

A final comment to the use of information contained in memory, is that the use thereof is heavily dependent on the degree of satisfaction with prior purchases.

As indicated in Figure 3.8, if the consumer is satisfied with the result, internal search may prove sufficient for decision-making purposes, whereas dissatisfaction probably will lead to external search.

3.4.1.2   External search

Consumers may opt to search for information from the environment if internal search proves inadequate for decision-making purposes (Schiffman & Kanuk, 1997: 568). Assael (1995: 91) notes an important consideration when studying

the consumer search process namely that consumers do not engage in extensive information search, unless the possible benefits gained from additional information are worth the time and cost of the search.

Hawkins et al. (1995: 453) support the statement above by showing (see Figure 3.9) how the benefits that will be obtained from the search are weighted against the cost thereof.

FIGURE 3.9: **BENEFITS AND COSTS GUIDE SEARCH EFFORT**

Benefits obtained

Financial
Psychological
Physical
Product

Cost of search

Out-of-pocket
    expenses
Psychological
Time
Activities missed

Do the expected benefits of external search exceed the expected costs?

No → Terminate search effort

Yes → Continue search effort

Source: Hawkins et al. (1995: 453)
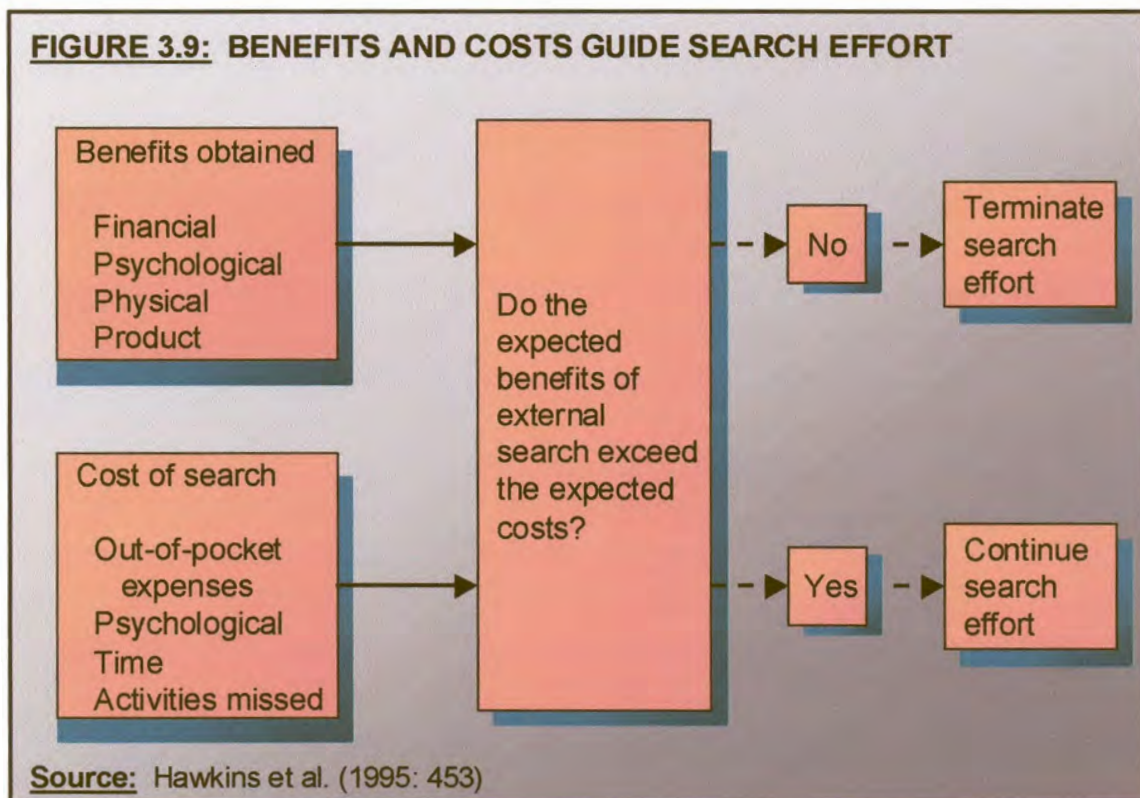
Assael (1995: 227) explains the term "external search", by stating that the sources of information are from the consumer's environment (that is, external to the consumer). Consumers may, therefore, engage in external search when one of the following conditions (or a combination) apply:

- the consumer believes that alternative brands being considered are inadequate;

- the consumer has insufficient information regarding the brands being considered;

- the consumer receives information from family and friends that is contradictory to own past experiences and current available information; and

- consumers may want to confirm expectations regarding a product's performance when they are close to deciding on a particular brand.

Before continuing with the discussion, it should be noted that Section 4.3.1 in Chapter 4 is dedicated to the influence of the Internet on the search stage of the consumer decision-making process. Specific reference will be made to search tools offered by the Internet and search strategies that Internet users can follow when searching for Online information.

Continuing the discussion on external search, Engel et al. (1995: 183) distinguish between two types of external search, namely pre-purchase search and ongoing search. **Pre-purchase search** suggests external search driven by an upcoming purchase decision. Solomon (1996: 273) adds by defining pre-purchase search as the search for specific information from the marketplace once a need has been recognised. **Ongoing search** refers to acquiring information on a relatively regular basis without the necessity to make an immediate purchase decision. For example, a consumer subscribing to Car magazine will engage in continuous and ongoing search and may use the same magazine during pre-purchase search when considering to purchase a new motor vehicle.

Engel et al. (1995: 183) express the opinion that the primary reason for consumers engaging in pre-purchase search is based on the desire to make a better consumption choice. The consumer may be motivated to search for information on an ongoing basis to develop a knowledge base that could be used

for future decision-making. Ongoing search could also occur simply because the consumer enjoys it. For example, the Car magazine reader may enjoy reading about new motor vehicles and the testing thereof for personal gratification. Also, consumers may enjoy browsing through a shopping centre although there is not an immediate need to purchase something.

It should be mentioned in conclusion that ongoing search can affect the need for pre-purchase search. As consumers continue searching for information, the need to carry out pre-purchase search may be considered unnecessary, since sufficient information is contained in memory to continue with the decision-making process.

Engel et al. (1995: 184) note that external search can be categorised along three dimensions, namely degree, direction and sequence. These three categories will be briefly discussed below.

A)   Degree of search

The degree of search represents the total amount of search and is reflected by the number of brands, attributes, stores and information sources considered together with the time taken to perform the search.

Assael (1995: 230) suggests that consumers search for little information, except for expensive products. Engel et al. (1995: 185) support this view but add that consumers often perform limited external search even when considering expensive items, such as furniture, appliances and personal computers. This has led to the question whether or not a decision-making process actually exists. Engel et al. (1995: 185) caution against this view by stating that this approach fails to consider internal search. Consumers could therefore rely solely on internal search, supporting the understanding that a decision-making process does exist.

The degree of search is furthermore directly related to the type of decision-making process. A consumer engaged in an extended decision-making process will, therefore, acquire a substantial amount of information, consider several brands, visit a number of stores and consult friends. In the other extreme, habitual decision-making, the consumer will minimise the search by considering only one product and brand and will possibly ignore other sources of information.

It should also be noted that the amount of search for a product engaged in, will differ from one consumer to another.

B)   Direction of search

The direction of search refers to the specific content of search, placing emphasis on the specific brands and stores involved during search rather than simply the number.

The direction of search is as important as the degree (if not more important), since knowing which brands consumers consider will aid the marketer in understanding consumer views of an organisation's competitive set. According to Engel et al. (1995: 188), an understanding of the attributes considered by consumers during search could, therefore, be emphasised in the organisation's promotional material. Puth, Mostert & Ewing (1999: 46) add to the above by stating that marketers should not only refer to important attributes in their promotional material, but also mention differentiating attributes, since attributes that are explicitly mentioned in advertisements are perceived to be of greater importance to the consumer. Puth et al. (1999: 46) continue by stating that marketers stand to fail in the intended message if attributes are not explicitly mentioned in their advertising.

The emphasis a consumer places on price during search can also affect an organisation's pricing strategy and the information sources used during search will influence marketing strategies (Engel et al., 1995: 189).

Information sources can be classified in terms of their source and type. Two sources are distinguished, namely personal and impersonal as well as two types of information, namely commercial versus non-commercial. Assael (1995: 229) supports this view by combining the source and type to form personal marketer-controlled, impersonal marketer-controlled, personal non-marketer-controlled and impersonal non-marketer-controlled sources. Table 3.2 shows the different sources and types of information.

TABLE 3.2: SOURCES AND TYPES OF INFORMATION

	Impersonal	Personal
Commercial	Advertising	Salespeople
	In-store information	
Non-commercial	General purpose media	Social others

Source: Engel et al. (1995: 189)

The sources and types of information showed in Table 3.2 above can be categorised into two main categories, namely marketer-dominated and other (Engel et al., 1995: 148). "Marketer-dominated" refers to anything that the marketer (or the supplier or manufacturer of the product) does for the purpose of information and persuasion, including advertisements and point-of-sale material. Included in the "other" category are those sources that are not dominated by marketers, for example word-of-mouth communication and consumer reports.

(i)   Marketer-dominated sources

As mentioned above, marketer-dominated sources refer to anything that the marketer does for the purposes of information and persuasion. Three main marketer-dominated sources are distinguished, namely advertising, in-store

information and sales people. Advertisements and in-store information can be classified as impersonal marketer-dominated sources (Laroche et al., 2000: 500 – 522; Engel et al., 1995: 189 & Assael, 1995: 229).

As consumers recognise needs, they become more receptive to **advertisements** and consult them for information purposes, although these advertisements, when needs are not recognised, would normally have been ignored.

Many purchase decisions are made in the store at the point-of-purchase. **In-store** information can therefore have a strong influence on consumer decision-making. Also included in in-store information are package labels. For example, consumers may consider a number of brands on the shelf, referring to the nutritional information printed on the packaging.

Engel et al. (1995: 189) and Assael (1995: 229) consider the third source of marketer-dominated information, sales people, to be personal (as opposed to impersonal advertisements and in-store information). Laroche et al. (2000: 500 – 522) explain that sales people represent an important personal source of in-store information. The influence of sales people is especially important when there is a need for point-of-sale negotiation and information exchange between the buyer and seller. For example, a pharmacist is considered an important source of information regarding nutrition and health-related matters.

(ii)   Other (non-commercial)

As suggested in Table 3.2, two other (non-commercial) sources of information can be identified, namely general-purpose media (impersonal) and social others (personal). It should be noted that in the 2001 version of the model, the terminology "other (non-commercial) sources" (appearing in the 1995 version) is changed to nonmarketer-dominated (Blackwell et al., 2001: 74).

General purpose media refers to information published in the general media that is not funded by marketers, for example editorials in magazines and newspapers. Other general purpose media include consumer reports and speciality magazines, for example Car magazine conducting tests and reporting on new vehicles, often comparing different makes and models, without the manufacturers or marketers of these vehicles approving the copy published in Car. Solomon (1996: 275) clarifies the lack of involvement of marketers in consumer reports by stating that these reports represent unbiased information by third parties. Hawkins et al. (2001: 534) agree with this description by labelling these sources as independent sources.

Social others include family and friends as sources of information. These influences were discussed in great detail in Section 3.3.1 (environmental influences). It should, however, be mentioned that most probably the most important sources of information (in terms of the possible influence thereof) consulted by consumers are friends and family. The sharing of information between consumers and their friends and family occurs in the form of word-of-mouth communication, discussed in more detail in Section 3.3.1.3 (personal influences).

Solomon (1996: 275) mentions another possible source of external information by explaining that consumers can observe others in an effort to fill gaps in knowledge about a product category or brand.

C)   Sequence of Search

The sequence of search, the final search dimension, pertains to the order in which search activities occur. Of particular importance is the order in which product attribute information is acquired. Engel et al. (1995: 191) explain that when consumers are exposed to a set of brands described along several attributes, they may follow a brand search sequence (also referred to as

processing by brand). This approach implies that the consumer will examine each brand along the various attributes before searching for the next brand. Another possible option is an attribute search sequence (also called processing by attribute), implying that brand information is collected on an attribute-by-attribute basis. Assael (1995: 248) adds by stating that attribute-specific processing is more likely when the consumer is involved with the brand and knowledgeable about the product category. An example of processing by attribute, is a consumer who may first examine each brand's price, followed by exploring each brand's warranty.

In conclusion it should be mentioned that several factors encourage consumers to obtain more information. These factors, according to Assael (1995: 228 – 229), are:

- high consumer involvement, where more information is acquired as consumers tend to get more involved in the process;

- the presence of high perceived risk with the intended purchase;

- the consumer who has little or no product knowledge or whose past experiences are negative;

- less time pressure on the consumer to make a decision;

- the intended purchase is characterised by a high price; and

- substantial differences between different brands

As noted above, a number of factors can have an influence on whether a consumer will engage in external information search. One particular factor, perceived risk, needs to be discussed in more detail since it can influence the

extent of the external search process due to a number of different risk types perceived by consumers. Tan (1999: 163 – 180) emphasises the importance of discussing perceived risk because risk is perceived in all purchase decisions since consumers cannot always be certain that buying goals will be achieved.

Peter & Olson (2002: 77) note that the amount of perceived risk experienced by the consumer is influenced by the degree of unpleasantness of the negative consequences and the probability that these negative consequences will occur. Hawkins et al (1995: 494) suggest that the past experiences and life-style of the consumer will also affect the degree in which the consumer perceives risk. The different types of perceived risk together with the related uncertainty are summarised in Table 3.3.

TABLE 3.3: TYPES OF PERCEIVED RISK AND RELATED UNCERTAINTY

Type of risk	Uncertainty
Functional/ Performance	Risk that the product will not function as anticipated (e.g. Will it work? or, Will it last?
Physical	Risk of bodily harm as a result of product performance (e.g. Is it safe to use?)
Financial	Risk that the outcome will harm the consumer financially (e.g. Am I wasting my money?)
Social	Risk that a purchase will not meet the standards of others (e.g. Will my friends and family approve my choice? or, Will they admire me?
Psychological	Risk that the purchase will not conform or even lower self-esteem (e.g. Will it make me feel or look good? Or, Will it impress others?
Time	Risk that time spent in product search will be wasted if the product does not perform as expected (e.g. Will I have to go through the shopping effort all over again?)
Opportunity loss	Risk that by taking one action, another option the consumer really would have liked to have chosen will be lost (e.g. Will the purchase of one expensive item deprive me purchasing many other, less expensive items?)

Source: Compiled from Schiffman & Kanuk (1997: 183 – 184), Mostert (1996: 79), Solomon (1996: 278), Assael (1995: 252) & Mowen (1993: 197).

As shown in Table 3.3, consumers can perceive a number of risks when purchasing products or services. Schiffman & Kanuk (1997: 185) state that consumers formulate their own strategies to reduce perceived risk. One strategy to reduce risk (enabling the consumer to grow and act in confidence), is through information search. This search will include both marketer-dominated (for example advertisements and sales people) and non-marketer-dominant sources (for example word-of-mouth communication with friends and family).

The manner in which information in the form of stimuli is processed is discussed below.

3.4.2 Information processing

The second component of the search process is that of information processing, applicable to information obtained from external search. The information processing process forms an important function in the consumer decision-making process with many authors (Assael, 1995: 225 – 264; Engel et al., 1995: 471 – 512, Peter & Olson, 1994: 157) providing elaborate discussions on the topic. Assael (1995: 235) summarises the importance of the process, from a marketer's perspective, by stating that it determines which information is remembered by consumers, which information is used in the evaluation process and how it is used.

As depicted in Figure 3.7 at the beginning of the discussion on "search", the information processing process comprises five stages, namely exposure, attention, comprehension, acceptance and retention.

Figure 3.7 also shows that memory fulfils an important function in the information processing process, where memory influences attention, comprehension and acceptance. The conclusion to the information processing process, retention, feeds back into memory. Another key input to the process is stimuli, both

marketer-dominated and "other". The relevance of stimuli and memory in the information processing process could possibly be best described by means of a definition of the information processing process.

Engel et al. (1995: 472) summarise the information processing process by defining it as: "... the process by which a stimulus is received, interpreted, stored in memory, and later retrieved". From the definition can be concluded that external input is processed and stored in memory, following the information processing process.

The different stages of the information processing process are discussed below to form an understanding of the different stages in the process and the combination thereof, enabling the consumer to retain the message in memory.

Of importance to note is that a pre-requisite for the information processing process to commence, is that a stimulus has to be present and available. In addition, a stimulus has to pass through each of the stages of the process before it can reach the memory.

3.4.2.1   Exposure

The first stage of the information processing process is represented by exposure, occurring when patterns of energy, in the form of stimuli input, reach one or more of the five senses (Engel et al.; 1995: 473). Hawkins et al. (2001: 285) support this view by defining exposure as: ".. when a stimulus comes within range of our sensory receptor nerves".

Engel et al. (1995: 474) continue the discussion on exposure by providing a rather technical explanation of how it functions by stating that given exposure to a stimulus of sufficient strength, the consumer's sensory receptors are activated and encoded information is transmitted to the brain along nerve fibres. This

activation, called a sensation, is affected by three thresholds, namely the lower, terminal and difference threshold.

The **lower threshold**, also called the absolute threshold, represents the minimum amount of stimulus energy necessary for sensation to occur. The **terminal threshold** refers to the point at which an increase in the intensity of a stimulus has no effect on sensation. The **difference threshold** represents the smallest change in the intensity of a stimulus that will be noticed by the consumer.

The importance of mentioning the three different thresholds is embedded in the fact that exposure and therefore the information processing process cannot commence if consumers are not able to notice stimuli.

In conclusion: The consumer can influence stimuli exposure through active self-nature. Hawkins et al. (2001: 286) explain this capability of the consumer by referring to "zipping" and "zapping". "Zipping" occurs when consumers fast-forward through commercials on a pre-recorded television programme. "Zapping" refers to the switching between different television channels when commercials appear.

3.4.2.2   Attention

From the discussion on exposure can be deducted that, due to the limitations of the cognitive resources of individuals, not all the stimuli that activate the consumer's sensory receptors will receive additional processing. According to Engel et al. (1995: 476), the cognitive system can, therefore, rather be viewed as constantly monitoring sensory inputs and selects some of them for further processing. This screening, at a pre-conscious level, is called pre-attentive processing. Only once stimuli have passed through the screening process do

they enter the second stage of the information-processing process, namely attention.

Engel et al. (1995: 476) defines the attention stage as: "... the allocation of processing capacity to a stimulus". Hawkins et al. (2001: 287) provide a more detailed explanation of how attention occurs by defining it as: ".. when the stimulus activates one or more sensory receptor nerves and the resulting sensations go to the brain for processing".

Engel et al. (1995: 476) explain the importance of attention by stating that one of the greatest challenges to marketers is to get consumers to pay attention to what the marketer has to say and sell. This is no easy task, considering the hundreds (if not thousands) of marketing messages consumers are exposed to every day. Schiffman & Kanuk (1997: 209) expand on this statement by explaining that consumers are bombarded with stimuli from the environment.

Consider for a moment all the advertisements that a consumer could be exposed to in one single day: radio advertisements and prizes sponsored by marketers over the radio (to which the consumer listens from the time the radio alarm wakes the consumer in the morning and travelling in the motor vehicle to the office); newspaper advertisements (many consumers may read – or only page through – more than one newspaper a day, for example The Star and Business Day); more radio advertisements on the way home; product information in the supermarket; reading or paging through magazines (reading the Car magazine and Financial Times when relaxing at home); and finally television advertisements (shown continuously between all programmes, news broadcasts and sports events). The example above does not even include non-marketer-dominated information the consumer is exposed to in the normal run of life where views and opinions of friends, family and colleagues are shared on a continuous basis.

Schiffman & Kanuk (1997: 210) and Assael (1995: 231) agree with the statement in the form of the example above by stating that too much information may result in an information overload, defined as a confusion in the decision task that results in an ineffective decision. Schiffman & Kanuk (1997: 209) elaborate on this view by suggesting that consumers will, subconsciously, block out a great deal of information that they think they do not "need" or cannot use.

From the elaborate example above can be concluded that consumers will , due to the limitation of cognitive and processing capacity, selectively pay attention to messages by marketers. Engel et al. (1995: 476 – 477) identify two major categories of factors influencing consumers' selective attention, namely personal and situational determinants.

Personal determinants (also called individual determinants) refer to characteristics of the individual that influence attention, including needs or motivation, attitudes, adaptation level and attention span. Consumer **needs** have a strong influence on stimuli that will receive attention, for example hungry consumers will be far more receptive to food stimuli than when they are not hungry. The consumer is therefore more motivated to attend to messages (stimuli) that address needs already identified. Hawkins et al. (2001: 291) add consumer **interests** to needs by stating that they reflect the overall life-style of consumers and a result of long-term goals and plans.

Engel et al. (1995: 477) suggest that consumers are more likely to be receptive to stimuli that maintain or enhance held **attitudes** and beliefs, therefore avoiding information that challenge them. For example, an anti-smoker will be more receptive to a message stipulating the rights of non-smokers than a smoker would be.

An **adoption level** implies the tendency of consumers to become so accustomed to stimuli that they are no longer noticed. For example, a person moving to the

centre of Johannesburg from a small Karoo town will initially find the noise levels very disturbing but will eventually get used to the noise to the extent that it is no longer noticed. The same phenomenon applies to marketing stimuli, for example Vodacom advertising virtually at all sports events broadcasted on a Saturday afternoon. A person may become so used to the same sponsor that eventually it is not noticed. Marketers, therefore, need to carefully draft strategies for repeat advertisements.

The **span of attention** suggests that the amount of time that can be focused on a single stimulus or thought is very limited. Hawkins et al. (2001: 291) add to the discussion by noting that individuals differ in their ability to pay attention to information. When consumers focus for too long on a specific stimulus, they tend to be distracted and their minds begin to "wander". Engel et al. (1995: 480) suggest that a possible solution to this problem would be the use of shorter commercials. However, too many short commercials can again influence the level of adoption.

Situational determinants, reflecting characteristics of the stimulus itself, form the second set of factors influencing attention. These factors can be controlled by marketers and are often used to gain consumer attention. Situational determinants include a variety of factors, including size, colour, contrast, position, intensity, movement, isolation, novelty, attractive spokesperson and directionality. Only four of these factors (size, colour, contrast and isolation) will be briefly discussed to indicate that stimulus determinants can influence attention.

The **size** of the stimulus can attract attention, for example a large advertisement in a newspaper or magazine. The amount or size of shelf space allocated to a product could also attract attention. For example, Oros orange squash is displayed over two display units (from top to bottom) in Pick & Pay, whereas competing orange squashes are only displayed on one shelf of one unit.

Consumers considering to purchase orange squash when visiting Pick & Pay may be overwhelmed by the display of Oros and ignore other, potentially better, alternatives.

The use of **colour** could also have an influence on attracting attention. Hawkins et al. (2001: 288) argue that bright coloured packaging is more likely to attract attention than dull packaging. People also pay more attention to stimuli that **contrast** to their background. For example, a commercial that is louder than the programme during which it is shown, could possibly attract attention. Finally, attention can also be attracted through **isolation**, referring to a single stimulus (or a few stimuli) in a relatively barren perceptual field. In following this method of attracting attention a substantial portion of the advertisement remains "unused" in an attempt to draw attention to the single stimulus (or a few stimuli).

It can be concluded that stimulus determinants can have an influence on attracting attention.

3.4.2.3   Comprehension

The stimulus is interpreted in the third stage of the information processing process, comprehension, where meaning is attached to the stimulus. According to Engel et al. (1995: 487), the meaning ascribed to a stimulus will depend on how it is categorised and elaborated in terms of existing knowledge.

The process of classifying a stimulus by using concepts stored in memory is called stimulus categorisation, whereas elaboration refers to the amount of integration between existing knowledge stored in memory and the new information. In addition to the above, consumers organise incoming stimuli into a meaningful whole.

As with attention, comprehension is influenced by personal and stimulus factors. The **personal factors** influencing comprehension include motivation, knowledge and expectations.

Motivation can influence the elaboration that occurs during comprehension, since more elaborate processing should occur if the stimulus is perceived to be personally relevant (seen as useful for satisfying a recognised need). Engel et al. (1995: 492) suggest that if consumers are motivated while processing an advertisement, they will engage in more thinking about the advertised product.

The categorisation of an advertisement depends heavily on **knowledge** contained in memory. For example, a novice will see a pistol whereas an expert will identify a Glock 23, .40 calibre. Knowledge also increases the ability of the consumer to understand the advertisement and recognise faulty logic and conclusions. Knowledge, therefore, reduces the likelihood that consumers will make an incorrect interpretation during message processing.

Comprehension also depends on prior conceptions or **expectations** of what consumers are likely to see. For example, if consumers were asked to rate a specific cigarette that was not labelled, it may have received a total different rating than it would have received if it had been labelled.

Different **stimulus determinants** could also influence comprehension. For example: the size of a stimulus (a smaller pistol may be perceived as lacking penetrating power), colour (Aquafresh toothpaste adding a new plaque-fighting ingredient, shown visually to consumers by adding a blue stripe) and packaging (fresh fish displayed on crushed ice simply looks fresher than if it were pre-wrapped in plastic).

Misperception or misinterpretation of stimuli occurs during the comprehension stage of the information processing process. Engel et al. (1995: 496) explain that

this occurs when consumers attach different meanings to stimuli than those intended by marketers, resulting in the conclusion that accurate comprehension of even a simple message cannot be assumed. Miscomprehension can occur when consumers allocate inadequate attention to the stimulus during the processing thereof, or when the stimulus itself is ambiguous, for example claims that a retail store offers "lowest prices guaranteed", could be interpreted as lower than the competitors, lower than usual or lower due to a sale. According to Puth, Mostert & Ewing (1997: 14), consumers may be "forced" to consider previous held beliefs and perceptions if specific guidelines or attributes are not provided by marketers in advertisements. This could possibly lead to miscomprehension of the meaning of the message intended by the marketer.

3.4.2.4 Acceptance

The fourth stage of the information processing process is acceptance, focusing on the persuasive effect of a stimulus (Engel et al., 1995: 497). The persuasiveness of a stimulus may influence consumer knowledge, attitudes and behaviour.

It is important to note that even if an advertisement received attention and was correctly comprehended, it does not necessarily mean that persuasion occurred, since comprehension is not the same as message acceptance. A consumer may understand the advertisement but may not agree with its claims. Acceptance, therefore, depends on the thoughts (referred to as cognitive responses) of consumers during the comprehension stage.

A consumer considering to purchase a product may engage in considerable thinking about the claims of an advertisement. Engel et al. (1995: 497) state that the nature of such cognitive responses will determine the acceptance of the claims. Two responses are identified, namely support arguments, representing

favourable thoughts to the claims and counter arguments, implying thoughts opposing the message claims.

Acceptance is, therefore, enhanced when support arguments increase and reduced by counter argumentation.

Acceptance of an advertisement's persuasiveness could also depend on how it makes the consumer feel. This represents affective responses, defined by Engel et al. (1995: 498) as the emotions and feelings elected by a stimulus. Affective responses can take many forms, classified in three main categories, namely upbeat, negative and warm. Upbeat and warm feelings will, generally, enhance acceptance of a message, whereas negative feelings will reduce acceptance.

3.4.2.5 Retention

Retention forms the final stage of the information processing process, involving the transfer of stimulus interpretation and persuasion into long-term memory. Memory consists of different storage systems. Engel et al. (1995) distinguish between three different storage systems in memory, namely sensory memory, short-term memory and long-term memory.

Information receives an initial analysis in the **sensory memory** based on physical properties, for example loudness and pitch. Auditory processing at this stage of memory is called echoic and visual processing is referred to as iconic. Schiffman & Kanuk (1997: 209) explain the working of the sensory memory by stating that sensory input lasts for only a second or two in the mind's sensory store. If a stimulus is not processed immediately, it will be lost through the functioning of the sensory memory.

The **short-term memory** component is accessed when a stimulus passes through sensory processing. Short-term memory operates by combining sensory

input with concepts of long-term memory to enable categorisation and interpretation of stimuli. Schiffman & Kanuk (1997: 209) explains short-term memory as the working memory, where information is processed and held for a brief period.

Assael (1995: 239) adds to the discussion by explaining that short-term memory acts as a filter to either store the information in long-term memory or discard it as it is perceived to be unimportant or undesirable. The decision to retain or discard information is made by relating it to information already stored in long-term memory. Engel et al. (1995: 502) add two limiting characteristics of memory, namely that it can hold only a limited amount of information and that the time that information can be kept active without any effort, is limited.

The final memory storage system, **long-term memory**, is viewed as an unlimited and permanent "storehouse" that contains all the knowledge contained by individuals. Assael (1995: 239) distinguishes two different forms of long-term memory, namely episodic memory (concerned with images that reflect past events) and semantic memory (represented by words and sentences that reflect concepts and facts that are remembered). Hawkins et al. (2001: 342) refer to semantic memory as schemantic memory and explain it as the stored representation of consumers' generalised knowledge of the world they live in.

Assael (1995: 242) maintains that once information has been filtered through the short-term and long-term memory, it is available for retrieval. When information is retrieved from long-term memory, it is briefly stored in short-term memory for the purpose of brand evaluation.

The objective of marketers, therefore, is for their advertisements to be accepted and retained in long-term memory for future reference purposes.

3.5   PRE-PURCHASE ALTERNATIVE EVALUATION

Pre-purchase alternative evaluation, re-worded as pre-purchase evaluation of alternatives in the 2001 version of the EMB model (Blackwell et al., 2001: 76), forms the third stage of the consumer decision-making process and is influenced, as with need recognition and search, by environmental influences and individual differences.

It should be noted that Section 4.3.1.2 in Chapter 4 will provide insights on how the Internet can assist the consumer with pre-purchase alternative evaluation.

Solomon (1996: 279) draws attention to the importance of pre-purchase alternative evaluation by stating that much of the effort associated with the decision-making process occurs at this stage, where the consumer has to choose from available alternatives.

Assael (1995: 92) explains that, as a result of information processing, consumers will associate brands that they are aware of with their expected benefits based on past and current information. Adding to this view, Engel et al. (1995: 206) define pre-purchase alternative evaluation as: "... the process by which a choice alternative is evaluated and selected to meet consumer needs".

The alternative evaluation process within the broader model of consumer behaviour proposed by Engel, Blackwell & Miniard (1995) is illustrated in Figure 3.10.

FIGURE 3.10: ALTERNATIVE EVALUATION

Source: Compiled from Engel et al. (1995: 149, 150 & 263)
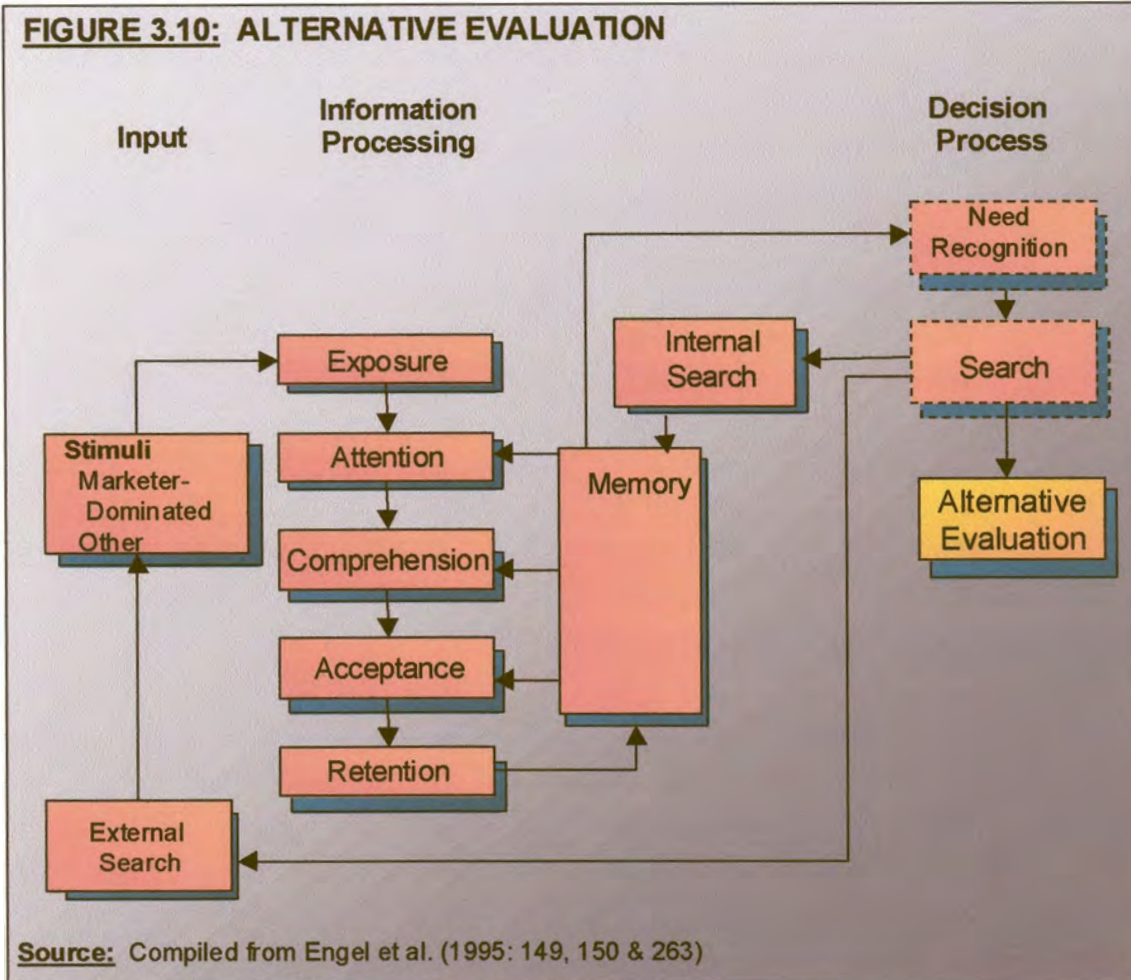
Although search and pre-purchase alternative evaluation is discussed as two separate stages, search and evaluation are intertwined during decision–making. Information obtained from the environment will often lead to some evaluation (for example, "these jeans at Edgars are too expensive) that may guide the consumer to subsequent search (for example, "let's find out the price of Woolworths' jeans elsewhere in this shopping mall"). Engel et al. (1995: 207) explain that the complexity of alternative evaluation is very likely to vary according to the decision-making process followed by the consumer. For example, if decision-making is habitual in nature, the consumer will (at this stage of the decision-process) form an intention to purchase the same brand as before.

If the consumer, however, engages in complex decision-making, the evaluation process will be complex.

The alternative evaluation process can be summarised by means of an illustration, indicating the functioning of the process and the components considered in the process. The functioning of the evaluation process, indicating the most complex form thereof, is shown in Figure 3.11.

FIGURE 3.11: THE ALTERNATIVE EVALUATION PROCESS

Determine Evaluative Criteria

Determine Choice Alternatives

Assess Performance of Alternatives

Apply Decision Rule

Source: Adapted from Engel et al. (1995: 205)
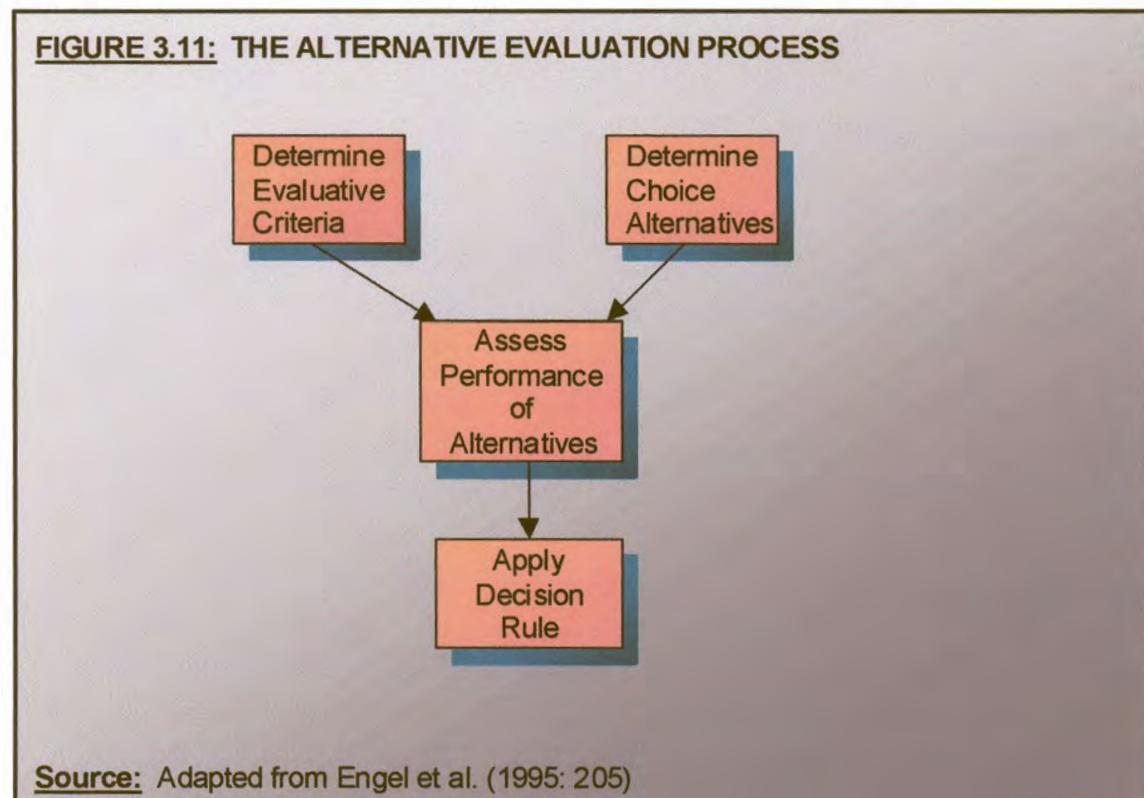
As indicated in Figure 3.11, a decision first has to be made about which choice alternatives to consider as well as the relevant evaluation criteria when comparing possible alternatives. This is followed by a comparison (judgment) of the chosen alternatives along the evaluation criteria (assessing the choice alternatives). Finally, a decision rule is applied to these judgments to select an alternative. These components of the alternative evaluation process are discussed below.

3.5.1 Evaluation criteria

According to Schiffman & Kanuk (1997: 571 – 573) consumers evaluate brands in terms of important product attributes. Hawkins et al. (1995: 468) support this view by defining evaluation criteria as: "... the various features a consumer looks for in response to a particular type of problem". Engel et al. (1995: 208) provide clarity on the function of evaluation criteria by defining it as: "... nothing more than the particular dimensions or attributes that are used in judging the choice alternatives".

As suggested by the definitions above, there are many different forms of evaluation criteria. Engel et al. (1995: 208) support this statement with the following example: when purchasing a motor vehicle, the consumer may consider factors such as safety, brand name, price, reliability, warranty, country where it was manufactured and fuel consumption. The consumer may, however, also consider evaluation criteria more hedonic in nature, including the feeling of owning the motor vehicle (status and prestige) and driving it (for example excitement and exhilaration).

As can be derived from the example above, the possible evaluation criteria consumers could use in decision-making seem endless. Therefore, only three possible evaluation criteria (price, brand name and country of origin) will be discussed in an attempt to show the importance of evaluation criteria in the alternative evaluation process.

One of the most important evaluation criteria is **price**, often influencing the product choice. Engel et al. (1995: 208) note that there is a considerable difference regarding the importance of price across consumers and products. Factors that could influence consumers not to purchase the lowest price or the best price-to-quality products include brand name and convenience. For example, a consumer purchasing milk, cigarettes and Coke from an Engen Quick

Shop may (knowingly) pay considerably more for the products than at Pick & Pay. The reason for still purchasing at the Quick Shop may be based on convenience, since Pick & Pay is another two kilometres away and there is hardly ever sufficient parking available.

Brand name often forms the most important evaluation criteria, since it serves as a surrogate indicator of product quality. Consumers may, therefore, be prepared to pay a premium for a specific brand due to the perceived high quality of the product. For example, a consumer may purchase Disprin for a mild headache because of the well-known name despite regulations that all over-the-counter aspirin products should conform to certain specifications. The brand name could also be of importance to the consumer when it is seen as a status symbol and the consumer is motivated by such considerations. A consumer may, therefore, attach the same (if not greater) value to a brand name as to other product features. For example, a teenager may consider the Nike brand name as being more important than the actual comfort of the running shoe.

The **country of origin** often forms an important evaluation criteria to consumers. This view is expanded on by Knight & Calantone (2000: 127 – 145) stating that, when known to consumers, country of origin influences the evaluation of products, since the country of origin's image reflects the consumer's general perception about the quality of products made in a particular country and the nature of the people in that country. Piron (2000: 308 – 321) adds that imagery of country of origin comprises the picture, reputation and stereotype that consumers attach to products of a specific country.

Piron (2000: 308 – 321) continues by stating that consumers may be influenced by a halo effect, where a country's name triggers feelings that may be transferred to a product.

For example, products manufactured in Germany are often considered to be of better quality because of precise quality specifications and workmanship. This is eminent when considering some of the world-class (and well-known) brands emerging from Germany, for example BMW, Mercedes Benz, AEG and Siemens. In practical terms, a consumer may decide to purchase a product from a more reputable country when all other evaluation criteria are considered equal. For example, a dinner service manufactured in the United Kingdom may be perceived as better quality than a product boasting: "Made in Taiwan".

As illustrated in the examples above, it can impose formidable barriers for marketers attempting to enter a market or position its products in an existing market (Knight & Calantone, 2000: 127 – 145) if the stereotype attributed to a country is negative.

An important concept to consider when discussing evaluation criteria is that of salience, reflecting the assumption that evaluation criteria differ in their influence on consumer product selection. Engel et al. (1995: 211) show the relevance of salience by explaining that it refers to the potential influence that each criterion may exert during the comparison process. Whether this potential influence materialises depends on how consumers perceive the alternatives to perform along an evaluation criterion. For example, all modern airlines comply with the highest safety standards and although safety is probably the most important evaluation criteria to the consumer when undertaking a flight, safety will not form a deciding factor when selecting an airline. Similarly, although price may be an important consideration, the impact thereof as an evaluation criteria will essentially fall away if all the airlines charge the same price.

According to Engel et al. (1995: 212) and Solomon (1996: 284), the salient attributes that actually influence the evaluation process are known as determinant attributes.

The evaluation criteria used by consumers during decision-making depend on a number of factors, including situational influences, similarity of the choice alternatives, motivation, involvement and knowledge. These factors, as determinants of evaluation criteria, will be discussed briefly below.

Situational factors often influence the salience of evaluation criteria. For example, a consumer may purchase a prestigious brand of liquor when entertaining friends or colleagues but will use a less prestigious brand for personal consumption.

The **similarity of choice alternatives** directly influence the evaluation criteria used by the consumer. If, for example, the consumer receives a substantial bonus at work, the consumer needs to decide on diverse alternatives, such as purchasing a new wardrobe, going on an overseas vacation or buying unit trust investments. Greater similarity will exist, however, when choosing a brand within a product category.

The consumer may also have to use abstract evaluation criteria when considering non-comparable alternatives. Schiffman & Kanuk (1997: 580) support this view by explaining that, for products with great dissimilarity, consumers will abstract the products to a level that comparisons are possible. Engel et al. (1995: 213) explain how this is done practically by means of the following example, where a consumer has to decide between a refrigerator, expensive outfit or new television. These alternatives share a few concrete attributes along which a direct comparison can be made. The consumer will, therefore, use abstract dimensions as evaluation criteria, for example necessity, status and entertainment. Although a new television will offer the consumer entertainment and a new outfit support the consumer's (perceived) status, the refrigerator may be selected, based on necessity.

If the choice alternatives are closely related and no differentiating factor can be distinguished (for example gardening services), the consumer will heavily rely on price as evaluation criteria.

Motivation, specifically whether the consumer is driven by utilitarian or hedonic considerations, could influence evaluation criteria. Engel et al. (1995: 213) illustrate this importance by means of an example, where utilitarian motivations during the purchase of running shoes could lead to examining the price and construction, whereas hedonic motives would lead to the feelings associated with product ownership (for instance the purchase of Nike to project a desirable image).

As consumers become more **involved** with a purchase decision, the evaluation criteria are likely to increase. Involvement could also possibly influence the relative salience of evaluation criteria. For example, a consumer who is more involved in the purchase decision may consider service attributes of a service organisation, whereas a less involved consumer would consider only the size and reputation of the organisation.

The final determinant of evaluation criteria is **knowledge**. Consumers who are well-informed will have information stored in memory about the useful dimensions for comparing alternatives. Engel et al. (1995: 215) expand this view stating that an advertisement that suggests evaluation criteria that consumers should consider are likely to be more effective for first-time buyers. A study by Mostert (1996: 152) supports this view by concluding that explicitly mentioned attributes in advertisements were perceived to be of greater importance to consumers when comparing the ratings the attributes received when all possible attributes for the product category were rated.

3.5.2 Determining the choice alternatives

Consumers not only have to determine the evaluation criteria during the evaluation of alternatives but also the alternatives from which a choice will be made. Hawkins et al. (1995: 446) note that all the brands within a product category can be categorised in either an awareness set or an unawareness set. The awareness set comprises all the brands the consumer is aware of, whereas the unawareness set represents those brands the consumer does not know about. Hawkins et al. (2001: 530 - 531) continue by explaining that the awareness set comprises three subcategories, namely the evoked, inert and inept sets.

Figure 3.12 depicts the evoked, inept and inert sets as subsets of all the brands in a product category.

FIGURE 3.12: CATEGORIES OF DECISION ALTERNATIVES

Source: Hawkins et al. (2001: 532)
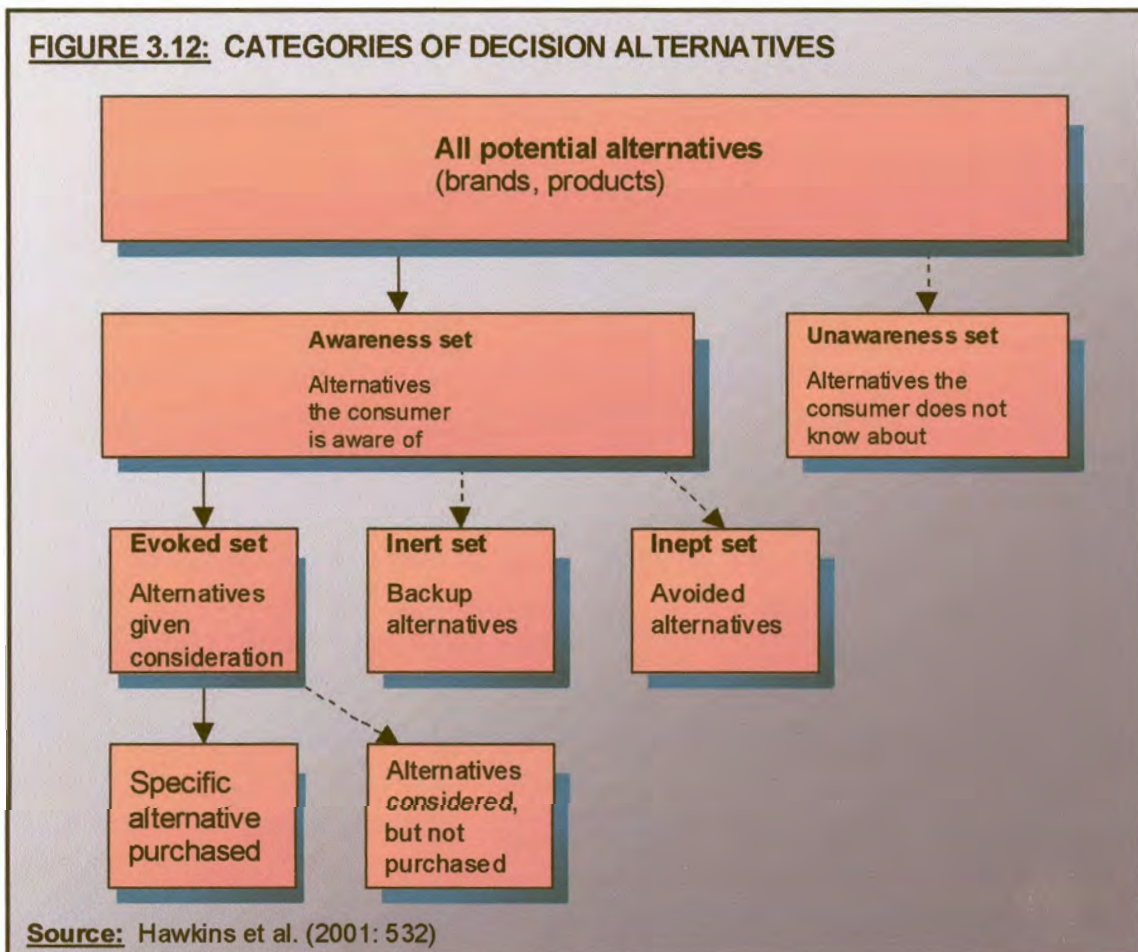
Schiffman & Kanuk (1997: 570) provide clarity on the **evoked set** by defining it as: "... the specific brands a consumer considers in making a purchase within a particular product category". According to Engel et al. (1995: 215) and LeBlanc & Turley (1994: 10 – 17), the evoked set will contain only a subset of the total number of alternatives (considered to be acceptable alternatives) available to the consumer. Some consumers may have a large evoked set, whereas others have a relatively small set. Consumers who are loyal towards a specific brand will only have one brand in their evoked set for a specific product category.

Schiffman & Kanuk (1997: 570) and Hawkins et al. (1995: 446) explain that the **inept set** refers to all the brands the consumer excludes from purchase thought because they are considered to be unacceptable. These brands could, for example, be seen as inferior. The **inert set** represents the brands to which the consumer is indifferent towards due to being perceived as offering little value.

It can be derived from Figure 3.12 that it is essential that a product forms part of a consumer's evoked set for it to be considered at all during the alternative evaluation process (Schiffman & Kanuk, 1997: 571 & Engel et al., 1995: 216).

Schiffman & Kanuk (1997: 571) explain that in the selection of choice alternatives, as depicted in Figure 3.12, five prominent positions in the model do not result in an alternative being considered for purchase. Firstly, brands may be unknown to the consumer, for example, due to the consumer's selective exposure to advertising media. Secondly, as suggested by the inept set, brands may be considered unacceptable based on poor quality or product attributes. Thirdly, brands may be perceived as being indifferent because they are being perceived as not offering any special benefits to the consumer (the inert set). Fourth, brands may be overlooked because they have not been positioned correctly and are therefore not targeting the consumer market where a selection has to be made in the product category wherein the brand is competing. Finally,

brands will not be selected if they are unable to satisfy perceived needs to the same extent as the chosen alternative.

Engel et al. (1995: 217) and Solomon (1996: 280) add to the discussion by stating that the evoked set comprises a retrieval set (a recollection of alternatives from memory) and prominent products from the environment. Engel et al. (1995: 218) continue by stating that if the consumer does not have sufficient knowledge (stored information in memory) in the retrieval set, the evoked set will be developed in a number of ways, for example talking to others, search for information or considering all the brands in the product category. A consumer may therefore select a brand in the retail store by scanning the brands on the shelf, choosing a recognised brand rather than relying on recall. It should be mentioned in conclusion to this section that a consumer's evoked set can comprise retail outlets in addition to brands (LeBlanc & Turley, 1994: 10 – 17).

3.5.3 Assessing the choice alternatives

The third component of the alternative evaluation process is assessing the choice alternatives, thereby judging the performance of the chosen alternatives along salient evaluative criteria. Engel et al. (1995: 219) explain that consumers often have judgements or beliefs regarding the performance of the selected alternatives being considered. Consumers lacking such stored knowledge will, however, need to rely on external information to form beliefs about the performance of these alternatives by using either cut-offs or signals.

A **cut-off** simply represents a requirement (or restriction) for acceptable attribute values. An example of a cut-off is price, where consumers will have a fairly defined range of prices that they will be willing to pay. A price falling outside this range will be deemed unacceptable, for example a consumer intending to purchase a water-feature will expect to pay between R 700 and R 950. If, however, the price of one of the alternatives being considered is R 1 500, the

consumer will view this price as being unacceptable, thereby not considering the alternative as a viable purchase option. Other examples of cut-offs for evaluation criteria include refusing to consider any fruit juice that does not contain at least 80% pure juice, insisting that a health treat contain less than a certain amount of calories or reject considering any generic cola brands. Consumer cut-offs will therefore have a very important influence on the final choice of the consumer.

Judgements about alternatives can also depend on certain **signals** or cues. Examples of signals include brand name and warranties relating to product quality. For example, a consumer deciding between two types of wall-to-wall carpeting may be unable to infer the quality of the carpets. The warranty offered by the manufacturers could therefore act as a signal of the quality, resulting in the consumer purchasing the carpet offering the most comprehensive warranty. Another example of a signal used to judge alternatives is price, where consumers will often use price as an indicator of quality.

3.5.4 Selecting a decision rule

The decision rule forms the final element of the alternative evaluation process. Engel et al. (1995: 222) define decision rules as: ".. represent the strategies consumers use to make a selection from the choice alternatives". Schiffman & Kanuk (1997: 576) support this view and states that consumers use decision rules to reduce the burden of making complex decisions by providing guidelines that make the process easier.

Decision rules applied by consumers vary from very simplistic procedures, requiring little time and effort, to very elaborate procedures involving considerably more time and processing effort by the consumer. Engel et al. (1995: 222) explain that when choice is habituated, a simple decision rule will be applied, for example purchasing the same brand as before. Simplistic decision rules could

also be used by consumers when the choice is not habituated, for example "purchase the cheapest brand" or "buy the brand preferred by the family".

Engel et al. (1995: 222) explain that consumers will often follow a decision rule that offers a satisfactory (as opposed to an optimal) choice while minimising their time and effort. Consumers may, however, also use more elaborate decision rules that require a greater processing effort as they become motivated during the decision-making process.

Schiffman & Kanuk (1997: 576) and Engel et al. (1995: 222) broadly divide decision rules into two categories, namely compensatory and non-compensatory decision rules. Assael (1995: 93) notes that compensatory decision rules imply that consumers will evaluate each brand across all evaluation criteria, whereas non-compensatory decision rules ascribe that brands are evaluated on one criterion at a time. Non-compensatory and compensatory decision rules together with the different types thereof are discussed below.

3.5.4.1   Non-compensatory decision rules

According to non-compensatory decision rules, a product's weakness on one attribute cannot be offset by strong performance on another attribute, for example, consumers desiring healthier snacks (for instance biscuits). Although many brands offer healthy ingredients, they taste awful. Such products may score high marks on health considerations but this strength cannot overcome the weakness in taste.

The simplistic decision rules mentioned before (e.g. "buy the cheapest") support a further potential for decision-making to follow a non-compensatory strategy. For example, if the consumer's decision rule is "buy the cheapest", a brand that is more expensive will not be chosen no matter how well it performs on other

evaluation criteria. The weakness in price is, therefore, not compensated by other favourable attributes.

According to Engel et al. (1995: 223), three types of non-compensatory rules are distinguished, namely lexicographic, elimination by aspects and conjunctive. Schiffman & Kanuk (1997: 577), Hawkins et al. (1995: 478) and Mowen (1993: 431) identify a fourth type of non-compensatory decision rule, namely the disjunctive rule.

Important to note is that a consumer can either process by brand or by attribute. When processing by brand, the consumer will obtain information on one brand at a time, whereas processing by attribute implies that the consumer will gather information on a specific attribute of various brands.

A practical example, provided by Engel et al. (1995: 223) in the form of Table 3.4 below assists in differentiating between the various decision rules.

TABLE 3.4: HYPOTHETICAL RATINGS FOR ILLUSTRATING DECISION RULES

Attribute	Importance ranking	Brand performance ratings			
		Brand A	Brand B	Brand C	Brand D
Taste	1	Excellent	Excellent	Very good	Excellent
Price	2	Very good	Good	Excellent	Fair
Nutrition	3	Good	Good	Poor	Excellent
Convenience	4	Fair	Good	Good	Excellent

Source: Engel et al. (1995: 223)

A) Lexicographic decision rule

Sheth, Mittal & Newman (1999: 539) and Schiffman & Kanuk (1997: 577) explain that with the lexicographic rule, consumers first have to rank the attributes in terms of perceived importance.

According to Assael (1995: 249) and Engel et al. (1995: 223), this is followed by comparing brands on the most important attribute. The brand perceived as superior on this attribute will be selected. If two or more brands are considered to be equal on the attribute, they will be compared on the second most important attribute. This process is continued until one brand is perceived to be superior to the other remaining brands.

By using the lexicographic decision rule, consumers will require processing by attribute. From the example provided in Table 3.4, Brand A will be selected based on an "excellent" rating on importance ranking 1 (Brands B and D will continue to the next importance ranking, whereas Brand C will be discarded based on a "very good" rating) and the best rating when compared to the remaining brands on importance ranking 2 ("very good" versus "good" for Brand B and "fair" for Brand D). Note that although Brand C had a higher rating than the other brands on importance ranking 2, it was excluded, based on importance ranking 1. If, however, price (importance ranking 2) were considered the most important attribute, then Brand C would have been chosen.

B) Elimination by aspects decision rule

The elimination by aspects rule closely resembles the lexicographic rule, where brands are evaluated on the most important attribute (Sheth et al., 1999: 540). The difference is that the consumer imposes cut-offs, for example the brand has to be nutritious or below R 20. As with the lexicographic rule, the brand that meets the cut-off on the most important attribute will be chosen. If two or more brands meet the cut-off, the next most important attribute is selected and the process is repeated until only one brand meets the set criteria.

Engel et al. (1995: 224) note that it is important to consider that if none of the alternatives are acceptable, the consumer has to revise the cut-offs, use a different decision rule or postpone choice.

According to Solomon (1996: 286), by using the elimination by aspects decision rule, processing by attribute will be required as with the lexicographic decision rule. Considering the example in Table 3.4, if the consumer set the minimum acceptable values for taste and price as "excellent" and "very good" respectively, Brand A would once again be chosen. If, however, the cut-off for taste was lowered to "very good" and the cut-off for price was raised to "excellent", Brand C would be the selected choice.

C)   Conjunctive decision rule

Cut-offs are prominent with the conjunctive decision rule, where the consumer will establish cut-offs for each salient attribute. With this rule, in contrast to the two rules discussed before, each brand will be compared individually against the set cut-offs, thereby resulting in processing by brand (Sheth et al., 1999: 538; Solomon, 1996: 280 and Engel et al., 1995: 224).

According to the conjunctive decision rule a brand will be chosen if it meets the cut-offs for all the attributes. If the brand fails on any of the cut-offs, it will be rejected. If none of the brands meet the required cut-offs, the consumer has to postpone choice, select a different decision rule or lower the set cut-offs.

D)   Disjunctive Decision Rule

According to Schiffman & Kanuk (1997: 577) and Mowen (1993: 431), the disjunctive decision rule is a "mirror image" of the conjunctive rule, where the consumer will set a minimal acceptable level as cut-off point for each attribute (which may be higher than that for the conjunctive rule). If a brand meets or

exceeds any of the established cut-off points for any one attribute, it will be accepted.

If a number of alternatives meet or exceed the cut-off point, the consumer will either apply a different decision rule or accept the first satisfactory brand as the final choice.

Considering the example in Table 3.4, if a consumer requires that a brand at least had to receive a rating of "good" on all the attributes, Brand B will be selected. Brand A will be rejected because of a "fair" rating for convenience, Brand C for a "poor" rating on nutrition and Brand D for a "fair" rating on price.

3.5.4.2   Compensatory decision rules

It will be noticed from the decision rules discussed above, when applied to the example in Table 3.4, that Brand D was never selected although it had an "excellent" rating on three of the four salient attributes (including the most important attribute). The reason why Brand D was never selected is based on a "fair" rating for price, showing the primary characteristic of non-compensatory decision rules, where an unacceptable rating on one attribute cannot be offset against an otherwise excellent performance.

In contrast to non-compensatory decision rules, compensatory decision rules permit that the perceived weakness of one attribute may be offset (or compensated for) by the strength of another attribute (Engel et al., 1995: 224).

Two different types of compensatory rules are distinguished, namely the simple additive and the weighted additive rules.

The **simple additive decision rule** implies that the consumer will simply count the number of times each alternative is judged favourably in terms of salient

evaluative criteria. The attribute with the most positive attributes will be chosen. By using the **weighted additive decision rule**, consumers will engage in a more refined judgement about the performance of attributes rather than simply deciding whether it is favourable or unfavourable. The relative salience of relevant evaluation criteria will, therefore, also be incorporated into the decision rule. Engel et al. (1995: 225) also state that the weighted additive decision rule is equivalent to multi-attribute attitude models, for example the Fishbein model.

Peter & Olson (1994: 164 – 165) are of the opinion that this form of compensatory rule is considered a multi-attribute model, since a negative consequence can be compensated by a positive consequence. The Fishbein model can briefly be explained by first representing it symbolically (Sheth et al., 1999: 409 and Engel et al., 1995: 269):

$$A_o = \sum_{i=1}^{n} b_i e_i$$

Where:

A_o = attitude towards the object,

b_i = the strength of the belief that the object has attribute i,

e_i = the evaluation of attribute i, and

n = the number of salient attributes

The Fishbein model proposes that attitude towards a product is based on the summed beliefs about the product's attributes weighted by the evaluation of these attributes.

The discussion on decision rules is concluded by Engel et al. (1995: 269) stating that it should be noted that consumers could involve the sequential use of at least two different decision rules, called a **phased decision strategy**. Mowen (1993: 435) supports this view by explaining that the consumer can either

sequentially use two non-compensatory decision rules or alternatively use a non-compensatory rule, followed by a compensatory rule. Engel et al. (1995: 225) explain that this would occur as a means of coping with many different choice alternatives. Phased decision strategies, therefore, typically consist of a two-phased process, where the consumer will at the initial stage use one type of rule as a screening device to narrow the choice set to a more manageable number. A final choice is then made by applying a second decision rule to the remaining choice alternatives.

According to Engel et al. (1995: 225), consumers can also retrieve a decision rule from memory as experience accumulates in making choices. If consumers lack such experience, they can construct their own decision rule at the time of choice by using "fragments" of rules available in memory that can accommodate the decision situation, called **constructive decision rules**.

A special type of decision rule identified by Engel et al. (1995: 225) is **affect referral**. According to this rule, consumers have previously formed attitudes towards each choice alternative, therefore retrieving these attitudes from memory rather than judging alternatives on various evaluative criteria. The alternative having the most favourable attitude will be chosen, implying that attitude serves as the only evaluative criteria used to determine the choice alternative. Schiffman & Kanuk (1997: 579) view this decision rule as most probably the most simplistic of all decision rules.

3.6   PURCHASE AND ITS OUTCOMES

Purchase forms the fourth stage of the decision-making process. This section will cover purchase together with the outcomes thereof (stages five, six and seven of the decision-making process). Figure 3.13 depicts purchase and its outcomes (consumption, post-purchase evaluation and divestment).

FIGURE 3.13: PURCHASE AND ITS OUTCOMES

Source: Engel et al. (1995: 154)
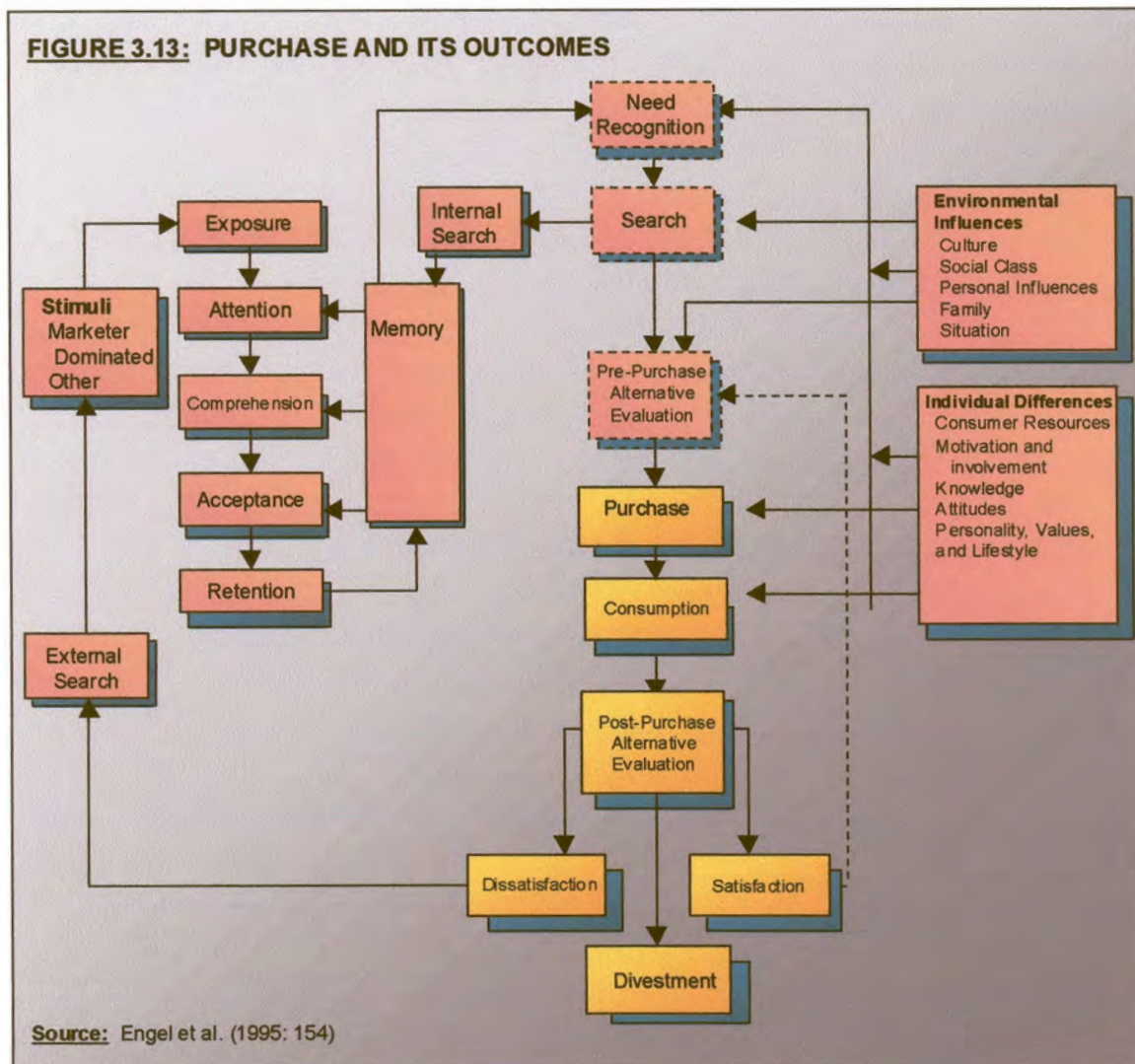
According to Engel et al. (1995: 236) the consumer has to decide during the purchase stage whether to buy, when to buy, what to buy, where to buy and how to pay. The decision whether to purchase implies that the intention to purchase is not always fulfilled, since consumers can abort the process at this point. Examples of factors that could have an influence on whether or not to purchase include changes in motivation and circumstances, new information and unavailability of the chosen alternative.

Changing motivations can have an influence on whether a product is purchased, for instance when a need is fulfilled in other ways or new needs become

dominant. Likewise, changes in circumstances (for instance a shortage of financial resources) can lead to the postponement of a purchase decision.

Timing of a purchase is also a consideration, for instance, the purchase of a heater will most probably accompany the arrival of winter or milk will only be purchased once current stock is depleted. Purchase intentions are often left open-ended, thereby necessitating further information search on which alternative to select. In addition to the above, the consumer has to decide where to purchase, selecting from a number of different outlets available, for example a retail store, wholesaler, manufacturer or in-house shopping. Assael (1995: 95) explain that the store selection in itself may require a decision-making process. Finally, the consumer has to decide how to pay for the intended purchase.

Engel et al. (1995: 238 – 239) continue by explaining that three categories of consumer purchase intentions, following pre-purchase alternative evaluation, can be distinguished, namely fully planned, partially planned and unplanned purchases.

Fully planned purchase intentions imply that the consumer knows exactly what to purchase and is willing to shop until it is found. Fully planned purchase intentions are often the outcome of high involvement and extended decision-making, where the consumer chose the product and brand in advance. Lower involvement purchases can also be fully planned, where the consumer decided on the product and brand and will therefore simply scan the shelves for the chosen product when visiting the store.

With **partially planned** intentions to purchase, consumers select the specific product to be purchased but the specific brand will only be selected at the point of sale. The consumer could, therefore, apply a simple decision rule by selecting the cheapest brand or a familiar brand. For example, a consumer who has recognised the need for aspirin may, once confronted in-store by a shelf

displaying multiple product options, purchase Disprin based purely on recognition.

Unplanned purchases represent impulse purchases where product displays in mass merchandising stores act as a surrogate shopping list. As discussed earlier, this does not imply that the decision-making process does not exist, since the in-store display trigger need recognition, leading to purchase.

In addition to the above, Schiffman & Kanuk (1995: 581) distinguish three different types of purchases, namely trial purchases, repeat purchases and long-term commitment purchases. A **trial purchase** constitutes the purchase of quantities smaller than usual, normally by first time buyers. A trial can therefore be seen as the exploratory phase of purchase behaviour where the consumer will attempt to evaluate the product by using it. For example, a consumer would try new toothpaste by purchasing a 35 ml tube instead of 75 ml (the usual size purchased). Consumers can also be encouraged by marketers to try new products by offering free samples, discount coupons and reduced prices.

If the trial product is perceived to be more satisfactory or better than other brands, the consumer is likely to repeat the purchase. **Repeat purchases** are closely related to brand loyalty and consumers will, unlike with trial purchases, purchase larger quantities based on satisfaction with the use thereof. Considering the toothpaste example, the consumer will purchase a 75 ml tube instead of 35 ml as was done with the trial purchase.

Trial purchases are, however, not always feasible and consumers have to move directly from evaluation to a long-term commitment through purchase, for example when purchasing a refrigerator, hi-fi or hairdryer.

Before addressing the actual shopping environment, the different types of shoppers need to be identified. Solomon (1996: 315) identifies five different shopping types, namely:

- the **economic consumer** (a rational, goal-oriented shopper wishing to maximise value for money);
- the **personalised consumer** (a person with strong attachments to the store personnel – shop where the person is known by name);
- the **ethical consumer** (a shopper that will support locally-owned stores rather than large supermarket chains);
- the **apathetic consumer** (one who does not enjoy shopping but sees it as a necessary chore); and
- the **recreational shopper** (a person who loves shopping and views it as fun and a social activity).

The purchase environment fulfils an important role in the purchase process, since many factors influence where consumers will purchase their selected products. Factors influencing the retail outlet selection include the store image, retail advertising and outlet location and size.

The outlet's **image** comprises a number of different dimensions and components. The importance of listing the dimensions influencing store image in Table 3.6 below is that all of these factors may have an influence on whether or not a consumer will purchase at a specific store, i.e. consumers will purchase products from outlets based on the image of these outlets.

These image-determining dimensions are listed in Table 3.5, indicating both the dimension and its components.

TABLE 3.5: DIMENSIONS AND COMPONENTS OF STORE IMAGE

Dimension	Component(s)
Merchandise	Quality, selection, style and price
Service	Lay-away plan, sales personnel, easy return, credit and delivery
Clientele	Customers
Physical facilities	Cleanliness, store layout, shopping ease and attractiveness
Convenience	Location and parking
Promotion	Advertising
Store atmosphere	Congeniality, fun, excitement, comfort
Institutional	Store reputation
Post-transaction	Satisfaction

Source: Adapted from Hawkins et al. (1995: 490)

Note that the listed dimensions are most probably only applicable (or a number of them) to physical stores. Image for other types of retail outlets, for example telesales (out-bound and in-bound call centres), will be determined by other factors. For example the image of a telesales outlet will be influenced by whether or not a toll-free number is provided (0800 – where the called party pays for the call), busy call attempts and 24-hour availability.

Retail advertising and promotion influence the consumer's choice of store selection by communicating its attributes to consumers. Of particular importance is advertising of prices (Levy & Weitz, 2001: 25-26). From a consumer point of view, an advertisement communicating a special price for a product, which the consumer has selected as the preferred alternative, may result in the consumer purchasing the selected item form the retailer advertising the special offer. Hawkins et al. (1995: 492) explain that consumers could possibly, when responding to the advertisement, also purchase other products (referred to as spill-over sales) in addition to the product on special promotion.

The **location** of the outlet plays an important role in consumer store selection, since consumers will most probably select the outlet closest to them if all other

considerations are equal. Similarly, unless fast service or convenience is required, consumers will probably select larger **sized** stores than smaller stores. Worth mentioning is that other internal factors of the store could determine the store selection. These factors include the store atmospherics, point-of-sale material, displays and sales people. Hawkins et al. (1995: 503) clarify store atmospherics by stating that it comprises, amongst other attributes, lighting, presentation of merchandise, layout, fixtures, colours, sounds, odours, appearance and behaviour of sales people and even the number, characteristics and behaviour of other consumers.

To conclude the discussion on purchase, it is important to include the physical act of purchasing in addition to factors consumers consider when purchasing products and services. Hawkins et al. (1995: 506) explain that once the brand and store has been selected, the consumer has to conclude the transaction, which is called the "purchasing" of the product. Dunne & Lusche (1999: 98) explain that the consumer can negotiate with the seller, apply for credit if necessary and determine the terms of payment (cash, credit offered by the seller or credit card) during the transaction process.

According to Hawkins et al. (1995: 506), credit is not only a means of purchase but also a product itself. A consumer intending to purchase an expensive item could, therefore, recognise a need for credit. Since many different forms of credit are available, the consumer may repeat the decision-making process for this identified need.

Dunne & Lusch (1999: 98) note that unexpected factors can intervene during the transaction phase that could influence the decision whether or not to proceed with the intended purchase. For example, the consumer can become aware of unanticipated costs, such as taxes and delivery costs.

3.6.1 Consumption

Consumption normally follows the act of purchase, where the consumer needs to decide how to consume the purchased product. It should be mentioned that authors such as Belch & Belch (2001: 107); Hawkins et al. (1995: 628); and Assael (1995: 81), unlike Engel et al. (1995: 263), do not include consumption as a specific stage in their discussions on the decision-making process.

Engel et al. (1995: 263), however, continue with the discussion of their process by stating that the consumer has several consumption options, including usage at the earliest convenience, short-term storage in anticipation of later use, long-term storage with no anticipated or specific use in mind or aborting the consumption process. As an example of the last option, the consumer may have been retrenched at work, the family could possibly disagree on the purchase choice or new information could suggest that the choice is inappropriate. In any of the above cases, the consumer would attempt to return the purchased product for either a refund or exchange it for a different alternative.

One well-known result from purchase is cognitive dissonance (post-purchase or buyers regret), where consumers have doubts whether they made the right choice or not. Cognitive dissonance can also lead to the consumption process being aborted. Hawkins et al. (1995: 514) explain that cognitive dissonance occurs when the consumer has to make a relatively permanent commitment to a chosen alternative, while other alternatives with attractive features are not chosen. Engel et al. (1995: 264) note four circumstances that can activate cognitive dissonance. Firstly, a certain threshold or dissonance-motivated tension is surpassed. Secondly, the action is irrevocable. Thirdly, there may be other, unchosen alternatives, with qualitatively dissimilar but desirable attributes. Finally, the choice was made by free will, implying that the consumer was not constrained by social or parental pressure.

According to Engel et al. (1995: 264), consumers experiencing cognitive dissonance have one of two options to reduce the dissonance. They can either confirm the choice or conclude that an unwise decision has been made. Confirmation of the correct choice can be achieved through search of supporting information. Schiffman & Kanuk (1997: 582) add two additional strategies that consumers can follow to reduce the dissonance, namely persuading friends or neighbours to purchase the same brand or turning to other satisfied owners for reassurance. Assael (1995: 96) lists a final method of choice confirmation, namely that consumers can lower their expectations for the performance of the product, for example finding the product acceptable although a few problems were experienced.

3.6.2 Post-purchase alternative evaluation

Engel et al. (1995: 273) are of the opinion that the consumer decision-making process does not cease once the product has been purchased and consumed. Schiffman & Kanuk (1997: 582) support this view by explaining that consumers will, when performing a post-purchase evaluation, judge their experience from purchasing and consuming the product against their expectations.

It is important to note that, for many products, there are two different dimensions for product performance, namely instrumental and symbolic or expressive performance. Hawkins et al. (1995: 522) explain that instrumental performance relates to the physical functioning of the product. In contrast, symbolic performance refers to the aesthetic or image-enhancement performance. Consumers will, therefore, evaluate the chosen product on these dimensions against their expectations.

According to Engel et al. (1995: 273), post-purchase alternative evaluation takes one of two forms - consumer satisfaction or dissatisfaction.

Engel et al. (1995: 275) broaden this view with the so-called expectancy disconfirmation model, suggesting that satisfaction or dissatisfaction is the outcome of a comparison between pre-purchase product expectations and actual outcomes. Consumers, therefore, purchase a product with certain expectations of how it will actually perform once it is used. Three categories of expectations are distinguished, namely **equitable performance** (a normative judgment reflecting the performance the consumer should receive given the cost and efforts devoted to purchase and use), **ideal performance** (representing the optimum or hoped-for "ideal" performance level), and **expected performance** (what the performance probably will be). The expected performance is used most often by consumers in arriving at satisfaction or dissatisfaction, since that is the logical outcome of the pre-purchase alternative evaluation process.

Schiffman & Kanuk (1997: 582) and Engel et al. (1995: 275) note that consumer satisfaction or dissatisfaction judgements take one of three different forms, namely **positive disconfirmation** (performance is better than expected), **simple confirmation** (performance equals expectations) and **negative disconfirmation** (performance is worse than expected). Schiffman & Kanuk (1997: 582) explain that simple confirmation, where actual performance matches expectations, will lead to neutral feelings.

Before discussing satisfaction and dissatisfaction, it is important to note the view of Simintiras, Diamantopoulos & Ferriday (1997: 857 – 872) and Assael (1995: 95) on the importance of post-purchase evaluations. The likelihood of a brand being repurchased at this stage depends on the decision-making process. As will be seen below, dissatisfaction will lead to a negative consumer response, directly influencing any loyalty for the product and future potential repurchase thereof.

3.6.2.1   Satisfaction

Engel et al. (1995: 273) are of the opinion that consumers hold certain expectations about what a product or service will do when it is purchased, with satisfaction being the hoped-for outcome.

Engel et al. (1995: 273) continue by defining satisfaction as: "... a post-consumption evaluation that a chosen alternative at least meets or exceeds expectations". In short, satisfaction implies that the product has performed at least as well as the consumer has hoped for.

Considering the three different forms of consumer satisfaction or dissatisfaction judgements listed above, it can be concluded that positive disconfirmation will lead to a satisfaction response.

Assael (1995: 95) indicates that an important outcome of consumer satisfaction is that it reinforces the purchase decision. Satisfaction also reinforces a positive attitude towards the brand, resulting in a greater likelihood that the consumer will repurchase the same brand.

3.6.2.2   Dissatisfaction

Engel et al. (1995: G-5) explain dissatisfaction by defining it as: "the outcome of purchase when the consumer perceives the choice as falling short of expectations".

Considering the three different forms of consumer satisfaction or dissatisfaction judgements listed above, it can be concluded that negative disconfirmation will lead to a dissatisfied response. Engel et al. (1995: 275) state that the negative disconfirmation represents the worst possible outcome from purchasing and consuming a product.

According to Hawkins et al. (1995: 523), consumers that are dissatisfied with their purchased product have to decide whether to take some sort of action or not.

By taking some action, consumers can respond to dissatisfaction in a number of ways. Singh (in Engel et al., 1995: 276) lists three different categories of **complaints**, namely voice responses (the consumer seeks redress from the seller), private responses (negative word-of-mouth communications) and third-party responses (the consumer takes legal action). Hawkins et al. (1995: 523) add two more possible responses, namely complaining to private or government agencies (for example Isabel Jones' Fair Deal) or simply no longer buying the product.

Hawkins et al. (1995: 523) note that an important consideration with dissatisfaction responses is that even if the consumer does not take any external action, a less favourable attitude towards the store or product will be formed.

3.6.3 Divestment

Divestment forms the last outcome of purchase and the final stage to the consumer decision-making process. Hawkins et al. (1995: 517) explain that divestment or disposition of a product or the packaging or container thereof could occur before, during or after product use.

According to Engel et al. (1995: 282), three methods of product divestment are distinguished, namely outright disposal, recycling and re-marketing. Hawkins et al. (1995: 517) add that consumers often do not have to consider divestment of a product, since it is completely consumed, for example, eating in a restaurant or simply eating an ice cream with its cone.

All products have to be **disposed** of even if the disposal thereof follows years after the use thereof. Examples of immediate disposal of products include empty ballpoint pens, torn and washed-out jeans and a used toothbrush. Disposal of products characterised by being used for many years before actual disposal, include a television set that cannot be fixed after years of service, books and motor vehicles. Peter & Olson (1994: 325) add by stating that consumers can also dispose of products by giving them away to others or donating items to charity.

Products are often **recycled** when they reach the end of their life-cycle. Products or product packaging that are often recycled commonly contain some or all of the following: metal, aluminium, glass, paper and plastics. Peter & Olson (1994: 325) explain that consumers could decide to recycle a product once it has been used, although it could simply be disposed of as garbage, based on concerns for the environment.

Consumers also have the option to **resell** products once they have been used. For example: selling a power drill, exercise equipment or a used motor vehicle by advertising them in the Junk Mail, under classifieds in newspapers or on billboards at community centres or churches or selling them at flea markets.

It can be derived from the brief discussion on divestment, that consumers can choose from a number of options to divest products once they have been used. Products, therefore, often have extended life-cycles through re-use by consumers once they have been disposed of in some way or another by the original consumer.

3.7   SUMMARY

Chapter 3 focused on the consumer decision-making process.   The chapter commenced with a discussion on different types of consumer decision-making processes, varying on a continuum from extended decision-making to habitual decision-making. Three factors determining the extent of decision-making were identified, namely the degree of involvement of the consumer in the purchase, differentiation of alternatives and time available for deliberation.

This was followed by a detailed discussion on the different stages of the decision-making process, namely need recognition, search, pre-purchase alternative evaluation and purchase and its outcomes (including consumption, post-purchase alternative evaluation and divestment).

Chapter 3 also considered the influence of individual differences and environmental influences on the consumer decision-making process. Environmental influences considered the manner in which the components thereof, namely culture, social class, personal influences, family and situational influences, influence consumer decision-making.   Individual differences, comprising consumer resources, motivation and involvement, knowledge, attitude and personality, values and life-style, together with their influence on the decision-making process were also considered as possible influences on the decision-making process..

Chapter 4 will focus on the influence of the Internet on consumer decision-making by considering how the Internet can assist the consumer at different stages of the decision-making process.

CHAPTER 4

THE INFLUENCE OF THE INTERNET ON CONSUMER DECISION-MAKING

4.1 INTRODUCTION

The consumer decision-making process was discussed in detail in Chapter 3, showing how environmental influences and individual differences influence various stages of the process. The different stages of the process were discussed together with important considerations during each stage.

Chapter 4 will focus on the Internet as an additional information and purchase channel to consumers. Particular emphasis will be placed on information search on the Internet as well as the manner in which the Internet can assist the consumer in the alternative evaluation stage of the decision-making process.

Chapter 4 will be structured by using a suggested Web-based decision-making process as a framework for discussion.

4.2 CONSUMER DECISION-MAKING AND THE NATURE OF THE INTERNET

Consumer behaviour theory and more specifically consumer decision-making theory focuses on more "traditional", non-Internet-based, consumer decision-making. The need is, therefore, highlighted for marketers to understand consumer behaviour and consumer decision-making in an Internet environment to be successful in this ever-growing and popular medium. Sultan & Henrichs (2000: 386 – 402) support the view that as more advanced technologies enter

the household domain, it becomes increasingly important to understand consumer response to these new technologies.

Before considering the Internet and its possible influence on consumer decision-making, it is important to highlight some shared characteristics and differences between the Internet and the traditional market place.

Phau & Poon (2000: 102 – 113) express the opinion that the Internet, as a marketing channel, has unique but also shared characteristics of other marketing channels. As an example, the Internet has the ability to store a large volume of information, located at different virtual locations that provides information to the consumer on demand. The Internet also has the advantage of a physical distribution medium for certain goods, for example computer software, with relatively low entry and establishment costs to the seller. Jones & Vijayasarathy (1998: 322 – 330) support this view by stating that by offering these kinds of products, sellers can offer instant gratification to consumers through accelerated distribution via the Internet.

Grönroos, Heinonen, Isoniemi & Lindholm (2000: 243 – 252) note a number of differences between the traditional and the virtual (Internet-based) market place. In the virtual market place (market space), the nature of a transaction centres around information regarding goods and services as opposed to the actual goods and services in the traditional market place. The content of a transaction is also electronic, on-screen interactions instead of face-to-face interactions. The final difference is that the infrastructure enabling a transaction in the virtual market place consists of computers and communication lines, whereas physical stores and service organisations characterise the traditional market place. Hanson (2000: 94) adds to the above by stating that interactions on the Internet are important considerations, since they create consumer value and set the stage for relationship building.

The Internet can most probably be viewed as an additional sales channel and information search medium (and information source) that consumers can consider when purchasing products and services. Rowley (2000a: 20 – 35) supports this statement by expressing the opinion that e-retailing will establish itself as an alternative channel alongside traditional shopping.

Therefore, from a consumer purchasing point of view consumers need to choose between different outlets to purchase a product or service from. Phau & Poon (2000: 102 – 113) explain that a number of factors influence the choice between a retail store and in-home shopping methods, such as mail order, telephone order and the Internet. These influences include socio-economic and demographic factors, product type and distribution methods, perceived purchase risk, personal characteristics and traits as well as shopping or delivery time.

Other possible factors influencing the channel selection include confrontation and contact control, manufacturer or brand reputation, type and source of the offer and price and refund or exchange policies. Phau & Poon (2000: 102 – 113) suggest that when in-house shopping is extended to Internet shopping malls, the listed factors will become more apparent.

As indicated above, the Internet may highlight factors influencing and affecting consumer decision-making. Chapter 3 indicated that various stages of the consumer decision-making process are influenced by environmental influences and individual differences. Research regarding Internet users emphasises and highlights these influences and supports the view that such influences need t1o be considered to be able to understand consumer differences before attempting to draft strategies to sell products and services to consumers through the Internet.

Research findings regarding Internet users highlight some of the individual differences and environmental influences, showing the importance of

understanding not only the "traditional" consumer, but also the Internet consumer. Examples of the influence of age, gender, education, consumer experiences and word-of-mouth are discussed below.

Trocchia & Janda (2000: 605 – 616) mention a valid limiting factor associated with **age**, namely that older individuals often suffer from physical disabilities. This limiting factor does not however, necessarily deter Internet usage by older individuals, since the Internet provides access to activities that were once thought formidable for those individuals who suffer from impaired mobility. Older individuals could therefore possibly represent an opportunity to Internet marketers due to their higher levels of free time and discretionary income when compared to younger individuals.

Gender differences also need to be considered. Teo (2001: 125 – 137) notes that, in the context of the Internet, users are predominantly males and men take faster to the Internet than women. A research study conducted by Teo (2001: 125 – 137) found that males are more likely to engage in downloading and purchasing on the Internet than females. Younger Internet users also tend to engage in messaging and downloading activities to a greater extent than older users.

In addition to age and gender, Hanson (2000: 117) provides a valuable perspective on **education** by stating that, after income, it forms the most important demographic variable determining Internet usage, since education enables users to operate and appreciate computers and the Internet. Research findings by Teo (2001: 125 – 137) suggest that education level seems to have very little effect on messaging, downloading and purchasing activities on the Internet, probably because the Internet has diffused widely to various sectors of society.

Grönroos et al. (2000: 243 – 252) continue by stating that the quality of **consumers' experiences** from interacting with the Web is also important, since the Internet provides a new forum for **word-of-mouth communication** where consumers can seek advice and discuss purchase suggestions with other Internet users.

It should, however, be mentioned that far more of the fundamentals of marketing carry over to the Internet than need to be changed, since consumers relate to virtual information with many of the same traits and tendencies as they do to the physical world (Hanson; 2000: 104).

It is therefore important to consider that although the Internet could possibly highlight some individual differences and environmental influences, these factors (discussed in Chapter 3) would all appear to be valid to a lesser or greater extent to decision-making when purchasing via the Internet.

From the seller's point of view the Internet offers distinct advantages with regard to advertising. Prabhaker (2000: 158 – 171) suggests that the Internet, as an advertising medium, is able to provide truly relevant advertising to consumers. Grönroos et al. (2000: 243 – 252) support this view by explaining that the interactive nature of the Internet allows marketers to reach and interact with individual consumers, whereas traditional media are used in a mass-media environment.

The interactivity of a Website also enables marketers to create and maintain one-on-one dialogues with current and potential customers. This one-on-one dialogue is illustrated in Figure 4.1, showing the difference between traditional advertising and Internet interaction enabled through interaction on a Website.

FIGURE 4.1: **FROM BROADCAST TO DIALOGUE**

One-to-Many Broadcast
(same message to all)

Direct Targeting
(one direction,
different messages)

One-to-One Interactive
(unique messages to
individuals)
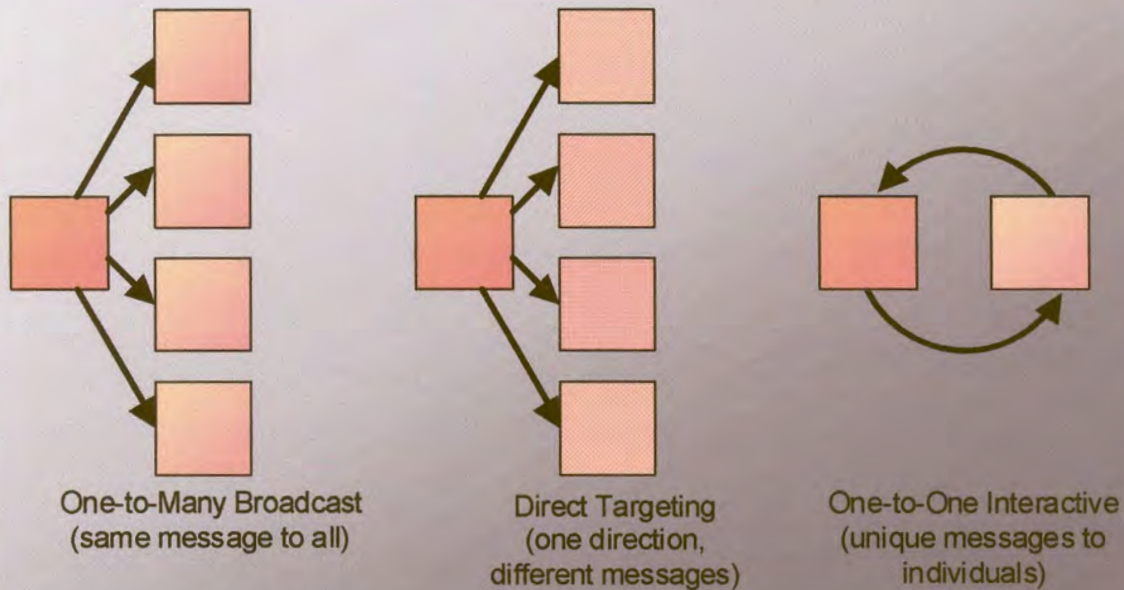
Source: Hanson (2000: 96)

From a marketing point of view, it is important to understand that not all consumers will migrate to the Internet as Internet users and consumers. Of particular importance is to understand what motivates consumers to adopt the Internet. Sultan & Henrichs (2000: 386 – 402) point out that those consumers who have not adopted the Internet for household use must decide whether they are going to use the Internet in the future. The decision to adopt the Internet is based on the need for Internet services and consumer perceptions of the usefulness thereof. According to Sultan & Henrichs (2000: 386 – 402), possible reasons for consumers not adopting the Internet can be attributed to the perception that the cost for adopting the Internet (in terms of money, time and effort to learn a new technology) may exceed the benefit of obtaining Internet access at home.

In addition to the above, Chapter 1 also listed a number of barriers in a South African context that will keep consumers from using the Internet and therefore becoming Internet consumers. These factors are the telecommunication monopoly, population distribution and the economic dichotomy (refer to Section 1.2.1 for a detailed discussion on these influences).

As noted above, the usefulness of the Internet is an important consideration to consumers when deciding to adopt the Internet. One possible way of determining its usefulness is to view the benefits that it offers to the consumer. For example, Prabhaker (2000: 158 – 171) expresses the opinion that the shrinking cost of information processing together with the global reach of the Internet guarantees higher quality and lower prices over time. Aldridge, Forcht & Pierson (1997: 161 - 169) support this view by stating that, for more conventional products, price will be important on the Internet since information on prices is so readily available.

Consumers can also benefit from a much wider selection of products to choose from since they are not bound to a certain selection of merchandise options as is the case with traditional channels. McQuitty & Peterson (2000: 233 – 248) support this view by explaining that Online shoppers can seek virtually any product at any time and from any location. Consumers who desire extraordinary value can find the best deals by knowing which Websites offer a given product and at what price. This is very similar to traditional shopping but the Internet provides consumers with an extraordinary search power, where a large number of Websites can be visited in a number of minutes, which is virtually impossible for traditional shoppers.

To illustrate: A consumer wants to select specific products and services together with the preferred outlets to purchase these from, draw statements and transfer money from one bank account to another and purchase a modem and personal computer software, groceries and books.

In the traditional market place, it will take this consumer the best part of a day to perform all these activities, requiring considerable effort to drive to all the outlets, find parking and incur costs in terms of petrol and parking (in addition to the time-cost element). The consumer can also experience frustration when outlets are out-of-stock , forcing him/her to find an alternative outlet. Even more important - all these activities can only be performed during business hours.

The consumer opting to use the Internet to perform these activities would most probably require only minutes to complete all the purchase activities. The consumer can log into a bank account (e.g. Absa.co.za or Standardbank.co.za) to draw statements and transfer funds (cheaper than it would have been in a physical bank), purchase a modem and software (download the software, therefore immediately available), order groceries (e.g. Inthebag.co.za or Picknpay.co.za) and purchase books (e.g. locally from Kalahari.net or internationally from Amazon.com). Of particular importance is that all these activities can be performed 24 hours a day, 365 days a year, thereby not restricting the consumer to business hours.

Although the Internet provides certain benefits to consumers, for example saving time and possibly lower prices and lower search costs, it increases the complexity of the decision process by adding another option to consider in addition to retail stores, mail order and telephone order (Strader & Shaw, 1999: 82 – 92).

Phau & Poon (2000: 102 – 113) are of the opinion that one of the limitations of the Internet is that it can realistically reproduce only two of a person's five senses, namely sight and sound. This limitation will, therefore, restrict the type of products that can be sold on the Internet. Despite this limitation, the capability offered may be sufficient for consumers to sample or experience certain categories of products, for example computer software and music.

In addition to the above, the illustration earlier indicates benefits to the consumer in terms of time saving and reduced costs in acquiring the products and services (for example time, petrol and parking costs). A negative aspect associated with Internet buying can also be derived from the example, namely that certain products can be purchased (or ordered), but not immediately received. For example, in the illustration the consumer purchased groceries and books. These products, although purchased, will not reach the consumer immediately.

From the discussion above can be concluded that although the Internet holds a number of benefits to the consumer it has certain limitations. The limitations, if not addressed, can directly influence whether or not consumers will use the Internet as an alternative shopping channel. It is therefore extremely important to understand the consumer decision-making process when considering the impact of the Internet as both an information source (aiding the consumer in the search process) and purchase channel.

4.3 THE CONSUMER DECISION-MAKING PROCESS IN THE INTERNET CONTEXT

The discussion on the consumer decision-making process detailed in Chapter 3 identified a number of distinct stages that are followed from need recognition to divestment. Chapter 3 also suggested that many of the stages of the decision-making process are often combined, especially when considering different types of decision-making processes.

This section will investigate certain stages of the consumer decision-making process in the Internet context, considering the manner in which the Internet can influence the traditional decision-making process. It must be noted that the Internet in this context implies specifically the World Wide Web (WWW), also called the Web. The discussion that follows will be structured on a suggested Web-based consumer decision-making model proposed by Windham & Orton

(2000: 79 – 101), used as a framework for this section. The model is illustrated below.

FIGURE 4.2: AN INTERNET MODEL FOR CONSUMER DECISION-MAKING

CONFIDENCE BUILDING

Consumer Behaviour:
Learn about alternatives and become sure of action

Merchant Goal:
- Raise awareness
- Build credibility
- Create trust

WAR

Consumer Behaviour:
Buy more

Merchant Goal:
- Customer retention
- Identify and consistently deliver value
- Remain competitive

SKIRMISH

Consumer Behaviour:
Purchase for the first time

Merchant Goal:
- Customer acquisition
- Close the deal
- Deliver the value
- Ensure satisfaction

Source: Windham & Orton (2000: 82)

According to Windham & Orton (2000: 81), the consumer decision-making process on the Web is similar to the traditional decision-making model in the

sense that consumers are generally the same with the same amount of money available for purchases. In the Web context, in contrast to the traditional model, the decision-making process becomes more compressed because of the readily available information. The stages of the traditional decision-making model are, therefore, compressed into fewer phases as different stages blend together.

As can be seen from Figure 4.2, Windham & Orton (2000: 82) identify three phases for Web-based consumer decision-making processes, namely Confidence Building, Skirmish and War. During the Confidence Building phase the consumer will become aware and learn about alternatives and become sure of what action should follow. The Skirmish phase suggests that consumers will purchase for the first time, whereas the War phase implies that consumers will engage in repeat purchases.

The proposed model suggests some goals to be achieved by Internet merchants. During the first phase of the process, the merchant attempts to raise awareness, build credibility and create trust. During the Skirmish phase, the goals merchants would like to achieve are consumer acquisition, closing the deal, deliver value and ensure satisfaction. Finally, during the War phase, the merchant wishes to retain consumers, identify and consistently deliver value and remain competitive.

The three phases of the Web-based consumer decision-making process will be discussed in greater detail below. It should be noted that the terminology used to describe the three identified phases are, arguably, more applicable to the seller than the consumer. Windham & Orton (2000: 81 – 101) refer, however, to a Web-based consumer decision-making process rather than the seller's view of the three phases in which consumer decision-making falls.

Important to note is that, when discussing possible influences of the Internet on consumer decision-making, other authors (for example Blackwell et al. 2001: 147-148; Kolesar & Galbraith, 2000: 424 – 438 and Rowley, 2000a: 20 – 35)

refer to and discuss the traditional theory and do not make any distinction between theory on the traditional decision-making process and the decision-making model applicable to the Internet. These authors, therefore, view the identified stages of the decision-making process as the same for both traditional and Internet consumers, highlighting either the differences or the manner in which the Internet simplifies or complicates the specific stages of the decision-making process.

The provided classification of the Web-based model will therefore be used as a framework to discuss elements identified in the traditional consumer decision-making model, applied to the Internet consumer. The framework used will, if nothing else, provide clarity on how the decision-making process can be influenced from a Web perspective.

4.3.1 The Confidence Building phase

The Confidence Building phase of the decision-making process proposed by Windham & Orton (2000: 90) comprises need recognition, search and the selection of choice alternatives. According to Rowley (2000a: 20 – 35), consumers may identify an understanding of a need and redefine the need as more information is obtained through search. From a Web perspective, consumers first have to "find" the seller of the products they have identified a need for.

As seen from the traditional decision-making model, need recognition is influenced, among others, by advertisements and articles and word-of-mouth communication with friends and relatives. These influences are also of importance in identifying the seller's site on the Web, together with other considerations only applicable to the Web, for example search engines and links.

Figure 4.3 below indicates the most important ways in which consumers become aware of a seller's Website.

FIGURE 4.3: METHODS OF BECOMING AWARE OF A SELLER'S WEBSITE
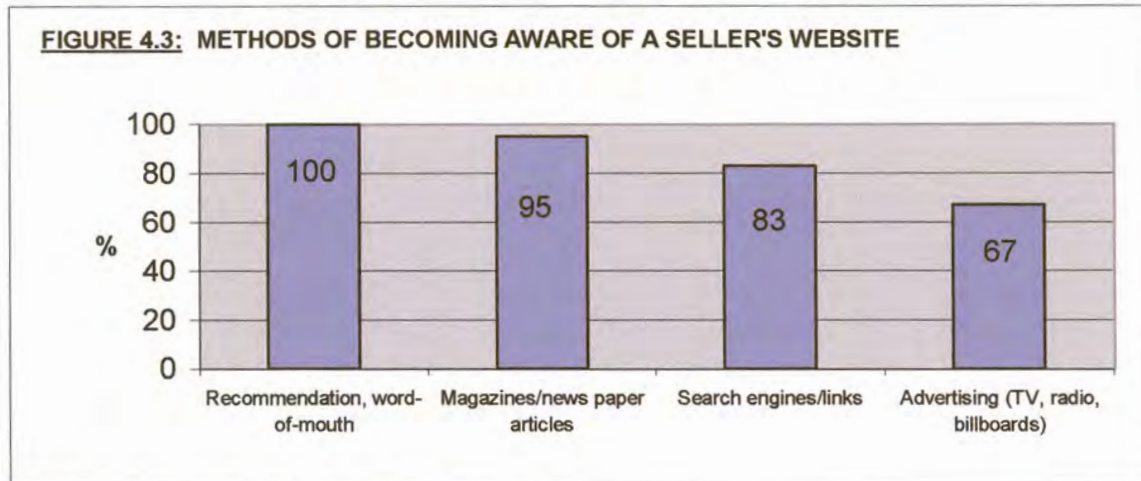
Source: Windham & Orton (2000: 83)

It can be seen from Figure 4.3 that word-of-mouth plays the most prominent role in finding the seller's Website. From a South African perspective, research findings by BMI (2000: 71) showed that word-of-mouth recommendations were the second most prominent method of site identification, following browsing the Net. Windham & Orton (2000: 83) attribute the importance of word-of-mouth as method of site identification to the credibility and trustworthiness of the source (supporting the discussion in Chapter 3 on word-of-mouth). The four sources identified in Figure 4.3 yield the most power in building the consumer's confidence.

Following initial awareness, the consumer has to actively "consider" the site by searching for it, finding it and confirming the validity of the site's existence. The validation, that is if the consumer did not have the benefit of a direct reference from a trustworthy source, is obtained through reviews on the site, discussing the site with others in "chat rooms" and user groups or searching for articles regarding the site in the media.

A unique aspect of this phase of the Web-based decision-making process is that all of the above can occur very quickly. This is clear, especially when compared to traditional methods of finding a seller, visiting the store to establish the credibility thereof and obtaining views regarding the seller from other consumers. Personal references from friends and family are also simplified since links can be e-mailed to consumers or friends can send messages from the actual site, a feature offered by many sites during the purchase process.

While in the Confidence Building phase, consumers will evaluate different sites by comparing different products, prices and special offers. By ensuring that complete information is provided on different products together with compelling offers, marketers can convince consumers to purchase their product offering. The evaluation process is simplified on the Web through reviews of not only the site but also products offered. Consumers can, therefore, be assisted in the evaluation process by searching for reviews or discussing the alternatives with others in "chat rooms" and discussion groups.

In conclusion: marketers wishing to establish such confidence in consumers have to make a considerable investment in marketing strategies and promotions to not only make the consumer aware of the sales offerings and the site where it can be found, but also to get consumers to visit the site and actively interact with it.

Before considering the second phase (Skirmish), a more in-depth discussion on the search component is essential to understand the impact of information search on the Internet, especially when considering information search with "traditional", non-Internet-based purchases. In addition to search, the possibilities of alternative evaluation by means of the Internet will be discussed to show how the Internet can assist the consumer during this stage of the decision-making process.

4.3.1.1   The search stage of the consumer decision-making process

Before discussing the search stage in a Web-context, it should be mentioned that five different categories of Web visitors can be identified. The importance of noting these categories is that it will assist in forming an understanding of how different Internet users use the Internet to search for information.

Rowley (2000a: 20 – 35) and Breitenbach & Van Doren (1998: 558 – 575) identify five categories of Web visitors, namely direct information seekers, undirected information seekers (browsers), bargain hunters (browsers of a type), entertainment seekers and directed buyers (directed search with buying intentions). Direct information seekers desire services that include the availability of timely and relevant information on specific topics or events. Undirected information seekers like to browse, looking for anything of interest or something unexpected, while bargain hunters look for give-aways, such as samples or prizes.

Breitenbach & Van Doren (1998: 558 – 575) continue by explaining that entertainment seekers, as the name suggests, are looking for entertainment. This group of Web visitors like the ability to interact with a Website and features that interest them, including the availability of animation, sound clips, Online puzzles and games. The main objective of the final category, directed buyers, is to buy while they are Online and they may be looking for a specific item or gift idea.

One of the main competitive challenges of shopping on the Internet, according to Rowley (2000a: 20 – 35), is the functionality it offers in terms of information search, where product information can be collected and different products can be compared (from different sellers), possibly across national and currency boundaries. Rowley (2000a: 20 – 35) continues by stating that the Internet lowers the cost of search for alternative and substitute products in almost a

commodity-like bargaining atmosphere, resulting in greater price competition for relatively generic products.

Hanson (2000: 104) points out that despite this functionality, it can be very difficult to find information on the Internet. This statement is supported by Rowley (2000a: 20 – 35), noting that there are many instances where the first search through the use of a search term does not lead to a satisfactory outcome. The search could either deliver no results or alternatively a large number of sites may be retrieved. Although all the sources of the search may be listed in order of algorithm (supposed to cause the most relevant sources to be listed at the top of the search result), it may be difficult to locate the desired source amongst the listed retrieved sources. The outcome of such a search process will require the searcher to develop a search strategy, where a number of alternative search terms and a combination thereof will be used in an attempt to provide a satisfactory search outcome.

Before discussing different search strategies that can be followed by Internet users, it is important to note the different search tools that can support the Internet user with information search.

A)   Search tools

Watson et al. (2000: 127) note that since the search for information is not without sacrifice in terms of money and time, a number of search tools emerging on the Internet greatly facilitate searching. These tools range from a simple search facilitation to the actual negotiation of deals on behalf of the consumer. The benefits to the consumer using the available search tools on the Internet are that consumer costs of finding potential suppliers are reduced and the consumer can make product and price comparisons by using some of the tools.

Rowley (2000a: 20 – 35) explains that consumers therefore have to decide which search tool to use, since this choice will determine search outcomes in ways that

they would probably not recognise. Rowley (2000a: 20 – 35) continues by stating that the search tools that Internet shoppers may use to locate products fall into two categories, namely general purpose tools and specially designed tools. Examples of general purpose search tools include browsers and search engines. Specially designed tools include, for example, shopping bots.

Watson et al. (2000: 127) also states that more sophisticated tools (for example shopping bots and agents) will seek the lowest price for a selected product and even negotiate lower prices on behalf of the consumer. Different tools that facilitate consumer search on the Internet are listed in Table 4.1 together with the functions and examples thereof.

TABLE 4.1: TOOLS THAT FACILITATE CONSUMER SEARCH ON THE INTERNET

Type of tool	Functions	Examples
Search engine	Software that searches Websites by key word (s)	Lycos, Excite, AltaVista and Hotbot
Directory	A Website containing a hierarchically structured directory of Websites	Yahoo and Infoseek
Comparison site	A Website that enables comparisons of product/service category by attribute and price	CompareNet, a Website that lists comparative product information and prices
Shopbot	A program that shops the Web on the consumer's behalf and locates the best price for the sought product	Bots used by search engines Lycos and Excite
Intelligent agent	A software agent that will seek out prices and features and negotiate on price for a purchase	Kasbah, a bot being developed by MIT can negotiate, based on the price and time constraints provided

Source: Adapted from Watson et al. (2000: 128).

From the discussion it can be concluded that the Internet offers a number of search tools that can assist the Internet user to search for information. These search tools can, therefore, be used by Internet users to search for specific and

relevant information that is required. Search bots will be discussed in more detail when discussing the manner in which the Internet can support the consumer in the alternative evaluation process (Section 4.3.1.2).

B)   Search strategies

Rowley (2000a: 20 – 35) expresses the opinion that a spectrum of search strategies can be followed by Internet users, ranging from a search strategy designed to locate specific information (referred to as direct or purposeful searching) to an almost aimless or general browsing of the Web for "something interesting". Many searches can be positioned somewhere between these two extremes, since consumers not only refine the search strategy but also the information requirements as the search proceeds. The search could, therefore, commence with browsing and develop into a focused intended outcome.

Rowley (2000a: 20 – 35) points out that browsing is performed when the user has a less precise view of information that might be available and is not sure whether or not requirements will be met or how they will be met. In addition, browsing can either be general or purposive. General browsing may be used as an opportunity to refine the user's perceptions of their requirements or where the Internet user is simply keeping up to date with the latest developments in a specific field or product range. Purposive browsing occurs when the Internet user has fairly specific requirements.

Rowley (2000a: 20 – 35) lists three situations in which browsing is generally preferred to direct searching:

- the search objective cannot be clearly defined, often because the searcher has a lack of sufficient information to define it precisely;

- the cognitive burden, including what the user needs to know about how to search, is less than it may be for directed searching; and

- the system interface encourages browsing through the types of search facilities that it offers.

Rowley (2000a: 20 – 35) identifies four more specific search strategies, appropriate to different kinds of searches, Internet users can follow to search for information, namely briefsearch, building blocks, successive fractions and citation pearl-growing.

Briefsearch refers to a quick search, usually using a phrase to retrieve a few information sources only. This type of search may either provide sufficient information or can be collected through this process to be used as the basis for a subsequent search. Briefsearch, therefore, will not locate all the possible information sources.

Building blocks extend the original query by using the concepts obtained from the results to search for more information by using alternative terms that can be used to describe the concept or product. This can be done either systematically or only in respect to some concept or term. Building blocks is a more thorough search strategy but may prove to be very time consuming.

Successive fractions, the third search strategy, is used to reduce a large set of retrieved sources or sites by selecting from the set through additional searches, which narrows the search set down, therefore being more selective. If this search strategy is successful, there will be a greater number of relevant sites in the final set.

According to the **citation pearl-growing** search strategy, only one or a few sources or sites will be used to identify suitable search terms, followed by a

search using the identified terms. This method of search should, therefore, lead to other usable sites.

From the discussion above can be concluded that Internet users can adopt a number of search strategies that will assist with the search process. By using such search strategies, Internet users can search for more relevant information in a shorter time period, thereby reducing the cost element associated with the time used to search for information.

4.3.1.2 The Internet as support to the alternative evaluation process

The Internet can also assist the consumer in the alternative evaluation stage of the consumer decision-making process. This function is greatly simplified through shopping bots.

Rowley (2000b: 203 – 214) explains that shopping bots (short for robot) represent a specialised search bot designed to locate and compare products. Shopping bots use the Internet user's query, visit Internet shops (sites) which may have the required product, retrieves the information and present it in a consolidated and compact format that allows comparison shopping at a glance.

Rowley (2000b: 203 – 214) continues by stating that most shopping bots claim to eliminate the searching necessary to identify the right product at the best price. If the consumer is interested to purchase a product listed in the search result, the consumer can either click on the site name (providing additional information on the products available from the site) or click on "Buy", which will produce an order form. From here, the consumer can proceed to purchase.

From the discussion it can be derived that the Internet can shorten the consumer decision-making process by almost integrating various stages of the process. In stead of, after alternative evaluation, having to still visit a store or stores to

purchase the selected product (provided the alternative evaluation was not done in-store), the consumer can proceed to purchase the product with the click of a few buttons. Examples of shopping bots are listed in Table 4.2.

TABLE 4.2: EXAMPLES OF SHOPPING BOTS

Name of shopping bot	Product range
BargainBot	Books
Bargain Finder Agent	Music, CDs
Bid Smart	Auctions
Bottom Dollar	Eight product categories
Buyer's Index	Comprehensive
Computer Shopper	Computer and related products
Gift finder	Gifts
Jango	Comprehensive
MySimon	Comprehensive
NetMarket	Comprehensive
Planet Retail	Comprehensive
Price Scan	Computer hardware and software
Shopping explorer	Computer hardware and software
Premium shopping directory	Malls and stores

Source: Rowley (2000b: 203 – 214)

Table 4.2 above shows that there are a number of shopping bots that can assist in obtaining information on a wide variety of products. The results of searches by means of shopping bots can therefore drastically reduce the time and effort needed by the consumer to obtain comparable information.

In addition, the shopping bot will simplify the evaluation process by comparing all the products on the same attribute and provide the Internet user with the opportunity to obtain more information on specific products or the sellers thereof. The Internet user can also proceed to purchase the selected product within the same Internet session.

The function of a shopping bot in assisting the Internet consumer with the alternative evaluation process is illustrated in Figure 4.4.

FIGURE 4.4: STAGES IN PRODUCT SEARCH USING A SHOPPING BOT

Locate Shopping Bot

↓

Consumer specifies product search parameters

↓

Search performed by bot, and hits reported

↓

Consumer narrows or broadens search if necessary

↓

Consumer views product listing

↓

Consumer selects a product for further consideration

↓

Bot displays further product details for one or a few products

↓

Consumer chooses potential product

↓

Consumer orders product   Consumer clicks on link to e-retailer's Website

↓   ↓

                                 Consumer views product and related products
                                 on e-retailer's Website

Consumer tenders payment details

Source: Adapted from Rowley (2000b: 203 - 214)

From Figure 4.4 it can be seen that obtaining information through shopping bots seems very simplistic. Rowley (2000b: 203 – 214) cautions, however, against this assumption by stating that using a shopping bot requires more than simply typing a few keywords and waiting for the results. Consumers opting to use a shopping bot have to decide how to embed their use thereof together with the information that it provides into the decision-making process.

The illustration of the search process using shopping bots indicates the manner in which the Internet can shorten the purchasing process. By using a shopping

ersiteit van pretoria
ersity of pretoria
yunibesithi ya pretoria

bot as primary search tool, the consumer can rapidly move from search for information to evaluation of alternatives identified through the search, enabling the Internet consumer to purchase the selected alternative.

In conclusion to the usage and value of shopping bots in assisting consumers with the alternative evaluation process, Rowley (2000b: 203 – 214) states that although this search tool could possibly still produce hundreds of sources found in a search attempt, Internet shoppers will find shopping bots attractive if they prove to support them with Online purchasing.

4.3.2 The Skirmish phase

The Skirmish phase represents a combination of the result of the alternative evaluation process (deriving a chosen alternative) and the act of purchase. According to Windham & Orton (2000: 93), the term "Skirmish" was selected because in business-to-consumer e-business, convincing the consumer to purchase for the first time is only a preliminary competitive conflict. The real battle for retaining the consumer is during the "War" phase (discussed in Section 4.3.3).

Sellers who have won the trust of consumers during the Confidence Building phase will be able to compete more effectively during the Skirmish phase. The Confidence Building phase is of such importance to the seller, that if this objective was not achieved, the seller is very unlikely to even be granted the opportunity to be a contender during Skirmish.

Windham & Orton (2000: 93) point out that there is little distinction between choosing and buying on the Web, since it is so easy for the consumer to purchase Online by the click of a few buttons once the choice alternatives have been narrowed-down and a selection has been made. The Confidence Building and Skirmish phases are often also combined on the Web, since there are

neither any time or space constraints that could impede the process nor any logistical barriers between first knowing about the site and purchasing something from the site. In fact, the entire process can occur in one Web session in a matter of minutes. This view is especially relevant if considering the search process using a shopping bot where the Internet consumer can, within a single Internet session, search for information, evaluate alternatives and purchase the selected product.

A strategy often followed by Internet sellers to encourage consumers to purchase during the "Skirmish phase" is to offer discounts. Discounts offered via Web sellers to encourage purchasing behaviour include free shipping of purchased goods, discounts offered to first-time buyers, Online coupons and free gifts with purchases.

Figure 4.5 shows the impact of some incentives offered by Web sellers to convince consumers to purchase from them during the 1999 Christmas season in the United States.

FIGURE 4.5: THE IMPACT OF INCENTIVES OFFERED BY WEB SELLERS
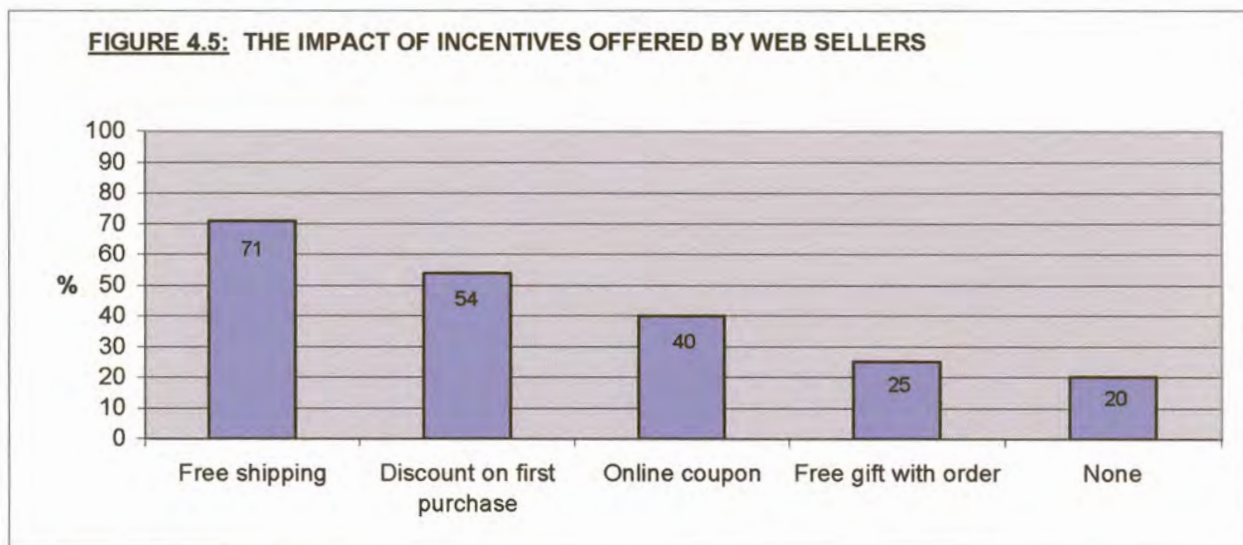
Source: Windham & Orton (2000: 95)

From Figure 4.5 it can be seen that Online sellers often have to, as with traditional sellers, offer incentives for consumers to purchase their products. The

advantages of motivating consumers to purchase through incentive-offering strategies is a possible "spill-over" effect (consumers could purchase additional products) and retention of consumers for future purchases. For example, free shipping (or reduced shipping costs or faster delivery at lower costs) of books offered by Amazon.com to South African consumers could possibly lead to more products being purchased from Amazon.com by South African consumers.

Breitenbach & Van Doren (1998: 558 – 575) add another possible incentive that can motivate consumers to purchase from an Internet seller, namely samples, provided that the product offering allows for sampling. For example, Internet sellers can offer free downloads of their software programmes, allowing the consumer to first try the product before purchasing it.

From the discussion it can be seen that purchase fulfils an important function in the Skirmish phase. Purchasing via the Internet will therefore be discussed in greater detail to form an understanding of the purchase stage of the consumer decision-making process when considering the Internet as a sales channel. The discussion will also consider possible concerns and costs that consumers can expect to encounter with Internet purchases as well as products that are most probably more suited to be sold over the Internet.

4.3.2.1   Purchasing on the Internet

Phau & Poon (2000: 102 – 113) express the opinion that Online purchasing can be viewed as a five-component process, namely promotions, one-to-one contact, closing, transaction and fulfilment. A brief discussion on the five components will provide an overview of how consumers and marketers can expect an Internet purchasing transaction to occur.

The first component, **promotions**, suggests that users have to be made aware of and learn about products offered by sellers through advertising. **One-to-one**

contact implies that the Internet allows for asynchronous contact with consumers through methods, such as e-mail and discussion groups, used to build a relationship with consumers. The third component, **closing**, refers to agreeing on a price and concluding the deal, possibly via a collection of e-mails. There is, therefore, an electronic record of the sale and the agreed deal. **Transaction**, the fourth component, refers to the payment method for products and services purchased. The final component, **fulfilment**, includes both the delivery and shipping of the purchased products as well as the effective electronic order processing.

Phau & Poon (2000: 102 – 113) also suggest three types of channels when purchasing via the Net, namely distribution, transaction and communication channels. **Distribution channels** function as facilitator of the physical exchange of products and services. **Transaction channels** assume the role of generating sales activities between buyers and sellers. Finally, **communication channels** are responsible for the exchange of information between buyers and sellers.

It therefore seems, according to Phau & Poon (2000: 102 – 113), that by combining the two suggested processes of Internet purchasing, the Internet appears to be a flexible, interactive and efficient medium through which economic parties can communicate.

When considering purchasing via the Internet, consumers must be aware of a number of cost elements that have to be considered in determining the value to them when purchasing via the Web. It is therefore important to consider the costs that consumers will incur with Internet purchases, since these costs could have an influence on whether or not Online purchases are made.

Strader & Shaw (1999: 82 – 92) identify a number of potential relevant costs to the consumer when shopping on the Internet. These costs together with a description thereof are shown in Table 4.3.

TABLE 4.3: COST VARIABLES AND DESCRIPTIONS

Variable	Description
Product price	The sum of the production costs, co-ordination costs and profits of the value chain that provides the product or service
Search costs	The time, effort and money involved in searching for a seller who has the product demanded at an acceptable price with acceptable features and quality
Risk costs	The costs involved in minimising transaction risk as well as the cost associated with losing value in the transaction
Distribution costs	The costs associated with physically moving the product from the seller to the buyer
Sales tax	Self-explanatory
Market costs	The costs associated with participating in a market

Source: Adapted from Strader & Shaw (1999: 82 – 92).

Apart from the costs that could possibly deter consumers from purchasing from the Internet, it is important to also note other factors that could discourage consumers.

Prabhaker (2000: 158 – 171) suggests that an increasing number of Online consumers change their minds regarding purchases Online when they are required to divulge personal and credit card information. This view is supported by Kolesar & Galbraith (2000: 424 – 438), stating that many consumers are reluctant to complete a purchase transaction on the Internet when required to provide credit card information. Also, a considerable number of non-Internet users indicated that privacy concerns kept them Offline and a majority of current Internet users agree that privacy concerns are the contributing factor for not using the Web more extensively.

These concerns are valid since, as Prabhaker (2000: 158 – 171) explains, every time an Internet user interacts with the Web, a trail of extraordinary detailed information is left behind, for example who the user is, buying habits, financial status and perhaps medical details and other personal details. The consumer also has very little control over who has access to this information and what they do with these particulars.

Grönroos et al. (2000: 243 – 252) are of the opinion that information gathered about consumers should be used in a manner that will provide tangible benefits to consumers, for example personal news, advice and personal offerings tailored to their preferences. Small companies on the Web can, therefore, compete with large multinationals. Prabhaker (2000: 158 – 171) adds by stating that it is unrealistic to expect profit-driven businesses not to infringe on consumer privacy in an environment that makes it increasingly profitable together with technology that makes it easier than ever to collect and share personal information. This leads Strader & Shaw (1999: 82 – 92) to identify another risk element applicable to the Internet, namely privacy risk, referred to as the degree to which consumers envisage a loss of privacy owing to information collected by sellers as they shop.

This perceived privacy risk has important implications for the Internet seller. Prabhaker (2000: 158 – 171) identifies three specific implications regarding privacy and its impact the sales of products and services. Firstly, there is a opportunity cost of lost sales as Online consumers, whose privacy concerns have not been addressed, will tend to delay or even abandon further Online purchases. Secondly, there is a shift from Online purchasing channels to Offline business channels, since some concerned consumers will rather revert back to traditional ways of purchasing, even if it means at a higher purchase price, given their privacy concerns regarding the Internet. Finally, privacy concerns represent an intangible cost component to consumers who purchase over the Internet. Consumers who, therefore, make use of the Internet for purchases do so by paying the full price, both the tangible product cost and the intangible privacy cost.

Chapter 4 has thus far shown how the Internet can influence the consumer decision-making process. It is therefore important to also briefly discuss different methods of purchasing together with payment options.

Using a shopping bot as purchase medium was discussed earlier, indicating how consumers can within a single Web session search for information, evaluate different alternatives and purchase the selected product from the shopping bot site or the actual seller's Website.

In addition to shopping bots, consumers can purchase from any Website offering products and services for sale through their site, for example from Inthebag.co.za, Kalahari.net, Picknpay.co.za or Amazon.com.

In addition to purchasing from sellers' Websites, consumers can also visit Web auction sites, where the consumer can enter an offer to purchase products on auction (often new products).

According to McQuitty & Peterson (2000: 233 – 248), a number of auction Websites have emerged that will sell virtually any product to consumers, for example eBay.com. Examples of South African Websites offering auctions to the consumer include Mwebauctions.co.za and Bidorbuy.co.za.

It is also important to consider the payment methods consumers can use to pay for products purchased on the Web.

Bickerton, Bickerton & Pardesi (2000: 149) list three payment options consumers can use to pay for products purchased Online, namely credit cards, electronic cash and electronic cheques. These three payment options will be briefly discussed below.

Bickerton et al. (2000: 254) note that credit cards have become the dominant payment mechanism for Internet purchases. Spar & Bussgang (1996: 129) explain the ease of using credit cards on the Internet by stating that consumers can purchase products in a different currency and let the banks intermediate the financial transaction. A South African consumer can therefore purchase a

special edition book from National Geographic, pay $ 75 and leave the transaction details to ABSA bank to conclude. The consumer will notice on the following statement received from ABSA that R 825 has been paid to National Geographic.

It should, however, be noted that by offering credit card payments only, Internet sellers could possibly exclude potential consumers, for example those who do not use credit cards and those who do not qualify for credit cards (for example children). Credit cards are also inefficient for low-cost purchases, for example purchasing a book at Kalahari.net for R 15.

These limitations together with security concerns have led to the creation of an Internet currency or electronic cash (e-cash), for example eBucks. Electronic cash is especially useful for low-value purchases. Spar & Bussgang (1996: 129) add that consumers using e-cash can purchase products quickly and most probably more important, anonymously on the Internet.

The final payment method for Internet purchases identified by Bickerton et al. (2000: 255) is electronic cheques, mostly used for business-to-business Internet transactions. Electronic cheques use a digital certificate system that secures the transfer of payment data between buyers, sellers and banks.

In addition to the discussion above it should be mentioned that many "traditional" retailers are exploiting the Internet as an alternative information and sales channel. The subsection below will consider "traditional" retailers offering Online purchasing.

A)   Brick and click retailers

As stated earlier, the Internet provides consumers with an additional information source and sales channel. Since the Internet has grown and showed

advantages for both sellers and consumers, a number of traditional "Offline" retailers have decided to offer their products and services to their customers via the Internet as an additional sales and information channel.

Nunes, Wilson & Kambil (2000: 20) explain that it is easy to see why traditional sellers are moving to the Internet to offer more ways to buy from them. They recognise that the same buyer may prefer different transaction mechanisms under different circumstances. For example, a consumer may not care about flight ticket prices when travelling for business, but may seriously consider lower prices when planning a family vacation. Nunes et al. (2000: 20) explain that by offering multiple transaction approaches, sellers could possibly win a larger share of existing consumers' business and also gain new types of purchasers.

Gulati & Garino (2000: 113) continue by stating that an established traditional retailer benefits from offering the Web as additional sales channel, since it offers the seller instant credibility on the Web (provided that the brand is recognised and respected). The seller's current customers will therefore provide nearly immediate traffic and revenue and new customers will know that the site is legitimate and fewer buyers will fear credit card fraud. Ghosh (1998: 126) warns, however, that established businesses that have built brands and physical distribution relationships over a considerable period of time, risk all that they have created when they pursue Internet selling.

Adding to the above should be mentioned that traditional sellers offering the Internet as an alternative sales channel will most probably be forced to offer the same prices as in the physical store so as not to confuse their current customers or leave them distrustful (Gulati & Garino, 2000: 113).

The extent of offering Online purchases by traditional sellers would, therefore, most probably depend on the strengths of existing distribution and information systems and their transferability to the Internet (Gulati & Garino, 2000: 113).

From a South African perspective, a number of traditional retailers have opted to offer their customers an Online purchasing channel.

For example, Woolworths offers a Website (Woolworths.co.za) providing information on, amongst others, its products and the location of their outlets together with each store's business hours. This Website therefore offers customers an additional information source where consumers can view what products and services are available and at what prices. Loyal Woolworths customers can therefore select products and then simply visit the store to purchase the selected items. Woolworths also offers a link to their Online purchasing site (Inthebag.co.za) where food and other popular grocery brands can be purchased. Once again, Woolworths customers can shop for their products and purchase them Online. Products purchased will be delivered according to the customer's instruction within one to a maximum of seven days. Currently, Woolworths only delivers in Johannesburg and Cape Town and does not offer same-day delivery.

Another example of a South African retailer offering Internet purchases and physical delivery is Pick & Pay. Unlike Woolworths, Pick & Pay announces on its Website that it offers delivery for Online purchases to more areas throughout South Africa (Western Cape, Gauteng, Durban, Bloemfontein and Eastern Cape). Also, if an Online customer purchases products before ten o'clock in the morning, the customer will receive the purchased products the same day, up to nine o'clock at night.

From the discussion above it can be concluded that more traditional sellers are offering Online purchasing to its current and potential new customers. Ghosh (1998: 129) explains that the decision to offer consumers an Internet sales channel could possibly be based on a driving force exerted by competitors or through consumer demand. It is therefore also important for traditional sellers to understand their customers' needs to ensure that they offer alternative sales

channels, for example the Internet, when customers demand an alternative channel.

It is also important to consider what types of products are more suitable than others to be sold via the Internet, implying that marketers should consider what types of products consumers will consider purchasing via the Internet. The section below will provide a discussion on the products and services that lend themselves more to the Internet than others.

B) Products purchased via the Internet

Bickerton et al. (2000: 149) note that not all products and services are equally suited to be sold via the Internet. Greenbury in Maruca (1999: 160) supports this view by stating that people will increasingly want to shop on the Internet for at least a certain range of products because of convenience.

According to Phau & Poon (2000: 102 – 113), the suitability of the Internet for marketing to consumers depends to a large extent on the characteristics of the products and services being marketed. It is, therefore, important to consider product and service characteristics when evaluating the impact of the Internet as a sales channel. A classification system, where products and services are categorised according to three dimensions, can be used to determine the product and service characteristics when evaluating the Internet as a sales channel. The three dimensions according to which products and services have to be measured, are cost and frequency of purchase, value proposition and degree of differentiation.

Considering the first dimension, products vary from low-cost, frequently purchased items (for example consumable products, such as milk and bread) to high-cost, infrequent purchased goods (for example durable goods, such as television sets). Phau & Poon (2000: 102 – 113) suggest that, as a general rule,

when purchase fulfilment requires physical delivery, the more frequent the purchase and the lower the cost of an item (for example bread and milk), the less likely the chances are for a "fit" between a product and the Internet-based sales thereof.

Products and services also vary along their value proposition, referring to the extent to which a product or service is either tangible and physical or intangible and service-related. Phau & Poon (2000: 102 – 113) suggest that the more intangible the value proposition is and the greater the frequency of purchase or use of a product or service is, the greater the advantage of the Internet becomes as a transaction and distribution medium.

The final dimension, degree of differentiation, reflects the degree to which a product or service is differentiable. More specific, it reflects the extent to which a seller is able to create a sustainable competitive advantage through product and service differentiation. The inability of sellers to show significant differentiation often leads to extreme price competition between competitors, whereas the successful differentiation allows for the Internet to serve as an effective segmentation mechanism for guiding buyers to their ideal product or service.

Table 4.4 reflects the three dimensions together with examples of products and services associated with each dimension.

TABLE 4.4: PRODUCT CLASSIFICATIONS

Dimension 1	Dimension 2	Dimension 3	Products and services
Low outlay, frequently purchased goods	Value proposition tangible or physical	Differentiation potential high	Wines, soft drinks, cigarettes
		Differentiation potential low	Milk, eggs
	Value proposition intangible or informal	Differentiation potential high	Online newspapers and magazines
		Differentiation potential low	Stock market quotes
High quality, infrequently purchased goods	Value proposition tangible or physical	Differentiation potential high	Stereo systems, automobiles
		Differentiation potential low	Precious metal ingot of known weight and purity
	Value proposition intangible or informal	Differentiation potential high	Software packages
		Differentiation potential low	Automobile financing, insurance

Source: Phau & Poon (2000: 102 – 113)

The findings of a research study conducted by Phau & Poon (2000: 102 – 113) suggest that consumers, more specifically consumers in Singapore and the Asia Pacific Region, are not ready to purchase expensive goods (for example, automobiles, jewellery and stereo systems) through the Internet. Two reasons can attribute to this finding, namely that the monetary risks associated with these types of products are too great and also that these products require a greater deal of visual inspection. The study also found that consumers were rather unfamiliar with Internet shopping and had a certain amount of uncertainty regarding the trustworthiness and credibility of Internet sellers.

Phau & Poon (2000: 102 – 113) furthermore suggest that products with low outlay are frequently purchased while tangible or physical products with a low differential potential are unsuitable for selling through the Internet in Singapore. In addition, Internet selling seems to be poor compared to traditional retail channels, where products are available for inspection prior to purchase. The

consumer may, however, inspect products in a traditional retail outlet and then revert to an Internet-based channel to purchase it.

Phau & Poon (2000: 102 – 113) conclude the findings of their empirical research study by stating that product and service type classification will significantly influence the consumer choice between a retail store and an Internet shopping mall. In addition, the findings by Phau & Poon (2000: 102 – 113) suggest that the products and services that have a low outlay, are frequently purchased, have intangible value propositions and are relatively high on differentiation are more likely to be purchased via the Internet. Bickerton et al. (2000: 149) support these findings by stating that amongst others, fragile and perishable goods, goods that require physical inspection and more expensive goods are less suited to be sold over the Internet.

4.3.3 War

According to Windham & Orton (2000: 97), retaining consumers on the Web is as difficult, if not more difficult, than acquiring them. The greatest challenge to the marketer will be to retain customers who are motivated to primarily use the Web for convenience and time-saving purposes. An even greater challenge to marketers will be to retain customers who are motivated by lower prices and better deals.

Windham & Orton (2000: 97) continue by stating that marketers formed a misconception about Web consumers through attempts to acquire them by means of free offers. The view was that offering good Web experiences and competitive prices would retain consumers. Consumers have, however, formed expectations from their previous shopping experiences and demand free shipping, discounts and other incentives to re-purchase. If the seller fails to meet these expectations, consumers will simply find other sellers who will meet their expectations.

Consumer expectations for repeat purchases include, for example, free shipping, discounts, better product selection and prices, improved site performance and capacity, increased security and privacy, improved site navigation and availability of stock. The result of these consumer expectations is that sellers will have to meet these consumer expectations, not only to acquire customers, but also to maintain customer loyalty in an effort to retain them.

Windham & Orton (2000: 99) are of the opinion that a key to success in Web marketing is to understand the target market and what it purchases Online. This information should be used to formulate strategies that will appeal to the identified motivation of consumers to purchase Online. For example, if a consumer is motivated by special deals, offering deals every time the consumer visits the Website will reinforce the perception that the site constantly offers the best deals, thereby enforcing the primary motivation of the consumer. The Online marketer can also create functionality and special offers that make the experience easier and faster, thereby appealing to the convenience shopper. An example of a site offering a feature aimed at improving convenience is Amazon.com's 1-Click Ordering.

The challenge to marketers is therefore to identify the consumer types that they can best serve and to develop marketing programmes, features and offers that will constantly achieve consumer attention.

The most important in winning the War on the Web, according to Windham & Orton (2000: 100), is to track competitors' innovations aimed at retaining consumers. In addition, marketers should assume that long-term consumer loyalty does not exist, therefore necessitating strategies of earning consumer loyalty and rewarding such loyalty with every visit and during every transaction.

Considering the Web-based consumer decision-making model, Windham & Orton (2000: 101) state that it is proving more expensive, at least for the foreseeable future, to build consumer confidence and achieve consumer

retention with an Online brand than to do so through more traditional methods. The profit margins achieved through Online selling may prove insufficient when considering the challenges of building consumer confidence, acquiring and retaining consumers. Consumers, therefore, have to be "bought", but these expectations of consumers cannot be sustained. The Online marketer wishing to retain Online consumers will therefore have to find non-price-related incentives to stimulate repeat purchases.

In concluding the discussion on the influence of the Internet on the consumer decision-making process, Teo (2001: 125 – 137) states that the perceived usefulness of the Internet fulfils a more important role when compared to the ease of use and perceived enjoyment thereof. This finding has important implications to the marketer pursuing sales from the Internet. Teo (2001: 125 – 137) lists two possible explanations why marketers should regard usefulness of the Internet so important, namely that Internet users will be unlikely to use the Internet once the novelty has worn off and they derive no usefulness from using it. A second explanation is that intrinsic motivation tends to be associated with enquiry type usage activities while extrinsic motivation tends to be associated with both enquiry and purchasing type usage activities, thereby implying that the varying importance of intrinsic motivation variables may be related to the nature of usage activities.

4.4   COMPARISON OF CONSUMER DECISION-MAKING MODELS

It was noted in Section 4.3 that the Web-based consumer decision-making model, arguably, is more applicable to the Internet seller than to the consumer using the Internet. It was also noted that despite this observation, Windham & Orton (2000: 81-101) refer to a Web-based consumer decision-making process.

It is possible to draw a comparison between the "traditional" and Web-based decision-making process by considering the discussion on the consumer decision making process (the EBM decision-making process discussed in

Chapter 3) and the discussion on the Web-based consumer decision-making process (Windham & Orton, 2000: 80-101) discussed in Section 4.3. Table 4.5 indicates the most predominant differences between the two processes.

TABLE 4.5: COMPARISON BETWEEN WEB-BASED AND "TRADITIONAL" DECISION-MAKING PROCESS

"Traditional" decision-making process	Web-based decision-making process	Comments
Stage 1: Need recognition Stage 2: Search	Stage 1: Confidence Building phase	• Confidence Building phase combines need recognition, search, selection of alternatives and **evaluation of different Websites** • Web-based process considers how Internet user becomes aware of Internet sellers • Web-model does not consider impact of environmental influences and personal differences • Web-process does not consider the possible use of internal search from memory
Stage 3: Pre-purchase alternative evaluation	Stage 2: Skirmish phase	• Skirmish phase combines alternative evaluation and the act of purchase • Skirmish phase assumes purchase follows evaluation, without considering other possible influences on pre-purchase stage of the decision-making process
Stage 4: Purchase and its outcomes, comprising: • purchase • consumption • post-purchase alternative evaluation • divestment	Stage 3: War	• War phase of the Web-based model focuses on repeat purchases • War phase does not consider consumption of purchase goods • War phase does not allow for post-purchase evaluation or feedback of satisfaction or dissatisfaction on future purchases • War phase does not consider divestment of purchased (and/or consumed) goods

Table 4.5 highlights a number of differences between the "traditional" and Internet model for consumer decision-making. In an effort to determine the validity of the Web-based model, it is important to consider guidelines (and

advantages) provided earlier in the study (Section 2.4.1and 2.4.2 in Chapter 2) regarding models:

- a model can be viewed as a testable "map of reality" and its utility lies in the extent to which successful predictions and description of behaviour, together with underlying influences, are made possible;

- explanations are provided for behaviour; and

- fundamental relationships between variables and the exact sequence of cause and effect of variables are specified

It can be derived that , following the discussion above, the Web-based model can not be regarded as a true model of consumer decision-making, especially when considering that the model has not been tested empirically.

One of the objectives of this study is to determine actions and buying behaviour of the respondents. When the implications and recommendations from the results are discussed in Chapter 8, this aspect will be revisited by providing a recommendation for future research.

4.5   SUMMARY

Chapter 4 provided an insight on the ways in which the Internet influences the consumer decision-making process. The chapter was structured by using a proposed model of decision-making applied to the Web as a framework for the discussion.

More specifically, Chapter 4 considered the manner in which information search is influenced when viewed from an Internet perspective and highlighted how the alternative evaluation process can be simplified by using the Internet. The

discussion also considered purchasing via the Internet and the products most suitable for selling through the Net. Comparing the "traditional" consumer decision-making model to the Internet-based model concluded the chapter.

Chapter 5 will be devoted to the study's problem statement and the hypotheses for the study will be formulated, with consideration to the theoretical foundation in the preceding chapters and with specific reference to Chapter 4.

CHAPTER 5

PROBLEM STATEMENT, RESEARCH OBJECTIVES AND HYPOTHESES

5.1 INTRODUCTION

Chapters 2 and 3 provided a theoretical foundation for the study where the areas of consumer behaviour and consumer decision-making were examined. The objective of Chapter 4 was to integrate the consumer decision-making process with the Internet as a buying and communications medium, focusing on how the Internet can possibly influence the decision-making process.

Chapter 5 will focus on the problem statement of the study and hypotheses for the study will be formulated. The chapter will be concluded by indicating how the formulated hypotheses relate to the objectives set for the study.

5.2 PROBLEM STATEMENT

According to Burns & Bush (1998: 62), defining the problem is the single most important step in the marketing research process. Forrest (1999: 3) and Burns & Bush (1998: 83) agree and add that a precise problem definition is critical in setting the direction for all subsequent phases in the research process and assists in ensuring that the research yields pertinent information.

The problem statement and definition of the research problem is therefore critical to meeting the objectives set for a research study. The problem statement for the study can be derived from considering the theoretical foundation captured in the preceding chapters.

Chapter 3 provided an in-depth discussion on the consumer decision-making process. The discussion highlighted the complexity of the process by providing a detailed discussion on each of the stages of the process together with the various sub-components associated with each stage. From the discussion in Chapter 3 it could be concluded that for marketers to draft effective marketing strategies, it is important to understand the complicated consumer decision-making process that could possibly be influenced at various stages of the process.

Chapter 4 contained a discussion on the possible influence of the Internet on the consumer decision-making process. Only one Internet-based consumer decision-making model was found in literature and the researcher's reservations towards the foundations and theoretical base of the proposed Internet-based model were noted. From the discussion in Chapter 4 it could be seen that marketing literature lacks both theoretical literature and proven and tested models of the consumer decision-making process applicable to the Internet.

The relatively little literature available regarding the Internet and the consumer decision-making process is also true for consumer behaviour. The following statement by Tan (1999: 165) supports this view: ".., more research is needed not only to examine the Internet's role and effectiveness as a new marketing medium, but also to study consumer behaviour arising as a result of the change from in-store to virtual shopping."

The relative lack of literature is even greater from a South African Internet user perspective, since very little literature could be found on consumer behaviour and the decision-making process of South African Internet users. The only information available from a South African perspective on Internet users' buying behaviour, documented in reports from research organisations, identify products purchased and focus on general spending trends of South African Internet users

with some reference to possible reasons why these Internet users do not purchase via the Internet.

Listing some views expressed by South African research organisations regarding consumer behaviour (including consumer decision-making) and the Internet highlights the problem statement for the study:

- Key to Online success is an understanding of consumers' Online behaviour, preferences and concerns (BMI, 2000a: 7);

- Proper profiling and monitoring of consumers are of critical importance to enable the marketer to convert "browsers" into "shoppers" and more importantly into regular shoppers (BMI, 2000a: 7);

- Understanding consumer needs and wants significantly enhances the chance for success in the Internet environment (Webchek, 1999: 21); and

- If marketers don't understand the needs of their customers, it will be difficult to know where to focus their energy, effort and capital. It could also lead to organisations having to make significant (often expensive) changes to Websites after the launch thereof (Webchek, 1999: 21).

The views expressed above indicate that marketers need to understand the buying behaviour of South African Internet users to be successful in this new marketing and communication medium. It is, therefore, extremely important to conduct research among Internet users in South Africa to contribute to the body of knowledge that is needed to sensitise marketers to understand the dynamics involved when pursuing the Internet as a marketing channel.

5.3   RESEARCH HYPOTHESES

Tichenor (in Stempel III & Westley, 1981: 24), defines a hypothesis as: "... a statement of relations, based on the best that can be derived from more general

assumptions and prior evidence". Stated more simply, hypotheses are statements describing the speculated relationships among two or more variables (Burns & Bush, 1998: 112).

According to Cooper & Schindler (1998: 45), the most important function of a hypothesis is that it guides the direction of the study, since a frequent problem in research is the proliferation of interesting information. Cooper & Schindler (1998: 45) caution that unless the researcher avoids the urge to include other elements, a research study can be diluted by trivial concerns that do not answer the basic questions posed.

Cooper & Schindler (1998: 45) add the following functions of a hypothesis:

- it is used to limit that which shall or shall not be studied;

- it identifies facts that are relevant and those that are not;

- by identifying the relevant facts, it suggests which form of research design is likely to be the most appropriate; and

- it provides a framework for organising the conclusions that result.

In conclusion it should be noted that one of the objectives of research should always be to choose among different possible hypotheses, since if all hypotheses considered for a specific study were known to be true in advance, there would be little reason to conduct the research (Aaker & Day: 1990:37).

5.3.1 Hypotheses formulated for the study

Keeping in mind the discussion and guidelines regarding hypotheses provided above, the researcher formulated 11 hypotheses from the theoretical foundation of the study. The hypotheses were evaluated and refined after insight was gained from a pre-test group (main findings attached in Appendix 6), which was

held as part of the research process (discussed in Chapter 6). The 11 hypotheses formulated for the study are discussed below.

a)   Hypotheses 1, 2, 3 and 4

Research conducted by Webchek (1999: 24) found that the length of time being an Internet user was one of the major variables influencing whether or not Internet users have purchased via the Internet before. In another research study conducted among South African Internet users, BMI (2000a: 74) found that 46% of current non-Internet shoppers had no intention to purchase via the Internet in the future, with an additional 22% indicating that they will only purchase within two years.

A possible reason why Internet users don't purchase (or do purchase) via the Internet, is based on factors which influence the decision whether or not to purchase. Security is a major reason listed why Internet users don't purchase via the Web (BMI, 2000a: 75 and Webchek, 1999: 53). Another factor (which could possibly be grouped under security reasons) is privacy risk, whereby consumers envisage a loss of privacy owing to information collected by sellers as they shop (Strader & Shaw, 1999: 82 – 92). Kolesar & Galbraith (2000: 424 – 438) and Prabhaker (2000: 158 – 171) add to the above by stating that an increasing number of Online consumers decide not to purchase via the Internet when they are required to divulge personal and credit card information.

Based on their research findings, Furnell & Karweni (1999: 380) caution that although non-Internet shoppers exhibited a greater level of concern regarding Internet security than Online shoppers, security concerns are not the only factor that should be considered as a possible reason why non-Internet shoppers do not shop Online. Other factors that can possibly influence the decision whether or not to purchase via the Internet are: reliability, convenience, price of products or services and ease of finding products on the Web (Webchek, 1999: 53).

Considering the discussion, together with the findings from the pre-test group and the theoretical overview provided in the study, the researcher formulated the following hypotheses:

H_1 The decision to purchase via the Internet is significantly influenced by factors consumers consider prior to purchase.

H_2 The factors Internet shoppers consider prior to purchasing via the Internet are significantly influenced by the period of Internet usage.

H_3 The period of Internet usage significantly influenced the decision to have purchased via the Internet.

H_4 The period of Internet usage significantly influences the decision of non-shoppers to purchase via the Internet in the future.

b)   **Hypotheses 5 and 6**

The Internet, as an information source, offers **consumers** a low-cost search tool that can be used to search for alternative and substitute products, resulting in greater price competition among sellers of products and services (Rowley, 2000a: 20 – 35).

Traditional, non-Internet sellers of products and services also benefit from creating a Web-presence, since more traditional sellers of products and services are moving to the Internet to offer more ways to purchase from them. The advantages of doing so include an additional sales channel to consumers and instant credibility to the seller (Nunes et al. 2000: 20 and Gulati & Garino, 2000: 113).

From a **Web-context** there seems to be very little distinction between choosing and purchasing via the Internet once a consumer has decided what to purchase, since it is so easy for the consumer to purchase Online with the click of a few buttons (Windham & Orton, 2000: 95).

Based on the discussion and findings from the pre-test group and the theoretical foundation of the study, the researcher formulated the following hypotheses:

H_5 The period of Internet usage significantly influences the decision to search for product or service information on the Net prior to purchasing from non-Internet based sellers.

H_6 There is a significant difference between Internet shoppers and non-shoppers in their decision to search for product and service information on the Internet prior to Offline purchases.

c)   Hypotheses 7 and 8

Research by Phau & Poon (2000: 102 – 113) indicated that consumers, more specifically consumers in the Asia and Pacific Region, are not ready to purchase expensive goods via the Internet.

Bickerton et al. (2000: 149) and Greenbury in Maruca (1999: 160) add to the above by stating that not all products and services are equally suited to be sold via the Internet and that consumers will increasingly want to shop for at least a certain range of products and services on the Internet.

Research among South African Internet users also revealed some product and services categories that they have purchased before and also found some categories that many Internet shoppers would never consider purchasing from (Webchek, 1999: 39 – 41 and BMI, 2000a: 65 – 66).

Based on the discussion above and with specific influence from the pre-test group findings, the researcher formulated the following hypotheses:

H_7 The period of Internet usage significantly influenced the product and service categories Internet shoppers have purchased via the Internet.

H_8 The period of Internet usage significantly influences the product and service categories Internet shoppers and non-shoppers consider purchasing via the Internet in the future.

d)   Hypotheses 9, 10 and 11

The consumer decision-making process and models of consumer behaviour were discussed in detail in Chapters 2 and 3 of the study. The discussion showed how the decision-making process can be influenced, at various stages, by environmental influences and individual differences (for example, need recognition in Section 3.3 in Chapter 3).

Influences on the consumer decision-making process include, for example, the consumer's language, geographic location, race and ethnic group, age, gender and income.

Research studies regarding Internet users also found differences when demographic variables (which could influence the consumer decision-making process) were studied, for example differences between men and women and the influence of level of education (Teo, 2001: 125 – 137) and income (Webchek, 1999: 24).

The researcher formulated the following hypotheses after considering the theoretical foundation of the study and findings from the pre-test group:

H_9 Demographic variables of Internet users significantly influence whether Internet users purchased products or services via the Internet.

H_{10} Demographic variables of Internet users significantly influence the product and service categories Internet users purchased via the Internet.

H_{11} Demographic variables of Internet users significantly influence the product and service categories Internet shoppers and non-shoppers consider purchasing via the Internet in the future.

5.3.2 Relation of objectives to hypotheses

Chapter 1 of the study listed the primary and secondary objectives which the researcher wishes to achieve by conducting the study. The hypotheses have specifically been formulated to ensure that usable research results will be obtained to meet the objectives set for the study.   Table 5.1 lists the secondary objectives for the study together with the hypotheses applicable to each objective (the secondary objectives will contribute towards achieving the primary objective, namely to determine the buying behaviour of South African Internet users by using the Internet as an information source and buying channel).

TABLE 5.1   RELATION OF OBJECTIVES TO HYPOTHESES

Secondary objective	Applicable hypotheses
i) Determine the factors Internet shoppers and non-shoppers take into account when considering whether or not to purchase via the Internet	H_1 H_2
ii) For non-Internet shoppers, determine whether or not they will purchase via the Internet in the future and which product and service categories they consider purchasing from	H_4 H_8
iii) For non-Internet shoppers not considering to purchase via the Internet in the future, determine whether or not they would consider purchasing via the Internet if more, well-known South African businesses offer products and services via the Internet	H_4 H_8

Secondary objective	Applicable hypotheses
iv) For current Internet shoppers, future Internet shoppers and non-Internet shoppers who do not consider to purchase via the Internet in the future, determine whether or not they use the Internet as information source to search for product and services information prior to purchase from non-Internet based sellers	H_5 H_6
v) For current Internet shoppers, determine the relationship between the length of time being an Internet user and factors considered before purchasing Online	H_1 H_2
vi) For current Internet shoppers, determine the product and service categories they currently purchase from and the product and service categories they consider to purchase from in the future via the Internet	H_3 H_7 H_8
vii) Determine the relationship between the demographic variables of Internet users and the decision whether or not to purchase via the Internet, as well as the product and service categories they currently purchase and consider to purchase from in the future	H_9 H_{10} H_{11}

As can be seen from Table 5.1, all the objectives set for the study are being addressed by the formulated hypotheses. The questions that will be included in the final questionnaire will match the formulated hypotheses to ensure that the objectives set for the study are achieved.

5.4   SUMMARY

The research problem was discussed in this chapter and the research hypotheses for the study were formulated. The chapter was concluded by providing a matrix indicating how the formulated hypotheses will address the objectives set for the study.

Chapter 6 will focus on a theoretical discussion on research methodology and the research process. Chapter 6 will also indicate how the theoretical basis for the research project will be used to conduct the research part of the study.

CHAPTER 6

RESEARCH METHODOLOGY

6.1 INTRODUCTION

Research hypotheses for the study were formulated and discussed in Chapter 5. This chapter will provide a theoretical perspective on the research process as well as show how the theory will be applied practically in order to conduct the research component of the study.

Detail will be provided on the data collection methods, sampling process and questionnaire design. The chapter will be concluded with a discussion regarding the statistical procedures and techniques that will be adopted for the study.

6.2 INFORMATION SOURCES

A distinction is made between two sources of data, namely primary and secondary data (Sudman & Blair, 1998: 74). Secondary data refers to information that has already been collected for some other purpose, while primary data refers to information that has been gathered to address the research objectives at hand (Burns & Bush, 1998: 66).

Sources of secondary information include libraries, Internet searches, trade associations and Online services, while primary information is gathered by means of observation, survey interviews, group discussions or experiments (Sudman & Blair, 1998: 74).

Both primary and secondary data sources will be used for the study. Secondary sources were used to form the theoretical foundation of the study and will also be

used to define and structure the methods as well as process that should be followed to conduct primary research. The remainder of this chapter will focus on the primary research-phase of the study.

6.3. DATA COLLECTION METHODS

It should be noted, before discussing various data collection methods, that the means of data collection during the research process can be classified into three broad categories: quantitative, qualitative and pluralistic (Burns & Bush, 1998: 209).

Quantitative research can be defined as research involving the use of structured questions with predetermined response options, with a large number of respondents involved. In contrast, **qualitative research** involves collecting of data and the analysis and interpretation thereof through observing what people do or say.

Pluralistic research can be defined as a combination of qualitative and quantitative research methods in an attempt to gain the advantages of the two methods. With pluralistic research, a researcher typically will begin with exploratory qualitative techniques (for example focus groups). The qualitative phase of the research project will then serve as a foundation for the quantitative phase of the project, since it provides first-hand knowledge of the research problem to the researcher.

For this study, the pluralistic approach will be followed by first using qualitative research techniques, followed by quantitative techniques.

Primary research data can be gathered in a number of ways, including observation, surveys, depth interviews, panels of research participants (focus groups), experiments and test markets (Sudman & Blair, 1998: 90). These

methods will not be discussed in any detail, with the exception of focus groups (pre-test group) and surveys, since the primary research data for the study will be collected using these methods.

6.3.1 Pre-testing

As a qualitative research technique, it was decided to use a pre-test group, where the results would be used as input to the quantitative-phase of the research project.

It was decided to use a pre-test group to identify characteristics and underlying issues with regards to South African Internet users' Online behaviour. It was envisaged that by doing so higher quality input to the remainder of the research process would be ensured.

A single pre-test group session was held with 94 South African Internet users. The Internet users gathered at a movie theatre and were requested to complete the first draft of the proposed research questionnaire (compiled from viewing research reports and findings from South African research organisations as well as insights gained through the literature review) that would be used during the quantitative-component of the study. It should be mentioned that the respondents gathered at the movie theatre to participate in another research project (also Internet-related), where after they participated in the pre-test group session. Respondents were, following the pre-test session, treated to a free movie sponsored by ISP "X" (who conducted the first study).

The following objectives were set as required outputs from the pre-test session:

- to test the questionnaire to be used during the quantitative phase of the study (surveys);

- to ensure that all the product categories that respondents could have purchased or intend purchasing via the Internet in the future were covered in the questionnaire; and

- to refine the hypotheses set for the study.

The objectives set for the pre-test session were achieved when the results from the study were scrutinised. The major findings (and corrective actions taken as a result of the pre-test group) that were used to improve the quality of the remainder of the research project were:

- 34% of respondents who have purchased via the Internet previously indicated (when requested to select from which product or service categories they have purchased before) that they have purchased "other" products or services (other than the listed categories). This led to more research reports searched for to identify other possible product and services categories Internet users purchase from via the Internet. The researcher also "surfed" the Net and more specifically Web-sites of South African Internet sellers of products and services to identify more categories;

- based on the search, the listed product and service categories that will be used in the final questionnaire were increased to 38 (as opposed to the 21 categories used in the pre-test group);

- due to the importance of banking services, it was decided to list banking services as a separate category (in addition to the 38 listed categories);

- questions that could have been misunderstood or misinterpreted were refined and rephrased to provide commonly understood questions in the final questionnaire; and

- insights gained from the pre-test group assisted in refining the hypotheses set for the study (discussed in Chapter 5).

The main findings from the pre-test group are summarised in Appendix 6. The remainder of the section will focus on the quantitative phase of the research project, namely surveys.

6.3.2 Surveys

Three broad methods of data collection by means of surveys are distinguished, namely telephone interviews, personal interviews and mail interviews (Malhotra, 1996: 198). Cooper & Schindler (2001: 321) add to the classification by listing self-administered surveys as a final survey method as opposed to mail interviews. These authors do, however, include mail surveys as a component of self-administered surveys but also include other methods of questionnaire distribution (for example fax and the Internet). The three methods will be compared in Table 6.1 below by providing a short description of each method and showing the advantages and disadvantages thereof.

TABLE 6.1: SURVEY DATA COLLECTION METHODS

Personal interview	Telephone interview	Self-administered surveys
Description		
People selected to be part of the sample are interviewed in person by a trained interviewer	People selected to be a part of the sample are interviewed on the telephone by a trained interviewer	Questionnaires are: a) Mailed, faxed, or couriered to be self-administered - with return mechanism generally included; b) Computer-delivered via the intranet, Internet and Online services – computer stores/forwards completed instruments automatically; c) People intercepted/studied via paper or computerised instrument in central location – without interviewer assistance.

Personal interview	Telephone interview	Self-administered surveys
Advantages		
• Good co-operation from respondents • Interviewer can answer questions about survey, probe for answers, use follow-up questions and gather information by observation • Special visual aids and scoring devices can be used • Illiterate and functionally illiterate respondents can be reached • Interviewer can pre-screen respondent to ensure he/she fits the population profile • CAPI – computer-assisted personal interviewing: Responses can be entered into a portable microcomputer to reduce error and cost	• Lower costs than personal interview • Expanded geographic coverage without drastic increase in costs • Uses fewer, more highly skilled interviewers • Reduced interviewer bias • Faster completion times • Better Access to hard-to-reach respondents through repeated call-backs • Can use computerised random-digit dialing • CATI – computer-assisted telephone interviewing: Responses can be entered directly into a computer file to reduce error and cost	• Allows contact with otherwise inaccessible respondents (e.g. CEOs) • Incentives may be used to increase response rate • Often low-cost option • Expanded geographic coverage without increase in cost (a) • Requires minimal staff (a) • Perceived as anonymous (a) • Allows respondents time to think about questions (a) • More complex instruments can be used (b) • Fast access to computer literate (b) • Rapid data collection (b,c) • Respondent who cannot be reached by phone (voice) may be accessible (b,c) • Sample frame lists viable locations rather than prospective respondents (b,c) • Visuals may be used (b,c)
Disadvantages		
• High costs • Need for highly trained interviewers • Long period needed in the field collecting data • May be wide geographical dispersion • Follow-up is labour intensive • Not all respondents are available or accessible • Some respondents are unwilling to talk to strangers in their homes • Some neighbourhoods are difficult to visit • Questions may be altered or respondent coached by interviewers	• Response rate is lower than for personal interview • Higher costs if interviewing geographically dispersed sample • Interview length must be limited • Many phone numbers are unlisted or not working, making directory listings unreliable • Some target groups are not available by phone • Responses may be less complete • Illustrations cannot be used	• Low response rates in some modes • No interviewer intervention available for probing or explanation (a) • Cannot be long or complex (a) • Accurate mailing list needed (a) • Often respondents returning survey represent extremes of the population – skewed responses (a) • Anxiety among some respondents (b) • Directions/software instruction for progression through the instrument (b) • Computer security (b) • Need for low-distraction environment for survey completion (c)

Source: Adapted from Cooper & Schindler (2001: 313)

It is important to briefly discuss the deciding factors when choosing between the various survey options before concluding the discussion on data collection methods. Sudman & Blair (1998: 155) provide a summary of the considerations (shown in Table 6.2) when choosing a survey method.

TABLE 6.2: CONSIDERATIONS WHEN CHOOSING A SURVEY METHOD

Consideration	Questions to be Answered
Questionnaire Design	What constraints does this method impose on the questionnaire? Does it allow us to do what we want?
Sampling	What constraints does this method impose on getting a sample of respondents? Will it allow us to get a sample of adequate quality?
Response Quality	Will any characteristic of this method discourage accurate answers?
Time and Cost	How long will it take to complete? How much will it cost?

Source: Sudman & Blair (1998: 155)

A number of additional criteria can be listed that should be considered when deciding between the different survey methods. These criteria include: diversity of the questions, use of physical stimuli, control of the data collection environment, control of the field force, quantity of the data and potential for interviewer bias (Malhotra, 1996: 205-211). In addition to these criteria, Burns & Bush (1998: 270) also list (amongst others): respondent characteristics - incidence rate, willingness to participate, ability to participate and diversity of respondents.

Although many other factors can also be listed as criteria when choosing between survey methods, Boyd, Westfall & Stasch (1989: 249) are of the opinion that if all the survey methods will produce the same results when data is collected, the decision can be made on the basis of speed or cost.

After pondering on the different methods of data collection and considerations when deciding which survey method to use, it was decided to use self-

administered surveys by using the Internet. The decision was further supported by considering the following statement by Forrest (1999: 10), explaining why the Internet is regarded as a powerful research tool: "., the advantages of the Internet as a survey medium when compared to existing methods are many, especially in terms of cost, speed of distribution and the ability of researchers to gain access to real-time information".

Forrest (1999: 139) does, however, also list a major concern that should be kept in mind when considering to use Internet surveys, namely that the Internet population is not representative of the general population. Although this concern is noted, it will be ignored since the population (discussed when the sampling process is described) used in the study is Internet users and not the South African population as a whole.

Two self-administered survey options were viewed as most probably the best methods that could be used to conduct the research project by using the Internet, namely: distribution of questionnaires through e-mail for completion by the respondent and returned to the researcher by e-mail and Internet-based research conducted on a live Web-site.

After considering the two options, it was decided to use the live Web-based option for the following reasons: Firstly, the respondents will be familiar with the Web-environment since they will all be registered Internet users and the research project is specifically to determine buying behaviour of Internet users (to a great extent implying Internet-based purchases). Secondly, the researcher had a concern that respondents may have been reluctant to open an attachment to an e-mail from a person or organisation they did not know.

The e-mail with attachment option also may have proved too cumbersome for respondents since they would have had to save the questionnaire once completed to their computer's hard drive before returning it. If the completed

questionnaire was not saved, "empty" questionnaires would have been received from respondents.

Based on this reasoning, it was decided to use the live Web-based self-administered survey option (attached in Appendix 9).

6.4   SAMPLING

A sample represents a limited number taken from a large group for testing and analysis and is based on the assumption that the sample can be treated as representative of the group (Crouch & Housden, 1996: 115). In basic terms, some elements in a population provide useful information of the entire population (Emory & Cooper, 1991: 242).

Before providing more detail on the terms associated with sampling (which should be discussed to provide clarity on the sampling process), it is important to firstly explain why samples are used in research and secondly to provide characteristics of "good" samples.

Two general reasons for the use of sampling can be distinguished, namely practical considerations such as cost and the size of the population and secondly, ability to analyse the data (Burns & Bush, 1998: 361 – 362). Cooper & Schindler (2001: 163) broaden this view by identifying four reasons for sampling, namely lower cost, greater speed of data collection, greater accuracy of results and availability of population elements.

The relation between **cost and speed** of data collection is supported by Crouch & Housden (1996: 116), indicating that the smaller the number of people from which data has to be collected, the cheaper and quicker it will be.

Greater **accuracy of results** is often assured, since fewer field-workers, who have to be trained and supervised, are needed. Sampling also allows for more thorough investigation of missing, wrong or suspicious information (Cooper & Schindler, 2001: 164 and Boyd et al., 1989: 358).

Finally, the **availability of population elements** is often a reason for sampling. This reason is typically listed when, for example, the breaking strength of materials has to be tested. The only way of ensuring that not all material is destroyed in testing, is by using a sample of the materials. This reason will also be prominent when the population is infinite (Cooper & Schindler, 2001: 164).

Considering the reasons stated above to explain why sampling is done, the question may arise as to what can be considered to be a good sample. Lohr (1999: 3) proposes that a perfect sample would be: "... a scaled-down version of the population, mirroring every characteristic of the whole population". Lohr (1999: 3) continues by stating that a perfect sample does, however, not exist for complicated populations and even if it did exist, there is no way of knowing that it is a perfect sample without measuring the whole population.

A good sample can therefore be regarded as one that reproduces the characteristics of interest in the population as closely as possible. It will be representative in the sense that each sample unit will represent the characteristics of a known number of units in the population (Lohr, 1999: 3).

Before continuing the discussion on sampling, the terminology associated with sampling will first be clarified. The following terms will be discussed: target population, sampled population, observation unit, sample unit, sample frame and the sample frame error.

The **target population** (also referred to as the **population**) is the collection of elements or objects (possessing the sought information) that the researcher

intends to study and about which inferences are to be drawn (Malhotra, 1996: 360). Siegel (1994: 252) defines the population perhaps a bit more simply: "The **population** is the collection of units (people, objects, or whatever) that you are interested in knowing about". The **sampled population** represents the actual population from which the sample has been taken (Keller & Warrack, 2000: 153 and Lohr, 1999: 3)

The **observation unit** represents an object on which a measurement is taken and forms the basic unit of observation (also referred to as an **element**)(Lohr, 1999: 3). In simple terms, the **element** is the object from which or about which information is desired (Malhotra, 1996: 361).

A **sample unit** represents the unit (or a unit containing the element) that is actually sampled or is available for selection at some stage of the sampling process (Lohr, 1999: 3 and Malhotra, 1996: 361).

Finally, the **sample frame** refers to a list of all sample units in the population (Lohr, 1999: 3 and Burns & Bush, 1998: 360). For example, when conducting a telephone survey, the sampling frame could include all the telephone numbers in a particular city. It should be noted that a sample frame could contain a **sample frame error**, defined as the degree to which the sample frame fails to account for all of the population (Burns & Bush, 1998: 361).

As mentioned above, errors do occur with sampling. Two other errors associated with sampling that should briefly be discussed are sampling and non-sampling errors. **A sampling error** refers to any error in a survey that occurs because a sample is used. A sampling error is caused by two factors, namely the method of sample selection and the size of the sample (Burns & Bush, 1998: 360).

A **non-sampling error** is regarded as being more serious than a sampling error (Keller & Warrack, 2000: 160), since a larger sample will not diminish the size of

the error or even the possibility of it occurring. Thompson (1997: 7) adds to this view by stating that the extent of sampling errors is much easier to estimate than the extent of non-sampling errors.

Non-sampling errors occur due to mistakes made in the acquisition of the data or through the improper selection of sample observations. Three types of non-sampling errors can be distinguished, namely errors in data acquisition (types of errors arising from the recording of incorrect responses), non-response errors or bias (occurs when responses are not obtained from some members of the sample) and selection bias (when the sampling plan is such that some members of the target population cannot possibly be selected for inclusion in the sample)(Keller & Warrack, 2000: 160).

The discussion above should provide sufficient information to form a general view of what sampling is and the terminology associated with sampling. The remainder of the section will provide details on the sampling process followed for the study. The discussion will be structured according to a sampling design process suggested by Malhotra (1996: 360). The process comprises 5 steps, namely:

Step 1:   Define the population (Section 6.4.1)

Step 2:   Determine the sampling frame (Section 6.4.2)

Step 3:   Select the sampling techniques (methods)(Section 6.4.3)

Step 4:   Determine the sample size (Section 6.4.3)

Step 5:   Execute the sampling process (selection of the sample units)(Section 6.4.4)

Steps 3 and 4 will be combined for the purpose of the discussion.

6.4.1 Define the population

From the discussion in Section 1.2 (in Chapter 1) it could be seen that the population for this study was defined as **all Internet users in South Africa accessing the Internet from home.**

Table 1.4 (in Chapter 1) provided details regarding the number of South African Internet users by access method. From Table 1.4 it could be seen that the Internet users who access the Internet via dial-up modem amount to 782 000 (end of 2000).

For the purpose of this study, only the South African Internet users accessing the Net from home (782 000 users at the end of 2000) will be included to represent the population for the study. It is implied that users from all of the geographic regions (provinces) will be included in the sample.

Since this study will focus on consumers, it was decided to only focus on users accessing the Net from home (based on the assumption that consumers would access the Net from home, rather that from academic institutions or corporate networks).

6.4.2 Determine the sampling frame

South African Internet users accessing the Internet by means of dial-up modems gain access to the Internet through Internet Service Providers (ISPs) to which they subscribe. A number of different ISPs offer dial-up access in South Africa, including ABSA Internet, M-Web, Telkom Internet (incorporating Intekom) and World-Online. Detailed information regarding the number of subscribers to each Internet Service Provider could not be obtained. A possible reason for the lack

of this information can be attributed to the competitive nature thereof to Internet Service Providers.

The researcher negotiated with a leading South African ISP to use their Internet user-database to conduct the study. **For confidentiality reasons (as requested by the ISP), the ISP will remain anonymous and will be referred to in the study as ISP "X".** Important to note is that ISP "X" provides two different dial-up access services, each trading under separate names. For the purpose of the study, the first service (and users/database thereof) will be referred to as ISP "X" (a) and the second (and users/database thereof) as ISP "X" (b). **The sampling frame for the study is, therefore, all Internet users who subscribe to ISP "X".**

6.4.3 Selecting the sampling method and size of the sample

Sampling methods can be broadly classified as non-probability and probability. Non-probability sampling relies on the personal judgement of the researcher rather than on chance to select elements, whereas with probability sampling methods the sample units are selected by chance (each element of the population has a fixed probabilistic chance of being selected for the sample (Cooper & Schindler, 1998: 218 and Malhotra, 1996: 365).

A number of different probability and non-probability sampling methods are distinguished. Although some authors differ as far as the actual terminology used for the various methods, there is general consensus regarding the major methods (Cooper & Schindler, 2001: 189 & 190; Lohr, 1999: 24; Burns & Bush, 1998: 363 & 376 and Sudman & Blair, 1998: 349 - 349). The most commonly used non-probability sampling methods are: convenience sampling, judgement sampling, referral sampling and quota sampling. The predominant probability sampling methods are: simple random sampling, systematic sampling, cluster sampling and stratified sampling.

For the purpose of the research study, probability sampling will be used. For this reason, only the four probability sampling methods identified above will receive further attention. These methods are shown in Table 6.3 below, providing a short description and the advantages and disadvantages of each method.

TABLE 6.3: PROBABILITY SAMPLING METHODS

Sampling method	Description	Advantages	Disadvantages
Simple Random	Each population element has an equal chance of being selected into the sample. Sample drawn using random number table/generator	* Easy to implement with automatic dialling (random digit dialling) and with computerised voice response systems (if telephone or fax is used)	* Requires a listing of population elements * Takes more time to implement * Uses larger sample sizes * Produces larger errors * Expensive
Systematic	Selects an element of the population at a beginning with a random start and following the sample fraction selects every k^{th} element	* Simple to design * Easier to use than simple random * Easy to determine sample distribution of mean or proportion * Less expensive than simple random	* Periodicity within the population may skew the sample and results * If the population list has a monotonic trend, a biased estimate will result based on the start point
Stratified	Divides population into sub-populations or strata and uses simple random on each strata. Results may be weighted and combined	* Researcher controls sample size and strata * Increased statistical efficiency * Provides data to represent and analyse subgroups * Enables use of different methods in strata	* Increased error will result if subgroups are selected at different rates * Expensive * Especially expensive if strata on the population have to be created
Cluster	Population is divided into internally heterogeneous sub-groups. Some are randomly selected for further study	* Provides an unbiased estimate of population parameters if properly done * Economically more efficient than simple random * Lowest cost per sample, especially with geographic clusters * Easy to do without a population list	* Often lower statistical efficiency (more error) due to subgroups being homogeneous rather than heterogeneous

Source: Adapted from Cooper & Schindler (2001: 190)

Couper (2000: 485) lists a specific (probability) Web-based sampling method, namely list-based samples. The basic approach of this type of Web survey is to begin with a frame of those with access to the Web (refer to Section 6.4.2 where

it was noted that the frame for this study is specifically Internet users). Couper (2000: 485) explains that invitations are sent by e-mail to participate and access is controlled to prevent multiple completions by the same respondents (Section 6.7 details the interview procedure, commencing with an e-mail message sent to Internet users comprising the frame). A main concern when using this survey method is a non-response error. A non-response error arises through the fact that not all people included in the sample are willing or able to complete the survey (Couper, 2000: 473) and is, therefore, a function of the rate of non-response and the difference between respondents and non-respondents.

After careful consideration of the different probability sampling methods shown in Table 6.3 and paying attention to the advantages and disadvantages of each method (with specific consideration of the objectives and hypotheses formulated for the study), it was decided to use the **stratified method of sampling**. The reason why the objectives and hypotheses set for the study played such an important role in deciding which sampling method to use can be justified - the length of time being an Internet user is of critical importance to the success of the study since most of the hypotheses centre around identifying possible relationships with the period being an Internet user.

In an attempt to ensure that this critical element to the study is met, different periods of Internet usage for Internet users will first have to be identified (creating various strata – refer to Table 6.4). Once the periods have been identified, it will be possible to use simple random sampling to complete the sampling process. It can be derived from the discussion that the stratified method of sampling is best suited to meet the requirements to conduct the study.

Since ISP "X" provided the information of all their Internet users, it was decided to use 20 000 Internet users in the sample.

6.4.4 Selection of the sample units

The selection of the sample units was conducted with a specific requirement in mind, namely that provision had to be made for the period of Internet usage. With this requirement in mind, the sample was drawn from the ISP "X" database as follows:

Step 1: Setting the parameters

A)   The following dates were specified as the periods wherein an Internet user had to have joined ISP "X" (a):

    a)   between 1 January 1997 and 31 December 1999; and

    b)   between 1 January 2001 and 25 November 2001 - the date on which the database was drawn. [It should be noted that in an attempt to ensure an even distribution, across all time periods, it was decided not to consider users who joined ISP "X" (a) in 2000 since ISP "X" (b) only became operational in 2000. Selecting more users from ISP "X" (a) who joined during 2000 could possibly skew the anticipated responses across the period of Internet usage when both user groups are considered.]

B)   The following dates were specified as the periods wherein an Internet user had to have joined ISP "X" (b) as their ISP:

    a)   between 1 January 2000 and 31 December 2000 [it should be noted that ISP "X" (b) was only launched in 2000 and, therefore, had no users prior to 1 January 2000]; and

    b)   between 1 January 2001 and 25 November 2001 (date on which the database was drawn)

Step 2: Simple random sampling

Simple random sampling was used to draw 7 000 subscribers for each period specified above. The sample units were randomly selected, following a ratio between the number of Internet users in each time period and the total number

required for each period (7 000). A total of 14 000 ISP "X" (a) and 14 000 ISP "X" (b) Internet subscribers were selected.

The reason for selecting 7 000 users per time period can be attributed to many records on the database lacking a primary e-mail address (possibly because subscribers use the ISP for Internet access only - if e-mail is required, subscribers can obtain free e-mail on the Net at, for example, HotMail or Yahoo Mail). The advantage of the latter is that even if the subscriber changes his/her ISP, the e-mail address will remain the same. The extra 2 000 users per period was thought to be sufficient to, once removed, leave 5 000 Internet users per specified period.

Step 3: Final selection

All data records of Internet users without a primary e-mail address on the ISP "X" (a) and ISP "X" (b) databases were removed, leaving 5 000 users per period (in cases where there were in excess of 5 000 users, all records from data entry 5 001 onwards were removed). The sample size that will be used in the study is summarised in Table 6.4 below:

TABLE 6.4: DETAILS OF STRATA FOR THE SAMPLE USED

ISP "X" (b): Period joined ISP		ISP "X" (a): Period joined ISP		Total
1 January 2000 to 31 December 2000	1 January 2001 to 25 November 2001	1 January 1997 to 31 December 1999	1 January 2001 to 25 November 2001	
5 000 Internet users	5 000 Internet users	5 000 Internet users	5 000 Internet users	20 000 users

6.5 MEASUREMENT AND MEASUREMENT SCALES

Measurement and measurement scales available to the researcher need to be explained before attention is focused on questionnaire design.

Measurement, in a research context, consists of assigning numbers to empirical events in compliance with a set of rules (Cooper & Schindler, 2001: 203). A question that may arise from the statement, is: "what is being measured?" Cooper & Schindler (2001: 204) and Burns & Bush (1998: 289 – 290) explain

that the properties of objects are being measured. Objects include, for example, consumers, advertisements and books, whereas properties are the specific characteristics or features of an object that can be used to distinguish between objects.

Of importance when studying measurement and scaling, is to understand scale characteristics since the characteristics possessed by a scale determine the level of measurement thereof (Burns & Bush, 1998: 292). Cooper & Schindler (2001: 204 – 205) and Burns & Bush (1998: 291) identify four scale characteristics, namely description (Cooper & Schindler, 2001: 204 refer to classification), order, distance and origin. These four characteristics will briefly be discussed below.

Description refers to the use of a label or unique descriptor to stand for each designation in the scale, for example "yes" and "no" or "agree" and "disagree". Burns & Bush (1998: 291) note that all scales include description in the form of characteristic labels that identify what is being measured.

The relative sizes of descriptors are referred to as **order**. Key to the explanation is the term "*relative*" and includes descriptors such as "greater than", "less than" or "equal to". For example, a consumer's least-preferred brand is "less than" the most-preferred brand. Not all scales possess order characteristics, as opposed to description. For example, is a "buyer" greater than a "non-buyer"? One cannot establish a *relative* size distinction.

The third characteristic, **distance**, is when the absolute difference between descriptors is known (and may be expressed in units). Order is also given to a scale if distance exists. For example, a consumer purchasing three bottles of beer purchases two bottles more than the consumer only purchasing one bottle. Order can be identified since it is clear that the three-bottle-buyer purchases "more than" the one-bottle-buyer and distance can be determined between the two buyers (two bottles).

The final characteristic is **origin**, implying that the scale has a unique beginning or true zero point. A zero is therefore the origin, for example, for the number of bottles of beer consumed. Not all scales used in research are characterised by origin, for example "do you agree or disagree with the following statement". The researcher can therefore not say, for that specific scale, that the respondent to the question has a true zero level of agreement.

The discussion above should provide sufficient information to form an understanding of the importance of measurement and characteristics of scales in the research process. The characteristics of scales will be considered when deciding which scales to use when designing the questionnaire. The four levels of measurement (measurement scale types) are discussed below.

6.5.1 Measurement scale types

The four measurement scale types that will now be briefly discussed are nominal scales, ordinal scales, interval scales and ratio scales. Showing the characteristics of measurement that each type of scale possesses will conclude the section.

Nominal measurement scales are used when objects are assigned to mutually exclusive, labelled categories, with no necessary relationship between the categories (Aaker & Day, 1990: 273). Nominal scales therefore only use labels and contain only the characteristic of description, for example race, gender and answers that involve "yes/no" or "agree/disagree" options.

Ordinal measurement scales are obtained by ranking objects in order with regard to some common variable (Aaker & Day, 1990: 273). Burns & Bush (1998: 293) add that ordinal scales indicate only relative size differences among objects. This type of scale has description and order characteristics but does not show how far apart the descriptors are since it does not show distance or origin.

For example, a respondent indicating "purchase less than once a week" when asked to indicate how frequently a product is purchased.

Scales where the distance between each descriptor is known are referred to as **interval scales** (Burns & Bush, 1998: 293). The distance characteristic is usually defined as one scale unit. For example, rating the taste of coffee as a "3" value is one unit away from a "4"-rating.

The final measurement scaling method is **ratio scales**. Aaker & Day (1990: 274) explain that ratio scales are a special kind of scale that has a meaningful zero point. For example, when asking a respondent: "how many bottles of beer have you purchased?" One respondent may have purchased twice as many bottles as another. The ratio explained in the example above could not have applied to interval scales, since it is not possible to conclude that one coffee brand is ¼ better than another brand (example used above to illustrate interval scales).

Table 6.5 provides a summary of the four different measurement scale types together with the characteristics of measurement associated with each type.

TABLE 6.5: CHARACTERISTICS OF DIFFERENT MEASUREMENT SCALES

Level of measure	Scale characteristics possessed			
	Description	Order	Distance	Origin
Nominal scale	Yes	No	No	No
Ordinal scale	Yes	Yes	No	No
Interval scale	Yes	Yes	Yes	No
Ratio scale	Yes	Yes	Yes	Yes

Source: Burns & Bush (1998: 292)

The classification and characteristics of different measurement scales were used when deciding which scale types to consider when designing the research questionnaire. Although various different scale types can be used when designing a questionnaire, only the rating scales used to develop the questionnaire used in the study will be briefly discussed. The discussion is based on the guidance provided by Cooper & Schindler (2001: 231 – 235).

The **simple category scale,** also called a dichotomous scale, offers two mutually exclusive response choices and is particularly useful where a dichotomous response is adequate. For example, the answer to a research question is either "yes" or "no". This scale type produces nominal data.

The **multiple choice, single-response scale** is used where multiple options are provided but only a single answer is sought. For example, respondents are requested to indicate their population group when the categories are provided: "white", "black" and "coloured". Only a single answer is sought from multiple options. This type of scale produces nominal data.

A variation to the above is the **multiple choice, multiple-response scale**, also referred to as a checklist, where the respondent can either choose one or several options provided. For example, a respondent is required to indicate which magazines are read at home, where multiple magazine titles are listed. This type of scale produces nominal data.

The **Likert scale** is a variation of the summated rating scale, consisting of statements that express either a favourable or unfavourable attitude towards an object. With the Likert scale, a respondent is asked to agree or disagree with the statements provided. Each response is given a numerical score, reflecting its degree of attitudinal favourableness. For example, respondents are requested to indicate the degree to which they agree or disagree with a specific statement (or a number of statements), where the options are "totally agree"; "agree"; "neither agree nor disagree"; "disagree" and "totally disagree". The Likert scale produces interval data.

The questionnaire design will be discussed in the following section, considering the different measurement scales available to the researcher.

6.6   QUESTIONNAIRE AND WEB-SITE DESIGN

The questionnaire used in the study was compiled after considering a number of factors that specifically influenced the design thereof. The major considerations were: the objectives and hypotheses set for the study, the survey method used, measurement scales selected for data collection, actual data capturing method and results obtained from the pre-test group. A copy of the questionnaire is attached (Appendix 9) together with a copy of the e-mail message that was sent to the sample population (Appendix 8), inviting them to respond to the questionnaire.

The section will provide details regarding the structure of the questionnaire, Web-site design, mapping of questions to address hypotheses set for the study, measurement scales used and rationale for questions used.

6.6.1 Questionnaire structure

The questionnaire was divided into four different sections, namely:

Section A: Classification questions;

Section B: Non-internet shoppers: factors considered when deciding whether or not to purchase via the Internet; consideration to purchasing via the Internet in the future; and tendency to search for information on the Internet prior to purchasing from "traditional", non-Internet-based sellers;

Section C: Internet shoppers: factors considered when deciding whether or not to purchase via the Internet; current product and services categories purchasing from via the Internet (and future intentions to purchase); and tendency to search for information on the Internet prior to purchasing from "traditional", non-Internet-based sellers;

Section D: Demographic information

The four sections with the relevant questions for each section will be discussed briefly in tabular form below, indicating the question (without the options that the respondents could choose), the variable (V) number applicable to each question and the scale type used.

It is important to note that the Web-site was designed in such a way that respondents would only complete questions according to their answers provided for the preceding question. For example, if the respondent answered "Yes" to question 7, the Web-site will automatically route the respondent to question 9. If the respondent answered "No" to question 7, the respondent will automatically be routed to question 8. The design of the questionnaire branching (attached in Appendix 7) is discussed in more detail in Section 6.6.2 (Web-site design).

Section A: Classification questions

Section A will attempt to classify the respondents according to the length of Internet access, determine from where they access the Internet, consider their Internet banking activities and determine whether or not they have purchased via the Internet before.

TABLE 6.6: QUESTIONS APPLICABLE TO SECTION A

Question	Variable	Scale type
1. From where do you access the Internet? (Multiple Answers)	V1 – V6	Multiple choice, multiple-response scale
2. From where do you most frequently access the Internet? (One answer only)	V7	Multiple choice, single-response scale
3. For how long have you been an Internet User? (Considering all the Internet Service Providers you have subscribed to)	V8	Multiple choice, single-response scale
4. How many Internet Service Providers have you subscribed to in the past?	V9	Multiple choice, single-response scale
5a. For how long are you subscribed to your current Internet Service Provider?	V10	Multiple choice, single-response scale
5b. Do you subscribe to more than one Internet Service Provider?	V11	Multiple choice, single-response scale
6. Please indicate the extent to which you agree or disagree with each of the statements listed below: [5 statements listed]	V12 – V16	7-point Likert scale
7. Do you use Internet banking?	V17	Simple category scale

Question	Variable	Scale type
8. Are you considering using Internet banking facilities in the future?	V18	Simple category scale
9. For how long have you been using Internet banking?	V19	Multiple choice, single-response scale
10. How frequently do you/do you think you will use Internet banking?	V20	Multiple choice, single-response scale
11. Have you ever purchased products or services via the Internet before? (excluding Banking Services)	V21	Simple category scale

It is important to note that, as can be seen from Question 11, banking services has been excluded as a product or service category option when classifying whether or not a respondent has purchased via the Internet before. The reason for keeping banking services as a separate category is based on the results from the pre-test group and the concern that by including banking services the findings of the research project may be skewed.

The pre-test group showed that 34% of respondents indicated that "other" products or services were purchased, which possibly could have included a large percentage of Internet banking users. The researcher also considered a respondent who used Internet banking as not necessarily an Internet shopper, since the respondent could perhaps use Internet banking purely for convenience purposes.

In an attempt to determine which Internet users "truly" purchase products and services via the Internet, banking services were separated and will be analysed separately due to the importance of this category.

Section B: Non-internet shoppers

Respondents who indicate that they have not purchased products or services via the Internet before (question 11), will automatically be routed to Section B, applicable to non-Internet shoppers only.

Section B will consider which factors are considered by non-Internet shoppers when deciding whether or not to purchase via the Internet, determine whether or not they consider purchasing via the Internet in the future, ascertain which product and service categories they consider purchasing from and determine whether or not they use the Internet to search for information before they purchase from "traditional", non-Internet based sellers (so-called brick and mortar organisations).

TABLE 6.7:   QUESTIONS APPLICABLE TO NON-INTERNET SHOPPERS (SECTION B)

Question	Variable	Scale type
12. Please indicate how important the factors listed below are to you when deciding whether or not to purchase via the Internet: [24 factors listed]	V22 – V45	7-point Likert scale
13. Do you consider purchasing products and/or services via the Internet in the future?	V46	Simple category scale
14. Would you consider to purchase via the Internet if more established, non-Internet based, South African businesses also offer products and services on the Internet? (e.g. Game Stores, OUTsurance, Musica)	V47	Simple category scale
15. From which of the following product and services categories will you seriously consider purchasing via the Internet in the future? (Multiple answers) [38 product and services categories listed]	V48 – V85	Multiple choice, multiple-response scale
16. Have you ever searched for or do you consider searching for product or service information on the Internet prior to purchasing from a non-Internet based seller? (e.g. A physical store or telephone shopping)	V86	Simple category scale
17. From which of the following product and service categories have you searched for or do you consider searching for information on the Internet prior to purchasing from a non-Internet based seller? (e.g. Physical store or telephone shopping) (Multiple answers) [38 product and service categories listed]	V87 – V124	Multiple choice, multiple-response scale

As can be seen from Table 6.7, the questions asked to non-Internet shoppers focused on the factors they consider to be of importance when considering whether or not to purchase via the Internet. It also tries to establish if they

consider purchasing via the Internet in the future and from which product and service categories they consider purchasing.

Section B finally tries to establish whether or not non-Internet shoppers use the Internet to search for information before purchasing from "traditional", non-Internet-based sellers. Upon completing Section B, respondents will automatically be routed to Section D.

Section C: Internet shoppers

Respondents indicating that they have purchased products or services via the Internet before (a "Yes" answer to Question 11 in Section A), will automatically be routed to Section C.

Section C will try to determine which factors Internet shoppers consider as being important when deciding whether or not to purchase via the Internet. The same statements as listed for non-Internet shoppers will be presented (question 12) for comparison purposes. Section C will also establish which product and service categories Internet shoppers have purchased from , will purchase from again and which they have not purchased from in the past they will consider purchasing from in the future.

Finally, as with Section B for non-Internet shoppers, Section C will determine whether or not Internet shoppers search for information on the Internet prior to purchasing from non-Internet based sellers. Section C will also try to establish from which categories they search on the Web. Table 6.8 summarises the questions asked to Internet shoppers.

TABLE 6.8: QUESTIONS APPLICABLE TO INTERNET SHOPPERS (SECTION C)

Question	Variable	Scale type
18. Please indicate how important the factors listed below are to you when deciding whether or not to purchase via the Internet: [24 factors listed]	V125 – V148	7-point Likert scale
19. From which of the following product and service categories have you purchased before and do you seriously consider purchasing via the Internet in the future? (Multiple answers) [38 product and service categories listed]	V149 – V186	Multiple choice, multiple-response scale
20. Have you ever searched for or do you consider searching for product or service information on the Internet prior to purchasing from a non-Internet based seller? (e.g. A physical store or telephone shopping)	V187	Simple category scale
21. From which of the following product and services categories have you searched for or do you consider searching for information on the Internet prior to purchasing from a non-Internet based seller? (e.g. Physical store or telephone shopping) (Multiple answers) [38 product and services categories listed]	V188 – V225	Multiple choice, multiple-response scale

Question 18 will try to determine which factors Internet shoppers consider when deciding whether to purchase via the Web. The results for this question will be compared to that of the non-Internet shoppers to determine whether or not any pertinent differences are noted between Internet shoppers and non-Internet shoppers. More detail on the manner in which the comparison will be made is provided in Section 6.9 when the statistical procedures and techniques adopted for the study are discussed.

Section C will also determine which product and service categories Internet shoppers have purchased before. Respondents will also have to indicate which they will purchase from again ("yes", "no" or "uncertain" responses have to be provided). Respondents will also be requested to indicate from which product and service categories they have not purchased before, they consider purchasing from in the future.

Section C will, as with Section B, conclude by determining whether or not Internet shoppers search for product and service information on the Internet prior to purchasing from non-Internet based sellers. Those respondents who indicated that they search for information will also be requested to indicate for which product and service categories they search on the Web.

Once Internet shoppers completed Section C, they will automatically be routed to the final section of the questionnaire, Section D.

Section D: Demographic information

The aim of the final section of the questionnaire, Section D, was to derive demographic information from the respondents who completed the questionnaire.

Table 6.9 below provides a summary of the questions that were used to compile a demographic profile of the respondents to the study.

TABLE 6.9:	QUESTIONS APPLICABLE TO DEMOGRAPHIC INFORMATION	
Question	**Variable**	**Scale type**
Please provide the following information about yourself:		
22. Gender	V226	Multiple choice, single-response scale
23. Age	V227	Multiple choice, single-response scale
24. Household Language	V228	Multiple choice, single-response scale
25. Gross Monthly Income	V229	Multiple choice, single-response scale
26. Highest Qualification	V230	Multiple choice, single-response scale
27. In which area do you live or which area is closest to you?	V231	Multiple choice, single-response scale
28. Population Group	V232	Multiple choice, single-response scale
29. Marital Status	V233	Multiple choice, single-response scale
30. Number of people actively using the Internet (more than once a week) in your household	V234	Multiple choice, single-response scale
31. Number of people in your household	V235	Multiple choice, single-response scale

Due to possible sensitivity in providing demographic information, it was explicitly stated, before respondents provided the required information, that the information provided will be treated as highly confidential and totally anonymous. It was

envisaged that by ensuring confidentiality, respondents would be more willing to provide personal information.

In conclusion to the questionnaire structure discussion, Table 6.10 below indicates which questions included in the questionnaire (with relevant variables) will provide data that can be used to evaluate the hypotheses formulated for the study.

TABLE 6.10:   RESEARCH HYPOTHESES AND QUESTIONNAIRE MATRIX

Hypotheses	Questions	Variables
H_1 : The decision to purchase via the Internet is significantly influenced by factors consumers consider prior to purchase	Q11; Q12: Q18	V21; V22– V45; V125 – V148
H_2 : The factors Internet shoppers consider prior to purchasing via the Internet are significantly influenced by the period of Internet usage	Q3; Q18	V8; V125- 148
H_3 : The period of Internet usage significantly influenced the decision to have purchased via the Internet	Q3; Q11	V8; V21
H_4 : The period of Internet usage significantly influences the decision of non-shoppers to purchase via the Internet in the future	Q3; Q11; Q13; Q14	V8; V21; V46; V47
H_5 : The period of Internet usage significantly influences the decision to search for product or service information on the Net prior to purchasing from non-Internet based sellers	Q3; Q16; Q20	V8; V86; V187
H_6 : There is a significant difference between Internet shoppers and non-shoppers in their decision to search for product and service information on the Internet prior to Offline purchases	Q11; Q16; Q20	V21; V86; V187
H_7 : The period of Internet usage significantly influenced the product and service categories Internet shoppers have purchased via the Internet	Q3; Q19	V8; V149- V186
H_8 : The period of Internet usage significantly influences the product and service categories Internet shoppers and non-shoppers consider purchasing via the Internet in the future	Q3; Q15; Q19	V8; V48 – V85; V149 – V186
H_9 : Demographic variables of Internet users significantly influence whether Internet users purchased products or services via the Internet	Q11; Q22- Q29	V21; V226- V235
H_{10} : Demographic variables of Internet users significantly influence the product and service categories Internet users purchased via the Internet	Q19; Q22- Q29	V149 – V186; V226 – V235
H_{11} : Demographic variables of Internet users significantly influence the product and service categories Internet shoppers and non-shoppers consider purchasing via the Internet in the future	Q15; Q19; Q22-Q29	V48 –V85; V149 – V186; V226 – V235

6.6.2 Web-site design

The Web-site was specifically designed with a number of " rules" for successful execution of the study in mind and to be compatible with both Microsoft Internet Explorer and Netscape Navigator Internet Browsers. These "rules" will briefly be discussed to create an understanding for the rationale for doing so.

The first requirement when designing the questionnaire was that **"Internet speed" or "download speed"** while on the Web-site should be a priority. The reason for focusing on the speed element is that respondents might have been discouraged to complete the questionnaire, or abandon the questionnaire after starting, if the interaction time with the Web-site took too long. The end-result from this requirement was that the background design had to be kept simple with no elements (for instance graphics or pictures) that would require additional downloading time.

A second requirement was that the responses to questions should be directly **captured in a database once the questionnaire had been completed in full**. There were two reasons for this requirement. Firstly, by writing responses to the database only once the entire questionnaire had been completed, would ensure completeness of all responses. There would, therefore, not be half-completed questionnaires (and database entries). The second reason is linked to the first, namely that the respondent would not be able to complete a questionnaire partly on a number of occasions (Web-sessions), possibly leading to duplications for the same respondent.

The second requirement led to subsequent requirements that the Web-site had to meet.   Firstly, to ensure that a respondent who had to complete a questionnaire through a number of Web-linked sessions, the Web-server generated a unique reference number each time an Internet user visited the Web-site.   The respondent could at any point, while completing the

questionnaire, decide to save the responses to questions already provided and leave the Web-site or terminate the Internet session. The reference number could then be used when the responded re-connected to the Web-site to continue with the questionnaire at the point at which the previous session was terminated.

Two important considerations for this requirement should be mentioned. Firstly, the reference number "protected" the database in the sense that data would only be captured once the entire questionnaire had been completed. Secondly, the reference tool also acted as encouragement to the respondent to complete the questionnaire, since the respondent could simply continue with the questionnaire instead of starting again from the beginning. It is important to note why a respondent would possibly not complete the questionnaire in one session. One possible reason is that the respondent's connection to the Web could have been terminated (e.g. a poor connection, a power failure, visitors arriving or call-waiting on their telephone line – which would most probably terminate the connection).

The second requirement also led to the issue of database integrity due to capturing only taking place once the questionnaire had been completed. In short, capturing in this manner was made possible by writing responses to temporary files on the Internet server with a command that once the final question had been completed, the system would write the files associated with the respondent's responses to the database. The problem that had to be addressed, was that respondents could move back to questions (pages on the Web-site) and complete other options not selected before, resulting in a corrupt database entry. For example, a respondent could select "have not purchased before" and be automatically routed to Section B of the questionnaire.

After completing the section, the respondent could move back to the main "routing question" ("have not purchased before") and select a different option, i.e. "have purchased before". The Web-site would automatically route the

respondent to Section C to be completed. Since the data, at this point of the process, is captured in a temporary file, a final entry in the database once the questionnaire had been completed would have shown that the respondent indicated a "has purchased before" as well as a "has not purchased before" response. This imposed a serious threat to the integrity of the data and the decision was made to de-activate the "back" ("previous") option on the entire Web-site.

A third requirement, aimed at ensuring complete database entries, was to ensure a question (and all sub-sections thereof) was completed before the system would allow the respondent to proceed to the next question. The requirement was met by blocking each entry-field for each possible response for each question (with the exception of question 19) and writing a programming rule that each question and sub-section had to contain an answer before the respondent would be routed to the next question. If an answer was missing, the system would notify the respondent by means of a pop-up screen that an answer or sub-section thereof had to be completed.

As mentioned above, question 19 was the exception to the rule. The reasoning for excluding this question was that respondents (only applicable to current Internet shoppers) had to indicate whether or not they have purchased from a category before and from which categories they considered purchasing from in the future. If the rule above was used for this question, respondents would have had to indicate that they purchased from all categories, which would make the findings from this question totally invalid.

Question 19 did however contain a set of rules applicable to this question only. It was considered important, for the purpose of the study, to determine whether or not current Internet shoppers who have purchased from a specific category before would purchase from the same category again. Respondents, therefore, had to indicate for each category from which they have purchased before,

whether or not they would purchase from the same category again, will not purchase from it again, or were uncertain whether or not they will purchase from it again. If the future consideration to the selected category was not indicated, the system would notify the respondent by means of a pop-up instruction to complete the specific omitted category. The system would route the respondent to the next question only once the rule/requirement was adhered to.

Once the final question had been answered, the Web-server automatically wrote a respondent's response to the questionnaire directly to the database.

6.7 INTERVIEW PROCEDURE

As indicated earlier, the sample population was reached by means of an e-mail that was distributed from a server hosted by ISP "X". The e-mail invited ISP "X" (a) and ISP "X" (b) Internet users to participate in the research project and mentioned that, by completing the questionnaire in full, they could be eligible to win a prize. The e-mail letter (attached in Appendix 8) contained an automatic link that, if clicked on, would route the respondent directly to the Web-site (due to confidentiality reasons, the Web-site address can not be divulged) where the questionnaire was hosted (on the ISP "X" Internet Server).

Once logged onto the Web-site, the respondent was greeted with an introductory message that provided more information than was contained in the e-mail message. The central message that a potential respondent should understand from reading the introductory page was that participation to the research project was totally voluntary and that confidentiality was assured. The need for the selected Internet users to understand the conditions of participating in the research project was a critical condition set by the ISP "X" database owner (to ensure that the rights and privacy of the Internet subscriber is protected).

The introductory page also indicated which prizes could be won by participating in the research project. It was envisaged that by offering potential respondents the opportunity to be rewarded for participating, a greater percentage of the users would participate. The prizes, all of which were sponsored by ISP "X", that participants to the study could win in a lucky draw were: 10 golf shirts and caps; 10 LCD telephones and 4 DIVA internal ISDN modems. The prizes were to be delivered to the physical addresses of the winners.

Respondents had a choice after reading the introductory page of the questionnaire whether or not they wanted to participate in the research project. If they chose to continue (by clicking on the continue button), they would be routed to Section A of the questionnaire. If they were not interested and clicked on the exit button, they would be routed to the ISP "X" Internet Web-site.

Once respondents started completing the questionnaire, they would automatically be routed through the Web-site according to their answers to the questions. Appendix 7 shows how the automatic branching navigated respondents through the Web-site.

6.8 CODING, EDITING AND TRANSFERRING OF DATA

Coding involves the process whereby numbers or symbols are assigned to answers for analysis purposes (Cooper & Schindler, 2001: 424; Burns & Bush, 1998: 453 and Sudman & Blair, 1998: 415). Two categories of coding are distinguished (Cooper & Schindler, 2001: 424), namely alphanumeric coding (when letters are used in combination with numbers and symbols for coding) and numeric coding (exclusive use of numbers). Numeric coding was used for the study.

The questionnaire used in the study did not contain any open-ended questions. Pre-coding of the questionnaire was therefore done when the questionnaire was

developed, ensuring that the answers provided by respondents to questions were directly captured in a coded format onto a database.

The purpose of **editing** is to detect errors and omissions and to correct them if possible (Cooper & Schindler, 2001: 423). The data will be checked to identify any possible errors and it will, if possible, be corrected. Any errors detected and corrections done will be reported.

After discussions with the Statistics Department at the University of Pretoria (who will analyse the data), it was found that the manner in which the data was recorded could not be used as input to the SAS computer statistical package. The data was captured in the database, residing on the Web-server, in a "string format", i.e. q1_3,q2_3,q3_1,q4_3,q5_4 etc. For the database to be imported to the SAS computer program, the required format should have been as follows:

Q1	Q2	Q3	Q4	Q5	etc.
3	3	1	3	4	etc.

where only the actual **coded value** is reported in the relevant question column.

Two options could be followed to overcome this obstacle. Firstly, a manual process could have been followed where the "string format" data could be captured manually in a Microsoft Excel Workbook. Secondly, a computer programmer could be approached to write a computer software programme that would automatically re-write the "string format" database into a new Microsoft Excel Workbook database. From both a time and cost perspective, as well as an accuracy perspective (possible errors due to manual intervention), a computer software programme was written especially to meet the requirements for further analysis of the data.

The final data file (approximately 5 Meg.) was transferred (through e-mail) from the researcher to the Statistics Department at the University of Pretoria.

6.9 STATISTICAL PROCEDURES AND TECHNIQUES ADOPTED FOR THE STUDY

This section will provide details regarding the manner in which missing responses will be dealt with. A detailed discussion will be provided regarding the descriptive statistics that will be reported as well as the statistical techniques that will be utilised. The SAS computer statistical software package will be used for data processing.

6.9.1 Missing responses

There are many ways of dealing with missing responses/data. Sudman & Blair (1998: 455 – 456) suggest two ways: Firstly, if the volume of missing data is small enough, it is very unlikely to affect the conclusions from an analysis. The best way of handling small volumes of missing data is, therefore, to exclude it from the analysis. Secondly, if the volume of missing data is large enough to affect the conclusions, the best way of dealing with it is to include it in the results. This can be accommodated in two ways. Firstly, the missing data can be retained as a separate category and should be reported in the results. Secondly, values can be estimated for the missing data by using values from the reported responses.

As discussed in Section 6.6.2, the questionnaire had been designed and posted on the Web in such a way that it was very unlikely that any missing responses would be received. The predicted lack of missing responses can be attributed to the rules written for the Web-site, whereby a response had to be registered for each question before a respondent could continue to the next question and because the data was only captured once the entire questionnaire had been completed.

Based on the reason stated above, all data records that contain missing values to any question of the questionnaire will be excluded. The treatment of missing response will only be adhered to if there is a small number of data records containing missing responses.

6.9.2 Descriptive statistics

Descriptive statistics involves arranging, summarising and presenting a set of data in such a way that the meaningful essentials of the data can be extracted and easily interpreted (Keller & Warrack, 2000: 18). A descriptive analysis is typically used early in the analysis process and becomes the foundation for subsequent analysis (Burns & Bush, 1998: 456). Two types of measures are distinguished, namely that of central tendency and measures of dispersion (Sudman & Blair, 1998: 456).

The two groups will briefly be defined, since some of the measures will be used when reporting the findings of the study in Chapter 7.

(a) Measures of central tendency

The objective of using measures of central tendency is to report a single piece of information that describes the most typical response to a question (Burns & Busch, 1998: 459 and Sudman & Blair, 1998: 456). Three principal measures of central tendency (also called measures of location - Cooper & Schindler, 2001: 442 and Keller & Warrack, 2000: 90) will be discussed, namely the mean, mode and median.

(i)   The mean

The mean represents the arithmetic average and is the most common method for finding a typical value for a set of numbers (Cooper & Schindler, 2001: 442; Burns & Bush, 1998: 461 and Siegel, 1994: 71). The mean represents the sum of the observed values divided by the number of observations. The mean is the measure of central tendency most frequently used for interval-ratio data (Cooper & Schindler, 2001: 442).

(ii)   The mode

The mode is the value that is observed more frequently than any other value (Sudman & Blair, 1998: 456).

(iii)   The median

The median (or halfway point) of a set of observations represents the value that falls in the middle when the observations are arranged in order of magnitude (Keller & Warrack, 2000: 90 and Siegel, 1997: 65). This value has an equal number of observations above and below it (Sudman & Blair, 1998: 456).

(b)   Measures of dispersion

Measures of dispersion (also called measures of spread or variability) describe how scores cluster or scatter in a distribution (Cooper & Schindler, 2001: 443), or more simplisticly explained, they depict the "typical" difference between values in a set of values (Burns & Bush, 1998: 462). Only three measures of dispersion will be discussed, namely the variance, standard deviation and the range.

(i)   The variance

The variance represents the average squared distance between the values of individual observations on some variable and the mean of that variable (Sudman & Blair, 1998: 459).

(ii)   The standard deviation

The standard deviation indicates how far away the average is from the data values (Cooper & Schindler, 2001: 443 and Siegel, 1997: 106).

(iii)   The range

The range represents the difference (distance) between the largest (maximum) and smallest (minimum) score (value) in the distribution (set of values) (Cooper & Schindler, 2001: 443 and Burns & Bush, 1998: 463).

6.9.3   Statistical techniques applicable to the study

To achieve the objectives set for the study and to test the hypotheses stated in Chapter 5, a number of statistical techniques will be used. This section will be devoted to only those relevant statistical techniques that will be applied.

A)   Factor analysis

Factor analysis is a procedure that groups variables together in an attempt to discover if an underlying combination of the original variables (called a factor) can summarise the original set (Cooper & Schindler, 2001: 575 and Sudman & Blair, 1998: 547). The objective is therefore to reduce many variables that belong together and have overlapping measurement characteristics, to a manageable number (Cooper & Schindler, 2001: 591).

Two approaches to factor analysis can be used, namely principal factor analysis and common factor analysis. **Principal factor analysis** transforms a set of variables into a new set of composite variables or principal components that are not correlated with each other (Cooper & Schindler, 2001: 591), aiming to develop factors that explain the maximum amount out of the total variance in the variables being analysed (Sudman & Blair, 1998: 551). The objective when using **common factor analysis** is to explain the maximum amount out of the variance shared in common by the variables in the analysis. Principal factor analysis, the most frequently used approach (Cooper & Schindler, 2001: 592), will be used in the study.

Two key descriptive results obtained from factor analysis need clarification, namely factor loadings and eigenvalues (Sudman & Blair, 1998: 548).

Factor loadings represent the correlations between a factor and the individual variables being analysed (Aaker & Day, 1990: 547). Each factor will have loadings for all the variables being analysed. Variables with loadings with absolute values larger than 0.50 are said to "load highly" on a factor and are considered to be members of a group of variables identified by the factor.

The **eigenvalue** for a factor equals the sum of the squared loadings for all variables on that factor. The first factor has the largest eigenvalue since it is chosen so as to maximise the sum of squared correlations without any constraints. The second factor has the second highest eigenvalue and so on.

The eigenvalues supply a measure of the percentage of variance in the contributing variables that is explained by the factor, while the sum of the eigenvalues represents the total amount of variance to be explained in the analysis.

All factors with eigenvalues values larger than 1.0 will be retained, since an eigenvalue of 1.0 is regarded as the amount of variance attributable to a single variable, whereas factors with eigenvalues of less than 1.0 are viewed as "explaining" less than one variable's worth of variance (Sudman & Blair, 1998: 549). Factors with eigenvalues less than 1.0 will therefore be dropped from further consideration since they will be regarded as non-significant.

Factor analysis is often characterised by **rotation**, used when unrotated factors are not enlightened. Researchers hope to find, when rotation is used, some pattern in which factors are more heavily loaded on some variables (Cooper & Schindler, 2001: 593). Rotation is performed when a rotation scheme (for example Varimax) literally rotates the factors so that they become closer to some variables and further away from others (Sudman & Blair, 1998: 555).

Two methods of rotation are distinguished as orthogonal and oblique rotation. When using **orthogonal rotation**, repositioning of factors is subject to a constraint that they remain orthogonal (at right angles) to each other, implying that the factors have to remain uncorrelated. **Oblique rotation**, as opposed to orthogonal rotation, is not constrained to remain at the right angles, meaning that factors can become correlated.

Varimax as a rotation scheme (orthogonal rotation) is used by the researcher since it searches for a set of factor loadings so that each factor has some loadings close to zero and some loadings close to −1 or +1. The reason for using Varimax is that, due to its application, it makes interpretation easier when the variable-factor correlations are close to +1 or −1, indicating a clear association between the variable and the factor (Aaker & Day, 1990: 550).

B) Cross-tabulation

Cross-tabulation is a technique used to compare two classification variables using a row and column format. The basic descriptive result from cross-tabulation is a frequency count for each cell in the analysis (Cooper & Schindler, 2001: 470; Burns & Bush, 1998: 541 and Sudman & Blair, 1998: 475).

Cross-tabulation will frequently be used in Chapter 7 when the results from the research study are discussed. An example, provided below in Figure 6.1, will clarify how the cross-tabulation technique will be used and interpreted in the study. Cross-tabulation will also be used as a statistical technique (inferential analysis) to either accept or reject a number of hypotheses that was set for the study. This will be done by means of using chi-square analysis, discussed later in the section.

FIGURE 6.1:   CROSS-TABULATION EXAMPLE

The cross-tabulation example shown in Figure 6.1 has been colour-coded for explanation purposes. The data shown in different colours correspond to the descriptions with the same colours. This is graphically shown for frequency (light yellow), represented by four sets of data (also in light yellow). A number of terms used in the cross-tabulation example shown above have to be explained so that the proposed presentation of cross-tabulation to be used is understood.

| Frequency | represents the actual frequency recorded in the initial data analysis (that is, the number of responses to the question posed in the questionnaire) (Burns & Bush, 1998: 543). In the example provided above, 125 respondents indicated that they were not married and owned a car. The "Total" figure provided in the same row as the frequency data represents the sum of all data figures in the frequency row (across all columns). That is, 125 ["Yes" option (own a car)] + 216 ["No" option (don't own a car)] = 341 ("Total" column).

| Expected | frequencies are defined by Burns & Bush (1998: 543) as: "...the theoretical frequencies that are derived from this hypothesis of no association between the two variables". Burns & Bush (1998: 543) continue by stating that the degree to which the frequency (observed data) depart from the expected frequencies is expressed in a single number called the chi-square statistic. The expected frequency is calculated by multiplying the column total (for all frequencies in all columns) by the row total (for all frequencies in the applicable rows), divided by all the respondents who completed the question. From the example above it can be derived that the expected frequency for unmarried car owners is 184.24, calculated as follow: [543 (all car owners) x 341 (all unmarried respondents)] / 1,005 (all respondents who completed the question) = 184.24.

| Cell ChiSquare | (chi-square for the specific cell under discussion) is 19.05. Chi-square will be discussed in more detail later in the section.

| Percent | is calculated by dividing the frequency by the **total number** of respondents that completed the questionnaire. Using the same example, it is

clear that 12.44% of all the respondents who completed the question are unmarried and own a car. The "Total" column indicates (in the same row as the percentage data) the sum of all the percentages indicated in that row. That is, 12.44% ["Yes" option (own a car)] **+** 21.49% ["No" option (don't own a car)] **=** 33.93% ("Total" column).

Row percent is calculated by dividing the frequency by the **"row specific total"** (indicated in the "Total" column – in the frequency row). That is, using the same example: 125 [frequency (unmarried and own a car)] **/** 341 [frequency (all unmarried respondents)] **x** 100 **=** 36.66%.

Column percent is calculated by dividing the frequency by the **"column specific total"** (indicated in the "Total" row – in the "Yes/No" own a car columns). That is, using the same example: 125 [frequency (unmarried and own a car)] **/** 543 [frequency (all respondents who own a car)] **x** 100 = 23.02%.

Finally, the "Total (Percent)" figures are calculated by adding all the Percent figures indicated for each column. From the example it can be seen that 54.03% of the respondents own a car and 45.97% don't own a car (the cumulative percentage – 100.00% - is also shown).

The discussion above should provide sufficient insight into the cross-tabulation process that will follow in Chapter 7 when the results and interpretation for the study is provided.

The final statistical technique that will be discussed, and that is closely related to cross-tabulation, is the chi-square test.

C)   The chi-square test

Diamantopoulos & Schlegelmilch (2000: 175) explain that the chi-square test should be used when two groups are compared on a variable which is measured on a nominal scale. Cooper & Schindler (2001: 499) add by stating that the chi-square (X^2) test is used to test for significant differences between observed distribution of data among categories and the expected distribution based on the null hypothesis. Burns & Bush (1998: 543) provide a more detailed explanation by stating that chi-square analysis examines the frequencies for two nominal-scaled variables in a cross-tabulation table to determine whether the variables have a non-monotonic relationship.

The chi-square procedure always starts with the formulation of a statistical null hypothesis that the two variables under investigation are **not** associated (Burns & Bush, 1998: 543). Stated simplistically: chi-square analysis always begins with the assumption that no association exists between the two nominal-scaled variables being analysed.

Of importance to note is that chi-square tests apply to the overall relationship between the variables and not for individual differences (Sudman & Blair, 1998: 479). Using the example in Figure 6.1, a chi-square value calculated would be applicable to the relationship between the two variables (marital status and car ownership) and not for individual categories, for example married car owners.

Burns & Bush (1998: 548) provide a cautionary statement when using chi-square values: "... chi-square value says nothing by itself – you must consider the number of degrees of freedom in the cross-tabulation table because more degrees of freedom are indicative of higher critical chi-square table values for the same level of significance". Burns & Bush (1998: 548) continue by explaining why this statement is made: "The logic of this situation stems from the number of cells. With more cells, there is more opportunity for departure from the expected

values". (The degree of freedom (DF) is calculated as $(R\text{-}1)(C\text{-}1)$, where R is the number of rows and C is the number of columns - Sudman & Blair, 1998: 479).

The discussion above is of extreme importance, since the computer programme used when the chi-square values are calculated will also provide the probability of the null hypothesis by taking the number of degrees of freedom into account. The probability percentage will be key to either accepting or rejecting the hypotheses set for the study.

The discussion on the chi-square test can be closed by stating that a chi-square analysis yields the probability that the researcher will find evidence in support of the null hypotheses if the study is repeated numerous times with independent samples (Burns & Bush, 1998: 548). For example, if a probability of 0.02 is found for the null hypothesis, the researcher would be able to conclude that evidence to support the null hypothesis will be found only two percent of the time. This implies that there **is a significant association** between the variables, resulting in the researcher being able to **reject** the null hypothesis (keep in mind that the null hypothesis states that there is **not** an association between variables).

6.10 SUMMARY

Chapter 6 provided a theoretical perspective on research methodology. The researcher indicated how the theory will be applied to conduct the primary research component of the study. The chapter indicated how the sampling process was followed, provided a discussion on the questionnaire that will be used and indicated how the Web-site was designed to accommodate the survey process that will be followed together with the methods on how the data will be collected. Providing a discussion on descriptive statistics and statistical

techniques that will be used to interpret the data that will be obtained from respondents concluded the chapter.

The results obtained from the primary research component of the study and the interpretation thereof will be discussed in Chapter 7.

CHAPTER 7

RESEARCH RESULTS AND INTERPRETATION

7.1   INTRODUCTION

Chapter 6 encompassed a detailed discussion on research methodology applicable to the empirical research phase of the study. Chapter 7 will document the research results and the key findings based on the interpretation of these results.

The chapter will commence by providing details of the realisation rate, where after the results obtained will be discussed on a question-by-question basis that is based on the research questionnaire (Appendix 9). Questions will be grouped together in order to establish a more meaningful discussion.

The discussion of each question will include descriptive statistics, where after statistical techniques will be applied (where necessary) to draw inferences from the data.

Chapter 7 will be concluded by a discussion on the acceptance or rejection of the hypotheses formulated for the study (as defined in Chapter 5), based on the main findings drawn from the research results.

7.2   REALISATION RATE

The sampling process was detailed in Chapter 6. A total of 20 000 Internet users formed the sample frame, comprising four different strata. Strata one and two each comprised 5 000 ISP "X" (b) Internet users. Stratum one contained ISP "X" (b) Internet users who joined ISP "X" between 1 January 2000 and 31 December 2000, stratum two contained 5 000 users who joined between 1 January 2001 and 25 November 2001.

Both strata three and four each comprised 5 000 ISP "X" (a) Internet users. Stratum three contained users who joined ISP "X" between 1 January 1997 and 31 December 1999, while stratum four was comprised of users who joined ISP "X" between 1 January 2001 and 25 November 2001.

Twenty thousand e-mail messages to invite Internet users to participate in the study were distributed to ISP "X" (a) and ISP "X" (b) Internet users on 26 November 2001. Confirmation was received (from the ISP "X" server) that 19 996 e-mail messages had been delivered to ISP "X" (a) and ISP "X" (b) Internet users. The realisation rate from the sample frame, indicating the response rate at nine o'clock in the morning on each business day (ISP "X" personnel who assisted the researcher did not work over weekends) for the duration of the research project, is shown in Table 7.1.

TABLE 7.1: REALISATION RATE OF RESPONDENTS

Date	Day	Number of responses	Cumulative responses	Cumulative response rate
27 November 2001	Tuesday	554	554	2.77%
28 November 2001	Wednesday	220	774	3.87%
29 November 2001	Thursday	71	845	4.23%
30 November 2001	Friday	58	903	4.52%
3 December 2001	Monday	82	985	4.93%
4 December 2001	Tuesday	21	1 006	5.03%
5 December 2001	Wednesday	11	1 017	5.09%

It can be noted from Table 7.1 that the research was conducted over a ten day period (26 November 2001 - 5 December 2001). The reason why the responses were only accepted over a ten day period was based on the realised response rate. The responses received steeply declined from the third day of the empirical research period. An assumption was therefore made that if an Internet user had not reacted to an e-mail within ten days, the probability was very low that a meaningful number would respond after ten days.

The cumulative realised response rate is therefore 5.09%. It can be speculated that three possible reasons attributed to the relative low response rate. The first may be that respondents were reluctant to participate in the study due to the personal nature thereof (Spam e-mails often received by Internet users lead them to believe that their privacy is being invaded, possibly supporting this statement). A second possibility is that the main South African holiday season begins early December. Consequently, respondents could have been on leave and unable to receive e-mails. They may also have been extremely busy during this time of year and therefore unwilling to take time to complete the questionnaire. Lastly, respondents had to incur a cost (cost associated with time spent Online while completing the questionnaire) if they decided to participate in the research project.

Table 7.2 provides an overview of the most important demographic information of respondents who participated in the study. It is important to note that the percentage of respondents indicated in Table 7.2 refers to the percentage of respondents of the specified demographic variable.

TABLE 7.2: DEMOGRAPHIC VARIABLES OF RESPONDENTS WHO PARTICIPATED IN THE STUDY

Demographic Variable		Percentage of respondents
Gender:	Male	69.95%
	Female	30.05%
Age group:	Under 35 years	35.32%
	36-50 years	40.20%
	> 51 years and not specified	24.48%
Household language:	Afrikaans	38.90%
	English	56.22%
	Other languages	4.88%
Gross monthly household Income group:	Less than R 9 999	30.05%
	R 10 000 – R 19 999	31.24%
	R 20 000 and more	30.05%
	Not specified	8.66%

Demographic Variable		Percentage of respondents
Highest qualification:	School only	30.85%
	Diploma	25.17%
	Degree	43.98%
Geographic location:	Smaller towns and cities	20.40%
	Metropolitan cities	79.60%
Population group:	Whites	89.75%
	Other population groups	10.25%
Marital status:	Single	19.60%
	Living together	4.18%
	Married	68.46%
	Other marital status	7.76%
Active Internet users per Household:	1	34.13%
	2	42.99%
	3	14.53%
	4	6.07%
	More than 4	2.28%
People per household:	1	8.76%
	2	27.65%
	3	20.30%
	4	26.37%
	More than 4	16.92%

n = 1 005

To possibly determine if the findings from this study are representative of the total population, the demographic information from another primary research study (conducted among Internet users) will be considered. Webchek (1999: 3-9) reported the following demographic information:

- Gender:
  - o Male: 60%
  - o Female: 40%
- Age group
  - o Under 34 years: 70%
  - o 35-49 years: 18%
  - o > 50 years: 12%

- Household language
    - o Afrikaans: 16%
    - o English: 77%
    - o Other languages: 7%
- Household income
    - o Less than R 9 999: 28%
    - o R 10 000 to R 19 999: 38%
    - o R 20 000 and more: 21%
    - o Refusal/don't know: 13%
- Highest qualification
    - o School only: 33% (including "some university")
    - o University completed: 34%
    - o Other post-school qualification: 32%
- Population group
    - o White: 85%
    - o Other population groups: 15%
- People per household
    - o 1: 9%
    - o 2: 16%
    - o 3: 22%
    - o 4: 31%
    - o more than 4: 21%

From the demographic information reported in the Webchek study, it can be seen that gender, income group, highest qualification, population group and people per household correspond to the demographic information reported in this study. It could also be seen that language group, although showing a greater difference between the two studies, also reports the same trend, where English speaking respondents were the greater majority, followed by Afrikaans speaking respondents. Respondents speaking other languages represented the minority in both studies, were this study reported 4.88% and Webchek 7%.

The major difference between the two studies, in terms of demographic information, pertains to age groups. It is surmised that the difference is due to the methodology followed by Webchek, where respondents were randomly recruited via a telephone directory. Basic assumptions were that respondents had a personal computer at home, had access to the Web and accessed the Web at least one per month.

Considering the positive relationship between the demographic information, it can be concluded that the findings for this study is representative of the South African Internet population who access the Internet from home.

As stated in Chapter 6, it had to be determined if any of the responses for this study were incomplete. After analysing the responses received, it was found that 12 responses were not fully completed, where parts of either Section A or Section D of the questionnaire were missing.

The researcher approached ISP "X" to discuss the missing data from the 12 responses. No apparent reason could be found for the missing data and it was therefore decided, in accordance with the guidance provided in Chapter 6, to discard these 12 responses from further analysis. The research findings will therefore be based on 1 005 responses and an effective response rate of 5.03%.

7.3 EMPIRICAL RESEARCH RESULTS

The results from the research study will be discussed in this section, focusing on descriptive statistics (either graphically or in tabular form) and statistical tests performed to determine possible relationships between the various variables. Cross-tabulation analyses included in the chapter will only depict frequency data (Chapter 6 provided a detailed discussion on the manner in which cross-tabulation analyses are interpreted). Frequency data will be reported together with standard deviation values and mean scores, if applicable. The variable

numbers (V) ascribed to questions in the questionnaire will be shown and new variable numbers (where applicable), re-coded as VV, will be shown together with the rationale for deriving new variable numbers.

It is important to note that it was decided to - for significance testing - regard an exceedence probability of less than five percent (shown as <0.05) as significant. All exceedence probability values of less than five percent (i.e. 0.0000 to 0.0499) will therefore be accepted as indicative of a relationship between variables. Values equal to or greater than five percent (≥ 0.05) will be interpreted as being indicative of no relationship between variables.

The discussion will be structured according to the structure of the questionnaire (unless otherwise stated), namely Section A (Section 7.3.1), Sections B and C, grouped together for discussion purposes, (Section 7.3.2) and Section D (Section 7.3.3). Section 7.3 will be concluded by reporting on the findings from a logit analysis performed for the study.

7.3.1 Results from Section A of the questionnaire

Information obtained from Section A of the questionnaire will be used to categorise respondents. The categorised information will be used to draw comparisons between the different groups of respondents. For example, this information will be used to determine if (a) the period of Internet usage or (b) whether or not respondents have purchased Online before, significantly influence factors which respondents consider prior to purchasing via the Internet.

(a)   Questions 1 and 2

Q1: From where do you gain access to the Internet?
Q2: From where do you most frequently access the Internet?

Respondents were asked to indicate all the locations at which they access the Internet (Q1) as well as from where they most frequently access the Internet (Q2). The results of these questions are shown in Table 7.3.

TABLE 7.3: PLACES OF INTERNET ACCESS

Place of access	Places of Internet access			Most frequent access		
	V	Frequency	Percentage	V	Frequency	Percentage
Home	V2	917	91.24%	V7.1	730	72.64%
Work	V3	491	48.86%	V7.2	268	26.66%
Internet Café	V4	17	1.69%	V7.3	0	0.00%
Academic Institution	V5	35	3.48%	V7.4	5	0.50%
Other	V6	11	1.09%	V7.5	2	0.20%

n = 1 005

As indicated in Table 7.3, the majority of respondents, when considering all the places from where they have access to the Internet, access the Internet from home (91.24%) and work (48.86%). Very few respondents indicated that they access the Internet from Internet Cafés (1.69%), academic institutions (3.48%) and from "other" places (1.09%). The majority of Internet users (99.30%) predominantly access the Internet from home (72.64%) and/or work (26.66%).

(A1) **The main finding from question 1 is that 91.24% of respondents who participated in the study access the Internet at home and 48.86% at work.**

(A2) **A main finding derived from question 2 is that 72.64% of respondents who participated in the study most frequently access the Internet from home and 26.66% most frequently from work.**

(b) **Question 3**

Q3: For how long have you been an Internet user? (considering all the Internet Service Providers you have subscribed to)

As stated in Chapters 5 and 6, the period of Internet usage is of extreme importance to the study in order to determine whether or not the length of

Internet usage influences other variables. The responses to the period of Internet usage are depicted in Table 7.4.

TABLE 7.4: PERIOD OF INTERNET USAGE

Period of Internet usage	V	Freq.	Percentage	Cumulative frequency	Cumulative percentage
Less than 1 year	V8.2	113	11.24%	113	11.24%
1 year to less than 2 years	V8.3	133	13.23%	246	24.48%
2 years to less than 3 years	V8.4	205	20.40%	451	44.88%
3 years to less than 4 years	V8.5	198	19.70%	649	64.58%
4 years or more	V8.6	356	35.42%	1 005	100%

(A3) A main finding derived from Table 7.4 is that 55.12% (V8.5 and V8.6)[(198+356)/1005] of respondents have been using the Internet for more than three years.

(c) Question 11

Q11: Have you ever purchased products or services via the Internet before? (excluding banking services)

As mentioned in Chapter 6, it was decided to keep banking services as a separate product and service category when determining whether or not respondents have purchased via the Internet before. The results to question 11 are shown in Figure 7.1, indicating whether or not respondents have purchased via the Internet before.

FIGURE 7.1: INTERNET SHOPPERS VS NON-SHOPPERS
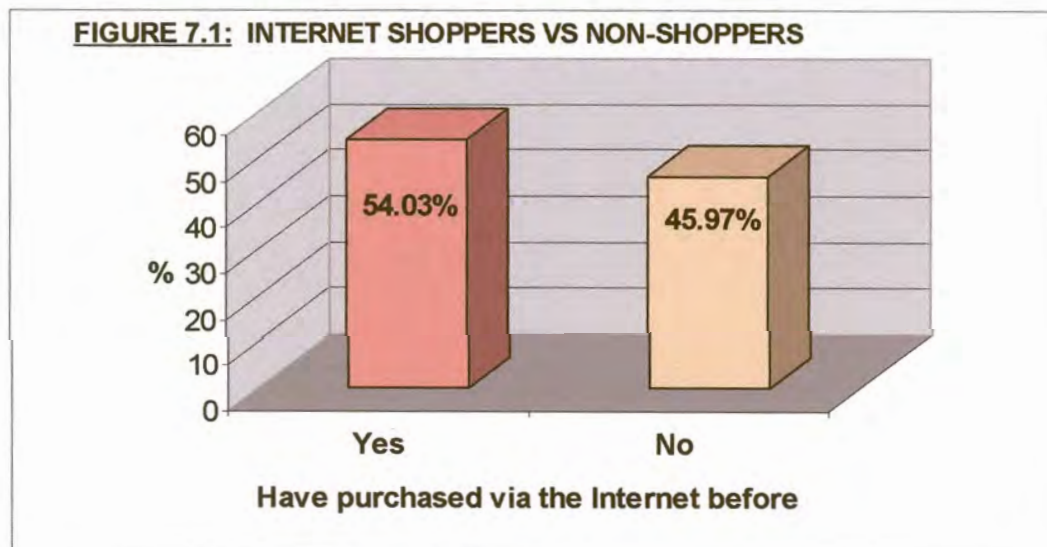
(A4) **A main finding from Figure 7.1 is that 54.03% of respondents who participated in the study have purchased products or services via the Internet before, while 45.97% have not purchased Online before.**

Further analysis between the period of Internet usage and whether or not respondents have purchased via the Internet before is now possible, since the period of Internet usage and the number of Internet shoppers and non-Internet shoppers have been reported.

A cross-tabulation between V8 (period of Internet usage) and V21 (V21.1 - have purchased via the Internet before; V21.2 – have not purchased Online before) was performed to determine whether or not a relationship exists between the two variables.

Table 7.5 portrays the results from the cross-tabulation and chi-square analysis, performed to determine whether or not a relationship exists between the period of Internet usage and the decision to purchase via the Internet.

As discussed in Chapter 6, the chi-square analysis provides the frequency (the actual recorded frequency) together with the expected frequency for each cell. The analysis also provides the chi-square value for the cell together with a number of percentage indicators.

TABLE 7.5: RELATIONSHIP BETWEEN INTERNET SHOPPERS, NON-INTERNET SHOPPERS AND PERIOD OF INTERNET USAGE

Period of Internet usage		Purchase via the Internet		
Frequency Expected Cell chi-square Percent Row percent Column percent	V	Yes 1	No 2	Total
Less than 1 year	8.2	23 61.05 23.78 2.29 20.35 4.24	90 51.95 27.88 8.96 79.65 19.48	113 11.24
1 year to less than 2 years	8.3	50 71.86 6.65 4.98 37.59 9.21	83 61.14 7.82 8.26 62.41 17.97	133 13.23
2 years to less than 3 years	8.4	100 110.76 1.05 9.95 48.78 18.42	105 94.24 1.23 10.45 51.22 22.73	205 20.40
3 years to less than 4 years	8.5	112 106.98 0.24 11.14 56.57 20.63	86 91.02 0.28 8.56 43.43 18.61	198 19.70
4 years or more	8.6	258 192.35 22.41 25.67 72.47 47.51	98 163.65 26.34 9.75 27.53 21.21	356 35.42
Total	(Frequency) (Percentage)	543 54.03	462 45.97	1,005 100.00

Statistics for table of V8 by V21:	DF	Value	Probability
Chi-square	4	117.60	<.0001

The **expected frequency** for the cell containing respondents who have purchased via the Internet and who have been using the Net for less than one year (with the frequency being 23) is calculated as follows: [543 (number of

respondents who have purchased Online before) / 1 005 (total number of respondents) = 0.5403] x 113 (number of respondents who have been using the Net for less than one year) = 61.05.

The "percent"-values are calculated for each cell and represent the percentage of the total respondents represented in the specific cell: [23 (frequency) / 1005 (total number of respondents)] x 100 = 2.29%. The cell chi-square is the chi-square value calculated for the specific cell.

The row percent portrays the percentage of respondents for the specific row, calculated as: [23 (frequency) / 113 (row total)] x 100 = 20.35%

The column percentage indicates the percentage of respondents, applicable to the specific column, calculated as: [23 (frequency) / 543 (column total)] x 100 = 4.24%

The following insights can be derived from Internet shoppers who have been using the Net for less than one year and who have purchased Online before (by considering the explanation above):

- 23 respondents have been Online for less than one year and have purchased via the Internet before;

- these respondents represent 2.29% of all respondents on which this analysis is applicable;

- 20.35% of respondents who have been using the Internet for less than one year have purchased Online before (and 79.65% have therefore not purchased Online); and

- Internet shoppers who have been Online for less than one year represent 4.24% of all Internet shoppers.

The cross-tabulation analysis also indicates the degrees of freedom (DF), chi-square value (calculated for the table and not for a specific cell) and computed probability value.

It can, from the explanation, be derived that the data portrayed in the cross-tabulation table can be calculated by using the frequency (actual number of respondents) data.

Due to the considerable amount of information contained in the cross-tabulation table, it was decided to show in further discussions only the "frequency" and "total" figures, since the remainder of the data can be calculated by using this information.

(A5) **A main finding that can be derived from Table 7.5 is that as the period of Internet usage increases, the percentage of Internet shoppers increases (percentage shoppers, per time period, over the five specified periods: 20.35%; 37.59%; 48.78%; 56.57% and 72.47%) and the percentage of non-Internet shoppers decreases (percentage non-shoppers, per time period, over the five periods: 79.65%; 62.65%; 51.22%; 43.43% and 27.53%).**

Although clear differences can be noted when comparing whether or not respondents have purchased via the Internet before when considering the different time periods, it is important to determine whether or not the differences can be supported statistically.

The chi-square test was used for significance testing and yielded a value of 117.60 with an exceedence probability of <0.0001. When applying the decision-rule that an exceedence probability value of <0.05 is an indication of significance, it can be concluded that the two variables portrayed in Table 7.5 (V8 and V21) are related.

Two more main findings can be derived from Table 7.5 and the discussion above, namely that:

(A6) Seventy-two percent (258/356) of respondents who have been using the Internet for four years and more have purchased via the Internet before, while only 20.35% (23/113) who have been using the Internet for less than one year had purchased Online before; and

(A7) The period of Internet usage significantly influences whether or not respondents have purchased products or services via the Internet.

(d)   Questions 13 and 14

Q13: Do you consider purchasing products and/or services via the Internet in the future?

Q14: Would you consider to purchase via the Internet if more, non-Internet based, South African businesses also offer products and services on the Internet? (e.g. Game Stores, OUTsurance, Musica)

Although questions 13 and 14 formed part of Section B of the questionnaire, the results of these questions will be discussed together with the results from Section A for the purposes of classifying respondents according to their consideration to purchase via the Internet in the future.

Respondents who indicated that they had not purchased via the Internet before (Q11 – V21.2) were requested to indicate whether or not they considered purchasing via the Internet in the future (Q13). The results of question 13 are portrayed in Table 7.6.

TABLE 7.6: NON-INTERNET SHOPPERS: CONSIDERATION TO PURCHASE VIA THE INTERNET IN THE FUTURE

Consider purchasing via the Internet in the future	V	Frequency	Percentage
Yes	V46.1	297	64.29%
No	V46.2	165	35.71%
Total		462	100%

(A8) **The main finding derived from question 13 is that the majority of respondents (64.29%) who have not purchased via the Internet before, consider purchasing via the Net in the future.**

Further analysis of the findings will show whether or not there is a relationship between the length of time that one is an Internet user and the decision to purchase via the Internet in the future. The analysis, portraying findings from a cross-tabulation analysis, is shown in Table 7.7.

TABLE 7.7: RELATIONSHIP BETWEEN NON-INTERNET SHOPPERS CONSIDERING TO PURCHASE VIA THE INTERNET AND PERIOD OF INTERNET USAGE

Period of Internet usage	V	Consider purchasing via the Internet		Total
		Yes V46.1	No V46.2	
Less than 1 year	V8.2	50	40	90
1 year to less than 2 years	V8.3	54	29	83
2 years to less than 3 years	V8.4	67	39	106
3 years to less than 4 years	V8.5	58	28	86
4 years or more	V8.6	68	29	97
Total	Frequency	297	165	462
	Percentage	64.29%	35.71%	100%

Table 7.7 demonstrates that the majority of respondents, across all time periods, consider purchasing via the Internet in the future. When comparing the ratio between respondents who consider purchasing versus those who don't, with specific reference to the period of Internet usage, it can be derived that respondents using the Internet for less than one year [55.56% (50/90)] are least

inclined to shop on the Internet and those who have been Online for four years and more [70.10% (68/97)] are most inclined to shop on the Net in the future.

As opposed to the findings from the cross-tabulation that compared current shoppers to non-shoppers, the cross-tabulation portrayed in Table 7.7 shows no linear increase or decrease in either the respondents who consider purchasing or those who do not consider purchasing via the Internet in the future when taking the specified time periods into consideration. It is therefore important to consider the results from a chi-square test to determine whether or not a significant difference exists between the two variables.

The chi-square test performed for Table 7.7 (V8 by V46) resulted in a value of 5.04 and an exceedence probability of 0.2832.

It can therefore be concluded that there is no relationship between the period of Internet usage (V8) and the intention to purchase via the Internet in the future (V46). This conclusion can be drawn on the basis of considering the decision-rule whereby a probability value of <0.05 is an indication of significance.

Three main findings can be drawn form this discussion, namely that:

(A9)   Respondents who have not purchased via the Internet before and have been using the Internet for less than one year (55.56%) are least likely to purchase Online and those who have been Online for four years and more (70.10%) are most likely to purchase via the Net in the future;

(A10)   The period of Internet usage does not significantly influence non-Internet shoppers' decision to purchase products and services via the Internet in the future; and

(A11)   Eighty-four percent (840 respondents / 1 005 participants in the study) of respondents indicated that either they have purchased via

the Internet before (543 respondents)(54.03%) or consider purchasing via the Internet in the future (297 respondents)(29.55%).

Those respondents who, after reading question 13, did not consider purchasing via the Internet in the future (Q13 – V46.2) were requested to indicate whether or not they would consider purchasing via the Internet in the future if more South African businesses offered products and services on the Net . Question 14 of the questionnaire was posed to respondents (who have not purchased via the Internet before - V21.2 – and those who are not considering to purchase in the future - V46.2) to determine whether or not they would consider purchasing via the Internet if more South African businesses offered products and services on the Net (V47). Table 7.8 portrays the findings of question 14, where respondents were requested to indicate their willingness to consider purchasing from South African businesses on the Net.

TABLE 7.8: NON-INTERNET SHOPPERS: CONSIDERATION TO PURCHASE VIA THE INTERNET IN THE FUTURE IF MORE SOUTH AFRICAN BUSINESSES SELL ON THE NET

Consider purchasing via the Internet in the future from South African businesses	V	Frequency	Percentage
Yes	V47.1	74	44.85%
No	V47.2	91	55.15%
Total		165	100%

(A12) A main finding from question 14 (in Table 7.8) is that 44.85% of respondents who recorded that they will not purchase in the future, would consider purchasing via the Internet if more, non-Internet based, South African businesses offer products and services via the Net.

Table 7.9 depicts the findings from a cross-tabulation analysis executed to determine whether or not a relationship exists between the period of Internet usage and the decision to purchase via the Internet if more South African businesses offered products and services via the Net.

TABLE 7.9: **RELATIONSHIP BETWEEN PERIOD OF INTERNET USAGE AND NON-INTERNET SHOPPERS CONSIDERING TO PURCHASE VIA THE INTERNET IF MORE SOUTH AFRICAN BUSINESSES SELL ON THE NET**

Period of Internet Usage	V	Consider purchasing Online if more South African businesses sell via the Net		Total
		Yes V47.1	No V47.2	
Less than 1 year	8.2	16	24	40
1 year to less than 2 years	8.3	14	15	29
2 years to less than 3 years	8.4	16	23	39
3 years to less than 4 years	8.5	15	13	28
4 years or more	8.6	13	16	29
Total	Frequency	74	91	165
	Percentage	44.85%	55.15%	100%

From the cross-tabulation analysis it can be observed that a greater percentage of respondents across all time periods (with the exception of respondents who have been Online for three years to less than four years) indicated that they would not consider purchasing via the Internet in the future, irrespective whether more South African businesses offered products and services on the Net.

The chi-square test for significance was performed for Table 7.9 to determine if a relationship exists between the period of Internet usage (V8) and the decision to purchase via the Net if more South African businesses offered products and services Online (V47). The test produced a value of 1.64 and an exceedence probability of 0.8026. Applying the decision rule that a probability figure of <0.05 would be accepted, it can be derived that there is not a relationship between V8 (period of Internet usage) and V47 (considering to purchase, should more South African businesses offer products and services via the Internet).

Two main findings can be derived from the discussion, namely that:

(A13) **The period of Internet usage does not significantly influence the decision to purchase via the Internet if more non-Internet based South African businesses offered products and services via the Internet.**

(A14) **Almost ninety-one percent (914 respondents / 1 005 participants) of all respondents indicated that they have purchased via the Internet before or that they consider doing so in the future [543 have purchased – V21.1 and 371 consider purchasing in the future while 74 would purchase if more South African businesses offer products and services Online – V47.1, and 297 consider purchasing in the future irrespective whether more South African businesses sell Online – V46.1].**

(e) **Questions 4, 5a and 5b**

Q4: How many Internet Service Providers have you subscribed to in the past?

Q5a: For how long are you subscribed to your current Internet Service Provider?

Q5b: Do you subscribe to more than one Internet Service Provider?

The findings from questions 4, 5a and 5b are shown in Table 7.10 to Table 7.12.

TABLE 7.10: **NUMBER OF INTERNET SERVICE PROVIDERS SUBSCRIBED TO IN THE PAST (Q4)**

Number of ISPs subscribed to	V	Frequency	Percentage	Cumulative frequency	Cumulative percentage
1 ISP	V9.2	499	49.65%	499	49.65%
2 ISPs	V9.3	327	32.54%	826	82.19%
3 ISPs	V9.4	126	12.54%	952	94.73%
4 ISPs	V9.5	32	3.18%	984	97.91%
5 or more ISPs	V9.6	21	2.09%	1 005	100%

(A15) **A main finding derived from Table 7.10 is that 49.65% of respondents have subscribed to only one Internet Service Provider (ISP)(V9.2), while 2.09% of respondents have subscribed to five or more ISPs (V9.6).**

TABLE 7.11: **PERIOD SUBSCRIBED TO CURRENT ISP (Q5)**

Period subscribed to ISP	V	Freq.	Percentage	Cumulative frequency	Cumulative percentage
Less than 1 year	V10.2	320	31.84%	320	31.84%
1 year to less than 2 years	V10.3	227	22.59%	547	54.43%
2 years to less than 3 years	V10.4	211	21.00%	758	75.42%
3 years to less than 4 years	V10.5	143	14.23%	901	89.65%
4 years or more	V10.6	104	10.35%	1 005	100%

(A16) A main finding illustrated in Table 7.11 is that 75.42% of respondents have been subscribed to their current ISP for less than three years.

TABLE 7.12: **MULTIPLE SUBSCRIPTIONS TO INTERNET SERVICE PROVIDERS (Q5a)**

Subscribe to more than one ISP	V	Frequency	Percentage	Cumulative frequency	Cumulative percentage
Yes	V11.1	141	14.03%	141	14.03%
No	V11.2	864	85.97%	1 005	100%

(A17) The main finding from Table 7.12 is that 85.97% of respondents currently subscribe to only one ISP (V11.2).

(f) **Question 6**

Respondents were requested to indicate the extent to which they agreed or disagreed (where a rating of "1" represented "totally agree" and a rating of "7" represented "totally disagree") with statements concerning views regarding the Internet. The responses, expressed as mean scores, are indicated in Table 7.13.

Table 7.13 also shows the probability values that realised from a two-sample t-test that was performed to determine if there is a significant difference between Internet shoppers and non-shoppers with regard to their views of the Internet.

TABLE 7.13: **VIEWS REGARDING THE INTERNET**

Statement	V	Mean	Standard deviation	Probability value
I view the Internet as a general information source	V12	1.89	1.21	0.0401
I view the Internet as a specific source of product and service related information	V13	2.56	1.51	0.0158
I view the Internet as a communication tool	V14	1.76	1.16	0.1971
I view the Internet as a buying channel	V15	4.52	1.83	0.4067
I view the Internet as an entertainment medium	V16	3.94	1.93	0.3117

n = 1 005

It should be noted that, according to Diamantopoulos & Schlegelmilc (2000: 184), the two-sample t-test is used to compare means of two groups (in this case Internet shoppers and non-shoppers). Dillon, Madden & Firtle (1987: 469) add that the t-test is the most commonly used approach to test whether the observed means from two independent samples differ enough to conclude that the populations are statistically different.

Four main findings can be derived from Table 7.13, namely that:

(A18)   **Viewing the Internet as a communication tool (V14) was the view most agreed with as shown by a mean value of 1.76. Respondents least agreed with the view that the Internet can be regarded as a buying channel (V15 - mean score of 4.52);**

(A19)   **The standard deviation for the statement that the Internet can be viewed as a communication tool (V14) was the lowest (1.16) for all the statements, leading to the conclusion that respondents were most homogeneous on the view that the Internet can be viewed as a communication medium. Viewing the Internet as an entertainment medium (V16) had the highest standard deviation (1.93), indicating that responses to the view that the Internet can be seen as an entertainment medium were most heterogeneous;**

(A20) From the probability values (considering the decision-rule that a value of <0.05 will be regarded as significant) it can be derived that Internet shoppers differ significantly from non-shoppers when viewing the Net as a general information source (V12)(probability value of 0.0401) and as specific source of product and service related information (V13)(probability value of 0.0158); and

(A21) There is not a significant difference between Internet shoppers and non-shoppers with regard to viewing the Internet as a communication tool (V14)(probability value of 0.1971), as a buying channel (V15)(probability value of 0.4067) and as an entertainment medium (V16)(probability value of 0.3117).

(g)   Questions 7, 8, 9 and 10

Q7.   Do you use Internet banking?

Q8.   Are you considering using Internet banking facilities in the future?

Q9.   For how long have you been using Internet banking?

Q10.   How frequently do you/do you think you will use Internet banking?

Questions 7 to 10 of the questionnaire were aimed at determining respondents' Internet banking activities. The findings from these questions can be viewed in Tables 7.14 to 7.17.

TABLE 7.14:   USAGE OF INTERNET BANKING SERVICES (Q7)

Status of Internet banking usage	V	Frequency	Percentage
Currently use Internet banking services	V17.1	664	66.07%
Don't use Internet banking service	V17.2	341	33.93%
Total		1 005	100%

(A22) The main finding deduced from question 7 (V17) is that 66.07% of respondents who participated in the study use Internet banking services (V17.1).

TABLE 7.15:   POTENTIAL FUTURE INTERNET BANKING USERS (Q8)

Status of Internet banking usage	V	Frequency	Percentage
Consider using Internet banking	V18.1	223	65.40%
Don't consider using Internet banking	V18.2	118	34.60%
Total		341	100%

(A23)   The main finding from Table 7.15 is that 65.40% of respondents who do not use Internet banking services, are considering making use thereof in the future.

TABLE 7.16:   PERIOD USING INTERNET BANKING SERVICES (Q9)

Period	V	Freq.	Percentage	Cumulative frequency	Cumulative percentage
Less than 1 year	V19.2	204	30.72%	204	30.72%
1 year to less than 2 years	V19.3	193	29.07%	397	59.79%
2 years to less than 3 years	V19.4	141	21.23%	538	81.02%
3 years to less than 4 years	V19.5	61	9.19%	599	90.21%
4 years or more	V19.6	65	9.79%	664	100%

Two main findings can be derived from Table 7.16 namely, that:

(A24)   Thirty-one percent of respondents who have been using Internet banking services, have been using it for less than one year;

(A25)   Eighty-one percent of respondents have been using Internet banking services for less than three years.

The findings of question 10, shown in Table 7.17, represent a combination of results from current Internet banking users as well as respondents who are considering using Internet banking services in the future.

TABLE 7.17:   FREQUENCY OF USE/CONSIDER TO USE INTERNET BANKING SERVICES (Q10)

Period	V	Frequency	Percentage	Cumulative frequency	Cumulative percentage
Daily	V20.1	213	23.99%	213	23.99%
Weekly	V20.2	445	50.11%	658	74.10%
Monthly	V20.3	225	25.34%	883	99.44%
Annually	V20.4	5	0.56%	888	100%

(A26) **A main finding derived from Table 7.17 is that 23.99% of respondents use or consider using Internet banking services daily (V20.1), 50.11% weekly (V20.2), 25.34% monthly (V20.3) and 0.56% annually (V20.4).**

Although Internet banking services are not portrayed in either the objectives or hypotheses of this study, it represents a main product and service category (and Internet activity – 66.07% of respondents participating in the study use Internet banking services and an additional 65.40% of current non-Internet banking users consider doing so in the future) and warrants further analysis.

It will therefore be determined whether or not there are relationships between Internet banking services and other variables used in the study. Firstly a cross-tabulation analysis will be conducted to determine whether or not a relationship exists between Internet banking services and whether or not respondents have purchased via the Net. Secondly, a cross-tabulation analysis will be used to determine whether or not there is a relationship between the length of time using Online banking services and whether or not respondents purchase Online.

TABLE 7.18: **RELATIONSHIP BETWEEN INTERNET BANKING USERS AND INTERNET SHOPPERS**

Use Internet Banking Services	V	Purchase via the Internet		Total
		Yes V21.1	No V21.2	
Yes	V17.1	418	246	664
No	V17.2	125	216	341
Total	Frequency	543	462	1 005
	Percentage	54.03%	45.97%	100%

It can be derived from Table 7.18 that the cell containing the most respondents [41.59% (418/1 005)] represents those who use Internet banking services and have also purchased products or services via the Internet before. It can also be derived that 21.49% (216/1 005) of respondents neither use Internet banking

services nor do they shop Online. The remainder of the respondents [36.92% (371/1 005)] either use Internet banking services but don't purchase Online [24.48% (246/1 005)] or don't use Online banking but purchase via the Internet [12.44% (125/1 005)].

The chi-square test for significance was performed for Table 7.18 (V17 by V21) and yielded a value of 62.72, resulting in an exceedence probability of <0.0001. It can be concluded that there is a relationship between Internet banking services and the decision to purchase via the Internet.

Four main findings can be derived from the discussion, namely that:

(A27) **The majority of respondents (41.59%) who use Internet banking services also shop Online (418/1005);**

(A28) **More than 24% (246/1005) of respondents use Internet banking services but don't purchase Online and 12.44% (125/1005) shop on the Net but don't use Internet banking;**

(A29) **More than 21% (216/1005) of respondents neither use Internet banking services nor do they shop Online; and**

(A30) **The use of Internet banking services significantly influences whether or not respondents have purchased products or services via the Internet before.**

The findings from a cross-tabulation analysis, shown in Table 7.19, will be used to determine whether there is a relationship between the period using Internet banking services and whether or not respondents have purchased via the Internet before.

TABLE 7.19: RELATIONSHIP BETWEEN THE DECISION TO PURCHASE VIA THE INTERNET AND PERIOD USING INTERNET BANKING SERVICES

Period using Internet banking services	V	Purchase via the Internet		Total
		Yes V21.1	No V21.2	
Less than 1 year	V19.2	87	117	204
1 year to less than 2 years	V19.3	126	67	193
2 years to less than 3 years	V19.4	105	36	141
3 years to less than 4 years	V19.5	48	13	61
4 years or more	V19.6	52	13	65
Total	Frequency	418	246	664
	Percentage	62.95%	37.05%	100%

A deduction from Table 7.19 is that the greatest percentage of respondents who have been using Internet banking services, and do not purchase via the Internet [17.62% (117/664)], have been using Internet banking services for less than one year (V19.2).

For all other time periods, there are more respondents who use Internet banking services that have also purchased Online than there are non-shoppers. The ratio between Internet shoppers and non-shoppers, when considering the period using Internet banking services, are (percentage of shoppers indicated first): one year to less than two years [65.28% (126/193) vs. 34.72% (67/193)]; two years to less than three years [74.47% (105/141) as opposed to 24.53% (36/141)]; three years to less than four years [78.69% (48/61) vs. 21.31% (13/61)] and four years and more [80% (52/65) compared to 20% (13/65)].

It is clear that as the period of time that respondents have used Internet banking services increases, the percentage of respondents who have purchased via the Net becomes greater. Although there seems to be a relationship between the two variables, it is important to test if such a relationship is statistically significant.

The chi-square test for significance was performed, rendering a value of 59.97 and a resulting exceedence probability of <0.0001. It can be derived, based on

the decision-rule, that a relationship exists between the period using Internet banking services and whether or not respondents have purchased Online.

Three main findings can be derived from the discussion, namely that:

(A31) **As the period of using Internet banking services increases, the percentage of respondents who use Online banking services and purchase via the Net increases;**

(A32) **Eighty percent (52/65) of respondents who have been using Online banking services for four years and more, have also purchased via the Internet before; and**

(A33) **The period of time using Internet banking services significantly influences whether or not respondents have purchased products and services via the Internet before.**

7.3.2 Results from Sections B and C of the questionnaire

Section B of the questionnaire was directed at respondents who had not purchased products or services via the Internet before, while Section C had to be completed by respondents who had previously purchased Online.

Since many of the findings from non-shoppers will be compared (and statistically tested) with data of Internet shoppers, the discussion in this section will cover frequency data and resulting statistical tests based on findings from questions pertaining to Sections B and C of the questionnaire.

(a) Questions 12 and 18

Q12 and Q18: Please indicate how important the factors listed below are to you when deciding whether or not to purchase via the Internet?

Question 12 was applicable to non-Internet shoppers only. By listing 24 statements that respondents had to rate on the importance thereof when

deciding to purchase via the Net, it was attempted to determine whether there were any underlying factors that respondents, who do not purchase Online, consider when deciding whether to purchase on the Internet.

The same question and statements were listed in question 18 for Internet shoppers. By using factor analyses, it was attempted to determine if there are differences between Internet shoppers and non-shoppers regarding the factors they consider when deciding whether or not to purchase via the Internet.

The factor analyses will be discussed once the realised mean values for each of the 24 statements, for both Internet shoppers and non-shoppers, are determined and discussed.

Table 7.20 provides the mean values and standard deviations recorded for questions 12 and 18. It should be noted that a rating of "1" was regarded as "extremely important" and a rating of "7" as "not important at all". In addition, Table 7.20 provides the probability values derived from applying t-tests to determine if significant differences exist between Internet shoppers and non-shoppers when considering the importance of the 24 statements, reflecting Internet users' considerations prior to purchasing Online.

The four statements that were rated as most important (based on the lowest mean scores) by *non-Internet shoppers* when deciding whether or not to purchase Online are: implications of providing credit card details (V24)(mean score of 1.38); how secure Internet payment methods are (V45)(mean score of 1.44); credibility of the seller(V25)(mean score of 1.55) and after-sales service (V37)(mean score of 1.65). The four least important considerations by *non-shoppers* were: don't have a credit card (V44)(mean score of 4.33); safety of shopping from home (V40)(mean score of 3.50); ease of purchasing via the Internet (V43)(mean score of 3.10) and convenience of purchasing from home (V42)(mean score of 3.09).

TABLE 7.20: **MEAN SCORES FOR STATEMENTS CONSIDERED WHEN DECIDING WHETHER OR NOT TO PURCHASE ONLINE**

Statement	Non-Internet shoppers (n = 462)			Internet shoppers (n = 543)			Probability value
	V	Mean	Standard deviation	V	Mean	Standard deviation	
The possible invasion of my privacy	V22	1.75	1.43	V125	2.01	1.55	0.0067
Providing my personal information to others	V23	1.66	1.31	V126	1.92	1.49	0.0037
Implications of providing my credit card details	V24	1.38	1.15	V127	1.54	1.19	0.0265
Credibility of the seller	V25	1.55	1.07	V128	1.51	1.01	0.5647
Concerned that goods purchased via the Internet will not be received	V26	2.02	1.34	V129	2.48	1.48	0.0000
Goods may be damaged while shipped (in transit) or when delivered	V27	2.43	1.61	V130	2.99	1.63	0.0000
The price of products or services offered via the Internet	V28	2.69	1.64	V131	2.55	1.53	0.1513
Brand name of products or services offered via the Internet	V29	2.82	1.72	V132	2.86	1.58	0.7494
Additional cost associated with purchasing via the Internet (e.g.) delivery/shipping costs; insurance costs, import taxes, etc	V30	2.26	1.54	V133	2.53	1.61	0.0065
The availability of prices on Internet sites	V31	2.27	1.52	V134	1.63	1.05	0.0000
Guarantees offered by Internet sellers	V32	1.71	1.05	V135	1.78	1.12	0.2887
Exchange/returns policies offered by Internet sellers	V33	1.80	1.28	V136	1.81	1.18	0.8966
Ability to understand how to use the Internet/purchase via the Internet	V34	2.45	1.84	V137	2.50	1.70	0.6248
Importance of "touching and feeling" products prior to purchase	V35	2.59	1.76	V138	3.69	1.64	0.0000
The range of products/services offered from individual sellers on the Internet	V36	2.69	1.68	V139	2.72	1.46	0.7730
After sales service	V37	1.65	1.20	V140	1.94	1.35	0.0003
Personal/individual attention	V38	2.60	1.76	V141	3.12	1.75	0.0000
The time between purchasing and receiving goods	V39	2.24	1.46	V142	2.20	1.31	0.6099
Safety of purchasing from home (i.e. don't have to visit shopping malls and possibly be a victim of crime)	V40	3.50	2.08	V143	3.55	2.06	0.6765
Knowledge of the seller	V41	2.18	1.47	V144	2.42	1.46	0.0107
Convenience of purchasing from home	V42	3.09	1.91	V145	2.36	1.53	0.0000
Ease of purchasing via the Internet	V43	3.10	1.90	V146	2.22	1.40	0.0000
Don't have a credit card	V44	4.33	2.53	V147	4.88	2.33	0.0003
How secure Internet payment methods are	V45	1.44	1.10	V148	1.58	1.21	0.0659

The four most important considerations by *Internet shoppers* when deciding to purchase via the Internet are: credibility of the seller (V128)(mean score of 1.51); implications of providing credit card details (V127)(mean score of 1.54); how

secure Internet payment methods are (V148)(mean score of 1.58) and availability of prices on Internet sites (V134)(mean score of 1.63). The three most important considerations of non-shoppers are shared with shoppers namely: implications of providing credit card details; credibility of the seller; and how secure Internet payment methods are - with only the fourth being different.

The four least important considerations by *Internet shoppers* were: don't have a credit card (V147)(mean score of 4.88); importance of "touching and feeling" products prior to purchase (V138)(mean score of 3.69); safety of purchasing from home (V143)(mean score of 3.55) and personal/individual attention (V141)(mean score of 3.12). Both Internet shoppers and non-shoppers agreed on two of the four least important considerations, namely don't have a credit card and safety of shopping from home.

From the standard deviation values listed in Table 7.20, it can be seen that *non-shoppers* were most homogeneous (based on a standard deviation of 1.05) with V32 (guarantees offered by Internet sellers). Non-shoppers were most heterogeneous (standard deviation of 2.53) with V44 (don't have a credit card), followed by V40 (safety of purchasing from home) with a standard deviation of 2.08. *Internet shoppers* were most homogeneous regarding V128 (credibility of the seller) with a standard deviation of 1.01. Internet shoppers were, as with non-shoppers, most heterogeneous with the statement: "don't have a credit card" (V147) with a standard deviation of 2.33 and V143 (safety of purchasing from home) with a standard deviation of 2.06.

From Table 7.20 it can also be seen that, with the exception of six listed statements, non-Internet shoppers rated most of the statements as being of greater importance to them than respondents who have purchased via the Net before. The six exceptions are: credibility of the seller (V25); the price of products or services offered on the Net (V28); the availability of prices on Internet sites (V31); the time between purchasing and receiving goods (V39);

convenience of purchasing from home (V42) and ease of purchasing via the Internet (V43).

Table 7.20 also reveals two differences between shoppers and non-shoppers regarding the importance of the listed statements. The first difference is that respondents who have purchased Online before, consider the ease of purchasing via the Internet far more important than non-shoppers (V146/V43)(mean value of 2.22 compared to 3.10). The second difference is that Internet shoppers rate "touching and feeling" products prior to purchase far less important than non-shoppers (V138/V35)(mean value of 3.69 compared to 2.59). Although there seems to be differences between Internet shoppers and non-shoppers when considering whether or not to purchase via the Internet, it is important to consider the probability values (shown in Table 7.20) to determine whether or not the differences are statistically significant.

Considering the decision rule, whereby probability values < 0.05 will be regarded as significant, it can be concluded from Table 7.20 that, with the exception of nine statements, there is a significant difference between Internet shoppers and non-shoppers when considering the importance of the 24 listed statements that these users consider when deciding to purchase via the Net.

The nine exceptions are: credibility of the seller (V25/V128); the price of products or services offered via the Internet (V28/V131); brand name of products or services offered via the Internet (V29/V132); guarantees offered by Internet sellers (V32/V135); exchange/return policies offered by Internet sellers (V33/V136); ability to understand how to use the Internet/purchase via the Internet (V34/V137); the range of products/services offered from individual sellers on the Internet (V36/V139); the time between purchasing and receiving goods (V39/V142) and safety of purchasing from home (i.e. don't have to visit shopping malls and possibly be a victim of crime)(V40/V143).

Although the findings above highlight significant differences between Internet shoppers and non-shoppers for specific statements, it is important to consider the t-test results when all the statements are considered. The exceedence probability value from the t-test, when considering all 24 statements, is 0.0000.

(BC1) **The main finding from the test for significance is that there is a significant difference between the statements Internet shoppers and non-shoppers consider when deciding whether or not to purchase products and services via the Internet.**

Considering the significant difference, the remainder of Section 7.3.2 (a) will be devoted to factor analyses performed to determine the underlying factors Internet shoppers and non-shoppers ,as well as the factors Internet shoppers across all time periods, consider when deciding whether or not to purchase via the Internet.

Principal factor analysis was used to conduct the analyses and the Varimax method of rotation was applied. As stated in Chapter 6, only factors with eigenvalues greater than one were extracted. The labelling of factors identified through factor analysis requires a judgement on the part of the researcher, therefore introducing a measure of subjectivity to the interpretation of any factor analysis. It is therefore important to decide which factor loadings are to be considered and which not, when conducting the analysis.

Chapter 6 indicated that factor loadings greater than 0.35 can be considered when conducting a factor analysis. In an attempt to reduce the subjectivity associated with factor analysis, it was decided that only factor loadings equal to or greater than 0.50 will be considered to determine the underlying factors.

When discussing the results from the factor analyses, the computed Cronbach's alpha values will be reported. Cronbach's alpha (or coefficient alpha) represents a measure of internal consistency reliability (Malhotra, 1996: 305) and its value varies between 0 and equal to 1, with higher numbers indicating greater reliability (Bagozzi, 1994: 18). For exploratory research a Cronbach's alpha greater than

0.60 is desired, although values greater than 0.70 is preferred (Bagozzi, 1994: 18). It should also be noted that a Cronbach's alpha value of 0.60 or less generally indicates unsatisfactory internal consistency reliability (Malhotra, 1996: 305). Based on the theoretical perspective, in this study a Cronbach's alpha greater than 0.70 will be considered as an indication of internal consistency reliability.

Since Section B of the questionnaire was directed at non-Internet shoppers, it was decided that factors identified for non-Internet shoppers will be labelled "B". The factors identified for Internet shoppers will be labelled "C" (Section C of the questionnaire was applicable to respondents who have purchased Online before).

It should be noted that it was decided to categorise the 24 listed statements used to conduct the factor analyses with the stages of the consumer decision-making process. By doing so, it will be determined if the factors (or at least statements) can be linked to some of the decision-making stages. Each table pertaining to factor analyses will indicate (in a column labelled as Dec. stage) the stage of the decision-making process that can be associated with each statement. Although being subjective, it was decided to categorise the 24 statements with the stages of the decision-making process discussed in Chapter 3. The legend ascribed to the decision-making stages, identified for the 24 statements, are: search (S); pre-purchase alternative evaluation (PP); purchase (P) and post-purchase evaluation (PE). It will be noted that need recognition is not covered by the 24 statements and will therefore be excluded from the legend.

(i) Factor analysis results for non-Internet shoppers

Table 7.21 depicts the rotated factor matrix for the 24 statements that non-Internet shoppers consider when deciding whether or not to purchase via the Internet.

TABLE 7.21: ROTATED FACTOR MATRIX FOR NON-INTERNET SHOPPERS

Statement	Dec. stage	V	Factor		
			B1	B2	B3
The possible invasion of my privacy	S&P	V22	0.14	0.01	**0.67**
Providing my personal information to others	S&P	V23	0.13	-0.03	**0.76**
Implications of providing my credit card details	P	V24	0.08	0.07	**0.70**
Credibility of the seller	PP	V25	0.34	0.09	0.38
Concerned that goods purchased via the Internet will not be received	P	V26	**0.51**	0.07	0.25
Goods may be damaged while shipped (in transit) or when delivered	P	V27	**0.62**	0.13	0.15
The price of products or services offered via the Internet	PP	V28	**0.59**	0.18	0.04
Brand name of products or services offered via the Internet	S&PP	V29	**0.62**	0.19	0.10
Additional cost associated with purchasing via the Internet (e.g.) delivery/shipping costs; insurance costs, import taxes, etc	PP	V30	**0.64**	0.15	0.02
The availability of prices on Internet sites	PP	V31	**0.61**	0.20	0.08
Guarantees offered by Internet sellers	PP&PE	V32	**0.65**	0.14	0.17
Exchange/return policies offered by Internet sellers	PP&PE	V33	**0.66**	0.13	0.19
Ability to understand how to use the Internet/purchase via the Internet	S	V34	0.46	0.18	0.12
Importance of "touching and feeling" products prior to purchase	PP	V35	0.34	-0.04	0.23
The range of products/services offered from individual sellers on the Internet	PP	V36	0.49	0.35	0.10
After sales service	PP&PE	V37	**0.52**	0.21	0.23
Personal/individual attention	PP&PE	V38	0.37	0.26	0.25
The time between purchasing and receiving goods	PP&PE	V39	**0.54**	0.30	0.21
Safety of purchasing from home (i.e. don't have to visit shopping malls and possibly be a victim of crime)	PP&P	V40	0.26	**0.67**	0.06
Knowledge of the seller	S&PP	V41	0.39	0.31	0.20
Convenience of purchasing from home	PP&P	V42	0.11	**0.95**	0.03
Ease of purchasing via the Internet	PP&P	V43	0.20	**0.86**	0.04
Don't have a credit card	PP	V44	0.18	0.32	0.21
How secure Internet payment methods are	P	V45	0.16	0.14	0.48
Eigenvalues			**6.81**	**1.88**	**1.27**
Percentage of variance			**55.47%**	**15.82%**	**10.54%**
Cumulative percentage			**55.47%**	**71.29%**	**81.83%**

n = 462 (Legend: S = Search; PP = Pre-purchase alternative evaluation; P = Purchase; and

PE = Post-purchase alternative evaluation)

Cronbach's alpha computed for the instrument items of the factor analysis is 0.896, indicating a relatively high internal consistency reliability.

Three factors (labelled B1 to B3), applicable to respondents who have not purchased Online before, were identified in Table 7.21. Factor B1 comprised nine, B2 and B3 three variables respectively. The realised eigenvalues for factors B1, B2 and B3 were 6.81; 1.88; and 1.27 respectively.

The percentage of variance explained by each factor is shown as 55.47% for factor B1; 15.82% for factor B2 and 10.54% for factor B3. Of particular importance is that the cumulative percentage (providing a summary measure that shows how much of the total variance is explained in the relationships between the 24 variables) explained by the three factors amounts to 81.83%, which is considered acceptable for the purpose of factor analysis.

Factor identification

As mentioned above, three factors were identified in Table 7.21 for non-Internet shoppers. The three factors will be analysed and discussed in more detail below.

Factor B1

Factor B1 comprised the following nine variables:

Statement	Dec. stage	V	Loading
Exchange/return policies offered by Internet sellers	PP&PE	V33	0.66
Guarantees offered by Internet sellers	PP&PE	V32	0.65
Additional cost associated with purchasing via the Internet (e.g.) delivery/shipping costs; insurance costs, import taxes, etc	PP	V30	0.64
Brand name of products or services offered via the Internet	S&PP	V29	0.62
Goods may be damaged while shipped (in transit) or when delivered	P	V27	0.62
The availability of prices on Internet sites	PP	V31	0.61
The price of products or services offered via the Internet	PP	V28	0.59
The time between purchasing and receiving goods	PP&PE	V39	0.54
After sales service	PP&PE	V37	0.52
Concerned that goods purchased via the Internet will not be received	P	V26	0.51

(Legend: S = Search; PP = Pre-purchase alternative evaluation; P = Purchase; and PE = Post-purchase alternative evaluation)

It seems as though a number of variables listed for factor B1 can be grouped together. Firstly, exchange/return policies (V33), guarantees offered (V32) and after sales service (V37) are indicative, as highlighted by the decision-making stages, of pre-purchase evaluations of after-sales support offered by Internet sellers.

Secondly, the time between purchasing and receiving goods (V39), the fact that goods may be damaged while shipped (in transit) or when delivered (V27) and concerns that goods purchased via the Internet will not be received (V26) can be grouped under concerns regarding the delivery of purchased goods.

Thirdly, the price of products or services offered (V28), additional cost associated with purchasing via the Net (V30) and the availability of prices on Internet sites (V31) can be grouped under pre-purchase evaluation of costs associated with Internet purchases.

It is therefore suggested that factor B1 comprises three underlying concepts, namely pre-purchase evaluation of after-sales support offered by Internet sellers (V32, V33 and V37), concerns regarding the delivery of purchased goods (V39 and V27) and pre-purchase evaluation of costs associated with Internet purchases (V28, V29, V30 and V31). The brand name of products and services (V29) most probably represents the search for and evaluation of brands offered Online.

It is the convention to label factors with a collective word/s. In this study the results indicate that aspects loading as factors are ostensibly diverse. It has therefore been decided to use a descriptor instead of a label containing all the aspects. This will prevent "losing" important aspects under an "umbrella" label. The descriptor will include the pre-dominant stage in the consumer decision-making process as well as the relevant aspects in the loading.

Descriptor: Factor B1

Considering the underlying concepts, **factor B1 (and relevant statements) is predominantly in the pre-purchase evaluation stage of the consumer decision-making process and consists of the following aspects: brands and after-sales support offered by Internet sellers, concerns regarding the delivery of purchases and costs associated with Internet purchases.**

Factor B2

Factor B2 contained three variables, namely:

Statement	Dec. stage	V	Loading
Convenience of purchasing from home	PP&P	V42	0.95
Ease of purchasing via the Internet	PP&P	V43	0.86
Safety of purchasing from home (i.e. don't have to visit shopping malls and possibly be a victim of crime)	PP&P	V40	0.67

(Legend: PP = Pre-purchase alternative evaluation; P = Purchase)

As opposed to the nine variables identified for factor B1, factor B2 comprises only three variables. Both variables V40 and V42 (safety of purchasing from home and convenience of purchasing from home) bring the home as central focus point while V43 focuses on the ease of purchasing via the Internet.

Descriptor: Factor B2

Considering the three identified variables (together with the decision-stages), **factor B2 (and relevant statements) is predominantly in the pre-purchase evaluation and purchase stages of the decision-making process and consist of the following aspects: the safety, ease and convenience of purchasing from home.**

Factor B3

The following variables constitute factor B3:

Statement	Dec. stage	V	Loading
Providing my personal information to others	S&P	V23	0.76
Implications of providing my credit card details	P	V24	0.70
The possible invasion of my privacy	S&P	V22	0.67

(Legend: S = Search; P = Purchase)

As with factor B2, factor B3 identified three variables, namely V23, V24 and V22. The three variables clearly indicate concerns regarding divulging personal information and credit card details and invasion of privacy, possibly applicable with search and purchase activities in the indicated decision-stages.

Descriptor: Factor B3

Factor B3 (and relevant statements) is predominantly in the search and purchase stages of the decision-making process and consists of the following aspects: privacy and security concerns in the search and purchase decision-making stages.

From the previous discussion Table 7.22 below summarises the factors identified for respondents who have not previously purchased via the Internet.

TABLE 7.22: FACTORS APPLICABLE TO NON-INTERNET SHOPPERS

Descriptor	Percentage of variance	Cumulative percentage
Factor B1 is predominant of the pre-purchase evaluation stage of the consumer decision-making process and consists of the following aspects: brands and after-sales support offered by Internet sellers, concerns regarding the delivery of purchases and costs associated with Internet purchases	55.47%	55.47%
Factor B2 is predominant of the pre-purchase evaluation and purchase stages of the decision-making process and consist of the following aspects: the safety, ease and convenience of purchasing from home	15.82%	71.29%
Factor B3 is predominant of the search and purchase stages of the decision-making process and consist of the following aspects: privacy and security concerns in the search and purchase decision-making stages	10.54%	81.83%

As can be seen from Table 7.22, the three factors identified for non-Internet shoppers when deciding whether or not to purchase via the Internet explained 81.93% of the total variance for the 24 variables.

(BC2) **The main finding derived from the factor analysis is that non-Internet shoppers consider three factors when deciding to purchase via the Internet, namely: factor B1 is predominantly in the pre-purchase evaluation stage of the consumer decision-making process and consists of the following aspects: brands and after-sales support offered by Internet sellers, concerns regarding the delivery of purchases and costs associated with Internet purchases; factor B2 is predominantly in the pre-purchase evaluation and purchase stages of the decision-making process and consists of the following aspects: safety, ease and convenience of purchasing from home; and factor B3 is predominantly in the search and purchase stages of the decision-making process and consists of the following aspects: privacy and security concerns in the search and purchase decision-making stages.**

(ii)   Factor analysis results for Internet shoppers

The rotated factor matrix for the 24 statements that Internet shoppers consider when deciding to purchase via the Internet is shown in Table 7.23.

It can be seen from Table 7.23 that three factors were identified for Internet shoppers, labelled as factors C1, C2 and C3. Factor C1 comprises twelve, C2 four and C3 two variables. The realised eigenvalues for each of the three factors are 6.54, 1.82 and 1.27 respectively. Factor C1 accounted for 52.95% of the total variance, 15.31% at C2 and 10.82% at C3. The three factors cumulatively accounted for 79.08% of the total variance.

TABLE 7.23:   ROTATED FACTOR MATRIX FOR INTERNET SHOPPERS

Statement	Dec. stage	V	Factor C1	Factor C2	Factor C3
The possible invasion of my privacy	S&P	V125	0.19	**0.76**	0.03
Providing my personal information to others	S&P	V126	0.07	**0.84**	0.08
Implications of providing my credit card details	P	V127	0.09	**0.78**	0.03
Credibility of the seller	PP	V128	0.42	0.31	0.10
Concerned that goods purchased via the Internet will not be received	P	V129	0.47	0.32	-0.004
Goods may be damaged while shipped (in transit) or when delivered	P	V130	**0.57**	0.31	0.03
The price of products or services offered via the Internet	PP	V131	**0.52**	0.06	0.05
Brand name of products or services offered via the Internet	S&PP	V132	**0.55**	0.07	0.13
Additional cost associated with purchasing via the Internet (e.g.) delivery/shipping costs; insurance costs, import taxes, etc	PP	V133	**0.51**	0.18	0.08
The availability of prices on Internet sites	PP	V134	**0.50**	0.08	0.19
Guarantees offered by Internet sellers	PP&PE	V135	**0.63**	0.21	0.19
Exchange/return policies offered by Internet sellers	PP&PE	V136	**0.62**	0.17	0.18
Ability to understand how to use the Internet/purchase via the Internet	S	V137	**0.58**	0.22	0.06
Importance of "touching and feeling" products prior to purchase	PP	V138	0.38	0.17	-0.14
The range of products/services offered from individual sellers on the Internet	PP	V139	**0.56**	0.01	0.18
After sales service	PP&PE	V140	**0.59**	0.19	0.13
Personal/individual attention	PP&PE	V141	**0.52**	0.15	0.11
The time between purchasing and receiving goods	PP&PE	V142	**0.55**	0.07	0.24
Safety of purchasing from home (i.e. don't have to visit shopping malls and possibly be a victim of crime)	PP&P	V143	0.30	0.12	0.43
Knowledge of the seller	S&PP	V144	0.48	0.17	0.25
Convenience of purchasing from home	PP&P	V145	0.13	0.04	**0.90**
Ease of purchasing via the Internet	PP&P	V146	0.18	0.04	**0.82**
Don't have a credit card	PP	V147	0.23	-0.02	0.05
How secure Internet payment methods are	P	V148	0.29	**0.53**	0.11
Eigenvalues			**6.54**	**1.82**	**1.27**
Percentage of variance			**52.95%**	**15.31%**	**10.82%**
Cumulative percentage			**52.95%**	**68.26%**	**79.08%**

n = 543 (Legend: S = Search; PP = Pre-purchase alternative evaluation; P = Purchase; and

PE = Post-purchase alternative evaluation)

Cronbach's alpha computed for the instrument items of the factor analysis portrayed in Table 7.23 is 0.891, indicating a relatively high internal consistency reliability.

Factor identification

As mentioned above, three factors were identified for Internet shoppers. The three factors will be analysed and discussed in more detail below.

Factor C1

Twelve variables were identified that constitute factor C1, namely:

Statement	Dec. stage	V	Loading
Guarantees offered by Internet sellers	PP&PE	V135	0.63
Exchange/return policies offered by Internet sellers	PP&PE	V136	0.62
After sales service	PP&PE	V140	0.59
Ability to understand how to use the Internet/purchase via the Internet	S	V137	0.58
Goods may be damaged while shipped (in transit) or when delivered	P	V130	0.57
The range of products/services offered from individual sellers on the Internet	PP	V139	0.56
Brand name of products or services offered via the Internet	S&PP	V132	0.55
The time between purchasing and receiving goods	PP&PE	V142	0.55
The price of products or services offered via the Internet	PP	V131	0.52
Personal/individual attention	PP&PE	V141	0.52
Additional cost associated with purchasing via the Internet (e.g.) delivery/shipping costs; insurance costs, import taxes, etc	PP	V133	0.51
The availability of prices on Internet sites	PP	V134	0.50

(Legend: S = Search; PP = Pre-purchase alternative evaluation; P = Purchase; and PE = Post-purchase alternative evaluation)

A number of different concepts can be distinguished from the variables that comprise factor C1. The first identifiable concept may be considered to be service, comprising guarantees offered (V135), exchange/return policies (V136), personal/individual attention (V141) and after sales service (V140). A second identifiable concept is brands offered and cost associated with purchasing via the

Net, comprising the range of products offered via the Net (V139), brand name of products offered (V132), the availability of prices on Internet sites (V134), the prices of products and services offered via the Net (V131) as well as additional costs associated with Online purchases (V133).

The delivery process forms the third concept, comprising the time between ordering and receiving goods (V142) and the possibility that goods may be damaged while shipped (V130). The final identified variable (ability to understand how to use the Internet/purchase via the Internet)(V137), seems to focus, considering all other variables identified for this factor, on the individual's ability to find important information (search) that is needed when deciding to purchase from a sellers' Website.

Descriptor: Factor C1

Considering the identified decision-making stages and the discussion above, **factor C1 (and relevant statements) is predominantly in the pre-purchase and post-purchase evaluation stages of the decision-making process and consists of the following aspects: the ability to find and evaluate information on brands, product ranges, costs associated with Internet purchases and after-sales service offered by Internet sellers.**

Factor C2

Factor C2 comprised the following four variables:

Statement	Dec. stage	V	Loading
Providing my personal information to others	S&P	V126	0.84
Implications of providing my credit card details	P	V127	0.78
The possible invasion of my privacy	S&P	V125	0.76
How secure Internet payment methods are	P	V148	0.53

(Legend: S = Search; P = Purchase)

The central theme that emerges from the first three identified variables (V125, V126 and V127) identifying factor C2, is the security and privacy aspect

associated with Internet purchases. The fourth variable (how secure Internet payment methods are – V148), specifically highlights the security aspect associated with Internet payment methods.

Descriptor: Factor C2

Considering the four variables (together with the identified decision-stages), **factor C2 (and relevant statements) is predominantly in the search and purchase stages of the decision-making process and consists of the following aspects: security and privacy concerns when searching and purchasing on the Internet.**

Factor C3

Factor C3 comprised only two variables, namely:

Statement	Dec. stage	V	Loading
Convenience of purchasing from home	PP&P	V145	0.90
Ease of purchasing via the Internet	PP&P	V146	0.82

(Legend: PP = Pre-purchase alternative evaluation; P = Purchase)

The two identified variables lean heavily towards the convenience aspect of shopping via the Internet from home and also manifest the ease of shopping on the Net.

Descriptor: Factor C3

Considering the decision-stages and these two variables, **factor C3 (and relevant statements) is predominantly in the pre-purchase evaluation and purchase stages of the decision-making process and consists of the following aspects: ease and convenience of purchasing from home.**

Table 7.24 provides a summary of the three descriptors identified for Internet shoppers discussed in the previous paragraphs together with the percentage of variance explained by the factors.

<u>TABLE 7.24:</u>   FACTORS APPLICABLE TO INTERNET SHOPPERS

Descriptor	Percentage of variance	Cumulative percentage
Factor C1 is predominantly in the pre-purchase and post-purchase evaluation stages of the decision-making process and consists of the following aspects: the ability to find and evaluate information on brands, product ranges, costs associated with Internet purchases and after-sales service offered by Internet sellers	52.95%	52.95%
Factor C2 is predominantly in the search and purchase stages of the decision-making process and consists of the following aspects: security and privacy concerns when searching and purchasing on the Internet	15.31%	68.26%
Factor C3 is predominantly in the pre-purchase evaluation and purchase stages of the decision-making process and consists of the following aspects: ease and convenience of purchasing from home	10.82%	79.08%

As can be seen from Table 7.24, the three factors identified for Internet shoppers when deciding whether or not to purchase via the Internet explained 79.08% of the total variance of the 24 variables.

(BC3)   **The main finding derived from the factor analysis is that Internet shoppers consider three factors when deciding to purchase via the Internet, namely: factor C1 is predominantly in the pre-purchase and post-purchase evaluation stages of the decision-making process and consists of the following aspects: the ability to find and evaluate information on brands, product ranges, costs associated with Internet purchases and after-sales service offered by Internet sellers; factor C2 is predominantly in the search and purchase stages of the decision-making process and consists of the following aspects: security and privacy concerns when searching and purchasing on the Internet;   and factor C3 is**

predominantly in the pre-purchase evaluation and purchase stages of the decision-making process and consists of the following aspects: ease and convenience of purchasing from home.

The findings from the factor analyses, applicable to Internet shoppers and non-shoppers, need to be compared to determine if there is a difference, regarding factors considered when deciding to shop Online, between the two groups. This can be done by comparing the factors (and descriptors) identified for the two groups.

Non-Internet shoppers **(from Table 7.22)**	**Internet shoppers** **(from Table 7.24)**
• Factor B1 is predominantly in the **pre-purchase evaluation stage** and consists of the following aspects: brands and after-sales support offered by Internet sellers, concerns regarding the delivery of purchases and costs associated with Internet purchases	• Factor C1 (and relevant statements) is predominantly in the **pre-purchase and post-purchase evaluation stages** and consists of the following aspects: the ability to find and evaluate information on brands, product ranges, costs associated with Internet purchases and after-sales service offered by Internet sellers
• Factor B2 is predominantly in the **pre-purchase evaluation and purchase stages** and consists of the following aspects: the safety, ease and convenience of purchasing from home	• Factor C2 (and relevant statements) is predominantly in the **search and purchase stages** and consists of the following aspects: security and privacy concerns when searching and purchasing on the Internet;
• Factor B3 is predominantly in the **search and purchase stages** and consists of the following aspects: privacy and security concerns in the search and purchase decision-making stages	• Factor C3 (and relevant statements) is predominantly in the **pre-purchase evaluation and purchase stages** and consists of the following aspects: ease and convenience of purchasing from home

An observation from the comparison is that Internet shoppers and non-shoppers consider security and privacy concerns when searching and purchasing on the Internet as an important factor when deciding to purchase via the Internet. A second observation is that although a similarity is identified, Internet shoppers

rate security and privacy as the second most important factor, while non-shoppers identify it as the third most important concern.

A third observation is that the third factor identified by Internet shoppers is the need recognition for the Internet by considering the ease and convenience of purchasing from home that it offers, while the second factor identified by non-shoppers is the need for the Internet as a safe and convenient purchasing medium from home. Although, at a first glance, it may appear as though these factors are identical, it can be surmised that they are not. The factor identified by Internet shoppers emphasises the need for ease and convenience as opposed to safety and convenience for non-shoppers.

A final observation is that the most important factor (based on the percentage of variance explained by this factor), identified for Internet shoppers and non-shoppers is different. Non-shoppers regard pre-purchase evaluation of brands and after-sales support offered by Internet sellers, concerns regarding the delivery of purchases and costs associated with Internet purchases, as the main factor considered when deciding to purchase Online. Internet shoppers regard the pre- and post-purchase evaluation of information on brands, product ranges, costs associated with Internet purchases and after-sales service offered by Internet sellers as the primary factor.

Based on the main finding earlier in the chapter that identified a significant difference between Internet shoppers and non-shoppers with regards to the importance ascribed to each statement (BC1) and the discussion above, the following main finding may be derived:

(BC4) There is an observable difference between the factors Internet shoppers and non-shoppers consider when deciding whether or not to purchase via the Internet.

For the purpose of the study, as defined by the formulated hypotheses, a number of factor analyses will be performed to determine if there are differences between the factors that Internet shoppers consider when a comparison is based on the period of Internet usage.

It should be noted that the responses from Internet shoppers who have been using the Internet for less than one year and responses of shoppers using the Net for between one year to less than two years had to be combined. The reason for combining the responses is based on the fact that only 23 respondents who have been using the Internet for less than one year, have purchased via the Net before and 50 who have been using the Net for one year to less than two years have purchased Online.

A concern was that based on the number of respondents, the findings of the analysis would be questionable. When combining the two time periods, the analysis was conducted by using responses from 73 Internet shoppers, considered to be sufficient to extract meaningful results. The factor analysis will therefore consider Internet shoppers who have been using the Net for less than two years.

(iii)   Factor analysis results for Internet shoppers who have been using the Internet for less than two years

Table 7.25 shows the rotated factor matrix applicable to Internet shoppers using the Net for less than two years.

Cronbach's alpha computed for the instrument items of the factor analysis is 0.90, indicating a relatively high internal consistency reliability.

TABLE 7.25: **ROTATED FACTOR MATRIX FOR INTERNET SHOPPERS USING THE NET FOR LESS THAN TWO YEARS**

Statement	Dec. stage	V	Factor			
			D1	D2	D3	D4
The possible invasion of my privacy	S&P	V125	0.05	0.12	0.71	0.24
Providing my personal information to others	S&P	V126	-0.09	0.15	0.80	0.37
Implications of providing my credit card details	P	V127	-0.02	0.03	0.84	0.26
Credibility of the seller	PP	V128	0.69	0.20	0.05	0.14
Concerned that goods purchased via the Internet will not be received	P	V129	0.43	0.13	0.46	-0.11
Goods may be damaged while shipped (in transit) or when delivered	P	V130	0.37	0.20	0.52	-0.05
The price of products or services offered via the Internet	PP	V131	0.52	0.24	0.17	-0.09
Brand name of products or services offered via the Internet	S&PP	V132	0.46	0.46	0.18	0.12
Additional cost associated with purchasing via the Internet (e.g.) delivery/shipping costs; insurance costs, import taxes, etc	PP	V133	0.36	0.35	0.38	0.02
The availability of prices on Internet sites	PP	V134	0.73	0.14	0.06	0.18
Guarantees offered by Internet sellers	PP&PE	V135	0.65	0.21	-0.01	0.24
Exchange/return policies offered by Internet sellers	PP&PE	V136	0.62	0.23	0.03	0.25
Ability to understand how to use the Internet/purchase via the Internet	S	V137	0.38	0.35	0.05	0.28
Importance of "touching and feeling" products prior to purchase	PP	V138	0.23	0.36	0.43	-0.13
The range of products/services offered from individual sellers on the Internet	PP	V139	0.17	0.54	0.22	0.20
After sales service	PP&PE	V140	0.07	0.70	0.23	-0.00
Personal/individual attention	PP&PE	V141	0.05	0.79	0.05	-0.02
The time between purchasing and receiving goods	PP&PE	V142	0.24	0.68	0.11	0.17
Safety of purchasing from home (i.e. don't have to visit shopping malls and possibly be a victim of crime)	PP&P	V143	0.17	0.17	0.07	0.55
Knowledge of the seller	S&PP	V144	0.23	0.51	0.10	0.29
Convenience of purchasing from home	PP&P	V145	0.08	0.11	0.20	0.85
Ease of purchasing via the Internet	PP&P	V146	0.25	0.04	0.17	0.75
Don't have a credit card	PP	V147	0.24	0.38	-0.01	0.13
How secure Internet payment methods are	P	V148	0.30	0.25	0.15	0.25
Eigenvalues			**6.98**	**2.19**	**1.79**	**1.41**
Percentage of variance			**47.23%**	**14.63%**	**11.58%**	**8.78%**
Cumulative percentage			**47.23%**	**61.86%**	**73.44%**	**82.22%**

n = 73 (Legend: S = Search; PP = Pre-purchase alternative evaluation; P = Purchase; and PE = Post-purchase alternative evaluation)

Table 7.25 identified four factors (labelled D1 to D4) that Internet users who have been using the Internet for less than two years considered when deciding to purchase via the Net. Factors D1 and D2 each comprise five, D3 four and D4 two variables. The realised eigenvalues for the four factors are 6.98, 2.19, 1.79 and 1.41 respectively.

Factor D1 explained 47.23% of the total variance (14.63% for D2, 11.58% for D3 and 8.78% for D4). Of importance is that the four factors cumulatively account for 82.22% of the total variance.

Factor identification

Factor D1

The following variables constitute factor D1:

Statement	Dec. stage	V	Loading
The availability of prices on Internet sites	PP	V134	0.73
Credibility of the seller	PP	V128	0.69
Guarantees offered by Internet sellers	PP&PE	V135	0.65
Exchange/return policies offered by Internet sellers	PP&PE	V136	0.62
The price of products or services offered via the Internet	PP	V131	0.52

(Legend: PP = Pre-purchase alternative evaluation; P = Purchase; PE = Post-purchase alternative evaluation)

Factor D1 identified five variables, namely V134, V128, V135, V136 and V131. The variables highlight issues associated with sellers on the Net (specifically credibility and guarantees and exchange policies offered) as well as pricing related aspects. Guarantees and exchange policies could possibly also support the credibility of Internet sellers.

Descriptor: Factor D1

Considering the decision-stages and the identified variables, **factor D1 (and relevant statements) is predominantly in the pre- and post-purchase evaluation stages of the decision-making process and consists of the**

following aspects: credibility of Internet sellers by considering their prices, guarantees and exchange policies offered.

Factor D2

Factor D2 comprised the following variables:

Statement	Dec. stage	V	Loading
Personal/individual attention	PP&PE	V141	0.79
After sales service	PP&PE	V140	0.70
The time between purchasing and receiving goods	PP&PE	V142	0.68
The range of products/services offered from individual sellers on the Internet	PP	V139	0.54
Knowledge of the seller	S&PP	V144	0.51

(Legend: S = Search; PP = Pre-purchase alternative evaluation; PE = Post-purchase alternative evaluation)

As with factor D1, factor D2 identified five variables, namely V141, V140, V142, V139 and V144. Considering the variables and the decision stages, the following descriptor can be ascribed to factor D2:

Descriptor: Factor D2

Factor D2 (and relevant statements) is predominantly in the pre- and post purchase evaluation stages of the decision-process and consists of the following aspect: reputability of Internet sellers.

Factor D3

Factor D3 encompasses the following four variables:

Statement	Dec. stage	V	Loading
Implications of providing my credit card details	P	V127	0.84
Providing my personal information to others	S&P	V126	0.80
The possible invasion of my privacy	S&P	V125	0.71
Goods may be damaged while shipped (in transit) or when delivered	P	V130	0.52

(Legend: S = Search; P = Purchase)

Considering the variables identified, it can be derived that **factor D3 is predominantly in the search and purchase stages of the decision-making process and consists of the following aspects: concerns regarding security, privacy and delivery of purchased goods**.

Factor D4

Three variables were identified for factor D4, namely:

Statement	Dec. stage	V	Loading
Convenience of purchasing from home	PP&P	V145	0.85
Ease of purchasing via the Internet	PP&P	V146	0.75
Safety of purchasing from home (i.e. don't have to visit shopping malls and possibly be a victim of crime)	PP&P	V143	0.55

(Legend: PP = Pre-purchase alternative evaluation; P = Purchase)

The variables lean heavily on the convenience aspect of shopping via the Internet from home and also acknowledge the ease of shopping on the Net.

Descriptor: Factor D4

Considering the decision-stages and these two variables, **factor D4 (and relevant statements) is predominantly in the pre-purchase evaluation and purchase stages of the decision process and consists of the following aspects: safety and convenience of purchasing from home**.

Table 7.26 shows the four factors discussed for Internet shoppers using the Internet for less than two years. Table 7.26 also indicates that the four identified factors explained 82.22% of the total variance for the 24 variables.

TABLE 7.26: **FACTORS APPLICABLE TO INTERNET SHOPPERS USING THE NET FOR LESS THAN TWO YEARS**

Descriptor	Percentage of variance	Cumulative percentage
Factor D1 is predominantly in the pre- and post-purchase evaluation stages of the decision-making process and consists of the following aspects: credibility of Internet sellers by considering their prices, guarantees and exchange policies offered	47.23%	47.23%
Factor D2 is predominantly in the pre- and post purchase evaluation stages of the decision-process and consists of the following aspect: reputability of Internet sellers	14.63%	61.86%
Factor D3 is predominantly in the search and purchase stages of the decision-making process and consists of the following aspects: concerns regarding security, privacy and delivery of purchased goods	11.58%	73.44%
Factor D4 is predominantly in the pre-purchase evaluation and purchase stages of the decision process and consists of the following aspects: safety and convenience of purchasing from home	8.78%	82.22%

(BC5)   **A main finding from the factor analysis is that Internet shoppers who have been using the Internet for less than two years consider the following four factors when deciding to purchase via the Net: factor D1 is predominantly in the pre- and post-purchase evaluation stages of the decision-making process and consists of the following aspects: credibility of Internet sellers by considering their prices, guarantees and exchange policies offered; factor D2 is predominantly in the pre- and post purchase evaluation stages of the decision-process and consists of the following aspect: reputability of Internet sellers; factor D3 is predominantly in the search and purchase stages of the decision-making process and consists of the following aspects: concerns regarding security, privacy and delivery of purchased goods; and factor D4 is predominantly in the pre-purchase evaluation and purchase stages of the decision process and consists of the following aspects: safety and convenience of purchasing from home.**

(iv)   Factor analysis results for Internet shoppers who have been using the Internet for two years to less than three years

TABLE 7.27: ROTATED FACTOR MATRIX FOR INTERNET SHOPPERS USING THE NET FOR TWO YEARS TO LESS THAN THREE YEARS

Statement	Dec. stage	V	Factor			
			E1	E2	E3	E4
The possible invasion of my privacy	S&P	V125	0.10	0.10	0.79	0.09
Providing my personal information to others	S&P	V126	0.11	0.06	0.70	0.19
Implications of providing my credit card details	P	V127	0.16	0.11	0.92	0.01
Credibility of the seller	PP	V128	0.33	0.31	0.44	0.06
Concerned that goods purchased via the Internet will not be received	P	V129	0.46	0.47	0.23	0.06
Goods may be damaged while shipped (in transit) or when delivered	P	V130	0.58	0.35	0.25	0.16
The price of products or services offered via the Internet	PP	V131	0.63	0.15	0.10	0.16
Brand name of products or services offered via the Internet	S&PP	V132	0.57	0.22	0.12	0.11
Additional cost associated with purchasing via the Internet (e.g.) delivery/shipping costs; insurance costs, import taxes, etc	PP	V133	0.56	0.19	0.26	0.07
The availability of prices on Internet sites	PP	V134	0.27	0.69	0.01	0.21
Guarantees offered by Internet sellers	PP&PE	V135	0.18	0.89	0.23	0.11
Exchange/return policies offered by Internet sellers	PP&PE	V136	0.28	0.79	0.18	0.13
Ability to understand how to use the Internet/purchase via the Internet	S	V137	0.60	0.38	0.32	0.20
Importance of "touching and feeling" products prior to purchase	PP	V138	0.41	0.07	0.13	-0.03
The range of products/services offered from individual sellers on the Internet	PP	V139	0.46	0.45	0.14	0.27
After sales service	PP&PE	V140	0.40	0.38	0.09	0.15
Personal/individual attention	PP&PE	V141	0.61	0.12	0.17	0.18
The time between purchasing and receiving goods	PP&PE	V142	0.50	0.42	0.11	0.28
Safety of purchasing from home (i.e. don't have to visit shopping malls and possibly be a victim of crime)	PP&P	V143	0.31	0.25	0.12	0.64
Knowledge of the seller	S&PP	V144	0.40	0.27	0.21	0.37
Convenience of purchasing from home	PP&P	V145	0.04	0.12	0.17	0.90
Ease of purchasing via the Internet	PP&P	V146	0.16	0.12	0.10	0.81
Don't have a credit card	PP	V147	0.27	0.06	-0.01	0.05
How secure Internet payment methods are	P	V148	0.27	0.20	0.61	0.21
Eigenvalues			**8.56**	**1.87**	**1.53**	**1.02**
Percentage of variance			**56.27%**	**12.22%**	**10.14%**	**6.42%**
Cumulative percentage			**56.27%**	**68.49%**	**78.63%**	**85.05%**

n = 100 (Legend: S = Search; PP = Pre-purchase alternative evaluation; P = Purchase; and

PE = Post-purchase alternative evaluation)

Table 7.27 portrays the rotated factor matrix for the 24 statements that Internet shoppers who have been using the Internet for two years to less than three years (n = 100) consider when purchasing via the Internet. Four factors are identified (labelled E1 to E4) for Internet shoppers who have been using the Net for two years to less than three years. Factor E1 comprises seven variables, E2 of three, E3 of four and E4 of three variables. The realised eigenvalues for each of the factors are 8.56, 1.87, 1.53 and 1.02 respectively. Cronbach's alpha computed for the instrument items of the factor analysis is 0.922, indicating internal consistency reliability.

The percentage of variance accounted for by the factors are 56.27% for E1, 12.22% for E2, 10.14% for E3 and 6.42% for E4. The four identified factors cumulatively account for 85.05% of the total variance. These four factors will be analysed and discussed in more detail below.

Factor identification

As mentioned, four factors were identified by Internet shoppers who had been using the Internet for two years to less than three years. Each factor will be analysed in the discussion below.

Factor E1

Factor E1 comprise seven variables, namely:

Statement	Dec. stage	V	Loading
The price of products or services offered via the Internet	PP	V131	0.63
Personal/individual attention	PP&PE	V141	0.61
Ability to understand how to use the Internet/purchase via the Internet	S	V137	0.60
Goods may be damaged while shipped (in transit) or when delivered	P	V130	0.58
Brand name of products or services offered via the Internet	S&PP	V132	0.57
Additional cost associated with purchasing via the Internet (e.g.) delivery/shipping costs; insurance costs, import taxes	PP	V133	0.56
The time between purchasing and receiving goods	PP&PE	V142	0.50

(Legend: S = Search; PP = Pre-purchase alternative evaluation; P = Purchase; and PE = Post-purchase alternative evaluation)

Considering the variables that constitute factor E1, three possible underlying concepts can be identified. The first incorporates variables V131, V132 and V133, focusing on pre-purchase evaluation of brand names, prices of products and services and additional cost associated with purchasing via the Internet.

The second concept identified by factor E1 is the delivery of purchased items. This concept is derived by considering the chosen statements that highlight the possibility that goods may be damaged while shipped or delivered (V130) and the time between purchasing and receiving purchased goods (V142). The final variable associated with factor E1, personal/individual attention (V141), can most probably be associated with the first concept, whereby shoppers would consider the individual attention offered by Internet sellers.

Descriptor: Factor E1

Factor E1 (and relevant statements) is predominantly in the pre-purchase evaluation stage of the decision-process and consists of the following aspects: brands, prices, individual attention offered by Internet sellers and delivery of purchased goods and additional costs associated with Internet purchases.

Factor E2

Factor E2 contained three variables, namely:

Statement	Dec. stage	V	Loading
Guarantees offered by Internet sellers	PP&PE	V135	0.89
Exchange/return policies offered by Internet sellers	PP&PE	V136	0.79
The availability of prices on Internet sites	PP	V134	0.69

(Legend: PP = Pre-purchase alternative evaluation; PE = Post-purchase alternative evaluation)

The central concept identified by the two variables (guarantees offered – V135 - and exchange or return policies – V136) as well as the third variable (V134 – availability of prices on Internet sites), is that Internet shoppers who have been using the Net for two years to less than three years evaluate Internet sellers on the guarantees and exchange policies offered together with their willingness to publish prices on their sites.

Descriptor: Factor E2

Considering the discussion regarding these three variables, it can be derived that **factor E2 (and relevant statements) is predominantly in the pre- and post purchase evaluation stages of the decision-making process and consists of the following aspects: Internet sellers' prices, guarantees and exchange policies.**

Factor E3

The following four variables constitute factor E3:

Statement	Dec. stage	V	Loading
Implications of providing my credit card details	P	V127	0.92
The possible invasion of my privacy	S&P	V125	0.79
Providing my personal information to others	S&P	V126	0.70
How secure Internet payment methods are	P	V148	0.61

(Legend: S = Search; P = Purchase)

The central theme from the first three variables (V127, V125 and V126) identifying factor E3, is the security and privacy aspect associated with Internet purchases. The final variable (how secure Internet payment methods are – V148) specifically highlights the security aspect associated with Internet payment methods.

Descriptor: Factor E3

Factor E3 (and relevant statements) is predominantly in the search and purchase evaluation stages of the decision-process and consists of the following aspects: security and privacy concerns.

Factor E4

The three variables constituting factor E4 are listed below:

Statement	Dec. stage	V	Loading
Convenience of purchasing from home	PP&P	V145	0.90
Ease of purchasing via the Internet	PP&P	V146	0.81
Safety of purchasing from home (i.e. don't have to visit shopping malls and possibly be a victim of crime)	PP&P	V143	0.64

(Legend: PP = Pre-purchase alternative evaluation; P = Purchase)

The three variables jointly focus on ease, safety and convenience of using the Internet from home. Factor E4 is as a convenient buying channel (from home) and an important aspect associated with the decision to purchase via the Net.

Descriptor: Factor E4

Factor E4 (and relevant statements) is predominantly in the pre-purchase evaluation and purchase stages of the decision-process and consists of the following aspects: safety and convenience of purchasing from home.

Table 7.28 summarises the previously discussed factor identification process by providing the descriptor together with the percentage of variance explained by the factors identified for Internet users who have been using the Internet for two to three years.

TABLE 7.28: FACTORS APPLICABLE TO INTERNET SHOPPERS USING THE NET FOR TWO YEARS TO LESS THAN THREE YEARS

Descriptor	Percentage of variance	Cumulative percentage
Factor E1 is predominantly in the pre-purchase evaluation stage of the decision-process and consists of the following aspects: brands, prices, individual attention offered by Internet sellers and delivery of purchased goods and additional costs associated with Internet purchases	56.27%	56.27%
Factor E2 is predominantly in the pre- and post purchase evaluation stages of the decision-making process and consists of the following aspects: Internet sellers' prices, guarantees and exchange policies	12.22%	68.49%
Factor E3 is predominantly in the search and purchase evaluation stages of the decision-process and consists of the following aspects: security and privacy concerns	10.14%	78.63%
Factor E4 is predominantly in the pre-purchase evaluation and purchase stages of the decision-process and consists of the following aspects: safety and convenience of purchasing from home	6.42%	85.05%

As can be seen from Table 7.28, the four factors identified for Internet shoppers who have been using the Net for two years to less than three years explained 85.05% of the total variance of the 24 variables.

(BC6)   **A main finding from the factor analysis is that Internet shoppers who have been using the Internet for two to less than three years consider the following four factors when deciding to purchase via the Net: factor E1 is predominantly in the pre-purchase evaluation stage of the decision-process and consists of the following aspects: brands, prices, individual attention offered by Internet sellers and delivery of purchased goods and additional costs associated with Internet purchases; factor E2 is predominantly in the pre- and post purchase evaluation stages of the decision-making process and consists of the following aspects: Internet sellers' prices, guarantees and exchange policies; factor E3 is predominantly in the search and purchase evaluation stages of the decision-process and consists of the following aspect: security**

and privacy concerns; and factor E4 is predominantly in the pre-purchase evaluation and purchase stages of the decision-process and consists of the following aspect: safety and convenience of purchasing from home.

(v)   Factor analysis results for Internet shoppers who have been using the Internet for three to less than four years

Table 7.29 shows the rotated factor matrix applicable to Internet shoppers using the Net for three to less than four years.

Cronbach's alpha computed for the instrument items of the factor analysis is 0.895, indicating internal consistency reliability.

From Table 7.29 it emerges that four factors (shown as factors F1 to F4) have been identified by Internet shoppers who have been using the Internet for three to four years. Factor F 1 comprises six, F2 four, F3 two and F4 four variables respectively. The realised eigenvalues for each of the factors are 7.38, 2.06, 1.19 and 1.08 respectively.

The four identified factors cumulatively are responsible for 80.94% of the total variance, with factor F1 accounting for 51.92% of the variance, F2 a further 14.08%, F3 an additional 7.79% and F4 the remaining 7.15% of the variance.

TABLE 7.29: ROTATED FACTOR MATRIX FOR INTERNET SHOPPERS USING THE NET FOR THREE YEARS TO LESS THAN FOUR YEARS

Statement	Dec. stage	V	Factor			
			F1	F2	F3	F4
The possible invasion of my privacy	S&P	V125	0.31	0.66	-0.04	0.34
Providing my personal information to others	S&P	V126	0.25	0.78	-0.07	0.17
Implications of providing my credit card details	P	V127	0.10	0.79	0.01	0.15
Credibility of the seller	PP	V128	0.34	0.48	0.17	0.35
Concerned that goods purchased via the Internet will not be received	P	V129	0.25	0.16	-0.09	0.51
Goods may be damaged while shipped (in transit) or when delivered	P	V130	0.21	0.26	-0.00	0.80
The price of products or services offered via the Internet	PP	V131	0.21	0.15	0.46	0.36
Brand name of products or services offered via the Internet	S&PP	V132	0.27	0.12	0.36	0.51
Additional cost associated with purchasing via the Internet (e.g.) delivery/shipping costs; insurance costs, import taxes, etc	PP	V133	0.13	0.22	0.36	0.56
The availability of prices on Internet sites	PP	V134	0.37	0.25	0.23	0.13
Guarantees offered by Internet sellers	PP&PE	V135	0.71	0.27	0.24	0.08
Exchange/return policies offered by Internet sellers	PP&PE	V136	0.69	0.27	0.25	0.06
Ability to understand how to use the Internet/purchase via the Internet	S	V137	0.56	0.12	0.07	0.20
Importance of "touching and feeling" products prior to purchase	PP	V138	0.45	-0.12	-0.30	0.17
The range of products/services offered from individual sellers on the Internet	PP	V139	0.41	0.01	0.40	0.21
After sales service	PP&PE	V140	0.66	0.15	0.21	0.25
Personal/individual attention	PP&PE	V141	0.57	0.05	0.23	0.19
The time between purchasing and receiving goods	PP&PE	V142	0.54	0.11	0.23	0.21
Safety of purchasing from home (i.e. don't have to visit shopping malls and possibly be a victim of crime)	PP&P	V143	0.22	0.06	0.25	0.21
Knowledge of the seller	S&PP	V144	0.43	0.29	0.01	0.27
Convenience of purchasing from home	PP&P	V145	0.12	-0.04	0.69	0.03
Ease of purchasing via the Internet	PP&P	V146	0.25	0.03	0.82	-0.02
Don't have a credit card	PP	V147	0.05	-0.30	-0.04	-0.03
How secure Internet payment methods are	P	V148	0.40	0.61	0.14	0.06
Eigenvalues			**7.38**	**2.06**	**1.19**	**1.08**
Percentage of variance			**51.92%**	**14.08%**	**7.79%**	**7.15%**
Cumulative percentage			**51.92%**	**66.00%**	**73.79%**	**80.94%**

n = 112 (Legend: S = Search; PP = Pre-purchase alternative evaluation; P = Purchase; and PE = Post-purchase alternative evaluation)

Factor identification

Factor F1

Factor F1 comprises six variables, namely:

Statement	Dec. stage	V	Loading
Guarantees offered by Internet sellers	PP&PE	V135	0.71
Exchange/returns policies offered by Internet sellers	PP&PE	V136	0.69
After sales service	PP&PE	V140	0.66
Personal/individual attention	PP&PE	V141	0.57
Ability to understand how to use the Internet/purchase via the Internet	S	V137	0.56
The time between purchasing and receiving goods	PP&PE	V142	0.54

(Legend: S = Search; PP = Pre-purchase alternative evaluation; PE = Post-purchase alternative evaluation)

From the variables comprising factor F1 it can be seen that service and after sales service and support offered by Internet sellers are central to identifying the factor. Four of the variables (V135, V136, V140 and V141) indicate after sales service offered by Internet sellers, by focusing on guarantees and exchange policies offered together with the explicit mentioning of after sales service (V140). Service is also highlighted by considering the personal/individual attention identified by V141.

Variable, V142, focuses on the time between purchasing and receiving goods. This variable could, arguably, be grouped with the preceding variables by considering that shoppers could view the delivery process (and the time associated with it) as part of the service offering offered by Internet sellers.

Descriptor: Factor F1

Considering the discussion, it can be derived that **factor F1 (and relevant statements) is predominantly in the pre- and post-purchase evaluation**

stages of the decision-process and consists of the following aspects: ability to find and evaluate information on after-sales support offered by Internet sellers.

Factor F2

The four variables that constitute factor F2 are:

Statement	Dec. stage	V	Loading
Implications of providing my credit card details	P	V127	0.79
Providing my personal information to others	S&P	V126	0.78
The possible invasion of my privacy	S&P	V125	0.66
How secure Internet payment methods are	P	V148	0.61

(Legend: S = Search; P = Purchase)

The central theme identified from the first three variables (V127, V125 and V126) comprising factor F2, is the security and privacy aspects associated with Internet purchases. The final variable (how secure Internet payment methods are – V148) specifically highlights the security aspect associated with Internet payment methods.

Descriptor: Factor F2

Factor F2 (and relevant statements) is predominantly in the search and purchase stages of the decision-process and consists of the following aspects: security and privacy concerns.

Factor F3

Only two variables were highlighted for factor F3, namely:

Statement	Dec. stage	V	Loading
Ease of purchasing via the Internet	PP&P	V146	0.82
Convenience of purchasing from home	PP&P	V145	0.69

(Legend: PP = Pre-purchase alternative evaluation; P = Purchase)

Considering the two variables, it can be derived that **factor F3 (and relevant statements) is predominantly in the pre-purchase evaluation and purchase stages of the decision-making process and consists of the following aspects: ease and convenience of purchasing from home.**

Factor F4

The final factor identified for Internet shoppers who have been using the Net for three years to less than four years, comprises four variables, namely:

Statement	Dec. stage	V	Loading
Goods may be damaged while shipped (in transit) or when delivered	P	V130	0.80
Additional cost associated with purchasing via the Internet (e.g.) delivery/shipping costs; insurance costs, import taxes, etc	PP	V133	0.56
Concerned that goods purchased via the Internet will not be received	P	V129	0.51
Brand name of products or services offered via the Internet	S&PP	V132	0.51

(Legend: S = Search; PP = Pre-purchase alternative evaluation; P = Purchase)

Two of the variables listed for factor F4 focus on possible concerns regarding the delivery of products and services offered via the Internet (V130 and V129). Variable V133 also strongly emphasises the delivery process, by focusing on additional costs associated with Internet purchases (the cost elements listed – delivery/shipping costs, insurance costs and import taxes – can all be directly associated with the delivery process).

The final identified variable, V132, focuses on the brand name of products and services offered via the Internet. It does not seem as though this variable can be used to support the overriding concept identified by the other three variables when ascribing a descriptor to factor F4.

Descriptor: Factor F4

Factor F4 (and relevant statements) is predominantly in the pre-purchase evaluation and purchase stages of the decision-process and consists of the following aspect: concerns regarding the actual delivery and delivery costs when purchasing known brands via the Internet.

It can be seen from Table 7.30 that the four factors identified for Internet shoppers who have been using the Internet for three years to less than four years accounted for 80.94% of the total variance of the 24 variables.

TABLE 7.30: **FACTORS APPLICABLE TO INTERNET SHOPPERS USING THE NET FOR THREE YEARS TO LESS THAN FOUR YEARS**

Descriptor	Percentage of variance	Cumulative percentage
Factor F1 is predominantly in the pre- and post-purchase evaluation stages of the decision-process and consists of the following aspects: ability to find and evaluate information on after-sales support offered by Internet sellers	51.92%	51.92%
Factor F2 is predominantly in the search and purchase stages of the decision-process and consists of the following aspects: security and privacy concerns	14.08%	66.00%
Factor F3 is predominantly in the pre-purchase evaluation and purchase stages of the decision-making process and consists of the following aspects: ease and convenience of purchasing from home	7.19%	73.79%
Factor F4 is predominantly in the pre-purchase evaluation and purchase stages of the decision-process and consists of the following aspect: concerns regarding the actual delivery and delivery costs when purchasing known brands via the Internet	7.15%	80.94%

(BC7) **The main finding from the factor analysis is that Internet shoppers, who have been using the Internet for three years to less than four years, consider the following four factors when deciding whether or not to purchase Online: factor F1 is predominantly in the pre- and post-purchase evaluation stages of the decision-process and consists of the following aspects: ability to find and evaluate**

information on after-sales support offered by Internet sellers; factor F2 is predominantly in the search and purchase stages of the decision-process and consists of the following aspects: security and privacy concerns; factor F3 is predominantly in the pre-purchase evaluation and purchase stages of the decision-making process and consists of the following aspects: ease and convenience of purchasing from home; and factor F4 is predominantly in the pre-purchase evaluation and purchase stages of the decision-process and consists of the following aspect: concerns regarding the actual delivery and delivery costs when purchasing known brands via the Internet.

(vi)   Factor analysis results for Internet shoppers who have been using the Internet for four years and more

Table 7.31 shows the rotated factor matrix applicable to Internet shoppers using the Net for four years or more.

Cronbach's alpha computed for the instrument items of the factor analysis is 0.868, indicating a relatively high internal consistency reliability.

From Table 7.31 it can be seen that five factors (labelled G1 to G5) are identified, that Internet shoppers who have been using the Internet for four years or more, consider when deciding to purchase via the Internet.   Factors G1 and G2 comprise four variables each, G3 two, G4 three and G5 two variables respectively.   The realised eigenvalues for each of the factors are 5.65, 2.20, 1.38, 1.20 and 1.05 respectively.

TABLE 7.31: ROTATED FACTOR MATRIX FOR INTERNET SHOPPERS USING THE NET FOR FOUR YEARS OR MORE

Statement	Dec. stage	V	Factor				
			G1	G2	G3	G4	G5
The possible invasion of my privacy	S&P	V125	0.07	0.74	0.07	0.17	-0.02
Providing my personal information to others	S&P	V126	0.03	0.81	0.08	-0.00	-0.01
Implications of providing my credit card details	P	V127	0.09	0.76	0.12	-0.05	-0.25
Credibility of the seller	PP	V128	0.40	0.31	-0.00	0.23	0.06
Concerned that goods purchased via the Internet will not be received	P	V129	0.18	0.34	0.32	0.28	0.03
Goods may be damaged while shipped (in transit) or when delivered	P	V130	0.29	0.24	0.40	0.29	0.05
The price of products or services offered via the Internet	PP	V131	0.05	0.03	0.12	0.78	-0.00
Brand name of products or services offered via the Internet	S&PP	V132	0.13	0.00	0.15	0.58	0.14
Additional cost associated with purchasing via the Internet (e.g.) delivery/shipping costs; insurance costs, import taxes, etc	PP	V133	0.16	0.13	0.17	0.56	0.09
The availability of prices on Internet sites	PP	V134	0.63	0.01	-0.19	0.42	0.17
Guarantees offered by Internet sellers	PP&PE	V135	0.82	0.20	0.12	0.18	0.12
Exchange/return policies offered by Internet sellers	PP&PE	V136	0.75	0.10	0.27	0.08	0.08
Ability to understand how to use the Internet/purchase via the Internet	S	V137	0.28	0.25	0.25	0.38	-0.01
Importance of "touching and feeling" products prior to purchase	PP	V138	0.01	0.18	0.48	0.20	-0.17
The range of products/services offered from individual sellers on the Internet	PP	V139	0.30	-0.10	0.37	0.29	0.07
After sales service	PP&PE	V140	0.51	0.15	0.52	-0.09	0.08
Personal/individual attention	PP&PE	V141	0.11	0.13	0.70	0.08	0.11
The time between purchasing and receiving goods	PP&PE	V142	0.28	-0.00	0.29	0.24	0.27
Safety of purchasing from home (i.e. don't have to visit shopping malls and possibly be a victim of crime)	PP&P	V143	-0.04	0.11	0.37	0.10	0.49
Knowledge of the seller	S&PP	V144	0.30	0.06	0.47	0.07	0.27
Convenience of purchasing from home	PP&P	V145	0.14	-0.03	0.06	0.07	0.87
Ease of purchasing via the Internet	PP&P	V146	0.17	-0.02	0.03	0.08	0.83
Don't have a credit card	PP	V147	-0.03	0.08	0.34	0.12	0.09
How secure Internet payment methods are	P	V148	0.15	0.60	0.18	0.05	0.08
Eigenvalues			5.65	2.20	1.38	1.20	1.05
Percentage of variance			41.87%	16.50%	10.62%	9.04%	8.13%
Cumulative percentage			41.87%	58.37%	68.99%	78.03%	86.16%

n = 258 (Legend: S = Search; PP = Pre-purchase alternative evaluation; P = Purchase; and PE = Post-purchase alternative evaluation)

The percentage of variance explained by the factors are as follows: 41.87% for G1, 16.50% for G2, 10.62% for G3, 9.04% for G4 and 8.13% for G5. The five factors cumulatively explain 86.16% of the total variance.

Factor identification

The five factors identified for Internet shoppers who have been using the Internet for four years or more will be discussed below.

Factor G1

Factor G1 comprises the following four variables:

Statement	Dec. stage	V	Loading
Guarantees offered by Internet sellers	PP&PE	V135	0.82
Exchange/return policies offered by Internet sellers	PP&PE	V136	0.75
The availability of prices on Internet sites	PP	V134	0.63
After sales service	PP&PE	V140	0.51

(Legend: PP = Pre-purchase alternative evaluation; PE = Post-purchase alternative evaluation)

Three variables (V135, V136 and V140) focus on after sales service aspects that Internet users who have been using the Internet for four years and more consider to be important when deciding to purchase Online. The fourth variable (V134) focuses on the availability of pricing information on sellers' Websites.

Descriptor: Factor G1

Considering the discussion together with the decision-making stages, it can be derived that **factor G1 (and relevant statements) is predominantly in the pre- and post-purchase evaluation stages of the decision-making process and consists of the following aspects: prices and after-sales service offered by Internet sellers.**

Factor G2

Four variables are distinguished for factor G2, namely:

Statement	Dec. stage	V	Loading
Providing my personal information to others	S&P	V126	0.81
Implications of providing my credit card details	P	V127	0.76
The possible invasion of my privacy	S&P	V125	0.74
How secure Internet payment methods are	P	V148	0.60

(Legend: S = Search; P = Purchase)

The central theme from the first three variables (V125, V126 and V127) identifying factor G2, is the security and privacy aspect associated with Internet purchases. The final variable (how secure Internet payment methods are – V148) specifically highlights the security aspect associated with Internet payment methods.

Descriptor: Factor G2

Considering the four variables, it can be concluded that **factor G2 (and relevant statements) is predominantly in the search and purchase stages of the decision-making process and consists of the following aspects: security and privacy concerns.**

Factor G3

Only two variables are identified for factor G3, namely:

Statement	Dec. stage	V	Loading
Personal/individual attention	PP&PE	V141	0.70
After sales service	PP&PE	V140	0.52

(Legend: PP = Pre-purchase alternative evaluation; PE = Post-purchase alternative evaluation)

The variables identified for factor G3 focus on service aspects. V141 highlights the need for individual attention, while V140 specifically consider after sales service.

Due to the higher loading for V141, it was decided to focus on V141 when ascribing a descriptor to factor G3. Since V141 does not specifically mention service, while V140 does, it can be concluded that **factor G3 (and relevant**

statements) is predominantly in the pre- and post-purchase evaluation stages of the decision-process and consists of the following aspect: personal attention offered by Internet sellers.

Factor G4

The three variables that constitute factor G4 are:

Statement	Dec. stage	V	Loading
The price of products or services offered via the Internet	PP	V131	0.78
Brand name of products or services offered via the Internet	S&PP	V132	0.58
Additional cost associated with purchasing via the Internet (e.g.) delivery/shipping costs; insurance costs, import taxes, etc	PP	V133	0.56

(Legend: S = Search; PP = Pre-purchase alternative evaluation)

Two variables (V131 and V133) identified for factor G4 highlight costs of purchases. The first variable, V131, focuses on the price of the actual product, while V133 considers the augmented cost to purchase a product via the Net (e.g. delivery costs, etc).

Descriptor: Factor G4

Factor G4 (and relevant statements) is predominantly in the pre-purchase evaluation stage of the decision-making process and consists of the following aspects: brands, prices and total cost associated with purchasing from Internet sellers.

Factor G5

Two variables were identified for factor G5, namely:

Statement	Dec. stage	V	Loading
Convenience of purchasing from home	PP&P	V145	0.87
Ease of purchasing via the Internet	PP&P	V146	0.83

(Legend: PP = Pre-purchase alternative evaluation; P = Purchase)

The two identified variables place emphasis on the convenience aspect of shopping via the Internet from home and also acknowledge the ease of shopping on the Net. Considering the two variables, it can be seen that **factor G5 (and relevant statements) is predominantly in the pre-purchase evaluation and purchase stages of the decision-making process and consists of the following aspects: ease and convenience of shopping from home.**

In Table 7.32 it can be seen that the five factors discussed, identified for Internet shoppers who have been using the Net for four years or more, explained 86.165% of the total variance for the 24 variables.

TABLE 7.32: **FACTORS APPLICABLE TO INTERNET SHOPPERS USING THE NET FOR FOUR YEARS OR MORE**

Descriptor	Percentage of variance	Cumulative percentage
Factor G1 is predominantly in the pre- and post-purchase evaluation stages of the decision-making process and consists of the following aspects: prices and after-sales service offered by Internet sellers	41.87%	41.87%
Factor G2 is predominantly in the search and purchase stages of the decision-making process and consists of the following aspects: security and privacy concerns	16.50%	58.37%
Factor G3 is predominantly in the pre- and post-purchase evaluation stages of the decision-process and consists of the following aspect: personal attention offered by Internet sellers	10.62%	68.99%
Factor G4 is predominantly in the pre-purchase evaluation stage of the decision-making process and consists of the following aspects: brands, prices and total cost associated with purchasing from Internet sellers	9.04%	78.03%
Factor G5 is predominantly in the pre-purchase evaluation and purchase stages of the decision-making process and consists of the following aspects: ease and convenience of shopping from home	8.13%	86.16%

(BC8) A main finding from the factor analysis is that Internet shoppers who have been using the Internet for four years or more consider five factors when deciding to purchase via the Net, namely: factor G1 is predominantly in the pre- and post-purchase evaluation stages of the decision-making process and consists of the following aspects:

prices and after-sales service offered by Internet sellers; factor G2 is predominantly in the search and purchase stages of the decision-making process and consists of the following aspects: security and privacy concerns; factor G3 is predominantly in the pre- and post-purchase evaluation stages of the decision-process and consists of the following aspect: personal attention offered by Internet sellers; factor G4 is predominantly in the pre-purchase evaluation stage of the decision-making process and consists of the following aspects: brands, prices and total cost associated with purchasing from Internet sellers; and factor G5 is predominantly in the pre-purchase evaluation and purchase stages of the decision-making process and consists of the following aspects: ease and convenience of shopping from home.

The findings from the factor analyses, applicable to Internet shoppers across different periods of Internet access, need to be compared to determine if there is a difference, regarding factors considered prior to Online shopping, between the different groups of Internet shoppers. This will be done by considering the different decision-making stages ascribed to each identified factor.

Period of Internet usage	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
• Less than 2 years (main finding BC5)	PP&PE (D1)	PP&PE (D2)	S&P (D3)	PP&P (D4)	N/A
• 2 years to less than 3 years (main finding BC6)	PP (E1)	PP&PE (E2)	S&P (E3)	PP&P (E4)	N/A
• 3 years to less than 4 years (main finding BC7)	PP&PE (F1)	S&P (F2)	PP&P (F3)	PP&P (F4)	N/A
• 4 years or more (main finding BC8)	PP&PE (G1)	S&P (G2)	PP&PE (G3)	PP (G4)	PP&P (G5)

From the comparison, it can be seen that there are noticeable differences between Internet shoppers (across different time periods) when considering the predominant stages of the decision-making process associated with each identified factor.

The following main finding can be derived from considering the comparison provided together with the factor analyses conducted for Internet shoppers by reflecting on the period of Internet usage:

(BC9) **There is a difference between the factors considered by Internet shoppers prior to purchasing via the Internet when the period of Internet usage is considered and the associated stages of the decision-making process.**

(b)   Questions 15 and 19

Q15: From which of the following product and service categories will you seriously consider purchasing via the Internet in the future? [38 categories were listed]

Q19:   From which of the following product and services categories have you purchased before and do you seriously consider purchasing via the Internet in the future? [38 categories were listed]

Question 15 was directed at respondents who had not purchased via the Net before, but indicated that they would either consider purchasing Online in the future, or would consider purchasing via the Net if more South African businesses offered products or services on the Internet. These respondents had to indicate from which product and service categories they would consider purchasing via the Internet in the future.

Question 19 was directed at those respondents who had purchased Online before. These respondents had to indicate from which product or service categories they had previously purchased.

Table 7.33 lists the product and service categories non-Internet shoppers seriously consider purchasing from via the Internet in the future.

TABLE 7.33:   PRODUCT AND SERVICE CATEGORIES NON-INTERNET SHOPPERS SERIOUSLY CONSIDER PURCHASING FROM VIA THE INTERNET

Product and service categories	V	Frequency	Percentage
Adult entertainment	V48	46	9.96%
Airline tickets	V49	244	52.81%
Baby products	V50	25	5.41%
Beauty products	V51	44	9.52%
Books and magazines	V52	241	52.16%
Cars and related	V53	76	16.45%
CDs (music)	V54	257	55.63%
Cellular phones and accessories	V55	102	22.08%
Clothing and accessories	V56	63	13.64%
Computer games	V57	127	27.49%
Computer hardware	V58	135	29.22%
Computer software	V59	209	45.24%
Cosmetics	V60	37	8.01%
DVDs / videos	V61	137	29.65%
Flowers	V62	96	20.78%
Electronic equipment (TV, Hi-Fi, Video machine; etc)	V63	124	26.84%
Household appliances (Washing machine, Fridge, etc)	V64	74	16.02%
Outdoors equipment and accessories (e.g. tents and camping gear)	V65	87	18.83%
Food (groceries)	V66	116	25.11%
Food (take away)	V67	102	22.08%
Furniture	V68	40	8.66%
Gifts	V69	137	29.65%
Gift vouchers	V70	130	28.14%
Garden related	V71	59	12.77%
Health products	V72	63	13.64%
Hotel reservations	V73	235	50.87%
Insurance: Car	V74	99	21.43%
Insurance: Household	V75	81	17.53%
Insurance: Life	V76	56	12.12%
Interior decorating / renovations	V77	37	8.01%
Jewellery	V78	33	7.14%
Movie or event tickets	V79	229	49.57%
Property	V80	48	10.39%
Sporting goods	V81	69	14.94%
Toys	V82	82	17.75%
Unit trust / Shares	V83	111	24.03%
Wine	V84	87	18.83%
Other Liquor	V85	45	9.74%

n = 462

Table 7.33 indicates that the four product and service categories from which the majority (at least 50%) of non-Internet shoppers seriously consider purchasing via the Internet in the future are:

Category	Percentage
• CDs (Music) (V54)	55.63%
• Airline tickets (V49)	52.81%
• Books and magazines (V52)	52.16%
• Hotel reservations (V73)	50.87%

In addition to the four categories from which the majority of non-Internet shoppers consider purchasing from in the future, between 25% and 49% of respondents indicated that they would consider the following categories:

Category	Percentage
• Movie or event tickets (V79)	49.57%
• Computer software (V59)	45.24%
• DVDs/Videos (V61)	29.65%
• Gifts (V69)	29.65%
• Computer hardware (V58)	29.22%
• Gift vouchers (V70)	28.14%
• Computer games (V57)	27.49%
• Electronic equipment (V63) (TV, Hi-Fi, Video machine, etc)	26.84%
• Food (groceries) (V66)	25.11%

The product and service categories non-Internet shoppers least consider purchasing from via the Internet in the future are:

Category	Percentage
• Other liquor (V85)	9.74%
• Beauty products (V51)	9.52%
• Furniture (V68)	8.66%
• Cosmetics (V60)	8.01%
• Interior decorating/ renovations (V77)	8.01%
• Jewellery (V78)	7.14%
• Baby products (V50)	5.41%

The following two main findings can be derived from the categories selected by non-Internet shoppers:

(BC10) **There are five product and service categories most non-Internet shoppers seriously consider purchasing from via the Internet, namely: CD's (music)(55.63%)(V54), airline tickets (52.81%)(V49), books and magazines (52.16%)(V52), hotel reservations (50.87%)(V73) and movie or event tickets (49.57%)(V79).**

(BC11) **There are five product and service categories non-Internet shoppers least consider purchasing from via the Internet, namely: baby products (5.41%)(V50), jewellery (7.14%)(V78), cosmetics (8.01%)(V60), interior decorating/renovations (8.01%)(V77) and furniture (8.66%)(V68).**

Internet shoppers also had to indicate from which product and service categories they would consider purchasing from in the future.

The product and service categories from which current Internet shoppers have purchased before together with the product and service categories they consider purchasing from in the future are shown in Table 7.34.

TABLE 7.34: PRODUCT AND SERVICE CATEGORIES INTERNET SHOPPERS HAVE PURCHASED FROM BEFORE AND CATEGORIES SERIOUSLY BEING CONSIDERED TO PURCHASE FROM IN THE FUTURE

Product and service categories	Have purchased from before			Consider to purchase from in the future		
	V	Freq.	Percentage	V	Freq.	Percentage
Adult entertainment	V149	83	15.28%	V149.5	54	9.94%
Airline tickets	V150	147	27.07%	V150.5	295	54.33%
Baby products	V151	16	2.95%	V151.5	39	7.18%
Beauty products	V152	29	5.34%	V152.5	71	13.08%
Books and magazines	V153	345	63.54%	V153.5	430	79.19%
Cars and related	V154	27	4.97%	V154.5	73	13.44%
CDs (music)	V155	222	40.88%	V155.5	348	64.09%
Cellular phones and accessories	V156	37	6.81%	V156.5	134	24.68%
Clothing and accessories	V157	43	7.92%	V157.5	98	18.05%
Computer games	V158	123	22.65%	V158.5	210	38.67%
Computer hardware	V159	105	19.34%	V159.5	204	37.57%
Computer software	V160	212	39.04%	V160.5	323	59.48%
Cosmetics	V161	20	3.68%	V161.5	63	11.60%
DVDs / videos	V162	113	20.81%	V162.5	255	46.96%
Flowers	V163	79	14.55%	V163.5	173	31.86%
Electronic equipment (TV, Hi-Fi, Video machine; etc)	V164	44	8.10%	V164.5	141	25.97%
Household appliances (Washing machine, Fridge, etc)	V165	13	2.39%	V165.5	90	16.57%
Outdoors equipment and accessories (e.g. tents and camping gear)	V166	17	3.13%	V166.5	111	20.44%
Food (groceries)	V167	51	9.39%	V167.5	159	29.28%
Food (take away)	V168	26	4.79%	V168.5	119	21.92%
Furniture	V169	15	2.76%	V169.5	57	10.50%
Gifts	V170	132	24.31%	V170.5	280	51.57%
Gift vouchers	V171	38	7.00%	V171.5	180	33.15%
Garden related	V172	14	2.58%	V172.5	88	16.21%
Health products	V173	55	10.13%	V173.5	153	28.18%
Hotel reservations	V174	137	25.23%	V174.5	301	55.43%
Insurance: Car	V175	22	4.05%	V175.5	106	19.52%
Insurance: Household	V176	22	4.05%	V176.3	107	19.71%
Insurance: Life	V177	11	2.03%	V177.5	68	12.52%
Interior decorating / renovations	V178	8	1.47%	V178.5	52	9.58%
Jewellery	V179	14	2.58%	V178.5	51	9.39%
Movie or event tickets	V180	190	34.99%	V180.5	324	59.67%
Property	V181	7	1.29%	V181.5	50	9.21%
Sporting goods	V182	36	6.63%	V182.5	117	21.55%
Toys	V183	41	7.55%	V183.5	144	26.52%
Unit trust / Shares	V184	49	9.02%	V184.5	148	27.26%
Wine	V185	11	2.03%	V185.5	78	14.36%
Other Liquor	V186	49	9.02%	V186.5	162	29.83%

n = 543

A first observation that can be made from Table 7.34 is that respondents have purchased from all 38 listed product and service categories. A second observation is that Internet shoppers seriously consider purchasing, to a greater or lesser extent, from all 38 categories in the future.

As can be seen from Table 7.34, the product category from which most respondents (63.54%) have purchased before is books and magazines (V153). Other product and service categories from which at least 25% of respondents have purchased are:

Category	Percentage
• CDs (music) (V155)	40.88%
• Computer software (V160)	39.04%
• Movie or event tickets (V180)	34.99%
• Airline tickets (V150)	27.07%
• Hotel reservations (V174)	25.23%

From Table 7.34 it can be seen that less than 10% of respondents have purchased from 25 of the 38 listed product and service categories.

Only the product and service categories from which less than five percent of respondents have purchased (11 categories) will be highlighted.

Category	Percentage
• Cars and related (V154)	4.97%
• Food (take away) (V168)	4.79%
• Cosmetics (V161)	3.68%

Category	Percentage
• Outdoors equipment and accessories (e.g. tents and camping gear) (V166)	3.13%
• Baby products (V151)	2.95%
• Furniture (V169)	2.76%
• Garden related (V172)	2.58%
• Household appliances (washing machine, fridge, etc.) (V165)	2.39%
• Wine (V185)	2.03%
• Interior decorating/ renovations (V178)	1.47%
• Property (V181)	1.29%

Table 7.34 also indicates the product and service categories from which Internet shoppers consider purchasing in the future.

Seven product and service categories were identified from which more than 50% of current Internet shoppers consider purchasing in the future. These categories are:

Category	Percentage
• Books and magazines (V153)	79.19%
• CDs (music) (V155)	64.09%
• Movie or event tickets (V180)	59.67%
• Computer software (V160)	59.48%
• Hotel reservations (V174)	55.43%
• Airline tickets (V150)	54.33%
• Gifts (V170)	51.57%

Product and service categories from which less than 10% of current Internet shoppers consider purchasing via the Internet in the future are:

Category	Percentage
• Adult entertainment (V149)	9.94%
• Interior decorating/ renovations (V178)	9.58%
• Jewellery (V179)	9.39%
• Property (V181)	9.21%
• Baby products (V151)	7.18%

Four main findings can be drawn at this point of the discussion, namely that:

(BC12) The five product and service categories most Internet shoppers have purchased from before via the Internet, are: books and magazines (63.54%)(V153), CDs (music)(40.88%)(V155), computer software (39.04%)(V160), movie or event tickets (34.99%)(V180) and airline tickets (27.07%)(V150);

(BC13) The five product and service categories Internet shoppers least purchased from via the Internet, are: property (1.29%)(V181), interior decorating/renovations (1.47%)(V178), wine (2.03%)(V185), household appliances (2.39%)(V165), and garden related (2.58%)(V172);

(BC14) The five product and service categories most current Internet shoppers consider purchasing from via the Internet in the future, are: books and magazines (79.19%)(V153), CDs (music) (64.09%)(V160), movie or event tickets (59.67%)(V180), computer

software (59.48%)(V160) and hotel reservations (55.43%)(V174); and

(BC15) The five product and service categories current Internet shoppers least consider purchasing from via the Internet in the future, are: baby products (7.18%)(V151), property (9.21%)(V181), jewellery (9.39%)(V179), interior decorating/renovations (9.58%)(V178) and adult entertainment (9.94%)(V149).

It was regarded important to determine, from the product and service categories Internet shoppers have purchased before, if they consider purchasing from the same categories via the Internet in the future.

Table 7.35 provides a detailed break-down of the product and service categories from which current shoppers have purchased before and indicate their intention of purchasing from the same categories in the future.

The percentage figures for each of the three columns in Table 7.35 portray the percentage of respondents who have purchased from the specified category before (i.e. n = the number of Internet shoppers who have purchased from each of the categories before – as depicted in Table 7.34). As an example, for adult entertainment, n = 83, whereas n = 147 for airline tickets and so forth.

TABLE 7.35: PRODUCT AND SERVICE CATEGORIES INTERNET SHOPPERS HAVE PURCHASED FROM BEFORE

Product and service categories	Have purchased from before, consider to purchase again								
	Will purchase from again			Will not purchase from again			Uncertain whether or not to purchase from again		
	V	Freq.	%	V	Freq.	%	V	Freq.	%
Adult entertainment	V149.2	37	44.58%	V149.3	32	38.55%	V149.4	14	16.87%
Airline tickets	V150.2	135	91.84%	V150.3	6	4.08%	V150.4	6	4.08%
Baby products	V151.2	10	62.50%	V151.3	4	25.00%	V151.4	2	12.50%
Beauty products	V152.2	23	79.31%	V152.3	5	17.24%	V152.4	1	3.45%
Books and magazines	V153.2	337	97.68%	V153.3	2	0.58%	V153.4	6	1.74%
Cars and related	V154.2	24	88.89%	V154.3	2	7.41%	V154.4	1	3.70%
CDs (music)	V155.2	211	95.05%	V155.3	1	0.45%	V155.4	10	4.50%
Cellular phones and accessories	V156.2	31	83.78%	V156.3	3	8.11%	V156.4	3	8.11%
Clothing and accessories	V157.2	36	83.72%	V157.3	3	6.98%	V157.4	4	9.30%
Computer games	V158.2	114	92.68%	V158.3	1	0.81%	V158.4	8	6.50%
Computer hardware	V159.2	95	90.48%	V159.3	7	6.67%	V159.4	3	2.86%
Computer software	V160.2	198	93.40%	V160.3	6	2.83%	V160.4	8	3.77%
Cosmetics	V161.2	17	85.00%	V161.3	3	15.00%	V161.4	0	0.00%
DVDs / videos	V162.2	109	96.46%	V162.3	2	1.77%	V162.4	2	1.77%
Flowers	V163.2	71	89.87%	V163.3	5	6.33%	V163.4	3	3.80%
Electronic equipment (TV, Hi-Fi, Video machine; etc)	V164.2	36	81.82%	V164.3	5	11.36%	V164.4	3	6.82%
Household appliances (Washing machine, Fridge, etc)	V165.2	9	69.23%	V165.3	3	23.08%	V165.4	1	7.69%
Outdoors equipment and accessories (e.g. tents and camping gear)	V166.2	14	82.35%	V166.3	2	11.76%	V166.4	1	5.88%
Food (groceries)	V167.2	44	86.27%	V167.3	5	9.80%	V167.4	2	3.92%
Food (take away)	V168.2	23	88.46%	V168.3	2	7.69%	V168.4	1	3.85%
Furniture	V169.2	13	86.67%	V169.3	1	6.67%	V169.4	1	6.67%
Gifts	V170.2	123	93.18%	V170.3	5	3.79%	V170.4	4	3.03%
Gift vouchers	V171.2	36	94.74%	V171.3	1	2.63%	V171.4	1	2.63%
Garden related	V172.2	12	85.71%	V172.3	1	7.14%	V172.4	1	7.14%
Health products	V173.2	49	89.09%	V173.3	5	9.09%	V173.4	1	1.82%
Hotel reservations	V174.2	132	96.35%	V174.3	2	1.46%	V174.4	3	2.19%
Insurance: Car	V175.2	18	81.82%	V175.3	2	9.09%	V175.4	2	9.09%
Insurance: Household	V176.2	20	90.91%	V176.3	1	4.55%	V176.4	1	4.55%
Insurance: Life	V177.2	7	63.64%	V177.3	3	27.27%	V177.4	1	9.09%
Interior decorating / renovations	V178.2	6	75.00%	V178.3	2	25.00%	V178.4	0	0.00%
Jewellery	V179.2	9	64.29%	V178.3	4	28.57%	V179.4	1	7.14%
Movie or event tickets	V180.2	183	96.32%	V180.3	6	3.16%	V180.4	1	0.53%
Property	V181.2	4	57.14%	V181.3	3	42.86%	V181.4	0	0.00%
Sporting goods	V182.2	29	87.88%	V182.3	4	12.12%	V182.4	3	9.09%
Toys	V183.2	36	87.80%	V183.3	5	12.20%	V183.4	0	0.00%
Unit trust / Shares	V184.2	46	93.88%	V184.3	3	6.12%	V184.4	0	0.00%
Wine	V185.2	9	81.82%	V185.3	2	18.18%	V185.4	0	0.00%
Other Liquor	V186.2	48	97.96%	V186.3	1	2.04%	V186.4	0	0.00%

Four main findings can be concluded from analysing the findings in Table 7.35, namely that:

(BC16)   **With the exception of one category (adult entertainment)(V149.2), more than 50% of respondents who have purchased from the 38 listed product and service categories before, will purchase from these categories again in the future;**

(BC17)   **The two product and service categories from which most respondents had purchased from before and would purchase from it again, are: other liquor (97.96%)(V186.2) and books and magazines (97.68%)(V153.2);**

(BC18)   **The two categories from which most respondents, who had already purchased from them before, would not purchase in the future, are: property (42.86%)(V181.2) and adult entertainment (38.55%)(V149.2);**

(BC19)   **Almost 17% of respondents who have previously purchased adult entertainment (V149.4) were uncertain as to whether or not they would purchase from this category again.**

In addition to the analyses above, it was decided to also consider, by viewing the different time periods, the product and service categories from which Internet shoppers have purchased and the categories shoppers and non-shoppers consider to purchase from in the future. This analysis and findings are attached in Appendix 10. Two main findings can be concluded from Appendix 10, namely:

(AP1)   **At least 20% of all non-Internet shoppers (with the exception of those who have been using the Net for four years or more), across all time periods, consider to purchase from more product and**

service categories via the Internet in the future than Internet shoppers falling within the same periods.

(AP2) **At least 45% of Internet shoppers and non-shoppers, who have been using the Internet for less than one year, consider purchasing from product and service categories that current Internet shoppers (who have been using the Net for between one and less than two years) have purchased from before.**

Section 7.3.1 (c) of this chapter showed that there is a definite relationship between the length of time being an Internet user and whether or not respondents have purchased via the Internet before. Although that finding was significant, it had to be established (considering the hypotheses formulated for the study) whether or not the period of Internet usage influences the product and service categories respondents have purchased from or consider purchasing from in the future.

Since 38 product and service categories were listed in the questionnaire, it had to be reduced to a more manageable number. A first consideration was to group the listed categories according to some standard classification, for example convenience goods and services. After considering the list of 38 categories, it was decided that such a grouping of categories was not possible.

For statistical testing purposes, it was decided to select 10 product and service categories. The categories were randomly chosen by considering the percentage of respondents who have purchased from the categories before (to ensure a non-biased distribution of categories). The following observations were made from the categories purchased before: less than 10% of respondents purchased from 25 categories; between 10% and 19.99% of respondents purchased from four categories and between 20% and 29.99% purchased from

five categories; between 30% and 49.99% of shoppers purchased from three categories and more than 50% purchased from one category.

Considering these observations, 10 categories distributed across the 38 categories were selected. The product categories chosen for further analyses, percentage of respondents who purchased from each category and the re-coded variable are shown in Table 7.36.

TABLE 7.36: **RE-CODING OF PRODUCT AND SERVICE CATEGORIES SELECTED FOR FURTHER ANALYSES**

Product or service category	V	Percentage of respondents	Re-coded variable (ProductHP; ProductAP)
CDs (music)	V155	41%	1
Hotel reservations	V174	25%	2
Computer hardware	V159	19%	3
Food (groceries)	V167	9%	4
Electronic equipment (TV, hi-fi, etc)	V164	8%	5
Gift vouchers	V171	7%	6
Food (take away)	V168	5%	7
Outdoors equipment and accessories	V166	3%	8
Household appliances	V165	2%	9
Interior decorating/renovations	V178	1%	10

It can be noticed from the categories listed in Table 7.36 that the re-coded variable ascribed to each identified product or service category comprises one of two descriptions (ProductHP and ProductAP). The reason for using two different variables (all with the same value, e.g. 1; 2; 3; and so forth) is based on the analyses and comparisons that will be made later in this section and the chapter.

The data contained in variable ProductHP comprises all responses from respondents who have purchased from the product or service categories selected for further analyses. The second variable, ProductAP, combines data from all respondents who participated in the study (irrespective whether or not

they have purchased via the Net before) who indicated that they would consider purchasing from the identified categories in the future.

It should be noted that after inferences were drawn from cross-tabulation information received (with specific reference to product categories used for further analyses), it was found that the SAS computer software programme repeatedly issued warnings regarding the validity of the results (since many of the cells contained expected counts of less than five). As a result, the first two time periods were combined, where applicable to the analysis, in an attempt to address the concern. For the purposes of cross-tabulation analyses considering period of Internet usage and the selected product and service categories, the periods of Internet usage were re-coded as depicted in Table 7.37.

TABLE 7.37   RE-CODED PERIOD OF INTERNET USAGE FOR FURTHER ANALYSES

Current description	V	New description	Re-coded variable
Less than 1 year	V8.2	Less than two years	VV8.1
1 year to less than 2 years	V8.3		
2 years to less than 3 years	V8.4	2 years to less than 3 years	VV8.2
3 years to less than 4 years	V8.5	3 years to less than 4 years	VV8.3
4 years or more	V8.6	4 years or more	VV8.4

The results from the first cross-tabulation analysis, considering the specific product and service categories that Internet shoppers have purchased from, are shown in Table 7.38.

TABLE 7.38: RELATIONSHIP BETWEEN PERIOD OF INTERNET USAGE AND CATEGORIES PURCHASED FROM

Period	V	ProductHP										Total
		1	2	3	4	5	6	7	8	9	10	
Less than two years	VV8.1	7	10	10	5	1	3	1	1	0	1	39
2 years to less than 3 years	VV8.2	14	12	7	4	5	5	7	4	3	4	65
3 years to less than 4 years	VV8.3	17	13	14	6	5	8	4	1	3	2	73
4 years or more	VV8.4	47	36	39	11	16	13	13	6	4	1	186
Total	Freq.	85	71	70	26	27	29	25	12	10	8	363
	Perc.	23.4%	19.6%	19.3%	7.1%	7.4%	8.0%	6.9%	3.3%	2.8%	2.2%	100%

Table 7.38 supports the findings from Table 7.5 earlier in the chapter, by showing that most of the respondents, who have purchased from the ten listed categories before, have been using the Internet for four years and more.

The chi-square test for significance, calculated for Table 7.38, yielded a value of 25.20 and an exceedence probability of 0.5633 calculated. Although the SAS program showed a warning that 42% of the cells had expected frequencies of less than five, it can be concluded that the two variables in the cross-tabulation table are not related.

(BC20) **A main finding that can be derived from the statistical test is that the period of Internet usage does not influence the product and service categories respondents have purchased from via the Internet.**

The cross-tabulation analysis was repeated to determine whether or not the period of Internet usage influences the product and service categories that respondents (both current shoppers and non-shoppers) consider to purchase from in the future. The results from this cross-tabulation are depicted in Table 7.39.

TABLE 7.39: RELATIONSHIP BETWEEN PERIOD OF INTERNET USAGE AND
CATEGORIES RESPONDENTS CONSIDER PURCHASING FROM

Period	V	ProductAP										Total
		1	2	3	4	5	6	7	8	9	10	
Less than two years	VV8.1	15	17	15	10	9	30	19	21	31	26	193
2 years to less than 3 years	VV8.2	10	17	5	6	12	21	24	27	22	18	162
3 years to less than 4 years	VV8.3	11	23	15	8	11	18	23	14	19	14	156
4 years or more	VV8.4	22	38	32	20	20	28	49	26	35	31	301
Total	Freq.	58	95	67	44	52	97	115	88	107	89	812
	Perc.	7.1%	11.7%	8.3%	5.4%	6.4%	12.0%	14.2%	10.8%	13.1%	11.0%	100%

The chi-square test for significance, applicable to the cross-tabulation findings depicted in Table 7.39, produced a value of 32.35 and an exceedence probability of 0.2193. It can therefore be concluded that the period of Internet usage and ProductAP are not related.

(BC21) **A main finding is that the period of Internet usage does not significantly influence the product and service categories respondents consider purchasing from via the Internet in the future.**

(c) Questions 16 and 20

Q16 and Q20: Have you ever searched for or do you consider searching for product or service information on the Internet prior to purchasing from a non-Internet based seller? (e.g. A physical store or telephone shopping)

Respondents who have not purchased via the Internet before were requested to indicate whether or not they search for or consider searching for product and service information on the Internet prior to purchasing from non-Internet-based sellers (question 16). Similarly, respondents who have purchased Online before had to complete question 20.

Table 7.40 shows which respondents search for or consider to search for product and service information on the Internet prior to purchasing from a non-Internet based seller.

TABLE 7.40: ONLINE INFORMATION SEARCH PRIOR TO PURCHASING OFFLINE

Description	Non-Internet Shoppers (N = 462)			Current Internet shoppers (N = 543)		
	V	Freq.	Perc.	V	Freq.	Perc.
Search for or consider searching for information on the Internet prior to purchasing from non-Internet based sellers	V86	322	69.70%	V187	469	86.37%
Don't search for or don't consider searching for information on the Internet prior to purchasing from non-Internet based sellers	V86	140	30.30%	V187	74	13.63%

Two main findings can be derived from Table 7.40, namely that:

(BC22) **Eighty-six percent of respondents who have purchased via the Internet, search for or consider searching for information on the Internet prior to purchasing from non-Internet based sellers.**

(BC23) **Almost 70% of respondents who have not purchased via the Internet before, search for or consider searching for information on the Internet prior to purchasing from non-Internet based sellers.**

Based on the findings above and taking into account the hypotheses formulated for the study, chi-square tests were conducted to determine if the period of Internet usage (and whether or not respondents have purchased Online before) is related to whether or not they search for (or consider searching for) Online information prior to Offline purchases.

The first cross-tabulation analysis is depicted in Table 7.41 and considers the period of Internet usage and whether or not non-shoppers search for product and

service information on the Net prior to purchasing from non-Internet based sellers.

TABLE 7.41: RELATIONSHIP BETWEEN PERIOD OF INTERNET USAGE AND PRODUCT AND SERVICE INFORMATION SEARCHED FOR ONLINE PRIOR TO OFFLINE PURCHASES (NON-INTERNET SHOPPERS)

Period of Internet usage	V	Search or consider searching for product and service information Online		Total
		Yes V86.1	No V86.2	
Less than 1 year	V8.2	46	44	90
1 year to less than 2 years	V8.3	55	28	83
2 years to less than 3 years	V8.4	77	29	106
3 years to less than 4 years	V8.5	63	23	86
4 years or more	V8.6	81	16	97
Total	Frequency	322	140	462
	Percentage	69.70%	30.30%	100%

Two main findings can be derived from Table 7.41, namely that:

(BC24) **A larger number of non-shoppers, across all time periods, either search for or consider searching for information on the Net prior to purchasing from non-Internet based sellers than non-shoppers who don't search for information Online.**

(BC25) **Eighty-three percent (81/97) of non-shoppers who have been using the Internet for four years and more (V8.6) search for information Online prior to Offline purchases.**

The chi-square test, performed for the cross-tabulation depicted in Table 7.41, yielded a value of 23.85 and an exceedence probability of <0.0001. Considering the probability value, it can be derived that the period of Internet usage and whether or not non-shoppers search for product and service information on the Internet prior to Offline purchases are related.

(BC26) **A main finding derived is that the period of Internet usage significantly influences whether or not non-Internet shoppers search for (or consider searching for) product and service information on the Internet prior to purchasing from non-Internet based sellers of products and services.**

The same cross-tabulation procedure was repeated for respondents who have shopped via the Internet before to determine whether or not the period of Internet usage influences Internet shoppers' search for product and service information Online prior to Offline purchases. The results from the applicable cross-tabulation analysis are shown in Table 7.42.

TABLE 7.42: **RELATIONSHIP BETWEEN PERIOD OF INTERNET USAGE AND PRODUCT AND SERVICE INFORMATION SEARCHED FOR ONLINE PRIOR TO OFFLINE PURCHASES (INTERNET SHOPPERS)**

Period of Internet usage	V	Search or consider searching for product and service information Online		Total
		Yes V187.1	No V187.2	
Less than 1 year	V8.2	16	7	23
1 year to less than 2 years	V8.3	42	8	50
2 years to less than 3 years	V8.4	83	17	100
3 years to less than 4 years	V8.5	94	18	112
4 years or more	V8.6	234	24	258
Total	Frequency	469	74	543
	Percentage	86.37%	13.63%	100%

It can be seen from Table 7.42 that larger numbers of current Internet shoppers, across all time periods, either search for or consider searching for information on the Net prior to purchasing from non-Internet based sellers than current shoppers who don't search for Online information.

(BC27) **A main finding that can be derived from Table 7.42 is that 90.70% (234/258) of respondents who have purchased via the Internet and have been using the Internet for four years and more (V8.6), search for information Online prior to purchasing Offline.**

The chi-square test for significance performed for the cross-tabulation analysis depicted in Table 7.42 produced a value equal to 11.39 and a resulting exceedence probability of <0.0225.

Based on the decision-rule that probability values <0.05 will be used as an indication for significance, it can be derived that the period of Internet usage and whether or not Internet shoppers search for or consider searching for information Online prior to Offline purchases are related.

(BC28) **A main finding is that the period of Internet usage significantly influences whether or not current Internet shoppers have searched for or consider searching for product and service information on the Internet prior to purchasing from non-Internet based sellers of products and services.**

Based on the hypotheses formulated for the study, the possible influence of the decision to purchase via the Internet and whether respondents have searched for or consider searching for product and service information on the Internet (prior to purchasing Offline) had to be considered.

The cross-tabulation analysis depicted in Table 7.43 is based on whether respondents have purchased via the Internet before and whether they use the Net to search for product and service information prior to purchasing from non-Internet based sellers.

TABLE 7.43: RELATIONSHIP BETWEEN SHOPPING ONLINE AND ONLINE INFORMATION SEARCH

Have purchased via the Internet before	V	Search for or consider Online information search		
		Yes Search1	No Search2	Total
Yes	V21.1	469	74	543
No	V21.2	322	140	462
Total	Frequency	791	214	1 005
	Percentage	78.71%	21.29%	100%

It is important to note that, for comparison purposes, responses V86.1 (question 16 – non-shoppers indicating that they have searched for or consider to search for Online information) and V187.1 (question 20 – current Online shoppers indicating that they have searched for or consider to search for Online information) had to be combined to form a new variable, namely Search 1 (combining all respondents who have searched for or consider to search for information on the Net prior to purchasing Offline).

Following the same logic, variable Search 2 was created, combining all respondents who have not searched for or do not consider searching for Online information prior to Offline purchases.

(BC29) **A main finding that can be derived from Table 7.43 is that 78.71% of respondents either search for or consider searching for product or service information on the Internet prior to purchasing from non-Internet based sellers.**

The chi-square statistical test for significance performed for the results depicted in Table 7.43 realised a value of 42.35 and an exceedence probability of <0.0001.

It can therefore be concluded that the two variables (representing whether or not respondents have purchased before and whether or not they have searched for or consider searching for Online information on products and services) are related.

(BC30) **A main finding is that the decision to search for (or consider searching for) product and service information Online (prior to purchasing Offline) is significantly influenced by whether or not respondents have purchased via the Internet before.**

It was also decided to determine whether or not the decision to purchase via the Net in the future (current non-shoppers) significantly influences whether or not respondents search for or consider searching for product and service information Online prior to purchasing Offline.

The results from the cross-tabulation analysis, considering non-shopper intentions to purchase Online in the future and whether or not product and service information is sought Online prior to Offline purchases, are portrayed in Table 7.44.

TABLE 7.44: RELATIONSHIP BETWEEN CONSIDERING TO SHOP ONLINE IN THE FUTURE AND ONLINE INFORMATION SEARCH

Consider to purchase via the Internet in the future	V	Search for or consider Online information search		Total
		Yes V86.1	No V86.2	Total
Yes	V46.1	233	64	297
No	V46.2	89	76	165
Total	Frequency	322	140	462
	Percentage	69.70%	30.30%	100%

The chi-square test for significance applicable to Table 7.44 resulted in a value of 29.48 and an exceedence probability of <0.0001, indicating that the two variables (V46 and V86) are related.

(BC31) **A main finding is that, for current non-Internet shoppers, the decision to purchase via the Internet in the future significantly influences whether or not respondents search for or consider searching for product and service related information on the Internet prior to purchasing from non-Internet based sellers.**

(b)   Questions 17 and 21

Q17 and Q21: From which of the following product and services categories have you searched for or do you consider searching for information on the Internet prior to purchasing from a non-Internet based seller?   (e.g. physical store or telephone shopping) [Respondents had to choose from a list of 38 categories]

Respondents who had not purchased via the Internet before were requested to complete question 17 if they indicated (question 16 – V86.1) that they searched for or consider searching for product and service information on the Internet prior to purchasing from non-Internet based sellers.

Following the same logic, current Internet shoppers who indicated that they search for or consider searching for product and service information via the Internet (question 20 – V187.1), were requested to complete question 21.

The results from questions 17 and 21 are depicted in Table 7.45, indicating from which product or service categories respondents search for or consider searching for information on the Internet prior to purchasing from non-Internet based sellers.

TABLE 7.45: INFORMATION ON PRODUCT AND SERVICE CATEGORIES SEARCHED FOR ON THE INTERNET PRIOR TO PURCHASING FROM NON-INTERNET BASED SELLERS

Product or service categories	Current Internet shoppers (n = 469)			Non-Internet shoppers (n = 322)		
	V	Freq.	Percentage	V	Freq.	Percentage
Adult entertainment	V188	58	10.68%	V87	37	8.01%
Airline tickets	V189	270	49.72%	V88	156	33.77%
Baby products	V190	29	5.34%	V89	12	2.60%
Beauty products	V191	44	8.10%	V90	20	4.33%
Books and magazines	V192	301	55.43%	V91	135	29.22%
Cars and related	V193	194	35.73%	V92	116	25.11%
CD's (music)	V194	285	52.49%	V93	152	32.90%
Cellular phones and accessories	V195	172	31.68%	V94	92	19.91%
Clothing and accessories	V196	53	9.76%	V95	43	9.31%
Computer games	V197	201	37.02%	V96	87	18.83%
Computer hardware	V198	261	48.07%	V97	138	29.87%
Computer software	V199	301	55.43%	V98	175	37.88%
Cosmetics	V200	40	7.73%	V99	18	3.90%
DVD's / videos	V201	207	38.12%	V100	80	17.32%
Flowers	V202	58	10.68%	V101	30	6.49%
Electronic equipment (TV, Hi-Fi, Video machine; etc)	V203	249	45.86%	V102	131	28.35%
Household appliances (Washing machine, Fridge, etc)	V204	133	24.49%	V103	63	13.64%
Outdoors equipment and accessories (e.g. tents and camping gear)	V205	98	18.05%	V104	61	13.20%
Food (groceries)	V206	63	11.60%	V105	42	9.09%
Food (take away)	V207	42	7.73%	V106	35	7.58%
Furniture	V208	66	12.15%	V107	43	9.31%
Gifts	V209	122	22.47%	V108	59	12.77%
Gift vouchers	V210	63	11.60%	V109	37	8.01%
Garden related	V211	57	10.50%	V110	31	6.71%
Health products	V212	86	15.84%	V111	42	9.09%
Hotel reservations	V213	214	39.41%	V112	137	29.65%
Insurance: Car	V214	86	15.84%	V113	77	16.67%
Insurance: Household	V215	66	12.15%	V114	60	12.99%
Insurance: Life	V216	40	7.37%	V115	44	9.52%
Interior decorating / renovations	V217	51	9.39%	V116	35	7.58%
Jewellery	V218	33	6.08%	V117	21	4.55%
Movie or event tickets	V219	227	41.80%	V118	107	23.16%
Property	V220	112	20.63%	V119	76	16.45%
Sporting goods	V221	90	16.57%	V120	53	11.47%
Toys	V222	73	13.44%	V121	40	8.66%
Unit trust / Shares	V223	110	20.26%	V122	73	15.80%
Wine	V224	100	18.42%	V123	43	9.31%
Other Liquor	V225	34	6.26	V124	21	4.55%

As can be seen from Table 7.45, the 10 product and service categories from which most **current shoppers** search for or consider searching for Online information prior to Offline purchases are:

Category	Percentage
• Books and magazines (V192)	55.43%
• Computer software (V199)	55.43%
• CDs (music) (V194)	52.49%
• Airline tickets (V189)	49.72%
• Electronic equipment (e.g. TV, Hi-Fi, Video machine, etc.) (V203)	45.86%
• Movie or event tickets (V219)	41.80%
• Hotel reservations (V213)	39.41%
• DVDs/Videos (V201)	38.12%
• Computer games (V197)	37.02%
• Cars and related (V193)	35.73%

In contrast to the 10 categories that more than 35% of current shoppers search from (or consider searching information from), only one category is searched for or considered by more than 35% of *non-shoppers*, namely computer software (V98) (37.88%).

The other nine categories most *non-shoppers* searched from for Online information are:

Category	Percentage
• Airline tickets (V88)	33.77%
• CDs (music) (V93)	32.90%
• Computer hardware (V97)	29.87%
• Hotel reservations (V112)	29.65%
• Books and magazines (V91)	29.22%
• Electronic equipment (TV, Hi-Fi, Video machines, etc) (V102)	28.35%

Category	**Percentage**
• Cars and related (V92)	25.11%
• Movie or event tickets (V118)	23.16%
• Cellular phones and accessories (V94)	19.91%

Three main findings can be drawn at this point of the discussion, namely that:

(BC32) **a greater number of current Internet shoppers search for more product and service categories Online than non-shoppers (more than 25% of shoppers search from 12 product and service categories as opposed to 8 categories by non-shoppers);**

(BC33) **the five categories on which most searches are conducted for product and service information by Internet shoppers are: books and magazines (55.43%)(V192), computer software (55.43%)(V199), CDs (music)(52.49%)(V194), airline tickets (49.72%)(V189) and electronic equipment (45.86%)(V203); and**

(BC34) **the five categories most searched from for product and service information by non-Internet shoppers are: computer software (37.88%)(V98), airline tickets (33.77%)(V88), CDs (music)(32.90%) (V93), computer hardware (29.87%)(V97) and hotel reservations (29.65%)(V112).**

It can also be derived from Table 7.45 that Internet shoppers search from more or consider searching from more categories than non-shoppers. This becomes clear when considering that there are only nine categories from which less than 10% of shoppers search for information as opposed to the 17 categories from which less than 10% of non-shoppers search.

There are also no categories from which less than five percent of **shoppers** search in comparison with the five categories from which less than five percent of **non-shoppers** search.

The five categories from which **current shoppers** least search for (or consider searching for) information prior to purchasing Offline are:

Category	Percentage
• Insurance: Life (V216)	7.37%
• Cosmetics (V200)	7.37%
• Other liquor (V225)	6.26%
• Jewellery (V219)	6.08%
• Baby products (V190)	5.34%

The five categories from which **non-shoppers** least search from (or consider searching from) information prior to purchasing Offline are:

Category	Percentage
• Other liquor (V124)	4.5%
• Jewellery (V117)	4.5%
• Beauty products (V90)	4.3%
• Cosmetics (V99)	3.9%
• Baby products (V89)	2.6%

7.3.3 Results from Section D of the questionnaire

The focus of Section D of the questionnaire was to categorise respondents who participated in the study according to demographic variables. In the following discussion attention will be given on descriptive statistics (either graphically or in tabular form) applicable to different demographic variables and show whether or

not the demographic variables can be associated with respondents' decisions to purchase Online.

Following the discussion on each demographic variable, inferences will be drawn between the demographic variable being discussed and other variables applicable to the study, for example the period of Internet usage.

It is important to note that the influence of demographic variables on the product and service categories (based on the categories selected earlier in the chapter) respondents purchased from or consider purchasing from via the Internet will only be considered if a significant influence (as determined by statistical tests) has been noted between the demographic variable and whether or not respondents have purchased Online before.

(a)   Gender (Q22)

Figure 7.2 graphically differentiates between male (V226.1) and female (V226.2) respondents who participated in the study.

FIGURE 7.2: GENDER OF RESPONDENTS
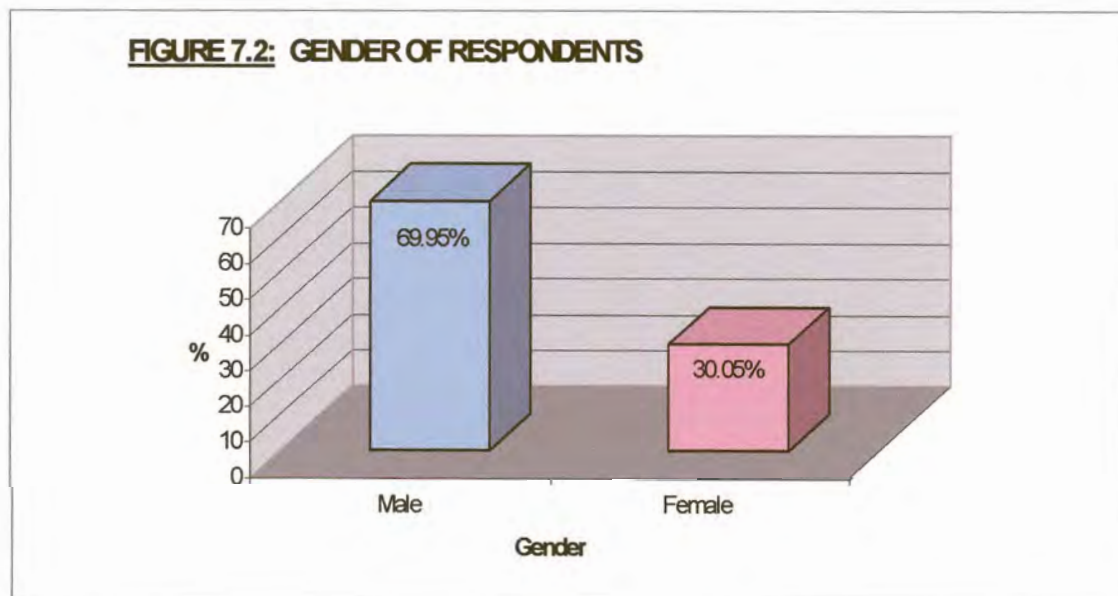
(D1) **A main finding derived from Figure 7.2 is that 69.95% of the respondents who participated in the study were male (V226.2), while the remaining 30.05% were female (V226.3).**

Table 7.46 shows the results when gender was compared with whether or not respondents have purchased via the Net before. Gender has, for the cross-tabulation purposes, been re-coded as VV226.1 (male) and VV226.2 (female).

TABLE 7.46: **RELATIONSHIP BETWEEN GENDER AND WHETHER OR NOT RESPONDENTS HAVE PURCHASED VIA THE INTERNET**

Purchased via the Internet	V	Gender		Total
		Male VV226.1	Female VV226.2	
Yes	V21.1	415	128	543
No	V21.2	288	174	462
Total	Frequency	703	302	1 005
	Percentage	69.95%	30.05%	100%

(D2) **A main finding that can be derived from analysing the results from Table 7.46, is that a greater percentage of male respondents (VV226.1)[59.03% (415/703)]) indicated that they have purchased products and services via the Internet as opposed to women (VV226.2)[42.38% (128/302)].**

(D3) **It should be explicitly stated that, although related to finding D2, 57.62% (174/302) of female respondents have never purchased products or services via the Internet before.**

The chi-square statistic calculated for Table 7.46 was equal to 23.58 and resulted in an exceedence probability of <0.0001, indicating that gender (VV226) and whether or not respondents have purchased Online before (V21) are related.

(D4) Gender significantly influenced whether or not respondents have purchased products or services via the Internet.

Considering the ten product and service categories, selected earlier in the study for further analyses, a cross-tabulation analysis was conducted to determine whether or not gender influenced the product and service categories respondents have purchased from.

The findings from the cross-tabulation analysis are portrayed in Table 7.47, considering gender and ProductHP (categories respondents have already purchased from).

TABLE 7.47:   RELATIONSHIP BETWEEN GENDER AND CATEGORIES PURCHASED FROM VIA THE INTERNET

Gender	V	ProductHP										Total
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	
Male	VV226.1	72	51	61	19	24	21	19	12	9	3	291
Female	VV226.2	13	20	9	7	3	8	6	0	1	5	72
Total	Freq.	85	71	70	26	27	29	25	12	10	8	363
	Perc.	23.4%	19.6%	19.3%	7.1%	7.4%	8.0%	6.9%	3.3%	2.8%	2.2%	100%

The chi-square test performed to determine if gender influenced whether or not respondents purchased from the selected product and service categories produced a value of 22.57 and an exceedence probability of 0.0072. It can therefore be derived that the two variables are related.

(D5) Respondents' gender significantly influenced the product and service categories they have purchased from via the Internet.

The cross-tabulation analysis was repeated to determine if gender influences the product and service categories respondents consider purchasing from in the future. Table 7.48 portrays the analysis, depicting gender and ProductAP (all

respondents indicating that they consider purchasing from the selected categories in the future).

TABLE 7.48: **RELATIONSHIP BETWEEN GENDER AND PRODUCT AND SERVICE CATEGORIES RESPONDENTS CONSIDER PURCHASING FROM**

Gender	V	ProductAP										Total
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	
Male	VV226.1	40	65	59	30	47	59	83	73	84	47	587
Female	VV226.2	18	30	8	14	5	38	32	15	23	42	225
Total	Freq.	58	95	67	44	52	97	115	88	107	89	812
	Perc.	7.1%	11.7%	8.3%	5.4%	6.4%	12.0%	14.2%	10.8%	13.1%	11.0%	100%

The chi-square test for significance was repeated for the variables portrayed in Table 7.48, yielding a value of 48.51 and an exceedence probability of <0.0001 resulted.

Considering the decision-rule that an exceedence probability of <0.05 would be considered as an indication of significance, it may be concluded that the two variables (VV226 and ProduckAP) are related.

(D6) **The main finding is that gender significantly influences the product and service categories respondents consider purchasing from via the Internet in the future.**

(b) **Age group (Q23)**

Table 7.49 depicts the age groups of respondents who participated in the study.

TABLE 7.49:   AGE GROUPS OF RESPONDENTS

Age groups	V	Frequency	Percentage	Cumulative frequency	Cumulative percentage
Under 18 years	V227.2	12	1.19%	12	1.19%
19-24 years	V227.3	70	6.97%	82	8.16%
25-35 years	V227.4	273	27.16%	355	35.32%
36-50 years	V227.5	404	40.20%	759	75.52%
51-65 years	V227.6	211	21.00%	970	96.52%
Older than 65 years	V227.7	33	3.28%	1 003	99.80%
Not specified	V227.8	2	0.20%	1 005	100%

Table 7.49 indicates that 8.16% of respondents are younger than 25 years (V227.2 and V227.3), 67.36% (677/1005) are between 25 and 50 years old (V227.4 and V227.5) and 24.28% (244/1005) are older than 50 years. Two respondents did not divulge their age group.

It should be mentioned that it was decided to group some of the age groups together to form new groups in an effort to derive a more manageable number to be used for further analyses. The new age groups are shown in Table 7.50.

TABLE 7.50:   RE-CODING OF AGE GROUPS FOR FURTHER ANALYSES

Current age groups	V	New age groups	Ascribed variable
Under 18 years	V227.2		
19-24 years	V227.3	< 35 years	VV227.1
25-35 years	V227.4		
36-50 years	V227.5	36-50 years	VV227.2
51-65 years	V227.6	Older than 51 years and not specified	
Older than 65 years	V227.7		VV227.3
Not specified	V227.8		

The cross-tabulation comparing the various age groups to whether or not respondents have purchased via the Net before is shown in Table 7.51.

TABLE 7.51: **RELATIONSHIP BETWEEN AGE GROUPS AND WHETHER OR NOT RESPONDENTS HAVE PURCHASED VIA THE INTERNET**

Purchase via the Net	V	Age groups			Total
		< 35 years VV227.1	36-50 years VV227.2	Older than 51 years and not specified VV227.3	
Yes	V21.1	196	218	129	543
No	V21.2	159	186	117	462
Total	Frequency	355	404	246	1 005
	Percentage	35.32%	40.20%	24.48%	100%

The results portrayed in Table 7.51 indicate that a greater percentage of respondents, when considering all specified age groups, have purchased Online than those who have not.

Although this may lead one to assume that the two variables are related, the chi-square statistic for significance will show if there is, statistically, a relationship between the two variables.

The chi-square test, applicable to the cross-tabulation depicted in Table 7.51, yielded a value of 0.45. The exceedence probability associated with the chi-square statistic is 0.798.

Considering the probability value, it can be derived that there is not a relationship between respondents' age groups and the decision to have purchased via the Internet.

(D7) **A main finding is that age group does not influence whether or not respondents have purchased products or services via the Internet.**

Based on this finding, further analyses will not be performed to determine if respondents' age groups influence the product and service categories they have purchased from or consider purchasing from via the Internet in the future.

(c)   Household language (Q24)

Respondents had to indicate their household language by choosing from eighteen different languages and an "other"-option. Results from question 24 are shown in Table 7.52.

TABLE 7.52:   RESPONDENTS' HOUSEHOLD LANGUAGE

Household language	V	Frequency	Percent
Afrikaans	V228.2	391	38.91%
English	V228.3	565	56.22%
French	V228.4	3	0.30%
German	V228.5	9	0.90%
Greek	V228.6	5	0.50%
IsiNdebele	V228.7	0	0.00%
IsiXhosa	V228.8	3	0.30%
IsiZulu	V228.9	5	0.50%
Italian	V228.10	2	0.20%
Portuguese	V228.11	0	0.00%
SePedi	V228.12	3	0.30%
SeSotho	V228.13	3	0.30%
SeTswana	V228.14	7	0.70%
SiSwati	V228.15	1	0.10%
TshiVenda	V228.16	0	0.00%
XiTsonga	V228.17	0	0.00%
An Eastern language	V228.18	0	0.00%
An Asian language	V228.19	0	0.00%
Other	V228.20	8	0.80%

n = 1 005

(D8)   A main finding derived from Table 7.52 is that the majority of respondents indicated that English (V228.3)(56.22%) or Afrikaans (V228.2)(38.91%) was their household language.   Only 4.87% of respondents who participated in the study spoke languages other than English or Afrikaans.

Considering the above, Figure 7.3 depicts the three main household language categories that will be considered for further analyses.

FIGURE 7.3: **RESPONDENTS' HOUSEHOLD LANGUAGE**
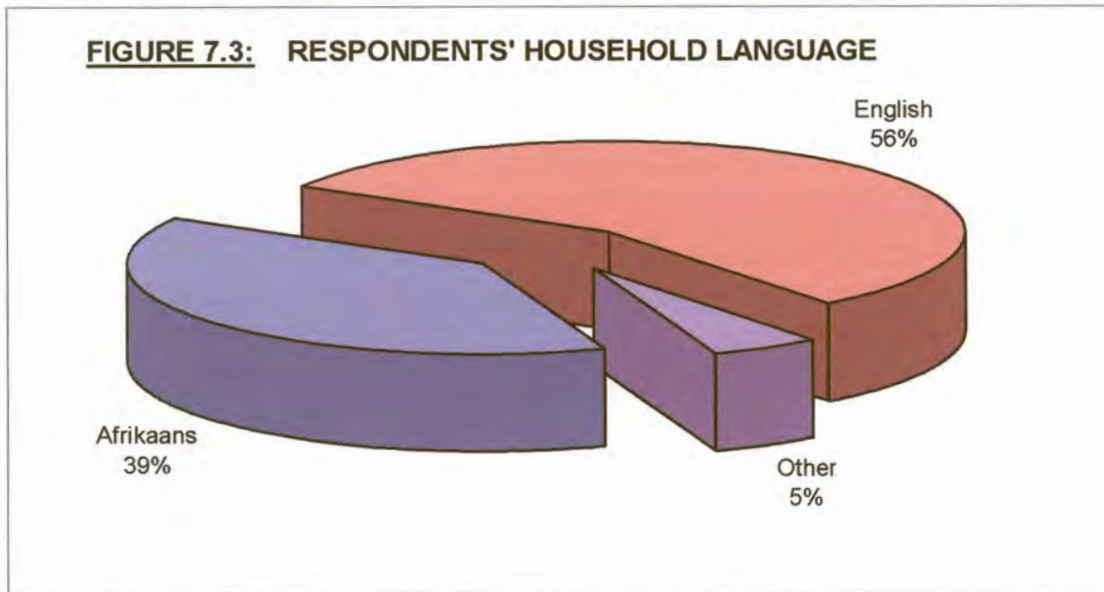
The three categories indicated in Figure 7.3 have been re-coded for further analyses as follows: Afrikaans is ascribed variable VV228.1; English VV228.2 and Other (including all other language options and the "other" than specified option) is re-coded as VV228.3.

Table 7.53 provides the findings from a cross-tabulation analysis, initiated to determine whether or not there is a relationship between household language and whether or not respondents have purchased on the Net before.

TABLE 7.53: **RELATIONSHIP BETWEEN HOUSEHOLD LANGUAGE AND WHETHER OR NOT RESPONDENTS HAVE PURCHASED VIA THE INTERNET**

| Purchase via the Net | V | Household language | | | Total |
		Afrikaans VV228.1	English VV228.2	Other VV228.3	
Yes	V21.1	201	327	15	543
No	V21.2	190	238	34	462
Total	Frequency	391	565	49	1 005
	Percentage	38.90%	56.22%	4.88%	100%

(D9) **A main finding derived from Table 7.53 is that 51.41% (201/391) Afrikaans speaking and 57.88% (327/238) English speaking respondents have purchased via the Internet before.**

It can also be derived from Table 7.53 that 69.39% (34/49) of respondents with other household languages (including all other official South African languages) have never purchased via the Internet.

The chi-square statistical test, when applied to Table 7.53, yielded a value of 15.27 and an exceedence probability of 0.0005. It can therefore be derived that household language and whether or not respondents purchase products or services via the Internet are related.

(D10) **A main finding from the analysis is that household language significantly influences whether or not respondents have purchased via the Internet before.**

A further analysis was repeated to determine if there is a relationship between household language and product and service categories respondents have purchased from via the Internet. The results from the cross-tabulation analysis is portrayed in Table 7.54 (showing differences between different household language groups and product and service categories respondents have purchased from).

TABLE 7.54: **RELATIONSHIP BETWEEN HOUSEHOLD LANGUAGE AND PRODUCT AND SERVICE CATEGORIES PURCHASED FROM**

Language Groups	V	ProductHP										Total
		1	2	3	4	5	6	7	8	9	10	
Afrikaans	VV228.1	35	31	30	7	8	10	5	5	1	2	134
English	VV228.2	46	37	39	19	19	18	19	7	8	6	218
Other	VV228.3	4	3	1	0	0	1	1	0	1	0	11
Total	Freq.	85	71	70	26	27	29	25	12	10	8	363
	Perc.	23.4%	19.6%	19.3%	7.1%	7.4%	8.0%	6.9%	3.3%	2.8%	2.2%	100%

From Table 7.54 it can be inferred that more respondents from English-speaking households have purchased from all ten product and service categories than any other language group.

The chi-square test for significance was executed and yielded a value of 17.73 and an exceedence probability of 0.4738. It can therefore be concluded that the two variables (VV228 and ProductHP) are not related.

(D11) **A main finding is that respondents' household language did not significantly influence the product and service categories they have purchased from via the Internet.**

The cross-tabulation analysis was repeated to determine if household language can be regarded as an influence on the decision to purchase from the selected product and service categories in the future. The results from the analysis, depicted in Table 7.55, portray data from VV228 (household language groups) and ProductAP (all respondents indicating that they consider purchasing from the selected product and service categories in the future).

TABLE 7.55: **RELATIONSHIP BETWEEN HOUSEHOLD LANGUAGE AND PRODUCT AND SERVICE CATEGORIES RESPONDENTS CONSIDER PURCHASING FROM**

Language Groups	V	ProductAP										Total
		1	2	3	4	5	6	7	8	9	10	
Afrikaans	VV228.1	24	35	27	16	21	39	36	47	51	37	333
English	VV228.2	30	54	39	28	27	52	75	37	49	52	443
Other	VV228.3	4	6	1	0	4	6	4	4	7	0	36
Total	Freq.	58	95	67	44	52	97	115	88	107	89	812
	Perc.	7.1%	11.7%	8.3%	5.4%	6.4%	12.0%	14.2%	10.8%	13.1%	11.0%	100%

The chi-square test for significance, performed for Table 7.55, realised a value of 27.51 with an exceedence probability of 0.0699. It is important to note that, based on the decision-rule that an exceedence probability of <0.05 would be

regarded as an acceptable indicator for significance, it has to be concluded that the two variables are not related.

(D12) A main finding is that respondents' household language does not significantly influence the product and service categories they consider purchasing from via the Internet in the future.

(d) Gross monthly household income (Q25)

The gross monthly household income of respondents participating in the study is portrayed in Table 7.56.

TABLE 7.56: RESPONDENTS' GROSS MONTHLY HOUSEHOLD INCOME

Gross monthly income	V	Frequency	Percentage	Cumulative frequency	Cumulative percentage
Less than R 5 000	V229.2	85	8.46%	85	8.46%
R 5 001 – R 9 999	V229.3	217	21.59%	302	30.05%
R 10 000 – R 14 999	V229.4	168	16.72%	470	46.77%
R 15 000 – R 19 999	V229.5	146	14.53%	616	61.29%
R 20 000 – R 24 999	V229.6	106	10.55%	722	71.84%
R 25 000 – R 29 999	V229.7	63	6.27%	785	78.11%
More than R 30 000	V229.8	133	13.23%	918	91.34%
Not specified	V229.9	87	8.66%	1 005	100%

It can be seen from Table 7.52 that the income group R5 000 – R9 999 (VV229.3) represents the income group with the most respondents (21.59%) who participated in the study. The lowest specified income group, representing less than R 5 000 per month (V229.2), contains the least number of respondents (5.46%), followed by respondents who would not divulge their income (8.66%)(V229.9).

Similar to the previous analyses of demographic variables, it was decided to combine some of the income groups to form more meaningful categories. The new ascribed variables are shown in Table 7.57.

Considering the probability value from the significance test, it can be derived that gross monthly household income and whether or not respondents have purchased Online before are related.

(D13) **A main finding is that household income significantly influence whether or not respondents have purchased products or services via the Internet before.**

A cross-tabulation analysis was performed to determine whether or not respondents' income group exerted an influence on the product and service categories they have purchased from via the Internet. The analysis is shown in Table 7.59, indicating variables VV229 (gross monthly household income groups) and ProductHP (consisting of responses from Internet shoppers who have purchased from the selected product and service categories before).

TABLE 7.59: **RELATIONSHIP BETWEEN GROSS MONTHLY HOUSEHOLD INCOME AND PRODUCT AND SERVICE CATEGORIES PURCHASED FROM VIA THE INTERNET**

Income Groups	V	ProductHP										Total
		1	2	3	4	5	6	7	8	9	10	
< R 9 999	VV229.1	19	8	19	3	6	7	4	2	3	3	74
R 10 000 – R19 999	VV229.2	25	22	23	3	7	11	7	6	3	3	110
R 20 000 and more	VV229.3	34	35	22	16	10	11	11	4	3	1	147
Not specified	VV229.4	7	6	6	4	4	0	3	0	1	1	32
Total	Freq.	85	71	70	26	27	29	25	12	10	8	363
	Perc.	23.4%	19.6%	19.3%	7.1%	7.4%	8.0%	6.9%	3.3%	2.8%	2.2%	100%

The chi-square test for significance applicable to Table 7.59 yielded a value of 27.70 and an exceedence probability of 0.4263 resulted, enabling one to conclude that the two variables (VV229 and ProductHP) are not related.

(D14) **A main finding is that respondents' household income did not significantly influence the product and service categories they have purchased from via the Internet.**

The analysis was repeated to determine if respondents' gross monthly household income group influence product and service categories they consider purchasing from via the Internet in future. Results from the cross-tabulation analysis are shown in Table 7.60.

TABLE 7.60: **RELATIONSHIP BETWEEN GROSS MONTHLY HOUSEHOLD INCOME AND PRODUCT AND SERVICE CATEGORIES RESPONDENTS CONSIDER PURCHASING FROM**

Income Groups	V	ProductAP										Total
		1	2	3	4	5	6	7	8	9	10	
< R 9 999	VV229.1	22	19	15	10	14	34	35	22	39	23	233
R 10 000 – R 19 999	VV229.2	14	29	29	14	15	28	30	35	24	35	253
> R 20 000	VV229.3	17	37	15	14	16	28	41	29	40	26	263
Not specified	VV229.4	5	10	8	6	7	7	9	2	4	5	63
Total	Freq.	58	95	67	44	52	97	115	88	107	89	812
	Perc.	7.1%	11.7%	8.3%	5.4%	6.4%	12.0%	14.2%	10.8%	13.1%	11.0%	100%

A value of 27.70 resulted from the chi-square test performed for Table 7.60, together with an exceedence probability of 0.0477. It can therefore be concluded that, if the decision-rule is applied that an exceedence probability of <0.05 is regarded as significant, the two variables (VV229 and ProductAP) used in the analysis are related.

(D15) **A main finding is that respondents' gross monthly household income significantly influences the product and service categories they consider purchasing from via the Internet in the future.**

(e) **Highest qualification (Q26)**

Table 7.61 provides a demarcation of respondents' highest qualifications.

TABLE 7.61:   **RESPONDENTS' HIGHEST QUALIFICATIONS**

Highest Qualification	V	Frequency	Percentage	Cumulative frequency	Cumulative percentage
Standard 8/Grade 10	V230.2	71	7.06%	71	7.06%
Matric/Grade 12	V230.3	239	23.78%	310	30.85%
Diploma from technical college	V230.4	126	12.54%	436	43.38%
Diploma from technikon	V230.5	127	12.64%	563	56.02%
Degree	V230.6	208	20.70%	771	76.72%
Post-graduate	V230.7	234	23.28%	1 005	100%

It can be seen from Table 7.61 that 23.28% of respondents indicated that they are post-graduates, 20.70% possesses a degree, 23.78% has finished Grade 12, 12.64% acquired a diploma from a technicon, 12.54% obtained a diploma from a technical college and 7.06% completed Grade 10.

The different groups associated with respondents' highest qualification were combined to form a more manageable set. The newly formed groups are labelled in Table 7.62.

TABLE 7.62:   **RE-CODING OF HIGHEST QUALIFICATION GROUPS FOR FURTHER ANALYSES**

Qualification groups	V	Newly formed qualification groups	Ascribed variable
Standard 8/Grade 10	V230.2	School Only	VV230.1
Matric/Grade 12	V230.3		
Diploma from technical college	V230.4	Diploma	VV230.2
Diploma from technicon	V230.5		
Degree	V230.6	Degree	VV230.3
Post Degree	V230.7		

Table 7.63 indicates the cross-tabulation results when the newly defined qualification groups were compared with whether or not respondents have purchased via the Net before.

TABLE 7.63: **RELATIONSHIP BETWEEN QUALIFICATIONS AND WHETHER OR NOT RESPONDENTS HAVE PURCHASED VIA THE INTERNET**

Purchase via the Net	V	Highest qualification			Total
		School only VV230.1	Diploma VV230.2	Degree VV230.3	
Yes	V21.1	142	135	266	543
No	V21.2	168	118	176	462
Total	Frequency	310	253	442	1 005
	Percentage	30.85%	25.17%	43.98%	100%

It can be seen from the results portrayed in Table 7.63 that a greater percentage of respondents with post-school qualifications shop on the Net than respondents who have no further qualifications [53.36% (135/253) of respondents with diplomas (VV230.2) and 60.18% (266/442) of respondents with degrees (VV230.3) purchase Online as opposed to 45.81% (142/310) of respondents with no tertiary education].

The chi-square value calculated for the cross-tabulation shown in Table 7.63 was equal to 15.22, resulting in an exceedence probability of 0.0005. If the decision-rule is applied that a probability value of <0.05 is regarded as being indicative of significance, it can be derived that respondent's qualifications (VV230) significantly influenced their decision to purchase Online (V21).

(D16) **A main finding is that whether or not respondents have purchased Online before, is significantly influenced by their qualifications.**

As with many other demographic variables, it was necessary to establish whether or not respondents' qualifications influenced the selected product and service categories they purchased from via the Internet.

A cross-tabulation analysis was performed (shown in Table 7.64) to determine whether or not a relationship exists between respondents' qualifications (VV230)

and product and service categories they have purchased from via the Internet (ProductHP).

TABLE 7.64:   **RELATIONSHIP BETWEEN QUALIFICATIONS AND PRODUCT AND SERVICE CATEGORIES PURCHASED FROM**

Qualification Groups	V	ProductHP										Total
		1	2	3	4	5	6	7	8	9	10	
School only	VV230.1	19	12	25	3	9	6	5	3	2	2	86
Diploma	VV230.2	24	9	16	8	7	4	10	2	5	2	87
Degree	VV230.3	42	50	29	15	11	19	10	7	3	4	190
Total	Freq.	85	71	70	26	27	29	25	12	10	8	363
	Perc.	23.4%	19.6%	19.3%	7.1%	7.4%	8.0%	6.9%	3.3%	2.8%	2.2%	100%

Following the chi-square analysis performed to test for significance, it can be reported that a value of 30.50 was realised from the test with an exceedence probability of 0.0329.

Keeping to the decision rule that an exceedence probability <0.05 is regarded as significant, it can be derived that the two variables (VV230 and ProductHP) are related.

(D17) **A main finding is that respondents' qualifications significantly influenced the product and service categories they have purchased from via the Internet before.**

The analysis was repeated to determine if qualifications exert an influence on product and service categories respondents consider purchasing from via the Internet in the future. The cross-tabulation analysis is shown in Table 7.65.

TABLE 7.65: **RELATIONSHIP BETWEEN QUALIFICATIONS AND PRODUCT AND SERVICE CATEGORIES RESPONDENTS CONSIDER PURCHASING FROM**

Qualification group	V	ProductAP										Total
		1	2	3	4	5	6	7	8	9	10	
School only	VV230.1	17	17	22	7	20	32	32	30	26	31	234
Diploma	VV230.2	13	16	19	12	14	15	35	21	35	19	199
Degree	VV230.3	28	62	26	25	18	50	48	37	46	39	379
Total	Freq.	58	95	67	44	52	97	115	88	107	89	812
	Perc.	7.1%	11.7%	8.3%	5.4%	6.4%	12.0%	14.2%	10.8%	13.1%	11.0%	100%

The chi-square test for significance performed, for the cross-tabulation depicted in Table 7.65, realised a value of 35.64 and an exceedence probability of 0.0078. It can therefore be concluded that the two variables (VV230 and ProductAP) portrayed in the cross-tabulation analysis are related.

(D18) **A main finding is that respondents' qualifications significantly influence the product and service categories they consider purchasing from via the Internet in the future.**

(f) **Geographic location (Q27)**

The cities or towns that respondents, who participated in the study, live in or are closest to them are shown in Table 7.66.

TABLE 7.66 **RESPONDENTS' GEOGRAPHIC LOCATION**

City/Town	V	Frequency	Percentage
Beaufort West	V231.2	5	0.50%
Belville	V231.3	30	2.99%
Bloemforntein	V231.4	50	4.98%
Cape Town	V231.5	220	21.89%
Colesberg	V231.6	2	0.20%
Durban	V231.7	85	8.46%
East London	V231.8	20	1.99%
Graaff Reinet	V231.9	4	0.40%
Johannesburg	V231.10	220	21.89%
Kimberley	V231.11	14	1.39%

City/Town	V	Frequency	Percentage
Mossel Bay	V231.12	20	1.99%
Nelspruit	V231.13	13	1.29%
Pietermaritzburg	V231.14	38	3.78%
Pietersburg	V231.15	10	1.00%
Port Elizabeth	V231.16	94	9.35%
Pretoria	V231.17	111	11.04%
Richards Bay	V231.18	23	2.29%
Rustenburg	V231.19	15	1.49%
Springbok	V231.20	3	0.30%
Tzaneen	V231.21	5	0.50%
Umtata	V231.22	6	0.60%
Upington	V231.23	3	0.30%
Witbank	V231.24	14	1.39%
Total		1 005	100%

From Table 7.66 it can be seen that at least some respondents live in or live close to all 23 cities or towns listed in the questionnaire. The majority of respondents indicated that they live in or closest to Cape Town (V231.5) or Johannesburg (V231.10) (21.89% for each of the cities), Pretoria (V231.17)(11.04%), Port Elizabeth (V231.16)(9.35%) and Durban (V231.7)(8.46%). Other cities or towns represented by at least 30 respondents are Belville (V231.3)(2.99%), Bloemfontein (V231.4)(4.98%) and Pietermaritzburg (V231.14)(3.78%).

To do further analyses, the 23 geographical locations had to be reduced to a manageable number. The following variable numbers were ascribed to variables previously used for different geographical locations:

Variables V231.2; V231.3; V231.6; V231.9; V231.11 – V231.15; and V231.18 – V231.24 were combined to form variable VV231.1, representing smaller towns and cities, whereas V231.4; V231.5; V231.7; V231.8; V231.10; V231.16 and V231.17 were combined to form VV231.2, representing metropolitan cities.

Table 7.67 depicts the cross-tabulation findings when V21 (considering whether or not respondents have purchased Online before) and VV231 (geographic location) were further analysed to determine whether or not geographic location significantly influence the decision to purchase on the Net.

TABLE 7.67   RELATIONSHIP BETWEEN GEOGRAPHIC LOCATION AND WHETHER OR NOT RESPONDENTS HAVE PURCHASED ON THE INTERNET

Purchase via the Net	V	Geographic location		Total
		Smaller towns and cities VV231.1	Metropolitan cities VV231.2	
Yes	V21.1	115	428	543
No	V21.2	90	372	462
Total	Frequency	205	800	1 005
	Percentage	20.40%	79.60%	100%

(D19)   A main finding that can be derived from the cross-tabulation analysis, is that the majority of respondents (79.60%) who participated in the study reside in or close to a metropolitan city (VV231.2).   The remaining 20.40% of respondents either live in or close to a smaller city, large town or smaller town (VV231.1).

The chi-square measure for significance applicable to the cross-tabulation table portrayed in Table 7.67 yielded a value of 0.44.   The realised exceedence probability applicable to the analysis is 0.5055. Based on the statistical results, it can be derived that the two variables (V21 and VV231) are not related.

(D20)   A main finding is that geographic location does not significantly influence whether or not respondents have purchased Online before.

(g)   Population group (Q28)

The population groups of respondents participating in the study are shown in Table 7.68.

TABLE 7.68:   **RESPONDENTS' POPULATION GROUPS**

Population group	V	Frequency	Percentage
Asian	V232.1	16	1.59%
Black	V232.2	29	2.89%
Coloured	V232.3	24	2.39%
Indian	V232.4	21	2.09%
White	V232.5	902	89.75%
Other	V232.6	13	1.29%
Total		1 005	100%

(D21)   A main finding from Table 7.68 is that 89.75% of respondents who participated in the study were White (V232.5), followed by 2.89% of respondents who indicated that they were Black (V232.2) and 2.39% Coloured (V232.3).

The population groups were combined to form a manageable set. Two groups were formed, namely "Whites" and "Other population groups". The "Whites" group was re-coded as VV232.1 and the "Other population groups" were labelled VV232.2.

Table 7.69 provides the findings from a cross-tabulation analysis, considering the newly formed population groups and whether or not respondents have purchased via the Internet before.

TABLE 7.69: **RELATIONSHIP BETWEEN POPULATION GROUP AND WHETHER OR NOT RESPONDENTS HAVE PURCHASED VIA THE INTERNET**

Purchase via the Net	V	Population group		Total
		Whites VV232.1	Other population groups VV232.2	
Yes	V21.1	507	36	543
No	V21.2	395	67	462
Total	Frequency	902	103	1 005
	Percentage	89.75%	10.25%	100%

Two main findings can be derived from scrutinising the results shown in Table 7.69, namely that:

(D22) **Fifty-six percent (507/902) of white respondents (VV232.1) have purchased products and services via the Internet before, as opposed to 34.95% (36/103) of respondents from other population groups (VV232.2).**

(D23) **Although related to the previously stated finding, 65.05% (67/103) of respondents from other population groups have never shopped Online before.**

The chi-square test for significance, calculated for Table 7.69, realised a value of 16.82 and yielded an exceedence probability of <0.0001. Based on the decision rule regarding acceptance of significant values, it can be concluded that there is a relationship between population groups and the decision to purchase via the Net.

(D24) **A main finding derived from the discussion is that respondents' population group significantly influences the decision to purchase products and services via the Internet.**

A cross-tabulation analysis was conducted to determine if respondents' population group could be regarded as an influence on the product and service categories they have purchased from via the Internet. The analysis, depicting respondents' population groups and the product categories they have purchased from before, is shown in Table 7.70.

TABLE 7.70: **RELATIONSHIP BETWEEN POPULATION GROUP AND PRODUCT AND SERVICE CATEGORIES PURCHASED FROM**

Population group	V	ProductHP										Total
		1	2	3	4	5	6	7	8	9	10	
Whites	VV232.1	76	69	64	26	24	24	22	12	10	7	334
Other	VV232.2	9	2	6	0	3	5	3	0	0	1	29
Total	Freq.	85	71	70	26	27	29	25	12	10	8	363
	Perc.	23.4%	19.6%	19.3%	7.1%	7.4%	8.0%	6.9%	3.3%	2.8%	2.2%	100%

Based on the results from the chi-square test for significance (yielding a value of 12.07 and an exceedence probability of 0.2094), it can be concluded that the two variables (population group - VV232 - and product and service categories purchased from before – ProductHP) are not related.

(D25) **A main finding is that respondents' population group did not significantly influence the product and service categories they have purchased from via the Internet before.**

The cross-analysis was repeated (shown in Table 7.71) to determine if the respondents' population group exerted an influence on product and service categories they consider purchasing via the Internet in the future (ProductAP).

TABLE 7.71: **RELATIONSHIP BETWEEN POPULATION GROUP AND PRODUCT AND SERVICE CATEGORIES RESPONDENTS CONSIDER PURCHASING FROM**

Population group	V	ProductAP										Total
		1	2	3	4	5	6	7	8	9	10	
Whites	VV232.1	49	85	61	42	46	88	105	79	97	74	726
Other	VV232.2	9	10	6	2	6	9	10	9	10	15	86
Total	Freq.	58	95	67	44	52	97	115	88	107	89	812
	Perc.	7.1%	11.7%	8.3%	5.4%	6.4%	12.0%	14.2%	10.8%	13.1%	11.0%	100%

The chi-square test for significance conducted for Table 7.71 yielded a value of 7.91 and an exceedence probability of 0.5432. It can, therefore, be concluded that population group and product and service categories respondents consider to purchase from are not related.

(D26) A main finding is that respondents' population group do not significantly influence product and service categories they consider purchasing via the Internet in the future.

(h) Marital status (Q29)

The marital status of respondents who participated in the study is captured in Table 7.72.

TABLE 7.72: RESPONDENTS' MARITAL STATUS

Population group	V	Frequency	Percentage
Single	V233.2	197	19.60%
Living together	V233.3	42	4.18%
Married	V233.4	688	68.46%
Separated	V233.5	10	1.00%
Divorced	V233.6	53	5.27%
Widowed	V233.7	8	0.80%
Other	V233.8	7	0.70%
Total		1 005	100%

It can be seen from Table 7.72 that the majority of respondents (88.06%) are either married (V233.4)(68.46%) or single (V233.2)(19.60%).

The remainder of respondents are divorced (V233.6)(5.27%), living together (V233.3)(4.18%), separated (V233.5)(1.00%) or widowed (V233.7)(0.80%). Seven respondents (0.70%) indicated that they could not be classified according to the categories provided and selected the "other" option (V233.8).

Since the number of categories for the cross-tabulation analysis had to be limited to be more manageable, the seven categories were reduced to four. The new categories together with the re-coded variables are shown in Table 7.73.

TABLE 7.73: **RE-CODING OF MARITAL STATUS GROUPS FOR FURTHER ANALYSES**

Current marital status group	V	New marital status groups	Ascribed variable
Single	V233.2	Single	VV233.1
Living together	V233.3	Living together	VV233.2
Married	V233.4	Married	VV233.3
Separated	V233.5	Other marital status	VV233.4
Divorced	V233.6		
Widowed	V233.7		
Other	V233.8		

The final cross-tabulation analysis for the study was performed to determine whether demographic variables (specifically marital status at this point of the discussion) influences the decision to purchase Online, is shown in Table 7.74.

TABLE 7.74: **RELATIONSHIP BETWEEN MARITAL STATUS AND WHETHER OR NOT RESPONDENTS HAVE PURCHASED VIA THE INTERNET**

Purchase via the Net	V	Marital status group				Total
		Single VV233.1	Living together VV233.2	Married VV233.3	Other marital status VV233.4	
Yes	V21.1	106	28	371	38	543
No	V21.2	91	14	317	40	462
Total	Frequency	197	42	688	78	1 005
	Percentage	19.60%	4.18%	68.46%	7.76%	100%

It can be deduced from Table 7.74 that, with the exception of the "other" marital status group, all marital status groups comprise of more respondents who have purchased Online before than those who have not. Although comprising the least number of respondents, respondents who are living together (VV233.2)

showed the largest percentage of respondents who have purchased [66.67% (28/42)] when considering the ratio between Online shoppers and non-shoppers for each marital status group.

The chi-square statistic for significance applied to Table 7.74 yielded a value equal to 3.59 and an exceedence probability of 0.3088. It can, therefore, be derived that there is not a relationship between marital status group and the decision to purchase Online.

(D27)   A main finding that can be derived is that marital status does not significantly influence the decision to purchase products and services via the Internet.

(i)   Number of people actively using the Internet (Q30)

Table 7.75 indicates the number of people, per respondent's household, who use the Internet more than once a week.

TABLE 7.75:   NUMBER OF ACTIVE INTERNET USERS PER HOUSEHOLD

Number of people	V	Frequency	Percentage	Cumulative frequency	Cumulative percentage
1	V234.2	343	34.13%	343	34.13%
2	V234.3	432	42.99%	775	77.11%
3	V234.4	146	14.53%	921	91.64%
4	V234.5	61	6.07%	982	97.71%
5	V234.6	18	1.79%	1,000	99.50%
6	V234.7	2	0.20%	1,002	99.70%
7	V234.8	1	0.10%	1,003	99.80%
More than 7	V234.9	2	0.20%	1 005	100%

Two main findings can be derived from Table 7.75, namely that:

(D28)   Two members of the household (V234.3) use the Internet more than once a week in 42.99% of households;

(D29) **Almost 98% of respondents indicated that four or less members of their households use the Internet more than once a week.**

(j) **Number of people per household (Q31)**

The results to the final question of the questionnaire are shown in Table 7.76.

TABLE 7.76: **NUMBER OF PEOPLE PER HOUSEHOLD**

Number of people	V	Frequency	Percentage	Cumulative frequency	Cumulative percentage
1	V235.2	88	8.76%	88	8.76%
2	V235.3	278	27.66%	366	36.42%
3	V235.4	204	20.30%	570	56.72%
4	V235.5	265	26.37%	835	83.08%
5	V235.6	120	11.94%	955	95.02%
6	V235.7	39	3.88%	994	98.91%
7	V235.8	6	0.60%	1,000	99.50%
More than 7	V235.9	5	0.50%	1 005	100%

(D30) **A main finding from Table 7.76 is that 83.08% of respondents indicated that there are four or less people living in their households.**

Three main findings can be derived from considering the discussion regarding demographic variables, namely that:

(D31) **Gender (VV226), household language (VV228), gross monthly household income group (VV229), highest qualification (VV230) and population group (VV232) significantly influence whether or not respondents have purchased via the Internet before;**

(D32) **Gender (VV226) and qualification (VV230) significantly influence the product and service categories respondents have purchased from via the Internet; and**

(D33) **Gender (VV226), gross monthly household income group (VV229) and highest qualification (VV230) significantly influence the product and service categories respondents consider purchasing from via the Internet in the future.**

7.3.4 Logit Analysis

Based on the research results obtained from the study, it is possible to perform a logit analysis.

In short, the logit model for categorical data, models the relationship between a binary response (dependent) variable and categorical explanatory (independent) variables. Hair, Anderson, Tatham & Black (1995: 130) explain that to understand the effects of the independent variables more fully, logit analysis does not predict just whether or not an event occurred, but instead predicts the probability of an event. Logit analysis, therefore, compares the probability of an event occurring with the probability of it not occurring (also expressed as an odds ratio)(Hair et al. 1995: 131).

A logit analysis was performed to determine the influence of various demographic variables (VV226 to VV233) on the decision to purchase products or services via the Internet (V21).

It is important to note that the index value will be used for interpretation purposes. An index value of 1.000 is regarded as average and an index of >1.000 represents a higher probability (odds) of having purchased products or

services via the Internet before and an index <1.000 represents a lower probability of having purchased Online before.

An index value for a demographic variable reflects the influence of that particular demographic variable on the probability of a respondent having purchased Online before.

The results from the logit analysis are summarised in Table 7.77.

TABLE 7.77:   **RESULTS FROM THE LOGIT ANALYSIS**

Demographic variable	Independent variable	Description	Index value
Gender:	VV226.1	Male	1.393
	VV226.2	Female	0.718
Age:	VV227.1	<35 years	1.263
	VV227.2	36-50 years	0.938
	VV227.3	>51 years and not specified	0.844
Household language:	VV228.1	Afrikaans	1.005
	VV228.2	English	1.542
	VV228.3	Other languages	0.645
Gross monthly household income:	VV229.1	Less than R 9 999	0.594
	VV229.2	R 10 000 – R 19 999	1.066
	VV229.3	R 20 000 or more	1.541
	VV229.4	Not specified	1.024
Highest qualification:	VV230.1	School only	0.758
	VV230.2	Diploma	1.043
	VV230.3	Degree	1.264
Geographic location:	VV231.1	Smaller town and cities	1.135
	VV231.2	Large cities	0.881
Population group:	VV232.1	Whites	1.560
	VV232.2	Other population groups	0.625
Marital status:	VV233.1	Single	1.001
	VV233.2	Living together	1.263
	VV233.3	Married	0.836
	VV233.4	Other marital status	0.946

The findings from the logit analysis will be based on the following calculation and interpretation (gender as demographic variable will be used for illustration purposes):

The probability (odds) of a male respondent having purchased via the Internet before can be calculated as 1.393:1.000 or (1.393 − 1.000) x 100 = 39.3%. It can therefore be derived that the probability of having purchased Online before is 39.3% higher than normal for male respondents. Following the same logic, it can be derived that the probability of having purchased via the Internet is 28.2% lower than average for female respondents, calculated as (1.000 − 0.718) x 100.

Considering the manner in which probability is determined, the following main findings can be made from the logit analysis in Table 7.77:

(E1)   **The probability of having purchased Online before are 39.3% higher than average for male respondents (VV226.1) and 28.2% lower than average for female respondents (VV226.2);**

(E2)   **The probability of having purchased via the Net is 26.3% higher than average for respondents who are 35 years old or younger (VV227.1), 6.2% lower than average for the age group 36-50 years (VV227.2) and 15.6% lower than average for the age group older than 51 and those who did not specify their age (VV227.3);**

(E3)   **The probability of having purchased via the Net is average (normal) for respondents from Afrikaans households (VV228.1), 54.2% higher than average for English speaking (VV228.2) and 35.5% lower than average for respondents speaking other household languages (VV228.3);**

(E4)   The probability of having purchased via the Internet is 40.6% lower than average for respondents with a gross monthly household income of less than R 9 999 (VV229.1); 6.6% higher than average for the income group R 10 000 – R 19 999 (VV229.2), 54,1% higher than average for the income group R 20 000 or more (VV229.3) and 2.41% lower than average for the groups of respondents who did not divulge their income group (not specified)(VV229.4);

(E5)   The probability of having purchased Online before is 24.2% below average for respondents falling in the "school only" category (VV230.1), 4.3% higher than average for the diploma-group (VV230.2) and 26.4% higher than average for the degree-group (VV230.3);

(E6)   The probability of having purchased via the Net is 13.5% higher than average for respondents from smaller towns and cities (VV231.1) and 11.9% lower than average for respondents living in or around large cities (VV231.2);

(E7)   The probability of having purchased via the Internet is 56% higher than average for Whites (VV232.1) and 37.5% lower than average for respondents from other population groups (VV232.2); and

(E8)   The probability of having purchased Online before is average (normal) for respondents who are single (VV233.1), 26.3% higher than average for respondents living together (VV233.2), 16.4% lower than average for respondents who are married (VV233.3) and 5.4% below average for respondents from the "other marital status"-group (VV233.4).

7.4 MAIN FINDINGS

A number of main findings can be derived from the study. Although these findings were highlighted throughout the chapter, they will be consolidated in this section to form the main findings of the study. The findings listed below will be used as a basis to either accept or reject the hypotheses that were formulated in Chapter 5.

(A1)   Ninety-one percent of respondents who participated in the study access the Internet at home and 48.86% at work (Section 7.3.1, p. 333).

(A2)   Seventy-two percent of respondents who participated in the study most frequently access the Internet from home and 26.66% most frequently from work (Section 7.3.1, p. 333).

(A3)   Fifty-five percent of respondents have been using the Internet for more than three years (Section 7.3.1, p. 334).

(A4)   Fifty-four percent of respondents who participated in the study have purchased products or services via the Internet before, while 45.97% have not purchased Online before (Section 7.3.1, p. 335).

(A5)   As the period of Internet usage increases, the percentage of Internet shoppers increases and the percentage of non-Internet shoppers decreases (Section 7.3.1, p. 338).

(A7)   The period of Internet usage significantly influences whether or not respondents have purchased products or services via the Internet (Section 7.3.1, p. 339).

(A10)   The period of Internet usage does not significantly influence non-Internet shoppers' decision to purchase products and services via the Internet in the future (Section 7.3.1, p. 341).

(A13)   The period of Internet usage does not significantly influence the decision to purchase via the Internet if more non-Internet based South African businesses offered products and services via the Internet (Section 7.3.1, p. 343).

(A6)   Seventy-two percent of respondents who have been using the Internet for four years and more have purchased via the Internet before, while only 20.35% who have been using the Internet for less than one year had purchased Online before (Section 7.3.1, p. 339).

(A8)   The majority of respondents (64.29%) who have not purchased via the Internet before, consider purchasing via the Internet in the future (Section 7.3.1, p. 340).

(A9)   Respondents who have not purchased via the Internet before and have been using the Internet for less than one year (55.56%) are least likely to purchase Online and those who have been Online for four years and more (70.10%) are most likely to purchase via the Net in the future (Section 7.3.1, p. 341).

(A11)   Eighty-three percent of respondents indicated that they have either purchased via the Internet before or consider purchasing via the Internet in future (Section 7.3.1, p. 341).

(A12)   Forty-four percent of respondents who showed that they will not purchase in the future, would consider purchasing via the Internet if more

non-Internet based South African businesses offer products and services via the Internet (Section 7.3.1, p. 342).

(A14) Almost 91% of all respondents indicated that they have either purchased via the Internet before or that they consider doing so in the future (including non-shoppers who will only purchase Online if more South African business offered products or services Online)(Section 7.3.1, p. 344).

(A15) Almost 50% of respondents have subscribed to only one Internet Service Provider while 2.09% of respondents have subscribed to five or more ISPs (Section 7.3.1, p. 344).

(A16) Seventy-five percent of respondents have been subscribed to their current ISP for less than three years (Section 7.3.1, p. 345).

(A17) Almost 86% of respondents who participated in the study currently subscribe to only one ISP (Section 7.3.1, p. 345).

(A18) Viewing the Internet as a communication tool was the view that respondents most agreed with while they least agreed with the view that the Internet can be regarded as a buying channel (Section 7.3.1, p. 346).

(A19) Respondents were most homogeneous on the view that the Internet can be viewed as a communication medium while respondents were most heterogeneous with the view that the Internet can be seen as an entertainment medium (Section 7.3.1, p. 346).

(A20) Internet shoppers differ significantly from non-shoppers when viewing the Internet as a general information source and a specific source of product and service related information (Section 7.3.1, p. 347).

(A21)   There is not a significant difference between Internet shoppers and non-shoppers with regard to viewing the Internet as a communication tool, as a buying channel and as an entertainment medium (Section 7.3.1, p. 347).

(A22)   Sixty-six percent of respondents who participated in the study use Internet banking services (Section 7.3.1, p. 347).

(A23)   Sixty-five percent of respondents who do not use Internet banking services, are considering making use thereof in future (Section 7.3.1, p. 348)

(A24)   Almost 31% of respondents who have been using Internet banking services, have been using it for less than one year (Section 7.3.1, p. 348).

(A25)   Eighty-one percent of respondents have been using Internet banking services for less than three years (Section 7.3.1, p. 348).

(A26)   Twenty-four percent of respondents use or consider using Internet banking services daily, 50.11% weekly, 25.34% monthly and 0.56% annually (Section 7.3.1, p.349).

(A27)   The majority of respondents (41.59%) who use Internet banking services also shop Online (Section 7.3.1, p. 350).

(A28)   Twenty-four percent of respondents use Internet banking services but don't purchase Online and 12.44% shop on the Net but don't use Internet banking(Section 7.3.1, p. 350).

(A29)   Twenty-one percent of respondents neither use Internet banking services nor do they shop Online (Section 7.3.1, p. 350).

(A30)   The decision to use Internet banking services significantly influences whether or not respondents have purchased products or services via the Internet before (Section 7.3.1, p. 350).

(A31)   As the period of using Internet banking services increases, the percentage of respondents who uses Online banking services and purchases via the Net increases (Section 7.3.1, p.352).

(A32)   Eighty percent of respondents who have been using Online banking services for four years and more, have also purchased via the Internet before (Section 7.3.1, p. 352).

(A33)   The period of time using Internet banking services significantly influences whether or not respondents have purchased products and services via the Internet before (Section 7.3.1, p. 352).

(BC1)   There is a significant difference between the statements Internet shoppers and non-shoppers consider when deciding whether or not to purchase products and services via the Internet (Section 7.3.2, p. 357).

(BC2)   Non-Internet shoppers consider three factors when deciding to purchase via the Internet, namely: factor B1 is predominantly in the pre-purchase evaluation stage of the consumer decision-making process and consists of the following aspects: brands and after-sales support offered by Internet sellers, concerns regarding the delivery of purchases and costs associated with Internet purchases; factor B2 is predominantly in the pre-purchase evaluation and purchase stages of the decision-making process and consists of the following aspects: the safety, ease and

convenience of purchasing from home; and factor B3 is predominantly in the search and purchase stages of the decision-making process and consists of the following aspects: privacy and security concerns in the search and purchase decision-making stages (Section 7.3.2, p. 364).

(BC3) Internet shoppers consider three factors when deciding to purchase via the Internet, namely: factor C1 is predominantly in the pre-purchase and post-purchase evaluation stages of the decision-making process and consists of the following aspects: the ability to find and evaluate information on brands, product ranges, costs associated with Internet purchases and after-sales service offered by Internet sellers; factor C2 is predominantly in the search and purchase stages of the decision-making process and consists of the following aspects: security and privacy concerns when searching and purchasing on the Internet; and factor C3 is predominantly in the pre-purchase evaluation and purchase stages of the decision-making process and consists of the following aspects: ease and convenience of purchasing from home (Section 7.3.2, p. 369).

(BC4) There is an observable difference between the factors Internet shoppers and non-shoppers consider when deciding whether or not to purchase via the Internet (Section 7.3.2, p. 371).

(BC5) Internet shoppers who have been using the Internet for less than two years consider four factors when deciding to purchase via the Net, namely: factor D1 is predominantly in the pre- and post-purchase evaluation stages of the decision-making process and consists of the following aspects: credibility of Internet sellers by considering their prices, guarantees and exchange policies offered; factor D2 is predominantly in the pre- and post purchase evaluation stages of the decision-process and consists of the following aspect: reputability of Internet sellers; factor D3 is predominantly in the search and purchase

stages of the decision-making process and consists of the following aspects: concerns regarding security, privacy and delivery of purchased goods; and factor D4 is predominantly in the pre-purchase evaluation and purchase stages of the decision process and consists of the following aspect: safety and convenience of purchasing from home (Section 7.3.2, p. 377).

(BC6) Internet shoppers who have been using the Internet for two to less than three years consider four factors when deciding to purchase via the Net, namely: factor E1 is predominantly in the pre-purchase evaluation stage of the decision-process and consists of the following aspect: brands, prices, individual attention offered by Internet sellers and delivery of purchased goods and additional costs associated with Internet purchases; factor E2 is predominantly in the pre- and post purchase evaluation stages of the decision-making process and consists of the following aspects: Internet sellers' prices, guarantees and exchange policies; factor E3 is predominantly in the search and purchase evaluation stages of the decision-process and consists of the following aspect: security and privacy concerns; and factor E4 is predominantly in the pre-purchase evaluation and purchase stages of the decision-process and consists of the following aspect: safety and convenience of purchasing from home (Section 7.3.2, p. 383).

(BC7) Internet shoppers, who have been using the Internet for three years to less than four years, consider four factors when deciding whether or not to purchase Online, namely: factor F1 is predominantly in the pre- and post-purchase evaluation stages of the decision-process and consists of the following aspects: ability to find and evaluate information on after-sales support offered by Internet sellers; factor F2 is predominantly in the search and purchase stages of the decision-process and consists of the following aspects: security and privacy concerns; factor F3 is

predominantly in the pre-purchase evaluation and purchase stages of the decision-making process and consists of the following aspects: ease and convenience of purchasing from home; and factor F4 is predominantly in the pre-purchase evaluation and purchase stages of the decision-process and consists of the following aspects: concerns regarding the actual delivery and delivery costs when purchasing known brands via the Internet (Section 7.3.2, p. 389).

(BC8) Internet shoppers who have been using the Internet for four years or more consider five factors when deciding to purchase via the Net, namely: factor G1 is predominantly in the pre- and post-purchase evaluation stages of the decision-making process and consists of the following aspects: prices and after-sales service offered by Internet sellers; factor G2 is predominantly in the search and purchase stages of the decision-making process and consists of the following aspects: security and privacy concerns; factor G3 is predominantly in the pre- and post-purchase evaluation stages of the decision-process and consists of the following aspect: personal attention offered by Internet sellers; factor G4 is predominantly in the pre-purchase evaluation stage of the decision-making process and consists of the following aspects: brands, prices and total cost associated with purchasing from Internet sellers; and factor G5 is predominantly in the pre-purchase evaluation and purchase stages of the decision-making process and consists of the following aspects: ease and convenience of shopping from home (Section 7.3.2, p. 395).

(BC9) There is a difference between the factors considered by Internet shoppers prior to purchasing via the Internet when the period of Internet usage is considered and the associated stages of the decision-making process (Section 7.3.2, p. 397).

(BC10)   The five product and service categories most non-Internet shoppers seriously consider purchasing from via the Internet are: CDs (music)(55.63%), airline tickets (52.81%), books and magazines (52.16%), hotel reservations (50.87%) and movie or event tickets (49.57%)(Section 7.3.2, p. 400).

(BC11)   The five product and service categories non-Internet shoppers least consider purchasing from via the Internet are: baby products (5.41%), jewellery (7.14%), cosmetics (8.01%), interior decorating/renovations (8.01%) and furniture (8.66%)(Section 7.3.2, p. 400).

(BC12)   The five product and service categories most Internet shoppers have purchased from before via the Internet are: books and magazines (63.54%), CDs (music)(40.88%), computer software (39.04%), movie or event tickets (34.99%) and airline tickets (27.07%)(Section 7.3.2, p. 404).

(BC13)   The five product and service categories Internet shoppers least purchased from via the Internet are: property (1.29%), interior decorating/renovations (1.47%), wine (2.03%), household appliances (2.39%), and garden related (2.58%)(Section 7.3.2, p. 404)

(BC14)   The five product and service categories most current Internet shoppers consider purchasing from via the Internet in the future are: books and magazines (79.19%), CDs (music) (64.09%), movie or event tickets (59.67%), computer software (59.48%) and hotel reservations (55.43%)(Section 7.3.2, p. 404).

(BC15)   The five product and service categories current Internet shoppers least consider purchasing from via the Internet in the future are: baby products (7.18%), property (9.21%), jewellery (9.39%), interior

decorating/renovations (9.58%) and adult entertainment (9.94%)(Section 7.3.2, p. 405).

(BC16) More than 50% of respondents who have purchased from the 38 listed product and service categories before, will again in future purchase from the categories they have purchased from (with the exception of adult entertainment)(Section 7.3.2, p. 407).

(BC17) The two product and service categories from which most respondents, who have purchased from a specific category before, will purchase from again, are: other liquor, with 97.96% of respondents who have purchased from the category will purchase from it again, and books and magazines, with 97.68% that will purchase from the category again (Section 7.3.2, p. 407).

(BC18) The two categories from which most respondents, who have purchased from it before, will not purchase from again are: property, with 42.86% of respondents that will not purchase from the category again and adult entertainment, with 38.55% that will not repurchase (Section 7.3.2, p. 407).

(BC19) Respondents who have purchased adult entertainment (16.87%) before are most uncertain whether or not they will purchase from this category again (Section 7.3.2, p. 407).

(AP1) at least 20% of all non-Internet shoppers across all time periods (with the exception of those who have been using the Net for four years or more) consider to purchase from more product and service categories via the Internet in the future than Internet shoppers falling within the same periods (Appendix 10).

(AP2)   at least 45% of Internet shoppers and non-shoppers, who have been using the Internet for less than one year, consider purchasing from product and service categories that current Internet shoppers (who have been using the Net for between one and less than two years) have purchased from before (Appendix 10).

(BC20)   The period of Internet usage does not influence product and service categories respondents have purchased from via the Internet (Section 7.3.2, p. 411).

(BC21)   The period of Internet usage does not significantly influence the product and service categories respondents consider to purchase from via the Internet in the future (Section 7.3.2, p. 412).

(BC22)   More than 86% of respondents who have purchased via the Internet search for or consider searching for information on the Internet prior to purchasing from non-Internet based sellers (Section 7.3.2, p. 413).

(BC23)   Almost 70% of respondents who have not purchased via the Internet before search for or consider searching for information on the Internet prior to purchasing from non-Internet based sellers (Section 7.3.2, p. 413).

(BC24)   Larger numbers of non-shoppers, across all time periods, either search for or consider searching for information on the Net prior to purchasing from non-Internet based sellers than non-shoppers who don't search for information Online (Section 7.3.2, p. 414).

(BC25)   More than 83% of non-shoppers who have been using the Internet for four years and more search for information Online prior to Offline purchases (Section 7.3.2, p. 414).

(BC26)   The period of Internet usage significantly influences whether or not non-Internet shoppers search for (or consider searching for) product and service information on the Internet prior to purchasing from non-Internet based sellers of products and services (Section 7.3.2, p. 415).

(BC27)   More than 90% of respondents who have purchased via the Internet and have been using the Internet for four years and more search for information Online prior to purchasing Offline (Section 7.3.2, p. 416).

(BC28)   The period of Internet usage significantly influences whether or not current Internet shoppers have searched for or consider searching for product and service information on the Internet prior to purchasing from non-Internet based sellers of products and services (Section 7.3.2, p. 416).

(BC29)   More than 78% of respondents who participated in the study either search for or consider searching for product or service information on the Internet prior to purchasing from non-Internet based sellers (Section 7.3.2, p. 417).

(BC30)   The decision to search for (or consider searching for) product and service information Online (prior to purchasing Offline) is significantly influenced by whether or not respondents have purchased via the Internet before (Section 7.3.2, p. 418).

(BC31)   The decision of non-Internet shoppers to purchase via the Internet in future significantly influences whether or not respondents search for or consider searching for product and service related information on the Internet prior to purchasing from non-Internet based sellers (Section 7.3.2, p. 419).

(BC32)   A greater number of current Internet shoppers search for more product and service categories Online than non-shoppers (more than 25% of shoppers search from 12 product and service categories as opposed to eight categories by non-shoppers)(Section 7.3.2, p. 422).

(BC33)   The five categories on which most searches are conducted by Internet shoppers for product and service information are: books and magazines (55.43%), computer software (55.43%), CDs (music)(52.49%), airline tickets (49.72%) and electronic equipment (45.86%)(Section 7.3.2, p. 432)(Section 7.3.2, p. 422).

(BC34)   The five categories most searched from for product and service information by non-Internet shoppers are: computer software (37.88%), airline tickets (33.77%), CDs (music)(32.90%), computer hardware (29.87%) and hotel reservations (29.65%)(Section 7.3.2, p. 422)

(D1)   Almost 70% of the respondents who participated in the study were male, while the remaining 30.05% was female (Section 7.3.3, p. 425).

(D2)   A greater percentage of male respondents (59.03%) indicated that they have purchased products and services via the Internet before than women (42.38%)(Section 7.3.3, p. 425).

(D3)   Almost 58% of female respondents have never purchased products or services via the Internet before (Section 7.3.3, p. 425).

(D4)   Gender significantly influences whether or not respondents have purchased products or services via the Internet (Section 7.3.3, p. 426).

(D5)   Gender significantly influenced the product and service categories Internet shoppers have purchased from via the Internet (Section 7.3.3, p. 426).

(D6)   Gender significantly influences the product and service categories respondents consider to purchase from via the Internet in future (Section 7.3.3, p. 427).

(D7)   Age group does not influence whether or not respondents have purchased products or services via the Internet (Section 7.3.3, p. 429).

(D8)   The majority of respondents indicated that English (56.22%) or Afrikaans (38.91%) was their household language. Only 4.87% of respondents speak languages other than English or Afrikaans at home (Section 7.3.3, p. 430).

(D9)   More than 51% of Afrikaans speaking and 57.88% of English speaking respondents have purchased via the Internet before (Section 7.3.3, p. 432).

(D10)   Household language significantly influences whether or not respondents have purchased via the Internet before (Section 7.3.3, p. 432).

(D11)   Household language did not significantly influence the product and service categories they have purchased from via the Internet (Section 7.3.3, p. 433).

(D12)   Household language does not significantly influence the product and service categories they consider purchasing from via the Internet in future (Section 7.3.3, p. 434).

(D13)   Household income groups significantly influence whether or not they have purchased products or services via the Internet before (Section 7.3.3, p. 436).

(D14)   Respondents' gross monthly household income did not significantly influence the product and service categories they have purchased from via the Internet (Section 7.3.3, p. 436).

(D15)   Respondents' gross monthly household income significantly influences the product and service categories they consider purchasing from via the Internet in the future (Section 7.3.3, p. 437).

(D16)   Whether or not respondents have purchased Online before is significantly influenced by their qualifications (Section 7.3.3, p. 439).

(D17)   Respondents' qualifications significantly influenced the product and service categories they have purchased from via the Internet (Section 7.3.3, p. 440).

(D18)   Respondents' qualifications significantly influence the product and service categories they consider purchasing from via the Internet in the future (Section 7.3.3, p. 441).

(D19)   The majority of respondents (79.60%) who participated in the study reside in or close to a metropolitan city. The remaining 20.40% of respondents either live in or close to a smaller city, large town or smaller town (Section 7.3.3, p. 443).

(D20)   Geographic location does not significantly influence whether or not respondents have purchased Online before (Section 7.3.3, p. 443).

(D21)   Almost 90% of respondents who participated in the study were White, followed by 2.89% of respondents who indicated that they were Black, and 2.39% Coloured (Section 7.3.3, p. 444)

(D22)   More than 56% of White respondents have purchased products or services via the Internet before, as opposed to 34.95% of respondents from other population groups (Section 7.3.3, p. 445).

(D23)   Sixty-five percent of respondents from other (than Whites) population groups have never shopped Online before (Section 7.3.3, p. 445).

(D24)   Respondents' population group significantly influences the decision to purchase products and services via the Internet (Section 7.3.3, p. 445).

(D25)   Respondents' population group did not significantly influence the product and service categories they have purchased from via the Internet before (Section 7.3.3, p. 446).

(D26)   Respondents' population group does not significantly influence product and service categories they consider purchasing from via the Internet in future (Section 7.3.3, p. 447).

(D27)   Marital status does not significantly influence the decision to purchase products and services via the Internet (Section 7.3.3, p. 449).

(D28)   In almost 43% of households that respondents belong to, two members of the household use the Internet more than once a week (Section 7.3.3, p. 450).

(D29)   Almost 98% of respondents indicated that four or less members of their households use the Internet more than once a week (Section 7.3.3, p. 450).

(D30)   Eighty-three percent of respondents indicated that there are four or less people living in their households (Section 7.3.3, p. 450).

(D31)   Gender, household language, gross monthly household income group, highest qualification and population group significantly influence whether or not respondents have purchased via the Internet before (Section 7.3.3, p. 450).

(D32)   Gender and qualification significantly influence the product and service categories respondents have purchased from via the Internet (Section 7.3.3, p. 451).

(D33)   Gender, gross monthly household income group and highest qualification significantly influence the product and service categories respondents consider purchasing from via the Internet in   future (Section 7.3.3, p. 451).

(E1)   The probability of having purchased Online before is 39.3% higher than average for male respondents and 28.2% lower than average for female respondents (Section 7.3.4, p. 453).

(E2)   The probability of having purchased via the Net is 26.3% higher than average for respondents who are 35 years old or younger, 6.2% lower than average for the age group 36-50 years and 15.6% lower average for the age group older than 51 and those who did not specify their age (Section 7.3.4, p. 453).

(E3)   The probability of having purchased via the Net is average (normal) for respondents from Afrikaans households, 54.2% higher than average for English speaking and 35.5% lower than average for respondents speaking other household languages (Section 7.3.4, p. 453).

(E4)   The probability of having purchased via the Internet is 40.6% lower than average for respondents with a gross monthly household income of less than R 9, 999; 6.6% higher than average for the income group R10,000 – R19,999; for the income group earning more than R 20, 000 it is 54.1% higher than average; and it is 2.41% lower than average for the groups of respondents who did not divulge their income group (not specified)(Section 7.3.4, p. 454).

(E5)   The probability of having purchased Online before is 24.2% below average for respondents falling in the "school only" category, 4.3% higher than average for the diploma-group and 26.4% higher than average for the degree-group (Section 7.3.4, p. 454).

(E6)   The probability of having purchased via the Net is 13.5% higher than average for respondents from smaller towns and cities and 11.9% lower than average for respondents living in or around large cities (Section 7.3.4, p. 454).

(E7)   The probability of having purchased via the Internet is 56% higher than average for Whites and 37.5% lower than average for respondents from other population groups (Section 7.3.4, p. 454).

(E8)   The probability of having purchased Online before is average (normal) for respondents who are single, 26.3% higher than average for respondents living together, 16.4% lower than average for respondents

who are married and 5.4% below average for respondents from the "other marital status"-group (Section 7.3.4, p. 454).

7.5 ACCEPTANCE OR REJECTION OF HYPOTHESES FORMULATED FOR THE STUDY

The hypotheses applicable to the study (formulated in Chapter 5) will again be listed in this section for convenience purposes and will, based on the main findings from the study, either be accepted or rejected.

7.5.1 Hypothesis 1

The decision to purchase via the Internet is significantly influenced by factors consumers consider prior to purchase

The results from the empirical research, based on questions 11, 12 and 18, will be considered when accepting or rejecting Hypothesis 1. It could be concluded from question 11 that 54.03% of respondents have purchased via the Internet while 45.97% have not purchased Online before [(Main finding A4 (p. 335)].

Based on the findings from questions 12 and 18, a t-test was performed which established that there is a significant difference between Internet shoppers and non-shoppers with regard to the 24 listed statements (where respondents were requested to rate the importance thereof when deciding to purchase via the Net) [Main finding BC1 (p. 357)].

Following the t-test, a factor analysis was performed for question 12, indicating factors considered by non-shoppers when deciding whether or not to purchase via the Internet. The factor analysis was repeated for question 18 and identified factors considered by Internet shoppers prior to purchasing via the Internet.

Three different factors were identified for non-Internet shoppers [Main finding BC2 (p. 364)] as well as Internet shoppers [Main finding BC3 (p. 369)]. It could also be seen from the factor analyses that, in addition to the identified predominant stages of the decision-making process ascribed to each factor, different aspects were associated with the factors identified for shoppers and non-shoppers [Main findings BC1 (p. 357) and BC4 (p. 371)].

Based on the main findings it can be concluded that **Hypothesis 1 should be accepted**.

7.5.2 Hypothesis 2

The factors Internet shoppers consider prior to purchasing via the Internet are significantly influenced by the period of Internet usage

Research findings from question 18 of the questionnaire (applicable to Internet shoppers) address Hypothesis 2.

Main finding BC5 (p. 377) listed four factors identified for Internet shoppers who have been using the Net for less than two years. Main finding BC6 (p. 383) identified four factors applicable to Internet shoppers who have been Online for two years to less than three years. Four factors were also identified for Internet shoppers using the Internet for three years to less than four years [Main finding BC7 (p. 389)] and five factors could be identified, portrayed in Main finding BC8 (p. 395), for Internet users who have been Online for four years and more.

Following an analysis from the main findings mentioned above, it can be concluded that the period of Internet usage influences the factors Internet shoppers consider prior to purchasing via the Internet [Main finding BC9 (p. 397)]. Main finding BC9 (p. 397) was also based on a comparison between the stages of the decision-making process ascribed to the factors identified for Internet shoppers across all time periods.

Based on the research findings, it can be concluded that **Hypothesis 2 should be accepted.**

7.5.3 Hypothesis 3

The period of Internet usage significantly influenced the decision to have purchased via the Internet

Hypothesis 3 is addressed by questions 3 and 11of the questionnaire.

From question 3 it could be derived that 11.24% of respondents who participated in the study have been using the Internet for less than one year, 13.23% for one year to less than two years, 20.40% for two years to less than three years, 19.70% three years to less than four years and 35.42% have been Online for four years and more. The main finding from question 3 was that 55% of respondents have been using the Internet for three or more years [Main finding A3 (p. 334)].

From question 11 it could be deduced that 54.03% of respondents have purchased via the Internet before, while the remaining 45.97% of respondents have never purchased via the Internet before [Main finding A4 (p. 335)].

Main finding A5 (p. 338) stated that as the period of Internet usage increases, the percentage of Internet shoppers increases. When subjected to statistical testing, it was found that the period of Internet usage significantly influences whether or not respondents have purchased products or services via the Internet [Main finding A7 (p. 339)].

Based on the main findings pertaining to previous Internet purchases, it can be derived that **Hypothesis 3 should be accepted since the period of Internet usage influenced whether or not respondents have purchased via the Internet before.**

7.5.4 Hypothesis 4

The period of Internet usage significantly influences the decision of non-shoppers to purchase via the Internet in the future

Hypothesis 4 is addressed by questions 3, 11, 13 and 14 of the questionnaire.

From question 13 (directed at non-Internet shoppers) it could be concluded that 64.29% of non-shoppers seriously consider purchasing via the Internet in the future [Main finding A8 (p. 340)]. From question 14 (directed at non-shoppers not considering to purchase via the Internet in the future) it could be concluded that 44.58% of respondents would consider purchasing via the Internet if more South African businesses sold products and services via the Net [Main finding A12 (p. 342)].

Responses for both questions 13 and 14 were statistically tested to determine whether or not there is a relationship between the period of Internet usage and consideration to purchase via the Internet. It was concluded that the period of Internet usage does not significantly influence the decision of non-shoppers to purchase via the Internet in the future [Main finding A10 (p. 341)], nor does it influence the decision to purchase via the Internet in the future if more South African businesses offered products and services via the Net [Main finding A13 (p. 343)].

Based on the main findings pertaining to the consideration to purchase via the Internet in the future, it can be derived that **Hypothesis 4 should be rejected when considering the period of Internet usage and non-shopper's decision to purchase via the Internet in the future.**

7.5.5 Hypothesis 5

The period of Internet usage significantly influences the decision to search for product or service information on the Net prior to purchasing from non-Internet based sellers

Questions 3, 16 and 20 addressed Hypothesis 5.

From the results applicable to question 16 it could be concluded that almost 70% of non-Internet shoppers search for or consider searching for product and service information on the Internet prior to purchasing from non-Internet based sellers [Main finding BC23 (p. 413)].

From the statistical tests performed to determine a possible influence due to the period of Internet usage and whether or not non-Internet shoppers search for information Online, it could be concluded that the period of Internet usage significantly influence whether or not non-Internet shoppers search for or consider searching for product and service information on the Internet prior to purchasing from non-Internet based sellers [Main finding BC26 (p. 415)].

It could also be concluded, from the results pertaining to question 20, that 86.37% of Internet shoppers search for or consider searching for product and service information on the Internet prior to purchasing from non-Internet based sellers [Main finding BC22 (p. 413)].

Based on statistical tests, it was concluded that the period of Internet usage significantly influences whether Internet shoppers search for (or consider searching for) product and service information on the Internet prior to purchasing from non-Internet based sellers [Main finding BC28 (p. 416)].

Considering the main findings highlighted above, it can be concluded that **Hypothesis 5 should be accepted**.

7.5.6 Hypothesis 6

There is a significant difference between Internet shoppers and non-shoppers in their decision to search for product and service information on the Internet prior to Offline purchases

Hypothesis 6 can be supported by the results from questions 11, 16 and 20.

As stated previously, question 11 distinguished between Internet shoppers and non-shoppers. Question 16 determined whether non-Internet shoppers search for or consider searching for Online product and service information, while question 20 determined if Internet shoppers search for or consider searching for product or service information.

Results from significance tests showed that the decision to have purchased via the Internet significantly influences whether or not respondents search for or consider searching for product and service information on the Internet [Main finding BC30 (p. 418)]. The statistical tests also showed that the decision to purchase via the Internet in the future (for non-Internet shoppers) significantly influence whether or not non-Internet shoppers search for or consider searching for product and service information on the Internet prior to purchasing Offline [Main finding BC31 (p. 419)].

It can therefore be concluded that **Hypothesis 6 should be accepted**.

7.5.7 Hypothesis 7

The period of Internet usage significantly influenced the product and service categories Internet shoppers have purchased via the Internet

Results from questions 3 and 19 can be used to determine if Hypothesis 7 should be accepted or not.

Statistical tests for significance were performed to determine if the period of Internet usage exerted an influence on the product and service categories Internet shoppers have purchased from via the Internet.

The statistical tests did not identify a relationship between the period of Internet usage and the product and service categories Internet shoppers have purchased from, enabling the researcher to conclude that the period of Internet usage does not significantly influence the product or service categories Internet shoppers have purchased from before [Main finding BC20 (p. 411)].

It can therefore be concluded that **Hypothesis 7 should be rejected**.

7.5.8 Hypothesis 8

The period of Internet usage significantly influences the product and service categories Internet shoppers and non-shoppers consider purchasing via the Internet in the future

Hypothesis 8 can be addressed by questions 3, 15 and 19.

Question 3 considered the period of Internet usage, question 15 the product and service categories non-Internet shoppers consider to purchase from via the Internet in the future and question 19 the categories Internet shoppers consider purchasing from in the future.

Based on a statistical test for significance, it was concluded that the period of Internet usage does not influence the product and service categories respondents (both Internet shoppers and non-shoppers considering to purchase via the Internet in the future) consider purchasing from via the Internet in the future [Main finding BC21 (p. 412)].

It can therefore be derived that **Hypothesis 8 should be rejected.**

7.5.9 Hypothesis 9

Demographic variables of Internet users significantly influence whether Internet users have purchased products or services via the Internet

Hypothesis 9 can be addressed by questions 11 and 22 to 29.

From statistical tests for significance, the following could be concluded (with regards to demographic variables):

- Gender significantly influences whether or not respondents have purchased via the Internet before [Main finding D4 (p. 426)];

- Age group does not significantly influence whether or not respondents have purchased via the Internet before [Main finding D7 (p. 429)];

- Household language significantly influences whether or not respondents have purchased via the Internet before [Main finding D10 (p. 432)];

- Gross monthly household income significantly influences whether or not respondents have purchased via the Internet before [Main finding D13 (p. 436)];

- Highest qualification significantly influences whether or not respondents have purchased via the Internet before [Main finding D16 (p. 439)];

- Geographic location does not significantly influence whether or not respondents have purchased via the Internet before [Main finding D20 (p. 443)];

- Population group significantly influences whether or not respondents have purchased via the Internet before [Main finding D24 (p. 445)];

- Marital status does not significantly influence whether or not respondents have purchased via the Internet before [Main finding D27 (p. 449)].

Hypothesis 9 should be accepted for gender, household language, gross monthly household income, highest qualification and population group,

since these demographic variables significantly influence whether or not respondents have purchased via the Internet before [Main finding D31 (p. 450)].

Hypothesis 9 should be rejected for age group, geographic location and marital status, since these demographic variables did not significantly influence whether or not respondents have purchased Online before [Main findings D7 (p. 429), D20 (p. 443) and D27 (p. 449)].

7.5.10 Hypothesis 10

Demographic variables of Internet users significantly influence the product and service categories Internet users have purchased from via the Internet

Questions 19 and 22 to 29 address Hypothesis 10.

Following statistical tests for significance, the following were derived:

- Gender significantly influences the product and service categories Internet shoppers have purchased from before [Main finding D5 (p. 426)];
- Household language does not significantly influence the product and service categories Internet shoppers have purchased from before [Main finding D11 (p. 433)];
- Gross monthly household income does not significantly influence the product and service categories Internet shoppers have purchased from before [Main finding D14 (p. 436)];
- Highest qualification significantly influences the product and service categories Internet shoppers have purchased from before [Main finding D17 (p. 440)];
- Population group does not significantly influence the product and service categories Internet shoppers have purchased from before [Main finding D25 (p. 446)].

Considering the main findings listed above, **Hypothesis 10 should be rejected for household language, income and population group**, since these demographic variables did not influence the product and service categories they have purchased from before [Main findings D11 (p. 433), D14 (p. 436) and D25 (p. 446)].

Hypothesis 10 can be accepted for gender and qualification, since these demographic variables significantly influenced the product and service categories Internet shoppers have purchased from before [Main finding D32 (p. 451)].

7.5.11   Hypothesis 11

Demographic variables of Internet users significantly influence the product and service categories Internet shoppers and non-shoppers consider purchasing via the Internet in the future

Hypothesis 11 can be addressed by questions 15, 19 and 22 to 29.

Following statistical tests for significance, the following could be concluded:

- Gender significantly influences the product and service categories respondents consider purchasing via the Internet in the future [Main finding D6 (p. 427)];

- Household language does not significantly influence the product and service categories respondents consider purchasing from via the Internet in the future [Main finding D12 (p. 434)];

- Gross monthly household income significantly influences the product and service categories respondents consider purchasing from via the Internet in the future [Main finding D15 (p. 437)];

- Highest qualification significantly influences the product and service categories respondents consider purchasing from via the Internet in the future [Main finding D18 (p. 441)];

- Population group does not significantly influence the product and service categories respondents consider purchasing from via the Internet in the future [Main finding D26 (p. 447)].

Considering the main findings listed above, **Hypothesis 11 should be accepted for gender, income and qualification**, since these demographic variables significantly influence the product and service categories respondents consider purchasing via the Internet in the future [Main finding D33 (p. 451)].

Hypothesis 11 should be rejected for language and population group, since these demographic variables do not significantly influence the product and service categories respondents consider purchasing via the Internet in the future [Main findings D12 (p. 434) and D26 (p. 447)].

7.6   SUMMARY

Chapter 7 provided the research findings obtained from 1 005 Internet users who participated in the research project.

Main findings were recorded throughout the discussion, forming the main findings from the empirical research-phase of the study. The main findings were then used to either accept or reject the hypotheses formulated for the study.

Hypotheses 1, 2, 3, 5 and 6 were accepted based on the main findings obtained from the study. Hypotheses 4, 7 and 8 had to be rejected. Hypothesis 9 was accepted for certain demographic variables, namely gender, language, income, qualification and population group. Hypothesis 9 was, however, rejected for three demographic variables, namely age, geographic location and marital status. Hypothesis 10 was accepted for gender and qualification, but rejected for language, income and population group. As with Hypothesis 10, Hypothesis 11

was accepted for gender, qualification as well as income, but was rejected for language and population group.

The final chapter, Chapter 8, will conclude the research study by providing recommendations based on the main findings recorded from the empirical research-phase of the study.

CHAPTER 8

CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

8.1 INTRODUCTION

The research results were presented and major findings reported in the previous chapter. This chapter will provide main conclusions and implications thereof, based on the main findings for the study. The questions of the questionnaire and main findings will be linked to the research objectives and the limitations of the study will be highlighted. Chapter 8 will be concluded by providing recommendations for future research.

8.2 MAJOR FINDINGS, CONCLUSIONS AND IMPLICATIONS BASED ON THE MAIN FINDINGS

The primary objective of the study, as documented in Chapter 1, was to determine the buying behaviour of South African Internet users. Following the literature review and the results from the empirical research, a number of conclusions and implications based thereon can be drawn. This section will list the major findings from the study, draw a conclusion from each finding and provide the implication of the finding.

(a) Major finding 1

The period of Internet usage influences whether or not Internet users purchase products or services via the Internet.

It could be seen from **Main finding A5 (p. 338) in Chapter 7** that as the period of Internet usage increases, the percentage of Internet shoppers increases and the percentage of non-shoppers decreases.

In addition to the above, **Main finding A6 (p. 339) in Chapter 7** showed that 72% of respondents who have been using the Internet for more than four years have purchased via the Internet, while only 20% who have been using the Internet for less than one year had purchased Online before.

Following the chi-square test for significance, it was concluded [as captured in **Main finding A7 (p. 339) in Chapter 7**] that the period of Internet usage significantly influences whether or not respondents have purchased products or services via the Internet.

A **main conclusion** is that the period of Internet usage exerts a significant influence on the decision to purchase products and services via the Internet.

The **implication** is that marketers should consider the period of Internet usage of South African Internet users when drafting marketing plans and Internet strategies that focus on selling products and services via the Internet.

Recommendation: Since the period of Internet usage can be regarded as an important indicator of Online purchases, marketers need to focus their attention on Internet users who have been using the Net for at least a number of years. Marketers also need to consider methods to stimulate Internet service uptake, considering that success would probably only be achieved from a medium to long term investment.

(b)   Major finding 2

The Internet holds great potential to be used as a sales channel.

It could be observed from **Main finding A4 (p. 334) in Chapter 7** that 54% of respondents have purchased Online before.

Main finding A8 (p. 340) in Chapter 7 showed that 64% of respondents, who have not purchased via the Net before, consider doing so in the future.

It could also be seen from **Main finding A12 (p. 342) in Chapter 7** that 44% of respondents who have not purchased Online before and who do not consider purchasing via the Net in the future, consider purchasing products or services via the Internet if more South African businesses offered products or services via the Net.

The **main conclusion** that can be drawn is that the Internet holds, from a South African perspective, great potential to be used as a sales medium/channel.

The **implication** is that marketers, and more specifically South African marketers, need to consider the possibility of using the Internet as a main or alternative sales channel when selling products or services to South African Internet users.

Recommendation: Marketers need to determine whether or not there is a demand for their products or services to be sold via the Internet. Once a need is identified for their offering, marketers need to offer their products and/or services by using the Internet as a primary sales channel. If the seller is a current "brick-and-mortar" business, the possibility should be investigated to utilise the Internet as an alternative sales channel. Marketers from "brick-and-mortar" sellers need to, however, be cautious not to simply pursue the Internet as a "nice-to-have" or "add-on" sales channel, but should draft proper business and marketing plans to actively pursue the Internet as a separate profitable sales channel.

(c)   Major finding 3

The use of Internet banking services can be regarded as an important influence on whether or not Internet users purchase products or services via the Net.

It could be derived from **Main findings A22 (p. 347) and A23 (p. 348) in Chapter 7** that 66% of respondents use Internet banking services while a further 65%, of those who do not currently use it, consider to do so in the future.

It could also be seen that 42% of Internet banking users also purchase Online **[Main finding A27 (p. 350) in Chapter 7]**. Other findings were that the decision to use Internet banking services significantly influences whether or not respondents have purchased via the Internet before **[Main finding A30 (p. 350) in Chapter 7]** and as the period using Internet banking services increases, the percentage of respondents who have purchased via the Net increases **[Main finding A31 (p. 352) in Chapter 7]**. These findings are supported when considering that 80% of Internet banking users, who have been using these services for more than four years, have purchased via the Net before **[Main finding A32 (p. 352) in Chapter 7]**.

A final finding, applicable to the use of Internet banking services, is that the period using Internet banking services significantly influences whether or not respondents have purchased via the Internet before **[Main finding A33 (p. 352) in Chapter 7]**.

The **main conclusions** are that the use of Internet banking services as well as the period of Internet banking usage significantly influence whether or not respondents have purchased via the Internet before.

The **implication** is that marketers need to understand that Internet banking services are an important activity Internet users engage in and should attempt to find common grounds between Internet banking users and their potential customers when drafting Internet marketing and sales strategies.

Recommendation: Considering the influence of using Internet banking services on Online purchases, marketers need to focus their efforts on Internet banking users. If at all possible, marketers should specifically target Internet banking users who have been using Online banking for four years or more.

(d) Major finding 4

Non-Internet and Internet shoppers consider different factors when deciding whether or not to purchase products or services via the Internet.

It could be seen from **Main finding BC2 (p. 364) in Chapter 7** that three factors (together with the predominant stages of the decision-making process with which the three factors were associated) were identified for *non-Internet shoppers*, namely: factor B1 is predominantly in the pre-purchase evaluation stage of the consumer decision-making process and consists of the following aspects: brands and after-sales support offered by Internet sellers, concerns regarding the delivery of purchases and costs associated with Internet purchases; factor B2 is predominantly in the pre-purchase evaluation and purchase stages of the decision-making process and consists of the following aspects: the safety, ease and convenience of purchasing from home; and factor B3 is predominantly in the search and purchase stages of the decision-making process and consists of the following aspects: privacy and security concerns in the search and purchase decision-making stages.

Internet shoppers also considered three factors (including the identified predominant stages of the decision-making process), namely: factor C1 is

predominantly in the pre-purchase and post-purchase evaluation stages of the decision-making process and consists of the following aspects: the ability to find and evaluate information on brands, product ranges, costs associated with Internet purchases and after-sales service offered by Internet sellers; factor C2 is predominantly in the search and purchase stages of the decision-making process and consists of the following aspects: security and privacy concerns when searching and purchasing on the Internet; and factor C3 is predominantly in the pre-purchase evaluation and purchase stages of the decision-making process and consists of the following aspects: ease and convenience of purchasing from home **[Main finding BC3 (p. 369) in Chapter 7]**.

After considering the different factors, with specific emphasis on the identified predominant stages of the decision-making process associated with each statement, it was concluded that there is an observable difference between the factors Internet shoppers and non-shoppers consider when deciding whether or not to purchase via the Net **[Main finding BC4 (p. 371) in Chapter 7]**.

The **main conclusion** is that Internet shoppers and non-shoppers consider different factors when deciding whether or not to purchase Online.

The **implication** is that marketers should know which factors Internet shoppers and non-shoppers consider when deciding whether or not to purchase via the Net.

Recommendation: Marketers need to address non-shoppers' concerns (identified through the factor analysis) by focusing their marketing initiatives and promotions on addressing specific factors highlighted for non-shoppers. By being sensitive to the concerns of non-shoppers (with regards to purchasing Online) and addressing these concerns through Internet offerings and marketing campaigns, the marketer could possibly convert more non-shoppers to Internet shoppers and more importantly, regular Online shoppers.

(e)   Major finding 5

It is not very likely that all products and services can be offered by Internet sellers on the Net.

It could be derived from **Main findings BC10 (p. 400) to BC15 (p. 405) in Chapter 7** that Internet shoppers have purchased from a number of product and service categories via the Net before and that both current shoppers and non-shoppers consider to purchase from various categories in the future. A great number of product and service categories were also identified from which smaller percentages of current shoppers and non-shoppers do not consider purchasing from via the Internet.

The **main conclusion** is that not all product and service categories will be sold equally successful via the Internet.

The **implication** is that marketers, who consider selling products or services via the Net, have to carefully consider whether or not their offering is suitable to be sold via the Net and whether or not South African Internet users will consider purchasing their offerings via the Internet.

Recommendation: Marketers need to, prior to investing in the Internet as primary or secondary sales channel, determine whether or not there is a need for their product or service to be sold via the Internet. Marketers can also determine, through marketing research, specific products or services that Internet users would like to purchase via the Internet. Such a proactive strategy could prove to be effective in creating a (profitable) Internet-presence.

(f)   Major finding 6

The Internet offers Internet users a powerful information source that can be used to search for product and service information prior to purchasing from non-Internet based sellers of products and services.

Both Internet shoppers and non-shoppers search for or consider searching for product or service information on the Net prior to purchasing from non-Internet based sellers. **Main finding BC22 (p. 413) in Chapter 7** showed that more than 86% of Internet shoppers search for or consider searching for Online information prior to purchasing Offline. In addition, almost 70% of non-shoppers either search for or consider searching for Online information on products or services **[Main finding BC23 (p. 413) in Chapter 7]** prior to purchasing from non-Internet based sellers.

It should, however, also be noted that respondents who participated in the study did not (or do not) consider searching equally from all product and service categories for information **[Main findings BC32, BC33 and BC34 (p. 422) in Chapter 7]**.

The **main conclusion** is that Internet users (Internet shoppers and non-shoppers) use the Internet to search for product and service information Online prior to purchasing from non-Internet based sellers.

The **implication** is that South African marketers need to understand the importance of providing Online product and service information (Internet users may, after searching Online, purchase at a "brick-and-mortar" seller).

Recommendation: Marketers need to seriously consider providing Online information on the products or services they sell, even if they don't sell via the Internet. Marketers should, however, first determine whether or not Internet

users search for (and more importantly consider searching for) information on the products or services they offer.

(g)   Major finding 7

It is important to gain insight on the demographic information of Internet users.

It could first be seen from **Main finding D31 (p. 450) in Chapter 7** that demographic variables such as gender, household language, gross monthly household income, highest qualification and population group influence whether or not respondents have purchased via the Internet before.

Second, gender and qualification significantly influence the product and service categories respondents have purchased from before **[Main finding D32 (p. 451) in Chapter 7].**

It could, finally, also be seen that three demographic variables (gender, gross monthly household income and highest qualification) influence the product and service categories respondents considered to purchase from via the Internet in the future **[Main finding D33 (p. 451) in Chapter 7].**

The **conclusion** is that it is important to determine demographic information to gain insights about Internet users.

The **implication** is that marketers need to, as with any marketing strategy, determine the demographic profile of their targeted Internet user market. Of equal importance, is that marketers not only need to determine the demographic profile of Internet users in general, but also determine (what and) if their target market will purchase the offering of the marketer via the Net.

users search for (and more importantly consider searching for) information on the products or services they offer.

(g)   Major finding 7

It is important to gain insight on the demographic information of Internet users.

It could first be seen from **Main finding D31 (p. 450) in Chapter 7** that demographic variables such as gender, household language, gross monthly household income, highest qualification and population group influence whether or not respondents have purchased via the Internet before.

Second, gender and qualification significantly influence the product and service categories respondents have purchased from before **[Main finding D32 (p. 451) in Chapter 7].**

It could, finally, also be seen that three demographic variables (gender, gross monthly household income and highest qualification) influence the product and service categories respondents considered to purchase from via the Internet in the future **[Main finding D33 (p. 451) in Chapter 7]**.

The **conclusion** is that it is important to determine demographic information to gain insights about Internet users.

The **implication** is that marketers need to, as with any marketing strategy, determine the demographic profile of their targeted Internet user market.   Of equal importance, is that marketers not only need to determine the demographic profile of Internet users in general, but also determine (what and) if their target market will purchase the offering of the marketer via the Net.

Recommendation: Marketers need to determine, for the products or services they sell, who will be the most likely group/s of people (for example males vs. females, different age groups or income groups) that would purchase their product and service offering via the Net. Once a group (or groups) has been identified, marketers need to target the group through advertising mediums that would be appealing to the group.

(h) **Major finding 8**

It is important to determine the applicability of the "traditional" decision-making process when considering the Internet as information source and buying channel.

From the discussion in chapter 4 it could be concluded that the Web-based consumer decision-making model does not present a representative model of consumer decision-making. The discussion in chapter 4 (section 4.4) also highlighted a number of differences between the traditional model and the proposed Web-based model.

A number of differences were noted between Internet shoppers and non-shoppers during the empirical research phase of the study, with specific emphasis on the factors these users consider when purchasing via the Net. Certain descriptors were ascribed to factors by considering the specific stages of the consumer decision-making process [**Main findings BC2 (p. 364) and BC3 (p. 369) in chapter 7**]. Table 8.1 provides a summary of the factors (together with descriptors) identified for Internet shoppers and non-shoppers.

TABLE 8.1: **FACTORS IDENTIFIED FOR INTERNET SHOPPERS AND NON-SHOPPERS**

Non-Internet shoppers	Internet shoppers
Factor B1 is predominantly in the **pre-purchase evaluation stage** and consists of the following aspects: brands and after-sales support offered by Internet sellers, concerns regarding the delivery of purchases and costs associated with Internet purchases	Factor C1 is predominantly in the **pre-purchase and post-purchase evaluation stages** and consists of the following aspects: the ability to find and evaluate information on brands, product ranges, costs associated with Internet purchases and after-sales service offered by Internet sellers
Factor B2 is predominantly in the **pre-purchase evaluation and purchase stages** and consists of the following aspects: the safety, ease and convenience of purchasing from home	Factor C2 is predominantly in the **search and purchase stages** and consists of the following aspects: security and privacy concerns when searching and purchasing on the Internet;
Factor B3 is predominantly in the **search and purchase stages** and consists of the following aspects: privacy and security concerns when searching and purchasing on the Internet	Factor C3 is predominantly in the **pre-purchase evaluation and purchase stages** and consists of the following aspects: ease and convenience of shopping from home

It can be seen from Table 8.1 that different stages of the decision-making process are embedded in the factors identified for Internet shoppers and non-shoppers.

Table 8.2 compares the traditional decision-making process (discussed in Chapter 3) with the Web-based model (discussed in Chapter 4) and provides a framework in the Internet environment, based on the findings from factor analyses performed during the empirical research phase of this study. The proposed framework will only consider the factors (and descriptors) identified for Internet shoppers and not non-shoppers, since the objective is to provide a framework for an Internet-based consumer decision-making process.

TABLE 8.2: A SUGGESTED FRAMEWORK FOR AN INTERNET-BASED CONSUMER DECISION-MAKING PROCESS

Existing theory		Findings of this study	
Stages of the "traditional" decision-making process	Stages of the Web-based decision-making process	Descriptors identified through factor analysis applicable to the "traditional" stages	Proposed labels for Internet-based decision-making process
Stage 1: Need recognition	Stage 1: Confidence	(Not specified: Note 1)	**Stage 1: Need recognition** (Note 2)
Stage 2: Search	Building phase	➤ Ability to find information on: • Brands • Product ranges • Costs associated with Internet purchases • After-sales support offered ➤ Security and privacy concerns when searching the Web	**Stage 2:** **Search and** **Pre-purchase evaluation**
Stage 3: Pre-purchase alternative evaluation	Stage 2: Skirmish phase	➤ Ability to evaluate information and Internet sellers on: • Brands • Product ranges • Costs associated with Internet purchases • After-sales support offered ➤ Ease and convenience of purchasing from home	

unsatisfied need (for example, while searching for a fax machine, the consumer may identify the need – following searching the Web – for a printer that can also be used as a fax machine);

- Purchase can, arguably, also form part of stage 2 of the proposed Internet-based decision-making process, since the Internet user can purchase Online following information search and pre-purchase evaluation on the Web;

- In the Web-context, post-purchase evaluation can also, at least to some extent, form part of the purchase stage of the process. This could occur in one of two possible scenarios, namely:

  o When downloading computer software or related products from the Web, the consumer could immediately evaluate the purchase and delivery process;
  o Post-purchase evaluation (regarding the seller) can also occur directly after purchase when the Web-seller communicates details regarding, for example, delivery periods, warranties, discounts for future purchases and status of purchases to the buyer;

- Divestment has not been covered in the statements applicable to the factor analyses. It is, however, possible to argue that divestment can occur in the Web-domain where the consumer can, for example un-install software purchased via the Net or offer products used by the consumer for sale on the Net.

The **conclusion** is that the traditional decision-making process could, possibly, not be used (in its current form) when considering the consumer decision-making process in an Internet environment.

The **implication** is that marketers have to understand that they need to proceed with caution when considering using the current consumer decision-making process models when drafting strategies aimed at Internet users.

Recommendation: The consumer decision-making model has to be re-evaluated to determine whether or not it is applicable in an Internet-context.

8.3   LINKING OF QUESTIONS AND MAIN FINDINGS TO THE RESEARCH OBJECTIVES

Following the results obtained from the empirical research phase of the study, it is possible to link the secondary objectives formulated for the study (listed in Chapter 1) and the questions portrayed in the questionnaire with the main findings (as listed in Chapter 7). It should be noted that the primary objective, namely to determine the buying behaviour of South African Internet users by using the Internet as an information source and buying channel, was reached by achieving the secondary objectives.

TABLE 8.3:   LINKING OF SECONDARY RESEARCH OBJECTIVES, RESEARCH QUESTIONS AND MAIN FINDINGS

(i) Determine the factors Internet shoppers and non-shoppers take into account when considering whether or not to purchase via the Internet	11, 12 & 18	BC2 and BC3
(ii) For non-Internet shoppers, determine whether or not they will purchase via the Internet in the future and which product and service categories they consider purchasing from	13 & 15	A8; BC10 and BC11
(iii) For non-Internet shoppers not considering to purchase via the Internet in the future, determine whether or not they would considering purchasing via the Internet if more, well-known South African businesses offer products and services via the Internet	14	A12
(iv) For current Internet shoppers, future Internet shoppers and non-Internet shoppers who do not consider to purchase via the Internet in the future, determine whether or not they use the Internet as information source to search for product and service information prior to purchase from non-Internet based sellers	11, 13, 14, 16 & 20	BC22 to BC34

(v) For current Internet shoppers, determine the relationship between the length of time being an Internet user and factors considered before purchasing Online	3 & 18	BC5 to BC9
(vi) For current Internet shoppers, determine the product and service categories they currently purchase from and the product and service categories they consider to purchase from in the future via the Internet	11 & 19	BC12 to BC15
(vii) Determine the relationship between the demographic variables of Internet users and the decision whether or not to purchase via the Internet, as well as the product and service categories they currently purchase from and consider to purchase from in the future	11 & 22 - 31	D1 to D33 and E1 to E8

8.4   LIMITATIONS

Specific limitations following the literature review and the empirical phase of the study should be noted.

8.4.1 Limitations based on the literature review

A number of limitations, based on the literature review of the study, can be listed, namely:

- Although abundant information could be found in the literature regarding the consumer decision-making process as well as literature regarding the Internet, there is limited literature available on the consumer decision-making process applicable to the Internet;

- The literature regarding the decision-making process applied to the Internet has not been scientifically tested and the validity thereof is questionable (as stated in Chapter 4 of the study);

- Although some research reports from business organisations were found (and referred to in the study) on the buying patterns of South African Internet users, no literature could be found that explicitly focuses on the South African Internet user;

- There is limited literature available on the consumer decision-making process of South African consumers;

- In support of the above, literature could not be found on the decision-making process of South African Internet users.

8.4.2 Limitations of the empirical research phase of the study

A number of limitations should be highlighted, following the empirical research phase of the study and the reporting of the results, namely:

- Due to the nature of this study, the non-response error could not be determined;

- The study was limited to only include South African Internet users who subscribed to either ISP "X" (a) or ISP "X" (b), thereby excluding South African Internet users who subscribe to other Internet Service Providers;

- The distinction between Internet shoppers and non-shoppers was based on whether or not respondents have purchased via the Internet before, regardless of whether they only purchased once via the Net or are regular shoppers and regardless of the monetary value of their Internet purchases;

- A distinction was not made between purchases made from South African Internet sellers versus International sellers, nor was a comparison made between the value of local versus International Internet spend;

- The consideration to purchase via the Internet in the future (for both current shoppers and non-shoppers) were not quantified in terms of monetary value respondents consider to spend via the Internet in the future, nor was a distinction made between the consideration to purchase from local versus international Internet sellers;

- In support of the above, a time frame for the consideration to purchase via the Internet in the future was not determined.

8.5 RECOMMENDATIONS FOR FUTURE RESEARCH

A number of recommendations for future research can be made following the main and major findings, conclusions, implications and limitations from the study. The recommendations are:

- A similar study can be conducted with Internet users who subscribe to other Information Service Providers to determine if there are similarities with the main findings from this study;

- A study can be dedicated to Internet banking services and the impact of this important Internet activity on buying behaviour of Internet users;

- It can also be considered to conduct a similar study, focusing on determining if there are differences between Internet users who purchase from South African sellers offering products and services on the Net versus Internet users who purchase from international sellers;

- A study can be dedicated to product and service information searched for Online by South African Internet users prior to purchasing Offline;

- It could also prove useful to determine what the impact would be (in terms of more users purchasing Online, current users purchasing more frequently and average spend on Internet purchases) on Internet users (both shoppers and non-shoppers) if more South African businesses offer products and services via the Net;

- A study can be conducted to determine what would persuade Internet users to purchase from South African Internet sellers; and

- A study can be commissioned to profile the demographics of Internet users (distinguishing between shoppers, non-shoppers and users who search for Online product and service information) by also considering the influence of technology (and more specifically the adoption of technology) on length of time being an Internet user and Internet activities engaged in.

- It could also prove valuable, from a branding perspective, to conduct a study dedicated to the influence of brands on whether or not shoppers purchase Online and also to determine consumer expectations when purchasing well-known brands (and lesser or unknown brands), with specific consideration to pricing and distribution issues.

- As indicated in Chapter 4 and Major finding 8, it is important (from a marketing theory perspective) to test the validity of the consumer decision-making process documented in literature when considering the Internet as an information source and buying channel. It should be determined (and empirically tested) if current marketing theory on the decision-making process is applicable to consumers using the Internet, especially when considering the different stages identified for the decision-making process.

8.6 SUMMARY

The primary objective of the study was to determine the buying behaviour of South African Internet users.

Based on the conclusions, implications and recommendations derived from the study, discussed in Chapter 8, it can be accepted that both the primary and secondary objectives formulated for the study were achieved.

It can therefore be concluded that the results from this study contribute to the body of knowledge on marketing theory, consumer decision-making theory (with specific emphasis on the influence of the Internet on decision-making theory) and knowledge of South African Internet users.

BIBLIOGRAPHY

Aaker, D. A. & Day, G. S. 1990. Marketing Research. Fourth Edition. New York, John Wiley & Sons.

Aldridge, A., Forcht, K., & Pierson, J. 1997. Get Linked or Get Lost: Marketing Strategy for the Internet. Internet Research: Electronic Networking Applications and Policy. 7 (3)

Arnould, E., Price, L., & Zinkhan, G. 2002. Consumers. First Edition. Boston, McGraw Hill.

Assael, H. 1995. Consumer Behavior and Marketing Action. Fifth Edition. Cincinnati, South-Western College Publishing.

Bagozzi, R. P. 1994. Principles of Marketing Research. Massachusetts, Blackwell Publishers.

Belch, G. E., & Belch, M. A. 2001. Advertising and Promotion: An Integrated Marketing Communications Perspective. Fifth Edition. New York, McGraw-Hill/Irwin.

Belch, G. E., & Belch, M. A. 1990. Introduction to Advertising and Promotion Management. Boston, Irwin.

Bettman, J. R. 1979. An Information Processing Theory of Consumer Choice. Massachusetts, Addison-Wesley Publishing Company.

Bickerton, P., Bickerton, M., & Pardesi, U. 2000. Cyber Marketing: How to Use the Internet to Market your Goods and Services. Oxford, Butterworth Heinemann.

Blackwell, R. D., Miniard, P. W., & Engel, J. F. 2001. Consumer Behavior. Ninth Edition. Fort Worth, Harcourt College Publishers.

BMI a TechKnowledge Group. 2000, September. South Africa Consumer e-Commerce Survey. Report Code: IE/004.

BMI b TechKnowledge Group. 2000, May. South African Internet Services Market. Report Code: IE/001.

BMI TechKnowledge Group. 1999. South African Outlook for Internet Access: Users and Devices. Report Code: ET/901

Bothma, C. H. 2000. E-Commerce for South African Managers. Irene, Interactive Reality.

Boyd (Jr.), H. W., Westfall, R., Stasch, S. F. 1989. Marketing Research: Text and Cases. Seventh Edition. Boston, Irwin.

Breitenbach, C. S., & Van Doren, D. C. 1998. Value-added Marketing in the Digital Domain: Enhancing the Utility of the Internet. Journal of Consumer Marketing. 15 (6)

Burns, A. C., & Bush, R. F. 1998. Marketing Research. Second Edition. Prentice Hall, New Jersey.

Churchill, G. A., & Peter, J. P. 1998. Marketing: Creating Value for Customers. Second Edition. New York, McGraw-Hill/Irwin.

Clark, B.H., Welcome to my Parlor ... The Lure of Marketing on the World Wide Web Is Great. Be Sure You Don't Get Stuck with the Wrong Approach, in

Richardson, P. 2001. Internet Marketing: Readings and Online Resources. New York, McGraw-Hill/Irwin.

Cooper, D. R., & Schindler, P. S. 2001. Business Research Methods. Seventh Edition. Boston, McGraw-Hill Irwin.

Cooper, D. R., & Schindler, P. S. 1998. Business Research Methods. Sixth Edition. Boston, Irwin/McGraw-Hill.

Crotts, J. C., & Erdmann, R. 2000. Does National Culture Influence Consumers' Evaluation of Travel Services? A Test of Hofstede's Model of Cross-Cultural Differences. Managing Service Quality. 10 (6).

Crouch, S., & Housden, M. 1996. Marketing Research for Managers. Second Edition. Oxford. Butterworth-Heinemann.

Diamtopoulos, A. & Schlegelmilch, B. B. 2000. Taking the Fear Out of Data Analysis: A Step-by-Step Approach. Australia, Business Press Thomson Learning.

Dillon, W. R., Madden, T. J., & Firtle, N. H. 1987. Marketing Research in a Marketing Environment. St. Louis, Times Mirror/Mosby College Publishing.

Dunne, P., & Lusch, R. 1999. Retailing. Third Edition. Fort Worth, The Dryden Press.

Du Plessis, P. J. 1986. Verbruikersgedrag by die Aankoop van 'n Motorvoertuig. Pretoria, University of South Africa. Unpublished DBL-thesis.

Emory, C. W., & Cooper, D. R. 1991. Business Research Methods. Fourth Edition. Boston. Irwin.

Engel, J. F., & Blackwell, R. D. 1982. <u>Consumer Behavior.</u> Fourth Edition. Chicago, The Dryden Press.

Engel, J. F., Blackwell, R. D., & Kollat, D. T. 1978. <u>Consumer Behavior</u>. Third Edition. Illinois, The Dryden Press.

Engel, J.F., Blackwell, R.D., & Miniard, P.W. 1995. <u>Consumer Behavior.</u> Eighth Edition. Chicago, The Dryden Press.

Engel, J. F., Blackwell, R. D., & Miniard, P. W. 1990. <u>Consumer Behavior</u>. Sixth Edition. London, The Dryden Press.

Engel, J. F., Blackwell, R. D., & Miniard, P. W. 1986. <u>Consumer Behavior</u>. Fifth Edition. Chicago, The Dryden Press.

Forrest, E. 1999. <u>Internet Marketing Research: Resources and Techniques.</u> Sydney, The McGraw-Hill Companies, Inc.

Foxall, G. 1990. <u>Consumer Psychology in Behavioural Perspective.</u> New York, Routledge.

Furnell, S. M., & Karweni, T. 1999. Security Implications of Electronic Commerce: A Survey of Consumers and Businesses. <u>Internet Research: Electronic Networking Applications and Policy</u>. 9(5)

Ghosh, S. 1998. Making Business Sense of the Internet. <u>Harvard Business Review</u>. March – April.

Gould, J. S. 1979. <u>Marketing Anthology.</u> New York, West Publishing Co.

Greenbury, R. in Maruca, R. F. 1999. Retailing: Confronting the Challenges that Face Brick-and-Mortar Stores. Harvard Business Review. July – August.

Greenstein, M., & Feinman, T. M. 2000. Electronic Commerce: Security, Risk Management and Control. Boston, Irwin McGraw-Hill.

Grönroos, C., Heinonen, F., Isoniemi, K., & Lindholm, M. 2000. The NetOffer Model: A Case Example from the Virtual Marketspace. Management Decision. 38 (4).

Gulati, R., & Garino, J. 2000. Get the Right Mix of Bricks & Clicks. Harvard Business Review. May – June.

Hair, J. F. (Jr), Anderson, R. E., Tatham, R. L., & Black, W. C. 1995. Multivariate Data Analysis with Readings. Fourth Edition. London, Prentice-Hall International, Inc.

Hanson, W. 2000. Principles of Internet Marketing. Cincinnati, South-Western College Publishing.

Hawkins, D. I., Best, R. D., & Coney, K. A. 2001. Consumer Behavior: Building Marketing Strategy. Eighth Edition. Boston, Irwin McGraw-Hill.

Hawkins, D. I., Best, R. D., & Coney, K. A. 1995. Consumer Behavior: Implications for Marketing Strategy. Sixth Edition. Boston, Irwin.

Hofstede, G. 2001. Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations Across Nations. London, Sage Publications.

Howard, J. A. 1994. Buyer Behavior in Marketing Strategy. Second Edition. New Jersey, Prentice Hall.

Howard, J. A., Consumer Behavior: Application of Theory, in Schiffman, L. G., & Kanuk, L. L. 1987. Consumer Behavior. Third Edition. New Jersey, Prentice Hall.

Howard, J. A., & Sheth, J. N., The Theory of Buyer Behavior, in Schiffman, L. G., & Kanuk, L. L. 1987. Consumer Behavior. Third Edition. New Jersey, Prentice Hall.

Jones, J. M., & Vijayasarathy, L. R. 1998. Internet Consumer Catalog Shopping: Findings from an Exploratory Study and Directions for Future Research. Internet Research: Electronic Networking Applications and Policy. 8 (4).

Keller, G., & Warrack, B. 2000. Statistics for Management and Economics. Pacific Grove. Duxbury Press.

Knight, G. A., & Calantone, R. J. 2000. A Flexible Model of Consumer Country-Of-Origin Perceptions: A Cross-Cultural Investigation. International Marketing Review. 17 (2).

Kolesar, M. B., & Galbraith, R. W. 2000. A Services-Marketing Perspective on E-Retailing: Implications for Retailers and Directions for Further Research. Internet Research: Electronic Networking Applications and Policy. 10 (5).

Kotler, P. 2000. Marketing Management: The Millennium Edition. London, Prentice-Hall International.

Kotler, P., Behavioral Models for Analyzing Buyers, in Gould, J. S. 1979. Marketing Anthology. New York, West Publishing Co.

Kotler, P., & Armstrong, G. 2001. Principles of Marketing. Ninth Edition. London, Prentice Hall International, Inc.

Laroche, M., Saad, G., Cleveland, M., & Browne, E. 2000. Gender Differences in Information Search Strategies for a Christmas Gift. Journal of Consumer Marketing. 17 (6).

LeBlanc, R. P., & Turley, L. W. 1994. Retail Influence on Evoked Set Formation and Final Choice of Shopping Goods. International Journal of Retail & Distribution Management. 22 (7).

Levy, M., & Weitz, B. A. 2001. Retailing Management. Fourth Edition. New York, Irwin-McGraw Hill.

Lilien, G. L., & Kotler, P. 1983. Marketing Decision Making: A Model-Building Approach. New York, Harper & Row Publishers.

Lohr, S. L. 1999. Sampling: Design and Analysis. Pacific Grove. Duxbury.

Lohse, G. L., & Spiller, P. 1998. Electronic Shopping. Communication of the ACM. 6(7), July.

Loudon, D. L., & Della Bitta, A. J. 1993. Consumer Behavior: Concepts and Applications. Fourth Edition. New York, McGraw-Hill.

Malhotra, N. K. 1996. Marketing Research: An Applied Orientation. Second Edition. New Jersey, Prentice Hall.

Martinez, E., & Polo, Y. 1999. Determining Factors in Family Purchasing Behaviour: An Empirical Investigation. Journal of Consumer Marketing. 16 (5).

Maruca, R. F. 1999. Retailing: Confronting the Challenges that Face Brick-and-Mortar Stores. Harvard Business Review. July – August.

McQuitty, S. & Peterson, R. T. 2000. Selling Home Entertainment on the Internet: An Overview of a Dynamic Marketplace. <u>Journal of Consumer Marketing</u>. 17 (3).

Media Africa.com. 2000. <u>The 4th South African Internet Services Survey, 2000.</u>

Mowen, J. C. 1993. <u>Consumer Behavior</u>. Third Edition. Toronto, Macmillan Publishing Company.

Mostert, P. G. 1996. <u>Consumer Perceptions of Displayed Product Attributes in Advertising</u>. Pretoria, University of Pretoria. Unpublished M Com-thesis.

Nicosia, F. M., Consumer Decision Processes, in Schiffman, L. G., & Kanuk, L. L. 1987. <u>Consumer Behavior</u>. Third Edition. New Jersey, Prentice Hall.

Nunes, P., Wilson, D., & Kambil, A. 2000. The All-in-One Market. <u>Harvard Business Review</u>. May – June.

O'Shaughnessy, J. 1992. <u>Explaining Buyer Behavior: Central Concepts and Philosophy of Science Issues</u>. Oxford, Oxford University Press.

Peter, J. P., & Olson, J. C. 2002. <u>Consumer Behavior and Marketing Strategy</u>. Sixth Edition. Boston, Irwin McGraw-Hill.

Peter, J. P., & Olson, J. C. 1994. <u>Understanding Consumer Behavior</u>. Third Edition. Massachusetts, Irwin.

Peter, J. P., & Olson, J. C. 1990. <u>Understanding Consumer Behavior.</u> Second Edition. Boston, Irwin.

Phau, I., & Poon, S. M. 2000. Factors Influencing the Types of Products and Services Purchased over the Internet. Internet Research: Electronic Networking Applications and Policy. 10(2).

Piron, F. 2000. Consumers' Perceptions of the Country-Of-Origin Effect on Purchasing Intentions of (in)conspicuous Products. Journal of Consumer Marketing. 17 (4).

Prabhaker, P. R. 2000. Who Owns the Online Consumer? Journal of Consumer Marketing. 17 (2).

Puth, G., Mostert, P. G., & Ewing, M. T. 1999. Consumer Perceptions of Mentioned Product and Brand Attributes in Magazine Advertising. Journal of Product and Brand Management. 8 (1).

Puth, G., Mostert, P. G., & Ewing, M. T. 1997. Consumer Perceptions of Mentioned Product Attributes in Magazine Advertising. Curtin Business School Working Paper Series. Perth, Curtin University, Western Australia.

Richardson, P. 2001. Internet Marketing: Readings and Online Resources. New York, McGraw-Hill/Irwin.

Riche, M. F., Psychographics for the 1990's, in Assael, H. 1995. Consumer Behavior and Marketing Action. Fifth Edition. Cincinnati, South-Western College Publishing.

Rowley, J. 2000a. Product Search in E-Shopping: A Review and Research Propositions. Journal of Consumer Marketing. 17 (1).

Rowley, J. 2000b. Product Searching with Shopping Bots. Internet Research: Electronic Networking Applications and Policy. 10 (3).

Runyon, K. E., & Stewart, D. W. 1987. Consumer Behavior and the Practice of Marketing. Third Edition. Toronto, Merrill Publishing Company.

SAARF Workshop. January 2002. Johannesburg.

Schiffman, L. G., & Kanuk, L. L. 1997. Consumer Behavior. Sixth Edition. New Jersey, Prentice Hall.

Schiffman, L. G., & Kanuk, L. L. 1987. Consumer Behavior. Third Edition. New Jersey, Prentice Hall.

Sheth, J. N., Mittal, B., & Newman, B. I. 1999. Customer Behavior Consumer Behavior and Beyond. London, The Dryden Press.

Siegel, A. F. 1997. Practical Business Statistics. Third Edition. Chicago. Irwin.

Siegel, A. F. 1994. Practical Business Statistics. Second Edition. Burr Ridge. Irwin.

Simintiras, A., Diamantopoulos, A., & Ferriday, J. 1997. Pre-Purchase Satisfaction and First-Time Buyer Behaviour: Some Preliminary Evidence. European Journal of Marketing. 13 (11/12).

Singh, J. Consumer Complaint Intentions and Behavior: Definition and Taxonomical Issues, in Engel, J. F., Blackwell, R. D., & Miniard, P. W. 1995. Consumer Behavior. Eighth Edition. Forth Worth, The Dryden Press.

Sinha, I. 2000. Cost Transparency: The Net's Real Threat to Prices and Brands. Harvard Business Review. March/April.

Solomon, M. R. 1996. Consumer Behavior. Third Edition. London, Prentice-Hall International.

Solomon, M. R. 1994. Consumer Behavior. Second Edition. Massachusetts, Allyn & Bacon.

Spar, D. & Bussgang, J. J. 1996. Ruling the Net. Harvard Business Review. May – June.

Stempel III, G. H. & Westley, B. H. 1981. Research Methods in Mass Communication. Englewood Cliffs, Prentice-Hall, Inc.

Strader, T. J., & Shaw, M. J. 1999. Consumer Cost Differences for Traditional and Internet Markets. Internet Research: Electronic Networking Applications and Policy. 9 (2).

Sudman, S. & Blair, E. 1998. Marketing Research: A Problem-Solving Approach. Boston. McGraw-Hill.

Sultan, F., & Henrichs, R. B. 2000. Consumer Preferences for Internet Services Over Time: Initial Explorations. Journal of Consumer Marketing. 17 (5)

Tan, S. J. 1999. Strategies for Reducing Consumer's Risk Aversion in Internet Shopping. Journal of Consumer Marketing. 16 (2).

Teo, T. S. H. 2001. Demographics and Motivation Variables associated with Internet Usage Activities. Internet Research: Electronic Networking Applications and Policy. 11 (2).

Thompson, M. E. 1997. Theory of Sample Surveys: Monographs on Statistics and Applied Probability. London, Chapman & Hall.

Solomon, M. R. 1996. Consumer Behavior. Third Edition. London, Prentice-Hall International.

Solomon, M. R. 1994. Consumer Behavior. Second Edition. Massachusetts, Allyn & Bacon.

Spar, D. & Bussgang, J. J. 1996. Ruling the Net. Harvard Business Review. May – June.

Stempel III, G. H. & Westley, B. H. 1981. Research Methods in Mass Communication. Englewood Cliffs, Prentice-Hall, Inc.

Strader, T. J., & Shaw, M. J. 1999. Consumer Cost Differences for Traditional and Internet Markets. Internet Research: Electronic Networking Applications and Policy. 9 (2).

Sudman, S. & Blair, E. 1998. Marketing Research: A Problem-Solving Approach. Boston. McGraw-Hill.

Sultan, F., & Henrichs, R. B. 2000. Consumer Preferences for Internet Services Over Time: Initial Explorations. Journal of Consumer Marketing. 17 (5)

Tan, S. J. 1999. Strategies for Reducing Consumer's Risk Aversion in Internet Shopping. Journal of Consumer Marketing. 16 (2).

Teo, T. S. H. 2001. Demographics and Motivation Variables associated with Internet Usage Activities. Internet Research: Electronic Networking Applications and Policy. 11 (2).

Thompson, M. E. 1997. Theory of Sample Surveys: Monographs on Statistics and Applied Probability. London, Chapman & Hall.

Tichenor, P. J. The Logic of Social and Behavioral Science, in Stempel III, G. H. & Westley, B. H. 1981. Research Methods in Mass Communication. Englewood Cliffs, Prentice-Hall, Inc.

Tischler, L. 1999. The Growing Interest in Spirituality in Business: A Long-term Socio-economic Explanation. Journal of Organizational Change Management. 12(4).

Trocchia, P. J., & Janda, S. 2000. A Phenomenological Investigation of Internet Usage Among Older Individuals. Journal of Consumer Marketing. 17 (7).

Walters, C. G. 1974. Consumer Behavior Theory and Practice. Revised Edition. Illinois, Richard D. Irwin, Inc.

Ward, P., & Sturrock, F. 1998. "She Knows what She Wants ...": Towards a Female Consumption Risk-Reducing Strategy Framework. Marketing Intelligence & Planning. 16 (5).

Watson, R. T., Berthon, P., Pitt, L. F., & Zinkhan, G. M. 2000. Electronic Commerce: The Strategic Perspective. New York, The Dryden Press.

Webchek. 1999. Project SA Web User 1999B Marketing and Selling to the South African Web User.

Windham, L., & Orton, K. 2000. The Soul of the New Consumer: The Attitudes, Behaviours, and Preferences of E-Customers. New York, Allworth Press.

List of appendices

Appendix 1: Primary functional relationships of the 1974 and 1977 versions of the Howard model

Appendix 2: The Howard model of buyer behaviour (1974 and 1977 versions)

Appendix 3: Formal statements of the 1978 and 1982 versions of the Engel, Kollat, Blackwell model

Appendix 4: The Engel, Kollat, Blackwell model (1978 and 1982 versions) and the Engel, Blackwell, Miniard model (1986 and 1990 versions)

Appendix 5: The Assael model of consumer behaviour

Appendix 6: Pre-test group results

Appendix 7: Automatic questionnaire branching

Appendix 8: E-mail letter inviting Internet users to participate in the research project

Appendix 9: Research questionnaire

Appendix 10: Comparing, across all time periods, product and service categories Internet shoppers have purchased from before with categories shoppers and non-shoppers consider purchasing from in future

Appendix 1

Primary functional relationships of the 1974 and 1977 versions of the Howard model

FORMAL STATEMENT OF THE 1974 VERSION OF THE HOWARD MODEL

1. $P_x = f(I_x)$

2. $I_x = f(F^c_x, A_x, C_x, \underline{C^u}, \underline{S^c}, \underline{S^{os}}, \underline{T^P}, \underline{F^S})$

3. $A_x = f(B^c_x, S_x, F^c_x, \underline{C^u}, \underline{S^c}, \underline{S^{os}}, \underline{P^T})$

4. $C_x = f(B^c_x, S_x, F^c_x, \underline{P^T})$

5. $B^c_x = f(F^c_x, \underline{C^u}, \underline{S^c}, \underline{S^{os}}, \underline{I^P}, \underline{P^T})$

6. $S_x = f(P_x)$

7. $F^c_x = f(F^E_x, A^n_x, P^B_x)$

8. $F^E_x = f(O^S_x, \underline{F^A_x}, \underline{M^H})$

9. $A^n_x O^S_x = f(M^a, \underline{I^P}, \underline{P^T}, \underline{T^P})$

10. $M^a = f(S^A_x, C_x, F^c_x, \underline{F^S})$

11. $S^A_x = f(F^E_x)$

12. $C^c = f(F^c_x, M^a, \underline{M^c})$

where symbols are defined as follows, with all terms referring to brand x (the underlined variables are defined as being exogenous or factors which exist independently and whose changes are not explained in the model).

P_x = purchase of brand (the overt act of buying)

I_x = intention to purchase the brand (a verbally stated expectation, made in cognizance of possible extenuating factors, that brand x will be purchased the next time this action is necessary)

F^c_x = facts coded regarding brand (recalled information that brand x exists, that it has certain specific characteristics, both favorable and unfavorable)

A_x = attitude toward the brand (a verbal evaluation of the potential of brand x to satisfy motives)

C_x = confidence in brand evaluation (confidence in ability to evaluate brand x)

C^u = culture

S^c = social class

S^{os} = social and organizational setting (comparative or normative reference groups)

T^P = time pressure (the inverse of the amount of time the buyer has available both for purchase and consumption as well as information seeking)

F^s = financial status (quantity of funds available or expected to be available to spend on goods and services during some specified time period)

B^c_x = brand comprehension (buyer understanding of brand features)

S_x = satisfaction with brand (satisfaction received from brand use)

P^T = personality traits (enduring dispositions or qualities accounting for relative consistency in emotional, temperamental, and social behavior, which explain differences among buyers)

I^P = importance of purchase (a measure of the relative intensity of motives governing buyer activities relating to the given product class relative to others)

F^E_x = facts exposed regarding the brand (information about the brand to which the buyer was exposed)

A^n_x = attention to brand information (buyer receptivity to information, regulating the quantity of information that reaches the nervous system)

P^B_x = perceptual bias of brand information (the tendency to distort information during its processing)

O^s_x = overt search of brand information (effort expended by the buyer to obtain brand information)

F^A_x = facts available regarding the brand (information available from the environment)

M^H = media habits toward vehicles containing brand information

M^a = motive arousal (the arousing or energizing aspect of motives – the intensity of motives satisfied by the product class of which x is a member)

S^A_x = stimulus ambiguity (perceived uncertainty and lack of meaningful information received from the environment)

C^c = choice criteria (an ordered set of motives relevant to the product class)

M^c = direct motives (motives directly related to choice criteria)

Source: Engel, Blackwell & Kollat (1978: 549-550)

FORMAL STATEMENT OF THE 1977 VERSION OF THE HOWARD MODEL

Although the equations from the 1977 Howard model is not clearly indicated, Engel & Blackwell (1982: 683-685) deducted the equations shown below from the model and state that, although not explicitly tested by Howard, these equations could be tested through various forms of modeling.

1. P_y = $f(I_y)$

2. I_y = $f(C_y, A_y, I^k)$

3. A_y = $f(I^k)$

4. C_y = $f(LTM, I^k)$

5. I^k = $f(LTM)$

6. S_y = $f(P_y)$

7. F_y^E = $f(O^s_y)$

8. A^n_y, O^s_y = $f(A^M)$

9. A^M = $f(M, I^A_y)$

10. PC $= f(P_y)$

11. M $= f(LTM)$

where symbols are defined as follows, with all terms referring to brand y:

P_Y = (purchase the point at which the consumer has paid for a product or made a financial commitment to do so)

I_y = intention (a cognitive state reflecting the consumer's plan to buy a specified number of units of a particular product or brand in a specified time period)

A_y = attitude (a cognitive state reflecting on a number of dimensions the extent to which the buyer expects the brand or product to yield satisfaction if purchased)

C_y = confidence (the degree of certainty that a consumer subjectively experiences with respect to satisfaction expected if a brand is purchased)

I^k = identification (a cognitive state of the consumer reflecting the extent to which the consumer has sufficient knowledge to exhibit well-defined criteria for recognizing, not evaluating, a particular brand)

S_y = satisfaction (the consumer's mental state of being adequately or inadequately rewarded for sacrifice in product purchase)

F^E_y = information exposed (external information with which the consumer's sense organs have come into contact)

A^n_y = attention (the active selection of and emphasis on a particular component of a complex experience)

O^n_y = overt search (movement of the body to bring sense organs into contact with some aspect of the environment)

A^m = arousal (the consumer's readiness to respond, manifesting an internal state of tension)

PC = product class(the subjective meaning of a class of similar brands)

M = motive (a long-term disposition of the buyer to act)

LTM   = long-term memory (permanent storage of events)

I^A_y = ambiguity of information (lack of clarity with which the content and form dimensions of environmental events are communicated)

Source: Engel & Blackwell (1982: 683-685)

Appendix 2

The Howard model of buyer behaviour

(1974 and 1977 versions)

APPENDIX 2: THE HOWARD MODEL OF BUYER BEHAVIOUR (1974 VERSION)
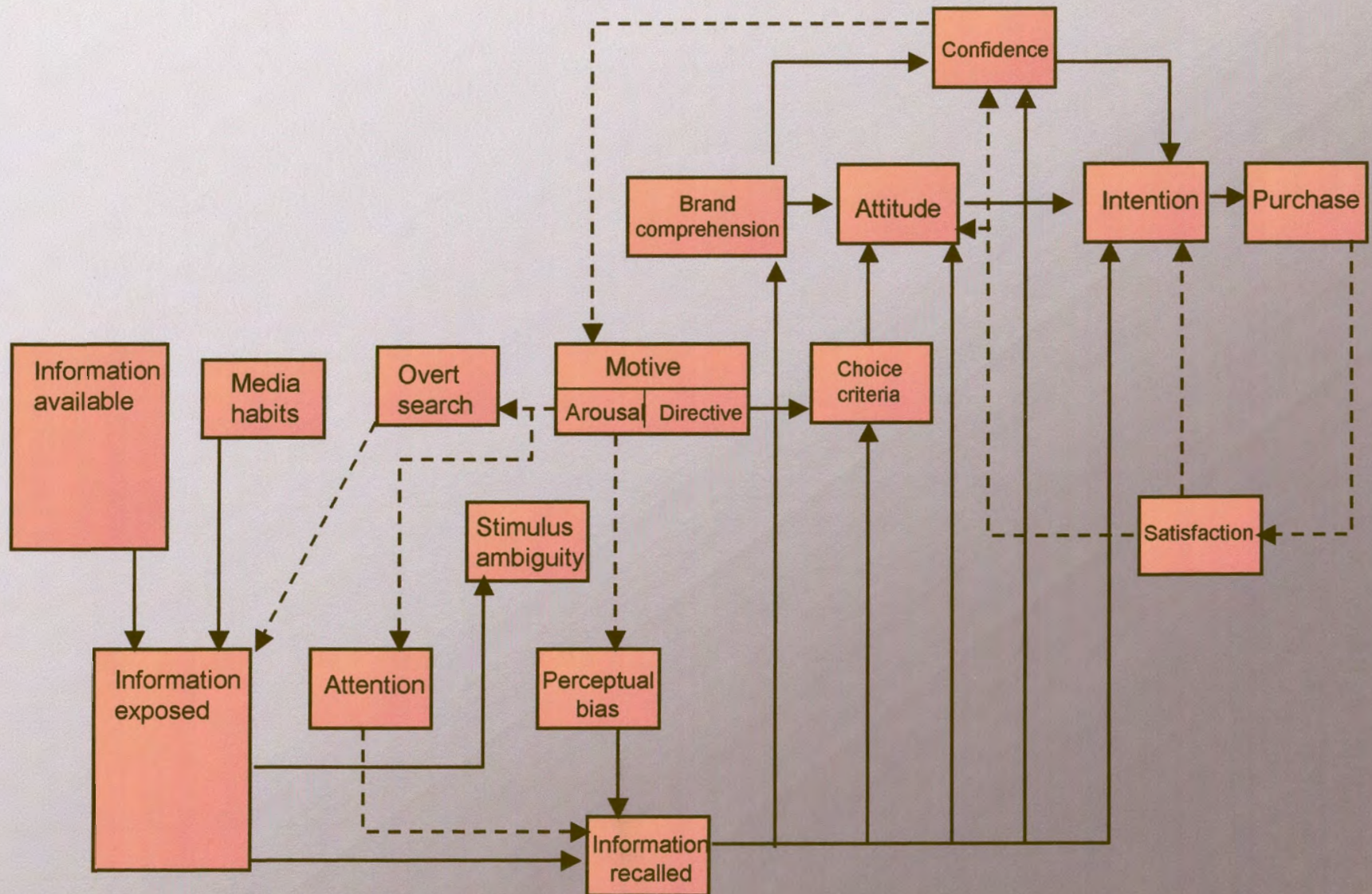
Source: Engel, Blackwell & Kollat (1978: 548)

APPENDIX 2: THE HOWARD MODEL OF BUYER BEHAVIOUR (1977 VERSION)
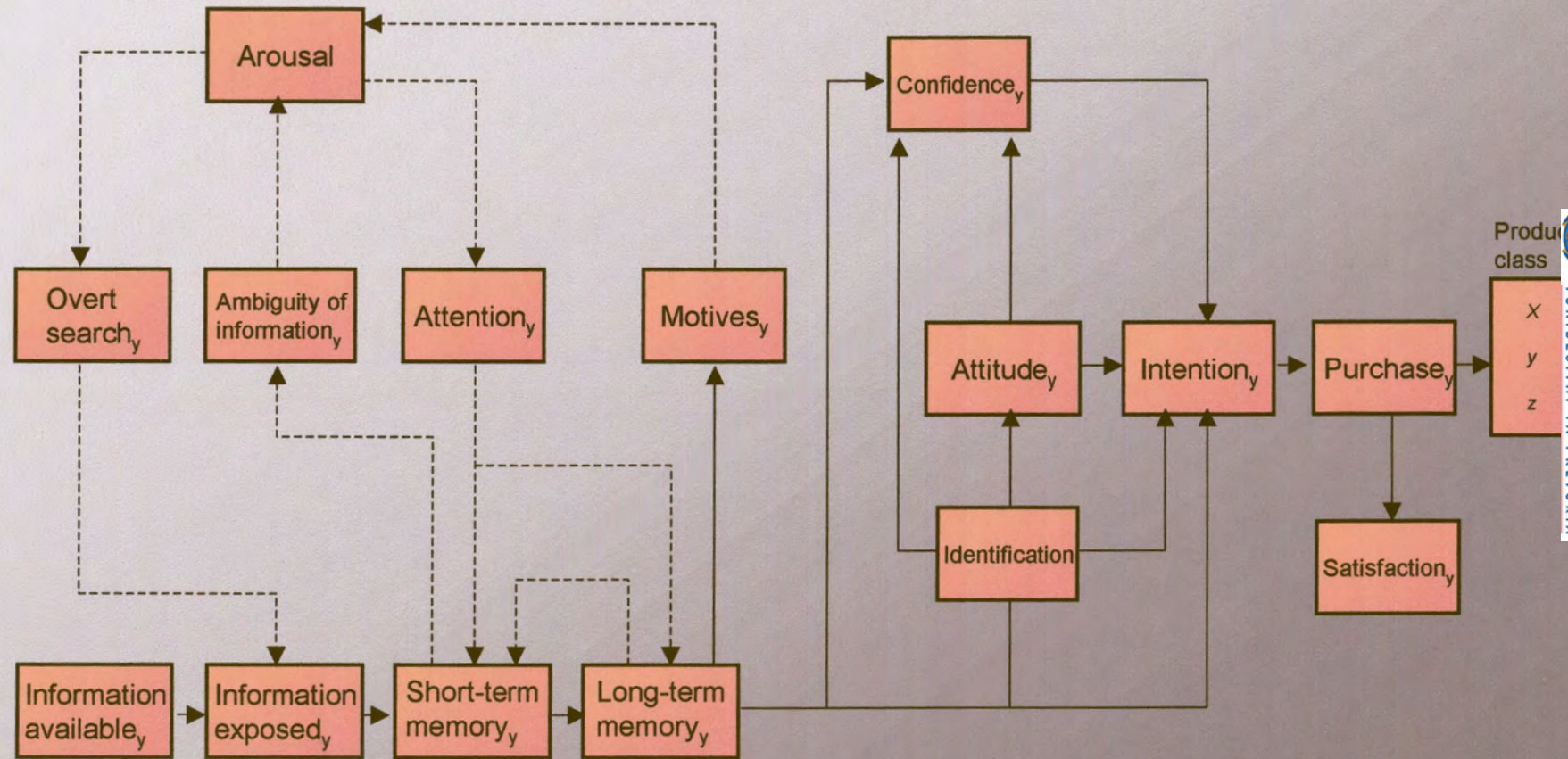
Source: Howard in Engel & Blackwell (1982: 684)

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Appendix 3

Formal statements of the 1978 and 1982 versions of the Engel, Kollat, Blackwell model

FORMAL STATEMENT OF THE ENGEL, KOLLAT, BLACKWELL MODEL (1978 VERSION)

1. C_x = $f(I_x, \underline{UC})$

2. I_x = $f(A_x, NC_x, \underline{AC})$

3. A_x = $f(B_x)$

4. NC_x = $f(\underline{L}, \underline{SI_x})$

5. B_x = $f(IE_x, EC)$

6. IE_x = $f(MR_x)$

7. MR_x = $f(At_x, \underline{AM})$

8. EC = $f(IE_x, Mo)$

9. Mo = $f(\underline{L})$

10. At_x = $f(E_x, \underline{AM}, PR)$

11. E_x = $f(S_x^{PC}, St_x, \underline{MU})$

12. S_x^{PC} = $f(B_x, A_x)$

13. PR = $f(Mo, IE_x)$

14. S_x = $f(C_x, D_x)$

15. D_x = $f(C_x, B_x)$

16. S_x^{PoC} = $f(D_x)$

where the sumbold are defined as follows, all terms referring to brand x (underlined variables are defined as being exogenous):

C_x = choice (selection and purchase of an alternative)

I_x = intention (the subjective probability that a specified alternative will be chosen)

UC   = unanticipated circumstances (and unexpected change in status of income levels, available alternatives, time pressure, social and organizational settings, and other environmental influences at the time of choice)

A_x = attitude toward the brand (a learned predisposition to respond consistently in a favorable or unfavorable manner with respect to a given alternative)

NC_x = normative compliance (the outcome of the existence of perceived social influence on the choice of alternative plus a motivation to comply with that influence)

AC   = anticipated circumstances (the expected status of income levels, available alternatives, time pressure, social and organizational setting, and other environmental influences at the time of choice)

B_x = belief regarding the brand (stored information, which links a given alternative to specified evaluation criteria)

L   = personality and lifestyle (the pattern of enduring traits, activities, interests, and the opinions that determine general behavior and thereby make an individual distinctive in comparison with others)

SI_x = social influence (the outcome of any interacting aggregation of people exerting an influence of an individual's selection and choice of a given alternative)

IE_x = information and experience (the general information content of long term memory with respect to product class and a given alternative)

EC   = evaluative criteria (desired outcomes from choice or use of an alternative expressed in the form of the attributes or specifications used to compare various alternatives)

MR_x = message reception (accurate comprehension of the meaning of incoming informational stimuli with respect to a given alternative and the storage of that input in long term memory)

At_x = attention (the active processing of exposed information stimuli with respect to a given alternative such that a conscious impression is made)

AM = active memory (a process whereby incoming information and that stored in long term memory are brought together and the new input is categorized and interpreted)

Mo = motive (an enduring predisposition to strive to attain specified goals, containing both an arousing and a directing dimension)

E_x = exposure (physical proximity to stimulus inputs with respect to a given alternative such that the individual has direct opportunity for one or more senses to be activated)

S^{PC}_x = pre-choice search (motivated exposure to inform with regards to a given alternative)

PR = problem recognition (a perceived difference between the ideal state of affairs and the actual situation sufficient to arouse and activate the decision process)

ST_x = stimuli (information available with respect to a given alternative)

MU = media usage (the individual's habits and preferences with respect to media usage)

S_x = satisfaction (an evaluation that the chosen alternative is consistent with prior beliefs with respect to that alternative)

D_x = dissonance (post-choice doubt motivated by awareness that one alternative was chosen and the existence of beliefs that un-chosen alternatives also have desirable attributes)

$S^{P oC}_x$ = post-choice search (a search for information following purchase to confirm the wisdom of the choice)

Source: Engel, Blackwell & Kollat (1978: 557-558)

FORMAL STATEMENT OF THE ENGEL, KOLLAT, BLACKWELL MODEL (1982 VERSION)

1. C_x = $f(I_x, \underline{UC})$

2. I_x = $f(A_x, NC_x)$

3. A_x = $f(B_x)$

4. NC_x = $f(\underline{L}, \underline{SI_x})$

5. B_x = $f(LTM, EC, S_x)$

6. EC = $f(LTM, Mo)$

7. Mo = $f(\underline{L})$

8. E_x = $f(S^{P}_{x}{}^{C}, St_x, \underline{MU})$

9. At_x = $f(E_x, LTM, PR)$

10. C^{o}_x = $f(At_x, LTM)$

11. YA_x = $f(C^{o}_x, LTM)$

12. R_x = $f(YA_x)$

13. S^{PC}_{x} = $f(PR, B_x)$

14. PR = $f(LTM, M_o)$

15. D_x, S_x = $f(C_x)$

16. S^{PoC}_{x} = $f(D_x)$

where the terms are defined as follows, all terms referring to brand *x* (underlined variables are defined as being exogenous):

C_x = choice (selection and purchase of an alternative)

I_x = intention (the subjective probability that a specified alternative will be chosen)

UC   = unanticipated circumstances (and unexpected change in status of income levels, available alternatives, time pressure, social and organizational settings, and other environmental influences at the time of choice)

A_x = attitude toward the act of purchasing the brand (a learned predisposition to respond consistently in a favorable or unfavorable manner with respect to purchase and use of a given alternative)

NC_x = normative compliance (the outcome of the existence of perceived social influence on the choice of alternative plus a motivation to comply with that influence)

B_x = belief regarding the brand (stored information, which links a given alternative to specified evaluation criteria)

L   = personality and life style (the pattern of enduring traits, activities, interests, and the opinions that determine general behavior and thereby make an individual distinctive in comparison with others)

SI_x = social influence (the outcome of any interacting aggregation of people exerting an influence of an individual's selection and choice of a given alternative)

EC   = evaluative criteria (desired outcomes from choice or use of an alternative expressed in the form of the attributes or specifications used to compare various alternatives)

LTM   = long term memory (information and experience stored in memory with respect to the product class and a given alternative)

R_x = retention (storage of a stimulus input in long term memory)

YA_x = yielding/acceptance (acceptance of a stimulus into long term memory, often accompanied by a change in beliefs, attitudes, or intentions)

C^o_x = comprehension (the outcome of information processing whereby the stimulus as admitted into memory conveys the same information as the stimulus itself viewed externally and objectively)

At_x = attention (the active processing of exposed information stimuli with respect to a given alternative such that a conscious impression is made)

Mo = motive (an enduring predisposition to strive to attain specified goals, containing both an arousing and a directing dimension)

E_x = exposure (physical proximity to stimulus inputs with respect to a given alternative such that the individual has direct opportunity for one or more senses to be activated)

$S^{P.C}_x$ = pre-choice search (motivated exposure to inform with regard to a given alternative)

PR = problem recognition (a perceived difference between the ideal state of affairs and the actual situation sufficient to arouse and activate the decision process)

$\underline{ST_x}$ = stimuli (information available with respect to a given alternative)

$\underline{MU}$ = media usage (the individual's habits and preferences with respect to media usage)

S_x = satisfaction (an evaluation that the chosen alternative is consistent with prior beliefs with respect to that alternative)

D_x = dissonance (post-choice doubt motivated by awareness that one alternative was chosen and the existence of beliefs that unchosen alternatives also have desirable attributes)

S_x^{PoC} = post-choice search (a search for information following purchase to confirm the wisdom of the choice)

Source: Engel, Blackwell & Kollat (1982: 686-688)

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Appendix 4

The Engel, Kollat, Blackwell model
(1978 and 1982 versions)
and the
Engel, Blackwell, Miniard model
(1986 and 1990 versions)

APPENDIX 4: THE ENGEL, KOLLAT, BLACKWELL MODEL (1978 Version)

Information Input

Information Processing

Decision process stages

Product brand evaluations

General motivating influences

Internalized environmental influences

Stimuli
Mass
Personal
General
Marketer-dominated

Exposure

Attention

Reception

ACTIVE MEMORY

Information and experience

Problem recognition

Search

Alternative evaluation

Choice

Outcomes

Satisfaction

Dissonance

Search

Evaluative criteria

Beliefs

Attitude

Intention

Motives

Personality Life-style

Normative compliance

Cultural norms and values

Referen[ce] group, fa[mily]

Anticipate[d] circumst[ances]

Unanticipated circumstances

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Source: Engel et al. (1978: 556)

APPENDIX 4: THE ENGEL, KOLLAT, BLACKWELL MODEL (1982 Version)

Input

Information Processing

Decision Process

Decision Process Variables

External Influences

Problem recognition

Motives

Exposure

Search

Attention

Memory

Comprehension

Beliefs

Evaluative criteria

Stimuli
Marketer dominated

Other

Cultural n and value

Attitude

Alternative evaluation

Life-style

Yielding/ Acceptance

Reference group/far

Intention

Retention

Normative compliance and informational influence

Choice

Unanticipated circumstances

External Search

Outcomes

Dissonance

Satisfaction

Source: Engel & Blackwell (1982: 687)

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

APPENDIX 4: THE ENGEL, BLACKWELL, MINIARD MODEL - 1986 VERSION

Input

Information Processing

Decision Process

Decision Process Variables

Problem Recognition

Exposure

Internal Search

Search

Individual Characteristics
Motives
Values
Life-style
Personality

Stimuli
Marketer
Dominated
Other

Attention

Memory

Comprehension/Perception

Alternative Evaluation

Beliefs

Attitude

Intention

Social Influen...
Culture
Reference C...
Family

Yielding/Acceptance

Situational Influences

Retention

Purchase

External Search

Outcomes

Dissatisfaction

Satisfaction

Source: Engel et al. (1986: 35)

APPENDIX 4: ENGEL, BLACKWELL, MINIARD MODEL - 1990 VERSION
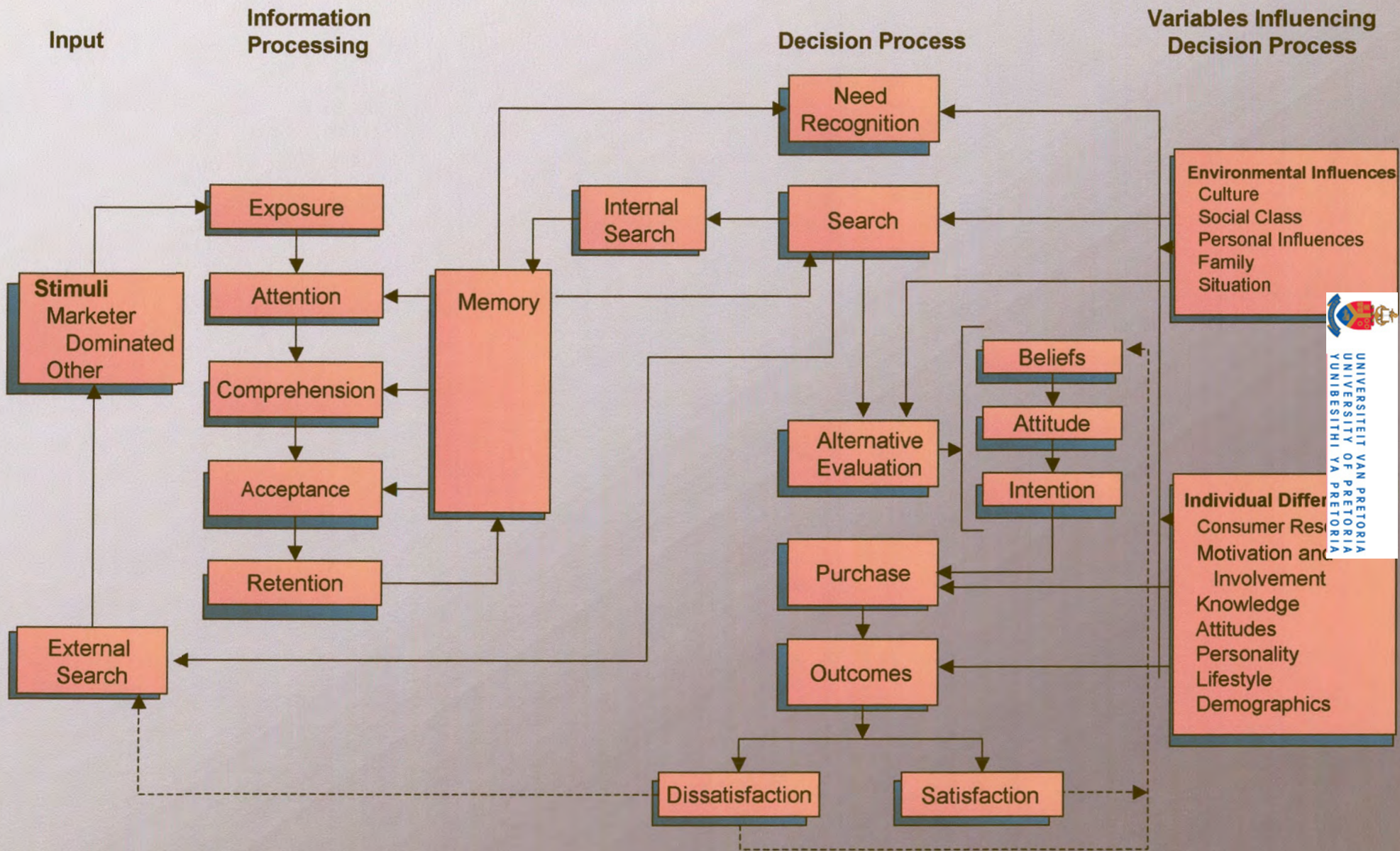
Source: Engel et al. (1990: 482)

Appendix 5

The Assael model of consumer behaviour

The Assael model of consumer behaviour

The approach followed by Assael (1995: 17-25) in discussing a model of consumer behaviour is one where the marketer should base strategies on factors influencing consumer behaviour. The approach by Assael (1995: 17), therefore, is to emphasise the interaction between the marketer and the consumer. The Assael model is illustrated in figure A5.1.

FIGURE A5.1: ASSAEL'S MODEL OF CONSUMER BEHAVIOUR

Source: Assael (1995: 18)
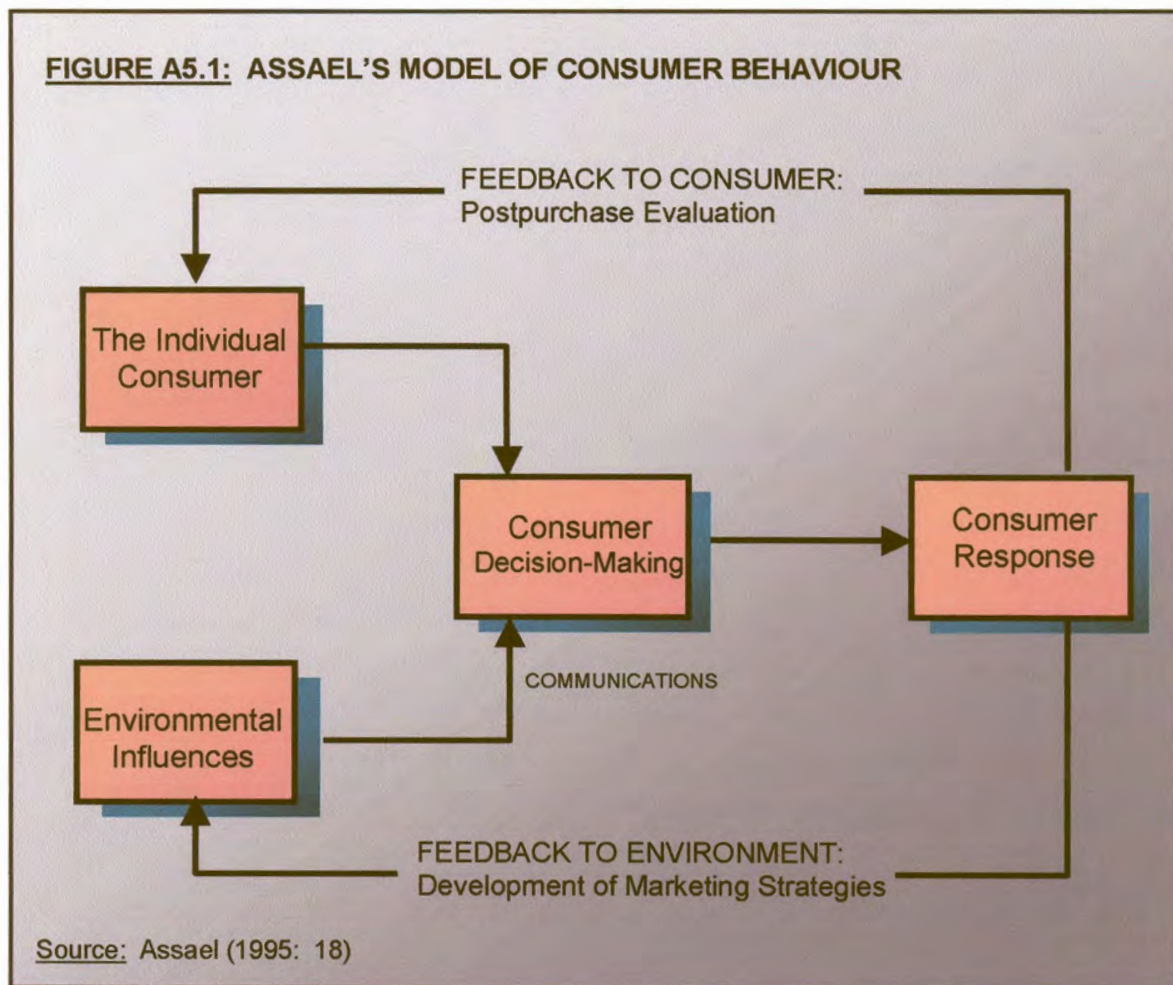
The central concept of the model proposed by Assael (1995: 17) is consumer decision-making and is defined as ".., the process of perceiving and evaluating brand information, considering how brand alternatives meet the consumer's needs, and deciding on a brand..."

According to the Assael model, consumer choice is determined by two broad influences, namely the individual consumer and the environment. **The individual consumer** is influenced by needs, perceptions of brand attributes and attitude towards alternatives. In addition to the above, the consumer is also influenced by personality characteristics, lifestyle and demographics.

The environment, the second influencing factor, and more specific the consumer's purchasing environment, is represented by culture, social class and face-to-face groups (including friends, family and reference groups). Culture refers to the norms of society and influences of ethnic and regional subcultures, whereas social class implies the broad socio-economic group to which a consumer belongs.

It should be noted that Assael (1995: 17) includes marketing organisations as part of the consumer's environment, since product offerings that can satisfy consumer needs are provided by these organisations.

Communication from the environment, primarily from marketing organisations or face-to-face groups, to the consumer is necessary to influence consumer choice. Communication from marketing organisations includes stimuli conveyed by sales people, advertising and product offerings that are perceived and evaluated by consumers in the decision-making process.

Information regarding consumer needs, perceptions of brand attributes and attitudes toward alternative brands, are provided to marketing organisations through marketing research. The marketing organisation uses the information obtained from the market to develop and communicate marketing strategies to the consumer.

Post-purchase evaluation, represented as feedback to the individual consumer, occurs once a decision has been made. During this evaluation, the consumer

may alter future patterns of obtaining information - the method of evaluating brands and selection of a brand due to experience gained through the purchase process. The consumption experience of a product will also directly influence whether or not the same brand will be purchased by the consumer.

Assael (1995: 18) continues by stating that feedback is provided to the environment, where the consumer will share purchase and consumption experiences with friends and family. Marketers also seek information from consumers in the form of market share and sales data. The information obtained by the marketer does not, however, provide information as to why consumers purchased a product or brand, nor does it provide insights as to what the strengths and weaknesses of the marketer's brand are in comparison to competitive alternatives.

It is therefore important to conduct market research to determine consumer reactions to the marketer's brand and ascertain future purchase intent. The information obtained from consumers through research will assist marketers to redefine marketing strategies to better meet consumer needs.

The components of the consumer behaviour model by Assael (1995: 17-25), as briefly described above, will be discussed in greater detail below. The model will be briefly discussed, as indicated by Assael (1995: 17-25), since chapter 3 will focus on the central concept of decision-making, where the theory on the decision-making component within the broader model of consumer behaviour will be discussed.

By focusing on the individual components of the model in detail, consumer behaviour applications to marketing strategy will be highlighted. The components that will be discussed below are consumer decision-making, the individual consumer, environmental influences and communication.
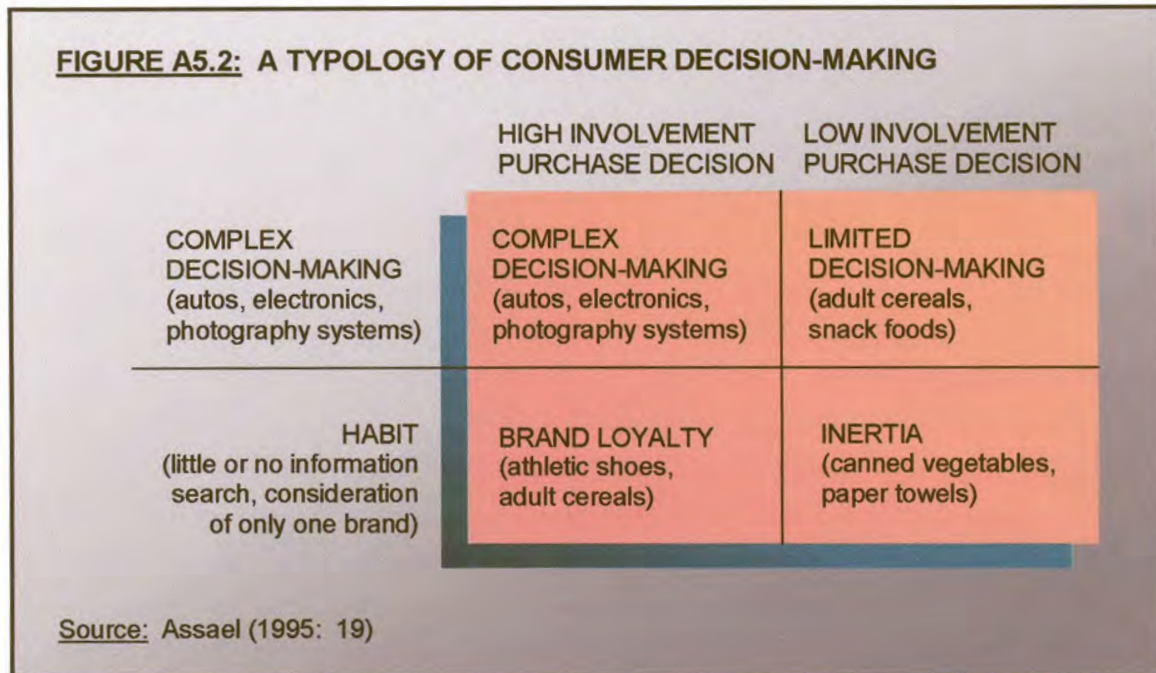
A) Consumer decision-making

It is important to understand the process consumers follow to derive at purchasing decisions to develop strategic applications. It can therefore be argued that decision-making is not a single (i.e. always the same) process. For example, the process to purchase toothpaste will be different to that of purchasing a motor vehicle.

Consumer decision-making can, according to Assael (1995: 19), be viewed from two dimensions, the first being the extent of decision-making and the second the degree of involvement in the purchase decision. The first dimension, the extent of decision-making, represents a continuum from decision to habit. Consumers can therefore base decisions on a cognitive process of search for information and evaluation of alternatives, to little or no decision-making where the consumer is satisfied with a particular brand and purchases the brand consistently.

The second dimension, namely degree of involvement, depicts a continuum from high to low involvement purchases. High involvement purchases are perceived to be important to the consumer and are closely related to the consumer's self-image and ego. High involvement purchases involve risk to the consumer, including financial (expensive products), social (importance to the peer group) and psychological (incorrect decisions may cause concern and anxiety) risks, and the consumer may therefore be obliged to spend time and energy to consider alternatives. Since financial, social and psychological risks are not that high with low involvement purchases, it will not be worth the effort to search for and consider alternatives at this level of purchases. Low involvement purchase decisions, therefore, usually entail a limited process of decision-making.

Figure A5.2 depicts a typology of consumer decision-making based on the extent thereof and the degree of involvement in the purchase.

FIGURE A5.2: A TYPOLOGY OF CONSUMER DECISION-MAKING

	HIGH INVOLVEMENT PURCHASE DECISION	LOW INVOLVEMENT PURCHASE DECISION
COMPLEX DECISION-MAKING (autos, electronics, photography systems)	**COMPLEX DECISION-MAKING** (autos, electronics, photography systems)	**LIMITED DECISION-MAKING** (adult cereals, snack foods)
HABIT (little or no information search, consideration of only one brand)	**BRAND LOYALTY** (athletic shoes, adult cereals)	**INERTIA** (canned vegetables, paper towels)

Source: Assael (1995: 19)

Decision-making versus habit and low involvement versus high involvement produce four types of consumer purchase processes namely, complex decision-making, brand loyalty, limited decision-making and inertia.

Complex decision-making, the first process – shown in the upper-left box of figure A5.2, implies that involvement is high and decision-making transpires. During this process consumers will actively seek information and consider alternative brands by applying specific criteria. For example when purchasing motor vehicles, reliability, safety and fuel consumption would be important.

Complex decision- making will not occur every time a brand is purchased, since when choice becomes repetitive, consumers learn from past experience and purchase the brand that is most satisfactory, with little or no formal decision-making. This will lead to the second process, **brand loyalty** (shown as the lower left-hand box in figure A5.2), as a result of repeated satisfaction and the development of a strong commitment to a specific brand.

With brand loyalty, products purchased are considered important to the consumer. Consumers establish a brand loyalty based on satisfaction with past purchase experiences, resulting in limited or non-existent information search and brand evaluation due to the purchase of the same brand. An example of brand loyalty to a consumer may be Kellogg's Hi-Fibre Bran, considered important to a consumer because of the high nutritional value.

The third process, **limited decision-making** (upper right-hand corner of figure A5.2), is characterised by little or no involvement from the consumer. Although not involved, the consumer makes a decision to purchase a product because of little past experience with the product. An example to illustrate limited decision-making, is where the consumer will purchase a new range of microwave snacks and, not involved or aware of the product category, will examine the package in the store and purchase the product on a trial basis for comparison with regular snacks. As can be derived from the example, the consumer, in comparison to purchases that involve complex decision-making, uses little information search and evaluation of alternative brands.

It should be noted that consumers, in low involvement decisions, are more prone to switch brands due to boredom or in search of variety, occurring when risks are perceived to be low and the consumer is less committed to a specific brand. With variety seeking, the brand decision is not pre-planned due to the lack of importance and the decision to purchase a brand will probably be made within the store. Examples of variety seeking purchases are a new brand of cookies or breakfast cereal, since the consumer has little to lose.

The final choice process, **inertia**, is plotted in figure A5.2 (lower right-hand box) as low involvement with the product and no decision-making. Inertia implies that the consumer purchases the same brand, not due to brand loyalty but because the time and trouble required to search for alternatives are not worth the effort. Examples of inertia are purchases of paper towels and canned vegetables.

In conclusion to the decision-making process component of the model, it should be noted that the four types of consumer purchase processes are consumer-specific and not product-specific. The degree of involvement and decision-making depends more on consumer attitudes towards products than on the actual product attributes. It should therefore be noted that one consumer may purchase a specific cereal brand for nutritional value whereas another consumer may regard all cereals as being similar, therefore switching brands to seek variety.

B) The individual consumer

Central to understanding consumer behaviour, is the manner in which the consumer influences the decision process. Influences on consumer choice, as depicted in the Assael model, are stimuli, the consumer, and consumer response. Figure A5.3 depicts the consumer's role in the decision-making process.

a) Stimuli

Stimuli, the first influence on consumer choice, represents information perceived by consumers. As depicted in figure A5.3, information processing occurs when stimuli, represented by information from advertisements, friends or personal product experiences, are organised and interpreted by consumers.

FIGURE A5.3: THE INDIVIDUAL

Source: Assael (1995: 21)
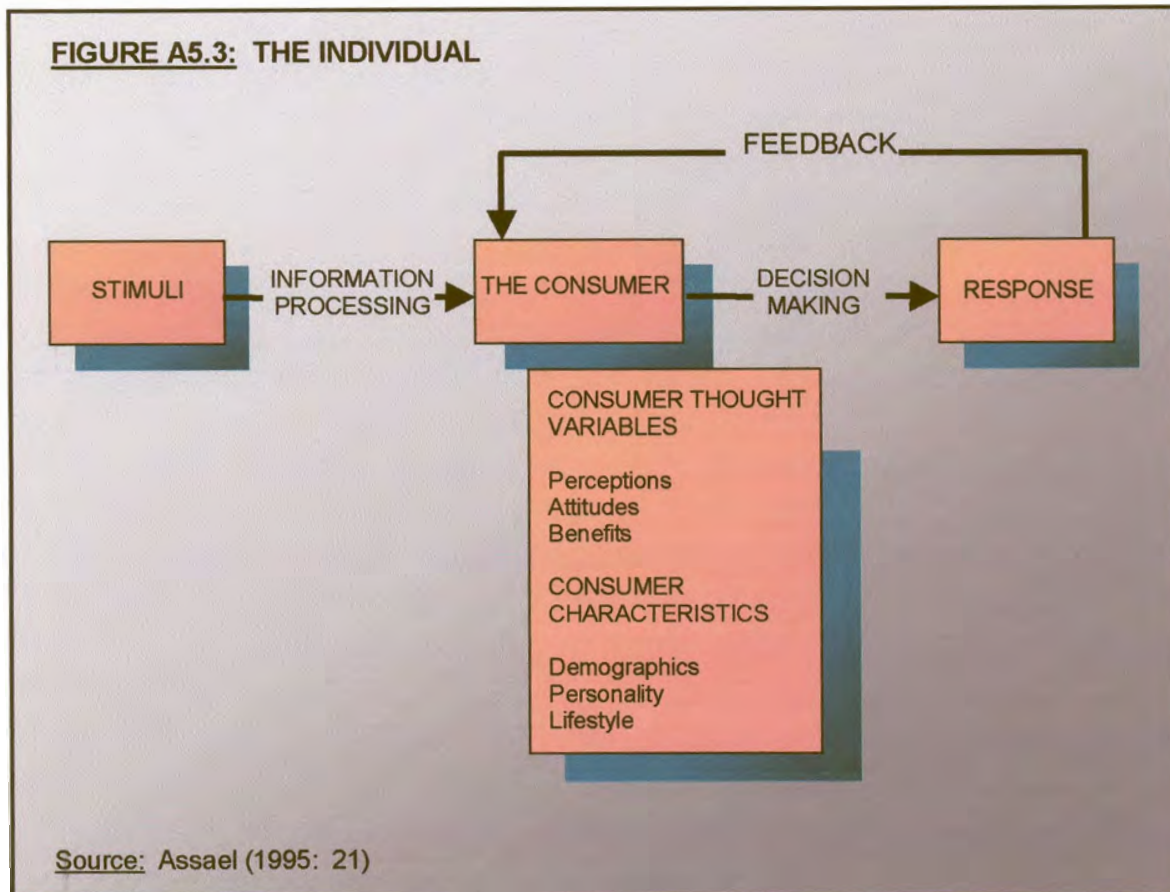
The consumer forms the second, central influence on consumer choice. The consumer is presented in the model by **thought variables**, the cognitive factors that influence decision-making and characteristics. In the decision process, three types of thought variables are considered essential, namely perception of a brand's attributes, attitude towards the brand and benefits desired by consumers. Stimuli characteristics impacting on consumer perception, as discussed by Assael (1995: 188-191), include sensory elements (comprising colour, taste, smell, sound and feel) and structural elements, applied primarily to print advertisements (for example the size, position, contrast and novelty of an advertisement). Consumer characteristics influencing perception of stimuli are the ability to discriminate between stimuli and the inclination to generalise stimuli. The second thought variable, attitude towards the brand, is defined by Assael (1995: 266-270) as the tendency by a consumer to evaluate a specific brand on

an overall basis from excellent to poor. Brand attitudes are important to marketers since they influence consumer behaviour, enable marketers to define attitudinal segments for the purpose of focused strategies for these segments and assist them with strategy evaluation.

Attitudes comprise three components, namely beliefs, the cognitive component of attitudes (implying the characteristics that consumers ascribe to a brand), brand evaluations, the affective or feeling component (representing the consumer's overall evaluation of the brand), and intention to purchase, the conative or action component (the tendency of the consumer to act towards an object, generally measured in terms of an intention to purchase). Benefits, the final thought variable, identify the key product attributes and are used by marketers to influence consumers by means of benefit segmentation strategies.

The second component representing the consumer as portrayed in figure A5.3, **consumer characteristics**, is used to describe consumers and comprises demographics, lifestyle and personality characteristics. Information regarding these characteristics may assist the marketer to influence consumer behaviour, should a correlation be found between these characteristics and behaviour.

Demographics, the first consumer characteristic according to Assael (1995: 331), are objective descriptions of individual consumers and households and include characteristics such as age, income, employment status and family size. Demographics will, therefore, influence whether consumers can purchase (relating to income) and whether they want to purchase (based on characteristics such as age and household composition).

Personality is defined by Assael (1995: 375) as consistent and enduring patterns of behaviour developed since childhood, whereas lifestyle refers to the mode of living, identified by activities consumers engage in, their interests and their opinions of themselves and others around them. Examples of activities include work, hobbies, vacation, sports and shopping, while interests include fashion,
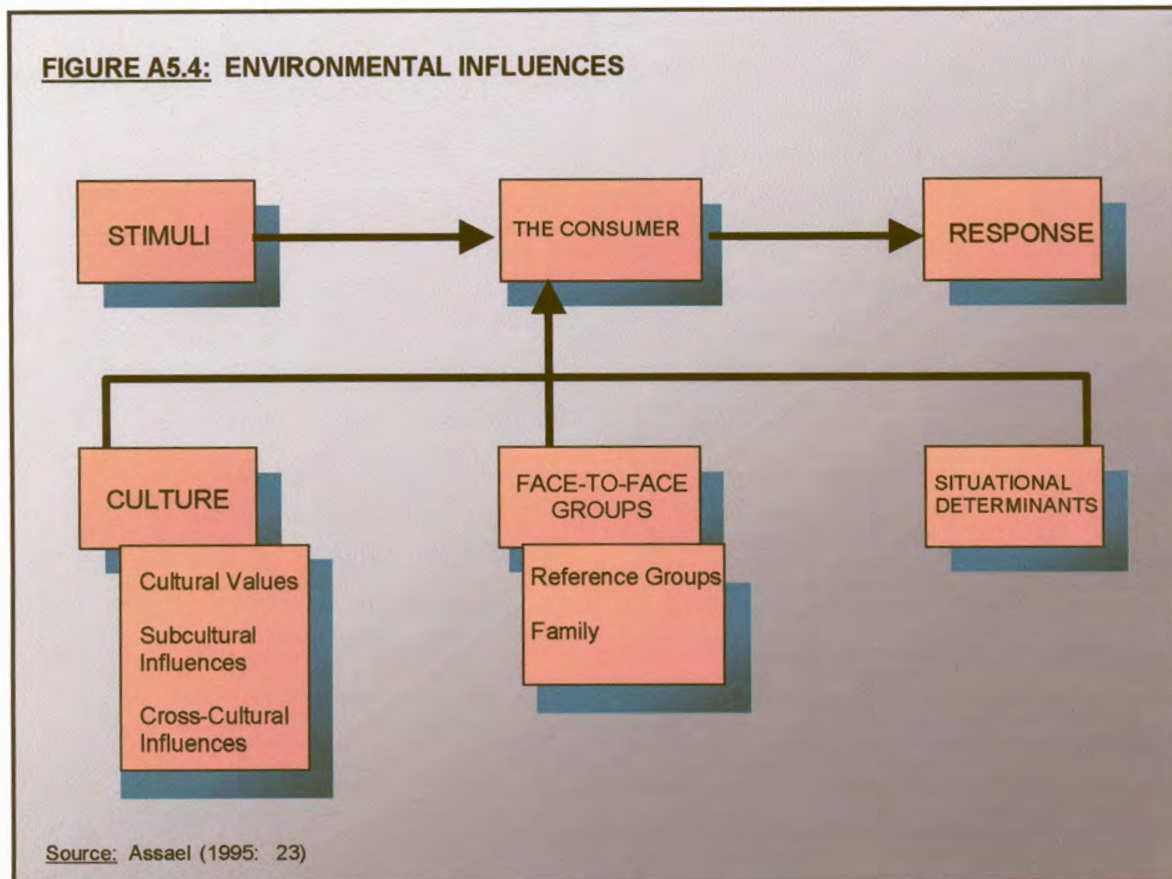
food, media and recreation. Finally, opinions include politics, economics, education and culture. Personality and lifestyle characteristics provide a richer set of descriptors of consumer characteristics in understanding consumer behaviour than demographics would provide alone.

c)   Consumer response

The final influence on consumer choice, consumer response, represents the end result of the consumer decision process. Consumer response most frequently refers to brand choice. Other possibilities as far as consumer response is concerned, include the chosen product class, choice of a store, choice of a specific communication medium and choice of a cause. Examples of the possible responses above are the purchase of fruit juice (product class), purchasing a fridge from an appliance store (store choice), purchasing a magazine or listening to a sales person to obtain information (communication medium) and contributing to an orphanage (chosen cause).

C)   Environmental influences

Consumer influences were discussed in the previous section and considered the consumer characteristics and state of mind. Consumers are, however, also influenced by the environment in terms of culture, face-to-face groups and situational determinants. Figure A5.4 indicates the environmental influences in the Assael model.

FIGURE A5.4: ENVIRONMENTAL INFLUENCES

STIMULI → THE CONSUMER → RESPONSE

CULTURE

Cultural Values

Subcultural Influences

Cross-Cultural Influences

FACE-TO-FACE GROUPS

Reference Groups

Family

SITUATIONAL DETERMINANTS

Source: Assael (1995: 23)

a) Culture

Widely shared norms and patterns of behaviour of a large group of people are referred to as culture, comprising cultural values, subcultural influences and cross-cultural influences. Assael (1995: 453) continues by stating that "culture is a set of socially acquired values that society accepts as a whole and transmits to its members through language and symbols". The societal values are likely to influence the purchase and consumption patterns of its members.

Cultural values, the first contributor to culture, are beliefs that a general state of existence is worth striving for, both personally and socially. Two types of cultural values can be distinguished, namely terminal values (goals to be attained), and instrumental values, the means of achieving a desired goal. Common to all

cultural values are four characteristics. The first characteristic is that cultural values are learned, called enculturation if learned from childhood within one's culture and acculturation if learned from a different culture. Secondly, cultural values are guides to behaviour and direct an individual's behaviour through cultural norms, implying established standards of behaviour regarding, for example, eating habits and means of ensuring safety. The third characteristic is that cultural values are permanent and dynamic. The final characteristic is that cultural values are widely held. Cultures, therefore, have certain widely held and commonly accepted values that differentiate one culture from another.

Subculture and cross-cultural influences, the remaining components of culture, according to Assael (1995: 483), offer variations to cultural influences in a particular country. Subcultures refer to groups distinguishable from the culture as a whole due to specific norms and values. Subcultures, therefore, represent differences in values among groups within the same country, whereas cross-cultural influences refer to differences in values across countries.

A number of factors affects the influence of a subculture on consumer behaviour, namely the distinctiveness, homogeneity and exclusion of the subculture. Subcultural distinctiveness implies that the potential influence on consumer behaviour increases as the subculture seeks to maintain its own identity. Furthermore, a subculture with homogeneous values is likely to influence its members. The final influence, subcultural exclusion, occurs when a subculture either seeks exclusion from society or has been excluded from society (for example, the Amish communities in the United States). Exclusion tends to influence and strengthen subcultures, due to the maintenance of subcultural values and norms, by means of isolation from society

b)   Face-to-face groups

The second environmental influence impacting on the consumer is face-to-face groups, comprising reference groups and the family. **Reference groups** play an important role in influencing consumer behaviour, since they serve as a point of reference for the individual in the formation of beliefs, attitudes and behaviour (Assael, 1995: 528).   Two different sets of reference groups can be distinguished, namely membership groups (for example the family) or aspiration groups (for example an upcoming golf player wishing to be associated with the professional players). It should also be mentioned that reference groups can also be viewed negatively, for example an individual may belong to a reference group and then rejects its values, resulting in the group being a disclaimant group for the individual. An individual may also decide to avoid membership to a group, called a dissociative group.

Reference groups to which consumers can belong serve a number of important functions. These groups assign roles as well as status positions to individuals within a group, provide norms of conduct and a method of socialisation for consumers. Consumers are also influenced by powers exerted by the groups they belong to. Firstly, consumers are influenced by expert powers of the group, implying expert information provided by the group, with the influence depending on the credibility of the source of the information. Secondly, the group exerts referent or comparative influences, which are influenced by the degree of similarity between the influencer and the consumer. The influence of the final power exerted, reward or normative influences, depends on the level of reward or punishment delivered by the group.

The second face-to-face group influence is the **family**, including households, where households refer to individuals living singly or together with others in a residential unit, while a family comprises two or more people living together who are related by blood or marriage (Assael, 1995: 558). The family, including

households, is considered the most important reference group. Three distinguishable factors can be identified with family decision-making. The first is that decisions are made jointly, especially if the perceived risk is high (there is minimal time pressure) and the purchase decision is considered important to the family.

The second identifiable factor is that members have prescribed roles in the decision process. The roles that individuals can portray in the family decision process are that of information gatherer, influencer, decision maker, the purchaser and finally the consumer. Finally, joint decision-making regularly results in conflict as far as purchase objectives are concerned. To resolve the conflict in these decisions, families develop strategies aimed at reducing the conflict through means such as persuasion, bargaining and problem-solving.

Specific family roles may also influence the decision process, for instance husband-wife and parent-child influences. Husband-wife influences, dominating the family decision process, comprise four decision processes, namely husband-dominant, wife-dominant, autonomous (where the husband and wife are equally empowered to make an individual decision) and joint decision-making.

Parent-child influences are important to consider, since children perform an important role in the decision process, even more so in single-parent households. Parents attempt to teach children how to become effective consumers and also influence their brand preferences.

c)   **Situational determinants**

The final environmental influence in the Assael model is situational determinants, considering the situation in which consumers purchase and use brands. Situational influences, according to Assael (1995: 600), are temporary conditions in the environment occurring at a specific time and place, independent of the

products or consumers. An example of situational determinants is shopping for a gift.

Three different types of situations can be identified that may influence consumer decision-making and brand choice, namely the consumption situation, the purchase situation and the communications situation.

The consumption situation refers to the situation in which consumers use the product, while the purchase situation refers to the specific conditions under which a decision is made, for example a purchase for personal use or a gift, as well as conditions in the store at the time of purchase. The final situation type, the communication situation, refers to the conditions in which exposure to advertising occurs, for example a radio commercial heard while alone in the car or at home, or while watching television with friends.

D) Communications

The final component of the Assael model is that of communications from the environment, providing information to influence consumers. As can be seen in figure A5.5, communications can either be from groups or from marketing organisations. Group communications comprises word-of mouth (communication within groups) and the diffusion process (across groups).

FIGURE A5.5: COMMUNICATIONS

Source: Assael (1995: 25)
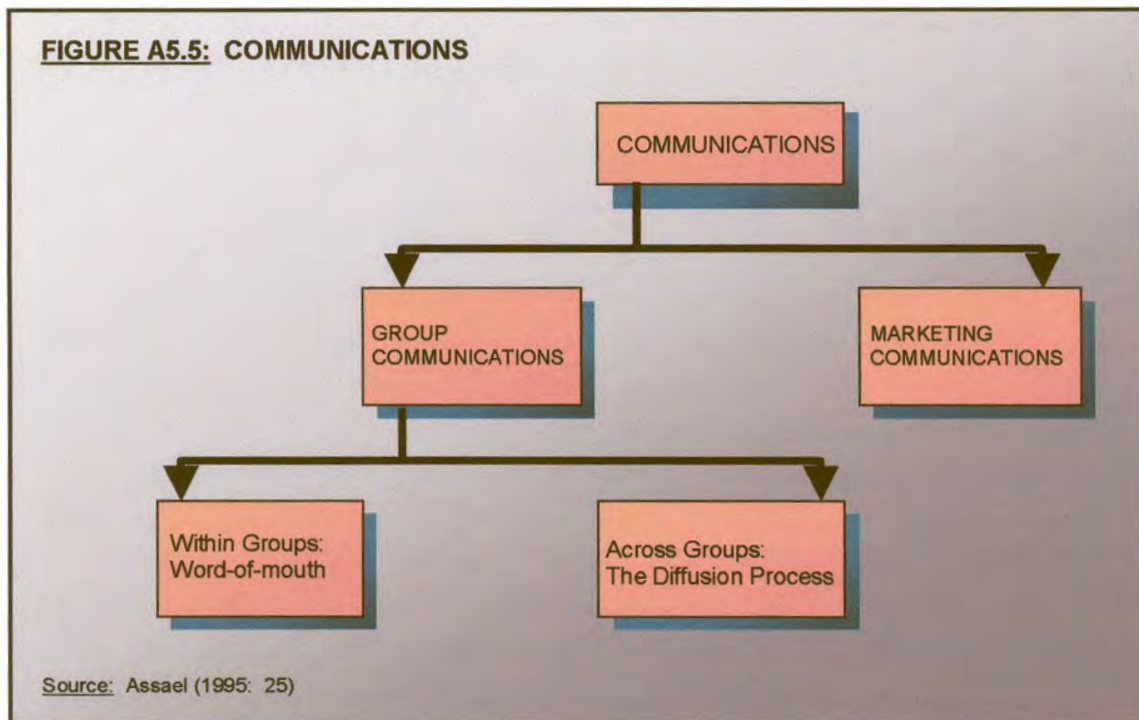
a)   Group communications

Assael (1995: 634) regards **word-of-mouth** communications, referring to the interpersonal relationship between two or more individuals, as the most important source of information and influence on consumer behaviour. The importance of the word-of-mouth influence can be viewed from the perspective that satisfied consumers influence friends and relatives to purchase the same product, while dissatisfied consumers inhibit sales.   In word-of-mouth communications, the individual influencing others is called the opinion leader, while the individual being influenced is referred to as the follower.

From a marketing perspective, it is important to identify the opinion leader, since those consumers may be influential within a product category. By identifying these leaders, marketers can develop promotional strategies directed at influencing this group.

The second category of group communications is that of the diffusion process, referring to communications across groups through the diffusion of information and influence over a wider segment of society. Diffusion can be defined as the process by which the adoption of innovation, implying technological advances that create new products or the symbolic representations that change the meaning of products, is spread over time to members of a target market through communications.

The importance of diffusion to the marketer is that it provides insights into the process of consumers accepting new products, especially considering the close link between the success of the introduction of a new product and the profit of an organisation.

b) Marketing communications

The second component of communications in the Assael model is that of marketing communications, for example informing consumers of new products and features, prices and the availability of brands.

It is important to increase the credibility of the marketer's messages, since consumers are more likely to accept messages from credible sources (including friends, family and impartial sources, such as consumer reports) than commercial sources.

Appendix 6:

Pre-test Group Results

1. INTRODUCTION

As mentioned in Chapter 6 of this study, a pre-test group was held as part of the research process. The objectives set for the pre-test group were:

a)   to pre-test the research questionnaire that was going to be used in the study;

b)   to refine the hypotheses formulated for the study;

c)   to identify any possible omissions from the questionnaire that could have a negative impact on the results of the study.

2. PRE-TEST GROUP RESULTS

This section will provide summarised results obtained from the pre-test group study. Only percentage figures will be indicated without a detailed analysis or discussion.

2.1 Demographic information

Demographic information obtained from the respondents who participated in the pre-test group is summarised in Table A6.1 below:

TABLE A6.1   PRE-TEST GROUP DEMOGRAPHIC INFORMATION

Demographic variable	Demarcation	Percentage
Age	18 – 24 Years	28%
	25 – 34 Years	34%
	35 – 50 Years	38%
Gender	Male	37%
	Female	63%

Demographic Variable	Demarcation	Percentage
Language	English/Other	73%
	Afrikaans	27%
Gross monthly Household Income	R 8,000 – R 11,999	39%
	R 12,000 – R 17,999	31%
	More than R 18,000	30%
ISP subscribed To	WorldOnline	18%
	ABSA	31%
	M-Web	33%
	Other	18%

n = 94

2.2 Views regarding the Internet

Responds were requested to indicate the degree to which they agree or disagree with statements representing views regarding the Internet. The results are shown in Table A6.2.

TABLE A6.2 VIEWS REGARDING THE INTERNET

Statement	Degree to which respondent agree or disagree with statement				
	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I view the Internet as a general information source	1%	2%	1%	35%	61%
I view the Internet as a source of product and service related information	1%	4%	24%	35%	36%
I view the Internet as a buying channel	14%	18%	30%	24%	14%

n = 76

From Table A6.1 it can be seen that viewing the Internet as a buying channel has the greatest distribution, with 32% of respondents either disagreeing or strongly disagreeing with the statement (as opposed to 3% and 5% for the other two statements) and 38% of respondents agreeing or strongly agreeing with the statement (as opposed to 96% and 71% for the other two statements).

2.3 Purchase and consideration to purchase via the Internet

Respondents were requested to indicate whether or not they have purchased via the Internet before. Respondents who indicated that they have not purchased via the Internet before had to indicate whether they considered purchasing via the Internet in the future.

- 34% of the respondents indicated that they've purchased Online before
- 66% of the respondents indicated that they have not purchased via the Internet before

Table A6.3 below matches the period being an Internet user with whether or not respondents have purchased via the Internet before.

TABLE A6.3:   **PERIOD BEING AN INTERNET USER: SHOPPERS AND NON-SHOPPERS**

Period being an Internet user	Have purchased via the Internet before	Have not purchased via the Internet before
Less than 1 Year	21%	79%
Between 1 and 3 years	26%	74%
More than 3 Years	51%	49%

n = 94

Table A6.3 above shows that as the period of Internet usage increases, the percentage of respondents who have purchased via the Internet also increases.

2.4 Factors considered when deciding whether or not to purchase via the Internet

Respondents were requested to rank nine statements in order of importance when deciding whether or not to purchase via the Internet. Table A6.4 shows how respondents ranked each statement.

TABLE A6.4: **IMPORTANCE RATINGS WHEN DECIDING WHETHER OR NOT TO PURCHASE ONLINE**

Statement	Mean Score
I consider implications of providing my credit card details prior to purchasing Online	2.72
Prior to purchasing on the Internet I consider the implications of providing personal information	3.63
Prior to purchasing Online I consider my privacy	3.93
I consider the credibility of the seller prior to purchasing Online	4.45
I consider the price of the product I want to purchase prior to purchasing Online	4.53
I'm concerned that I will not receive my purchases when purchasing Online	4.95
I consider the costs associated with my purchase prior to purchasing Online	5.02
I consider the brand name of the product prior to purchasing Online	5.05
I am concerned that my purchases will be damaged while shipped	6.07

n = 56

Table A6.4 shows that respondents rated providing their credit card details (mean score: 2.72), providing personal information (mean score: 3.63) and their privacy (mean score: 3.93) as the three most important considerations when deciding whether or not to purchase via the Internet.

2.5 Product and service information searched for on the Internet

Respondents were requested to indicate whether or not they searched for product and service information on the Internet prior to purchasing from "traditional", non-Internet based sellers of products and services.

Fifty-five percent of the respondents indicated that they search and 45% indicated that they do not search for product and service information on the Internet prior to purchasing from non-Internet based sellers.

Table A6.5 shows the percentage of Internet users, per period being an Internet user, who searches for information on the Net prior to purchasing Offline.

TABLE A6.5   **PERIOD BEING AN INTERNET USER: ONLINE INFORMATION SEARCH AND OFFLINE PURCHASES**

Search for product and service information before purchasing at non-Internet based sellers	Period being an Internet user		
	Less than 1 year	Between 1 and 3 years	More than 3 years
Yes	59%	35%	69%
No	41%	65%	31%

n = 93

It can be seen from Table A6.5 that respondents using the Internet for more than 3 years were the most frequent searchers for information on the Internet prior to purchasing from non-Internet based sellers.

The six product and service categories that respondents have searched from most frequently via the Internet prior to purchasing from non-Internet based sellers are:

- Hotel reservations (49%)
- Airline tickets (45%)
- Books and magazines (43%)
- Cars and related (40%)
- Computer software (37%)
- Electronic equipment (31%)

2.6   Product and service categories purchased / consider purchasing from via the Internet

Respondents were requested to indicate from which of the 21 listed product and service categories they have purchased before and considered to purchase from via the Internet in the future. The product and service categories respondents most frequently purchased from are:

- Movie tickets (43%)

- Books and magazines (34%)
- Hotel reservations (23%)
- Computer software (23%)
- Airline tickets (20%)

In addition to the categories listed above, 34% of the respondents indicated that they have purchased from the "other" category.

Product and service categories that current Internet shoppers and non-Shoppers (who consider to purchase via the Internet) consider to purchase from via the Internet in the future are:

- Airline tickets (65%)
- Hotel reservations (57%)
- Movie tickets (49%)
- Groceries (40%)
- Books and magazines (38%)
- Videos and DVDs (31%)

3.   CONCLUSION

The pre-test group research provided valuable information, the most important findings being:

- The product and service categories had to be broadened to address the finding that 34% of respondents purchased from "other" than the categories provided;
- The research questionnaire was tested and had to be refined to address uncertainties expressed by respondents and poor statistical data received on some questions; and
- The pre-test group findings assisted the researcher in refining the hypotheses formulated for the study.

Appendix 7

Automatic questionnaire branching

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Section A: Internet Usage
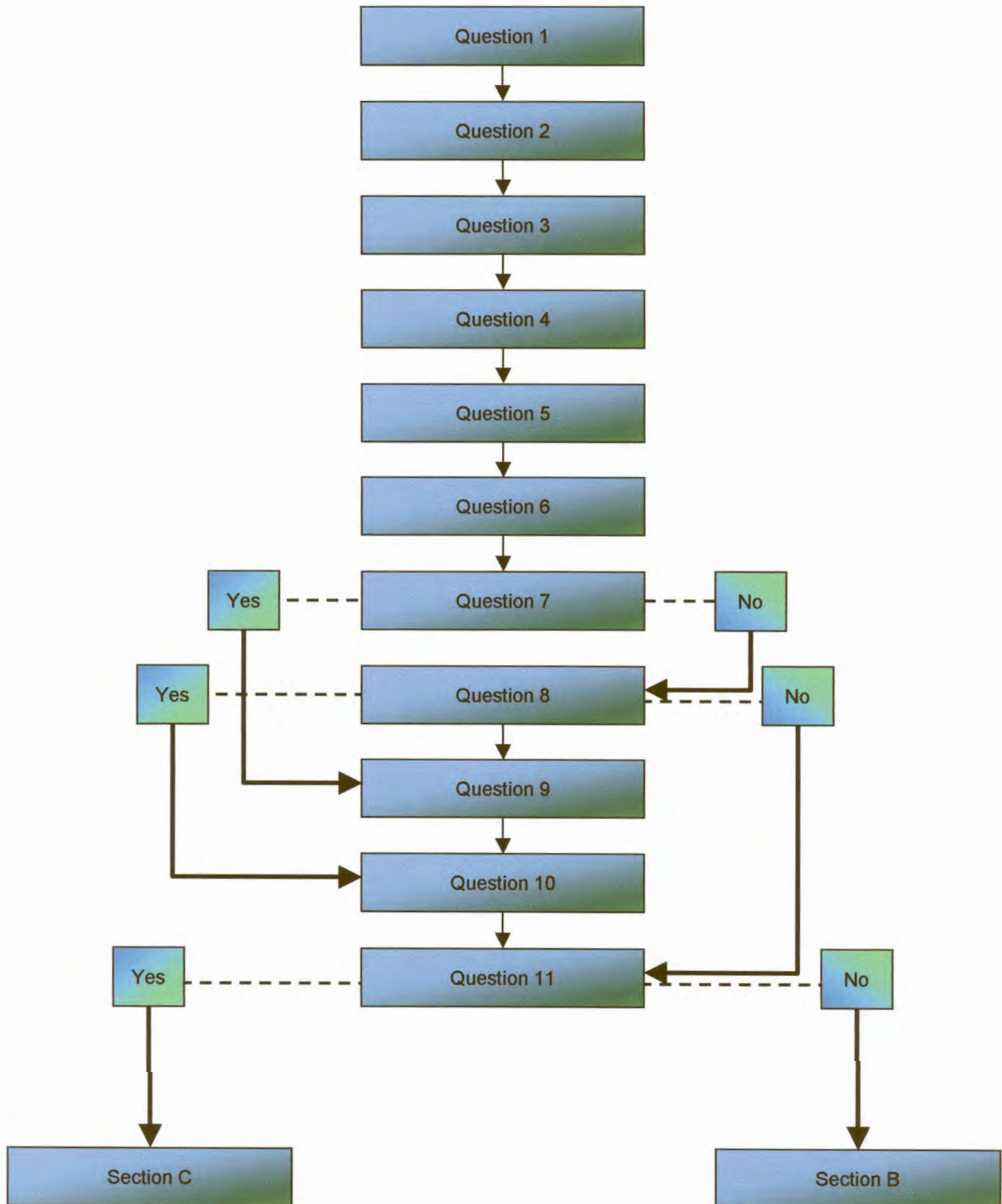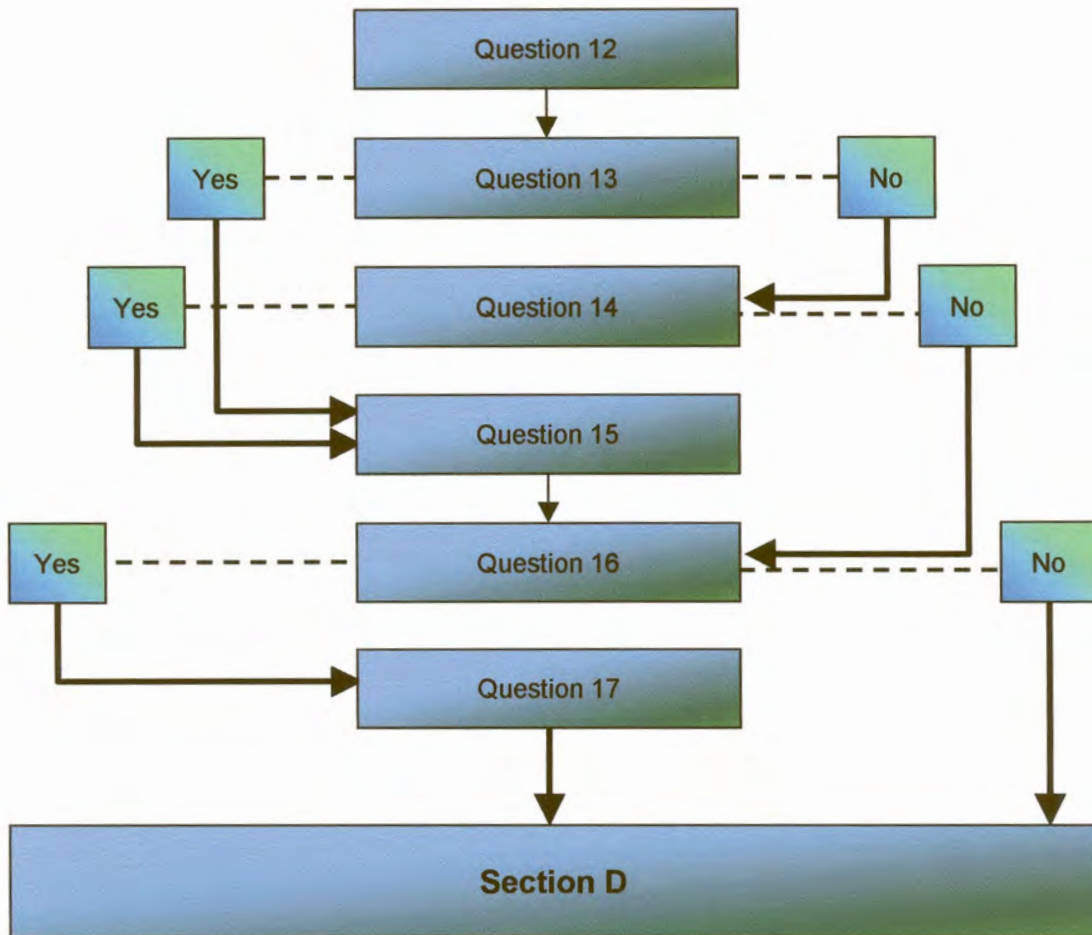
```
                    ┌──────────────┐
                    │  Question 1  │
                    └──────┬───────┘
                           ▼
                    ┌──────────────┐
                    │  Question 2  │
                    └──────┬───────┘
                           ▼
                    ┌──────────────┐
                    │  Question 3  │
                    └──────┬───────┘
                           ▼
                    ┌──────────────┐
                    │  Question 4  │
                    └──────┬───────┘
                           ▼
                    ┌──────────────┐
                    │  Question 5  │
                    └──────┬───────┘
                           ▼
                    ┌──────────────┐
                    │  Question 6  │
                    └──────┬───────┘
                           ▼
  ┌─────┐            ┌──────────────┐            ┌─────┐
  │ Yes │------------│  Question 7  │------------│ No  │
  └─────┘            └──────────────┘            └─────┘

  ┌─────┐            ┌──────────────┐            ┌─────┐
  │ Yes │------------│  Question 8  │◄-----------│ No  │
  └─────┘            └──────────────┘            └─────┘
                     ┌──────────────┐
                     │  Question 9  │
                     └──────────────┘
                     ┌──────────────┐
                     │ Question 10  │
                     └──────┬───────┘
                            ▼
  ┌─────┐            ┌──────────────┐            ┌─────┐
  │ Yes │------------│ Question 11  │◄-----------│ No  │
  └──┬──┘            └──────────────┘            └──┬──┘
     ▼                                              ▼
┌──────────────┐                          ┌──────────────┐
│  Section C   │                          │  Section B   │
└──────────────┘                          └──────────────┘
```
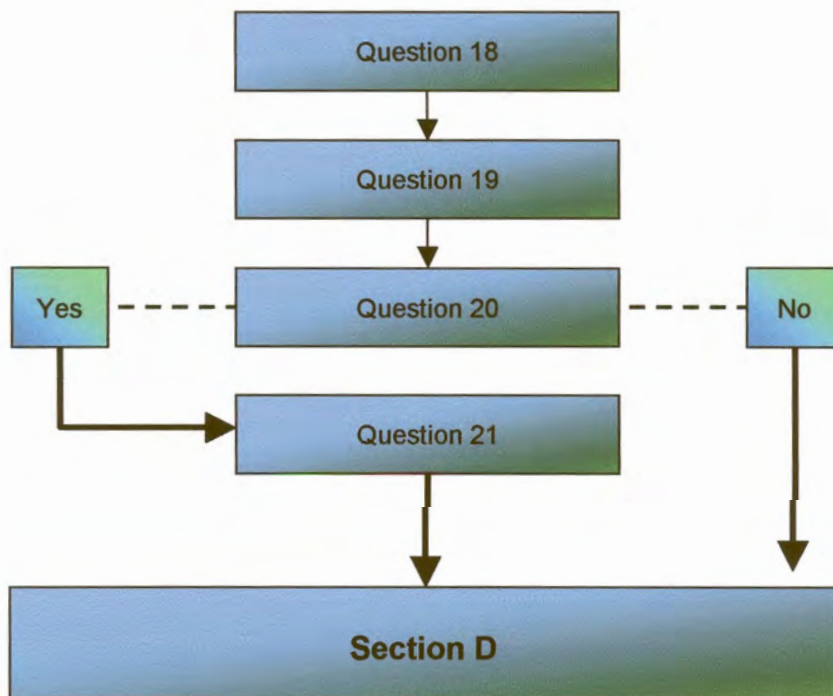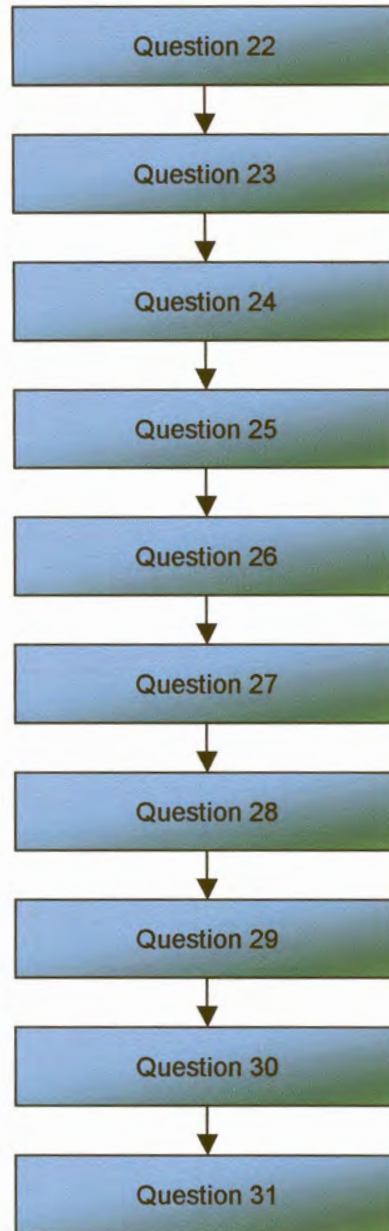
Section B: Non-Internet Users

```
                        ┌──────────────────┐
                        │   Question 12    │
                        └──────────────────┘
                                │
                                ▼
        ┌─────┐            ┌──────────────────┐            ┌─────┐
        │ Yes │ - - - - -  │   Question 13    │  - - - - - │ No  │
        └─────┘            └──────────────────┘            └─────┘
           │                                                   │
        ┌─────┐            ┌──────────────────┐            ┌─────┐
        │ Yes │ - - - - -  │   Question 14    │ ◄───────── │ No  │
        └─────┘            └──────────────────┘            └─────┘
           │                                                   │
           └────────────►  ┌──────────────────┐
                           │   Question 15    │
                           └──────────────────┘
                                │
                                ▼
        ┌─────┐            ┌──────────────────┐            ┌─────┐
        │ Yes │ - - - - -  │   Question 16    │ ◄───────── │ No  │
        └─────┘            └──────────────────┘            └─────┘
           │                                                   │
           └────────────►  ┌──────────────────┐               │
                           │   Question 17    │               │
                           └──────────────────┘               │
                                │                              │
                                ▼                              ▼
        ┌───────────────────────────────────────────────────────────┐
        │                      Section D                            │
        └───────────────────────────────────────────────────────────┘
```

Section C: Internet Users

```
                        ┌──────────────────┐
                        │   Question 18    │
                        └──────────────────┘
                                │
                                ▼
                        ┌──────────────────┐
                        │   Question 19    │
                        └──────────────────┘
                                │
                                ▼
        ┌─────┐            ┌──────────────────┐            ┌─────┐
        │ Yes │ - - - - -  │   Question 20    │  - - - - - │ No  │
        └─────┘            └──────────────────┘            └─────┘
           │                                                   │
           └────────────►  ┌──────────────────┐               │
                           │   Question 21    │               │
                           └──────────────────┘               │
                                │                              │
                                ▼                              ▼
        ┌───────────────────────────────────────────────────────────┐
        │                      Section D                            │
        └───────────────────────────────────────────────────────────┘
```

Section D: Demographic Information

```
┌─────────────────────┐
│     Question 22      │
└─────────────────────┘
          │
          ▼
┌─────────────────────┐
│     Question 23      │
└─────────────────────┘
          │
          ▼
┌─────────────────────┐
│     Question 24      │
└─────────────────────┘
          │
          ▼
┌─────────────────────┐
│     Question 25      │
└─────────────────────┘
          │
          ▼
┌─────────────────────┐
│     Question 26      │
└─────────────────────┘
          │
          ▼
┌─────────────────────┐
│     Question 27      │
└─────────────────────┘
          │
          ▼
┌─────────────────────┐
│     Question 28      │
└─────────────────────┘
          │
          ▼
┌─────────────────────┐
│     Question 29      │
└─────────────────────┘
          │
          ▼
┌─────────────────────┐
│     Question 30      │
└─────────────────────┘
          │
          ▼
┌─────────────────────┐
│     Question 31      │
└─────────────────────┘
```

Appendix 8

E-mail letter inviting Internet users to participate in research project

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

(To)   Internet users

(Subject) Research Questionnaire

(Copy)

Dear Internet User

You have been randomly selected to participate in a research project that forms part of the requirements for me to obtain the DComm (Marketing) degree from the University of Pretoria.

The objective of this study, and the title of my thesis, is to determine the buying behaviour of South African Internet users.

Due to the high costs involved in a research project of this magnitude, I negotiated with ISP "X" to sponsor the Web design and hosting of the research questionnaire.   Also, in an effort to encourage you to participate in this questionnaire, I negotiated a number of wonderful prizes (specified on the introduction page of the questionnaire) that you could be eligible for by participating in this questionnaire.

If you wish to participate in this project (confidentiality assured), simply click on the link (www.ISP "X" /questionnaire). You will automatically be routed to the questionnaire and the system will guide you through the process (it will take you approximately 7 to 12 minutes to complete the questionnaire).

Thank you for assisting me in determining the buying behaviour of South Africa's Internet users. Your opinion is extremely important to me.

Kind regards

Pierre Mostert

Appendix 9

Research questionnaire

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Internet Buying Behaviour Questionnaire

This research questionnaire comprises 3 sections dealing with your searching and buying patterns on the Internet.
Please note that by completing this questionnaire (totally voluntary), all information supplied will be dealt with in the strictest confidence

and regarded as highly confidential. All information supplied, will only be used for statistical analyses and no information
will be interpreted in isolation or provided to any third party.

By completing this questionnaire, you will be entered into a lucky draw (if you wish to enter the lucky draw) where you
will stand the chance of winning one of the following prizes:

10 Golf shirts with caps (valued at R 150 per set)
10 LCD telephones (valued at R 180 each)
4 Diva Internal ISA ISDN modems (valued at R 800 each)
(I would like to thank ISP "X" for sponsoring these prizes)

Before you start with the questionnaire, please read the following:

1. Please complete this questionnaire in the capacity of representing all the Internet users in your household, thereby also
considering the views of the Internet users in your household regarding the Internet.
2. If you use the Internet for business purposes, please complete this questionnaire from an individual/household perspective (i.e. not
from a business communications/purchasing perspective)

	Home	Work	Internet Café	Academic Institution	Other
1. From where do you gain access to the Internet? (multiple answers)	○	○	○	○	○
2. From where do you most frequently access the Internet? (one answer only)	○	○	○	○	○

3. For how long have you been an Internet user?
(considering all the Internet Service Providers you have subscribed to)   [Please select ⬇]

4. How many Internet Service Providers have you subscribed to in the past?   [Please select ⬇]

5a. For how long are you subscribed to your current Internet Service Provider?   [Please select ⬇]

5b. Do you subscribe to more than one Service Provider?   Yes ○   No ○

Options: Question 3:	Options: Question 4:	Options: Question 5a:
Less than 1 year; 1 to less than 2 years; 2 to less than 3 years; 3 to less than 4 years; 4 years or more	1; 2; 3 4; 5; 6 7	Less than 1 year; 1 to less than 2 years; 2 to less than 3 years; 3 to less than 4 years; 4 years or more

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

6. Please indicate the extent to which you agree or disagree with each of the statements listed below:

Totally agree   Totally disagree

a) I view the Internet as a general information source

| 7 | 6 | 5 | 4 | 3 | 2 | 1 |

b) I view the Internet as a specific source of product and service related information

| 7 | 6 | 5 | 4 | 3 | 2 | 1 |

c) I view the Internet as a communication tool

| 7 | 6 | 5 | 4 | 3 | 2 | 1 |

d) I view the Internet as a buying channel

| 7 | 6 | 5 | 4 | 3 | 2 | 1 |

e) I view the Internet as an entertainment medium

| 7 | 6 | 5 | 4 | 3 | 2 | 1 |

7. Do you use Internet banking?   Yes ☐   No ☐

8. Are you considering using Internet banking facilities in the future?   Yes ☐   No ☐

9. For how long have you been using Internet banking?   Please select ⬇

10. How frequently do you / do you think you will use Internet Banking?

Daily ○   Weekly ○   Monthly ○   Annually ○

11. Have you ever purchased products or services via the Internet before? (Excluding Banking Services)   Yes ☐   No ☐

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Section B

12. Please indicate how important the factors listed below are to you when deciding whether or not to purchase via the Internet:

Factor	Extremely Important						Not important at all
The possible invasion of my privacy	7	6	5	4	3	2	1
Providing my personal information to others	7	6	5	4	3	2	1
Implications of providing my credit card details	7	6	5	4	3	2	1
Credibility of the seller	7	6	5	4	3	2	1
Concerned that goods purchased via the Internet will not be received	7	6	5	4	3	2	1
Goods may be damaged while shipped (in transit) or when delivered	7	6	5	4	3	2	1
The price of products or services offered via the Internet	7	6	5	4	3	2	1
Brand name of products or services offered via the Internet	7	6	5	4	3	2	1
Additional cost associated with purchasing via the Internet (e.g.) delivery/shipping costs; insurance costs, import taxes, etc	7	6	5	4	3	2	1
The availability of prices on Internet sites	7	6	5	4	3	2	1
Guarantees offered by Internet sellers	7	6	5	4	3	2	1
Exchange/returns policies offered by Internet sellers	7	6	5	4	3	2	1
Ability to understand how to use the Internet/purchase via the Internet	7	6	5	4	3	2	1
Importance of "touching and feeling" products prior to purchase	7	6	5	4	3	2	1
The range of products/services offered from individual sellers on the Internet	7	6	5	4	3	2	1
After sales service	7	6	5	4	3	2	1
Personal/individual attention	7	6	5	4	3	2	1
The time between purchasing and receiving goods	7	6	5	4	3	2	1
Safety of purchasing from home (i.e. don't have to visit shopping malls and possibly be a victim of crime)	7	6	5	4	3	2	1
Knowledge of the seller	7	6	5	4	3	2	1
Convenience of purchasing from home	7	6	5	4	3	2	1
Ease of purchasing via the Internet	7	6	5	4	3	2	1
Don't have a credit card	7	6	5	4	3	2	1
How secure Internet payment methods are	7	6	5	4	3	2	1

13. Do you consider purchasing products and / or services via the Internet in the future?

Yes ☐   No ☐

14. Would you consider to purchase via the Internet if more, non-Internet-based, South African businesses also offer products and services on the Internet ? (e.g. Game Stores, OUTsurance, Musica, etc)

Yes ☐   No ☐

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

15. From which of the following product and services categories will you seriously consider purchasing via the Internet in the future? (Multiple answers)

Adult entertainment	○	Airline tickets	○	Baby products	○
Beauty products	○	Books and Magazines	○	Cars and related	○
CD's (music)	○	Cellular phones and accessories	○	Clothing and accessories	○
Computer Games	○	Computer hardware	○	Computer software	○
Cosmetics	○	DVD's / videos	○	Flowers	○
Electronic equipment (TV, Hi-Fi, Video machine; etc)	○	Household appliances (Washing machine, Fridge, etc)	○	Outdoors equipment and accessories (e.g. tents and camping gear)	○
Food (groceries)	○	Food (take away)	○		
Furniture	○	Gifts	○	Gift vouchers	○
Garden related	○	Health products	○	Hotel reservations	○
Insurance: Car	○	Insurance: Household	○	Insurance: Life	○
Interior decorating / renovations	○	Jewellery	○	Movie or event tickets	○
Property	○	Sporting goods	○	Toys	○
Unit trust / Shares	○	Wine	○	Other Liquor	○

16. Have you ever searched for or do you consider searching for product or service information on the Internet prior to purchasing from a non-Internet-based seller? (e.g. A physical store or telephone shopping)

Yes ☐   No ☐

17. From which of the following product and services categories have you searched for or do you consider searching for information on the Internet prior to purchasing from a non-Internet-based seller? (e.g. physical store or telephone shopping) (Multiple answers)

Adult entertainment	○	Airline tickets	○	Baby products	○
Beauty products	○	Books and Magazines	○	Cars and related	○
CD's (music)	○	Cellular phones and accessories	○	Clothing and accessories	○
Computer Games	○	Computer hardware	○	Computer software	○
Cosmetics	○	DVD's / videos	○	Flowers	○
Electronic equipment (TV, Hi-Fi, Video machine; etc)	○	Household appliances (Washing machine, Fridge, etc)	○	Outdoors equipment and accessories (e.g. tents and camping gear)	○
Food (groceries)	○	Food (take away)	○		
Furniture	○	Gifts	○	Gift vouchers	○
Garden related	○	Health products	○	Hotel reservations	○
Insurance: Car	○	Insurance: Household	○	Insurance: Life	○
Interior decorating / renovations	○	Jewellery	○	Movie or event tickets	○
Property	○	Sporting goods	○	Toys	○
Unit trust / Shares	○	Wine	○	Other Liquor	○

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Section C

18. Please indicate how important the factors listed below are to you when deciding whether or not to purchase via the Internet:

Extremely Important — Not important at all

Factor	7	6	5	4	3	2	1
The possible invasion of my privacy	7	6	5	4	3	2	1
Providing my personal information to others	7	6	5	4	3	2	1
Implications of providing my credit card details	7	6	5	4	3	2	1
Credibility of the seller	7	6	5	4	3	2	1
Concerned that goods purchased via the Internet will not be received	7	6	5	4	3	2	1
Goods may be damaged while shipped (in transit) or when delivered	7	6	5	4	3	2	1
The price of products or services offered via the Internet	7	6	5	4	3	2	1
Brand name of products or services offered via the Internet	7	6	5	4	3	2	1
Additional cost associated with purchasing via the Internet (e.g.) delivery/shipping costs; insurance costs, import taxes, etc	7	6	5	4	3	2	1
The availability of prices on Internet sites	7	6	5	4	3	2	1
Guarantees offered by Internet sellers	7	6	5	4	3	2	1
Exchange/returns policies offered by Internet sellers	7	6	5	4	3	2	1
Ability to understand how to use the Internet/purchase via the Internet	7	6	5	4	3	2	1
Importance of "touching and feeling" products prior to purchase	7	6	5	4	3	2	1
The range of products/services offered from individual sellers on the Internet	7	6	5	4	3	2	1
After sales service	7	6	5	4	3	2	1
Personal/individual attention	7	6	5	4	3	2	1
The time between purchasing and receiving goods	7	6	5	4	3	2	1
Safety of purchasing from home (i.e. don't have to visit shopping malls and possibly be a victim of crime)	7	6	5	4	3	2	1
Knowledge of the seller	7	6	5	4	3	2	1
Convenience of purchasing from home	7	6	5	4	3	2	1
Ease of purchasing via the Internet	7	6	5	4	3	2	1
Don't have a credit card	7	6	5	4	3	2	1
How secure Internet payment methods are	7	6	5	4	3	2	1

19. From which of the following product and service categories have you purchased before and do you seriously consider purchasing via the Internet in the future? (Multiple answers)

	Have purchased before	Consider to purchase from again — Yes	No	Uncertain
Adult entertainment	O	O	O	O
Airline tickets	O	O	O	O
Baby products	O	O	O	O
Beauty products	O	O	O	O
Books and Magazines	O	O	O	O
Cars and related	O	O	O	O
CD's (music)	O	O	O	O
Cellular phones and accessories	O	O	O	O
Clothing and accessories	O	O	O	O
Computer Games	O	O	O	O
Computer hardware	O	O	O	O
Computer software	O	O	O	O
Cosmetics	O	O	O	O
DVD's / videos	O	O	O	O
Flowers	O	O	O	O
Electronic equipment (TV, Hi-Fi, Video machine; etc)	O	O	O	O
Household appliances (Washing machine, Fridge, etc)	O	O	O	O
Outdoors equipment and accessories (e.g. tents and camping gear)	O	O	O	O

	Have purchased before	Consider to purchase from again — Yes	No	Uncertain
Food (groceries)	O	O	O	O
Food (take away)	O	O	O	O
Furniture	O	O	O	O
Gifts	O	O	O	O
Gift vouchers	O	O	O	O
Garden related	O	O	O	O
Health products	O	O	O	O
Hotel reservations	O	O	O	O
Insurance: Car	O	O	O	O
Insurance: Household	O	O	O	O
Insurance: Life	O	O	O	O
Interior decorating / renovations	O	O	O	O
Jewellery	O	O	O	O
Movie or event tickets	O	O	O	O
Property	O	O	O	O
Sporting goods	O	O	O	O
Toys	O	O	O	O
Unit trust / Shares	O	O	O	O
Wine	O	O	O	O
Other Liquor	O	O	O	O

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

20. Have you ever searched for or do you consider searching for product or service information on the Internet prior to purchasing from a non-Internet-based seller? (e.g. A physical store or telephone shopping)

Yes ☐   No ☐

21. From which of the following product and services categories have you searched for or do you consider searching for information on the Internet prior to purchasing from a non-Internet-based seller? (e.g. physical store or telephone shopping) (Multiple answers)

Adult entertainment ○	Airline tickets ○	Baby products ○
Beauty products ○	Books and Magazines ○	Cars and related ○
CD's (music) ○	Cellular phones and accessories ○	Clothing and accessories ○
Computer Games ○	Computer hardware ○	Computer software ○
Cosmetics ○	DVD's / videos ○	Flowers ○
Electronic equipment (TV, Hi-Fi, Video machine; etc) ○	Household appliances (Washing machine, Fridge, etc) ○	Outdoors equipment and accessories (e.g. tents and camping gear) ○
Food (groceries) ○	Food (take away) ○	
Furniture ○	Gifts ○	Gift vouchers ○
Garden related ○	Health products ○	Hotel reservations ○
Insurance: Car ○	Insurance: Household ○	Insurance: Life ○
Interior decorating / renovations ○	Jewellery ○	Movie or event tickets ○
Property ○	Sporting goods ○	Toys ○
Unit trust / Shares ○	Wine ○	Other Liquor ○

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

The information requested in this section will be treated as highly confidential and totally anonymous. Answers will only be used for statistical analyses and no individual's details will be used in isolation or be provided to a third party.

Please provide the following information about yourself:

22. Gender	Please select ⬇
23. Age	Please select ⬇
24. Household Language	Please select ⬇
25. Gross Monthly Household Income	Please select ⬇
26. Highest Qualification	Please select ⬇
27. In which area do you live or which area is closest to you?	Please select ⬇
28. Population Group	Please select ⬇
29. Marital Status	Please select ⬇
30. Number of people actively using the Internet (more than once a week) in your household	Please select ⬇
31. Number of people in your household	Please select ⬇

Options: Question 22:

Male
Female

Options: Question 23:

Under 18 years; 19-24 years;
25-35 years; 36-50 years;
51-65 years; Older than 65 years;
Not specified

Options: Question 24:

Afrikaans; English; French; German;
Greek; IsiNdebele; IsiXhosa; IsiZulu; Italian;
Portuguese; SePedi; SeSotho; SeTswana;
SiSwati; TshiVenda; XiTsonga;
An Eastern Language;
An Asian Language; Other

Options: Question 25:
Less than R 5 000;
R 5 001 – R 9 999;
R 10 000 – R 14 999;
R 15 000 – R 19 999;
R 20 000 – R 24 999;
R 25 000 – R 29 999;
More than R 30 000
Not specified

Options: Question 26:

Standard 8/Grade 10;
Matric/ Grade 12;
Diploma from Technical College;
Diploma from Technikon; Degree;
Post-graduate

Options: Question 27:

Beaufort West; Belville; Bloemfontein;
Cape Town; Colesburg; Durban; East London;
Graaff Reinet; Johannesburg; Kimberley;
Mossel Bay; Nelspruit; Pietermaritzburg;
Pietersburg; Port Elizabeth; Pretoria;
Richards Bay; Rustenburg; Springbok;
Tzaneen; Umtata; Upington; Witbank

Options: Question 28:

Asian; Black;
Coloured; Indian;
White; Other

Options: Question 29:

Single; Living together;
Married; Separated.
Divorced; Widowed; Other

Options: Question 30:

1; 2; 3; 4; 5; 6; 7; More than 7

Options: Question 31:

1; 2; 3; 4; 5; 6; 7; More than 7

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Appendix 10

Comparing, across all time periods, product and service categories Internet shoppers have purchased from before with categories shoppers and non-shoppers consider purchasing from in future

Table A10.1 details the product and service categories Internet shoppers have purchased from via the Internet before by considering the different time periods. The following observations can be made from the detail provided in Table A10.1:

- more than 20% of Internet shoppers, who have been using the Net for less than one year, have purchased from five product and service categories;

- more than 20% of Internet shoppers, who have been using the Internet for between one and less than two years, have purchased from six categories;

- more than 20% of Internet shoppers, who have been Online for between two to less than three years, have purchased from nine product and service categories;

- more than 20% of Internet shoppers, who have been using the Net for between three and less than four years, have purchased from seven categories;

- more than 20% of Internet shoppers, who have been using the Net for four years and more, have purchased from 10 categories;

- all respondents who have purchased via the Net before and have been using the Internet for more than one year, have purchased from the same categories from which shoppers who have been using the Internet for less than one year have purchased;

- relating to the previous observation, it can be derived that more than 20% of Internet shoppers, across all time periods, have purchased from the following five categories: books and magazines (V153), CDs (music)(V155), computer software (V160), hotel reservations (V174) and movie or event tickets (V180).

From Table A10.2, detailing product and service categories non-shoppers (across all time periods) consider to purchase via the Net in the future, the following observations can be made:

- more than 20% of non-Internet shoppers, who have been using the Net for less than one year, consider purchasing from 28 product and service categories;

- more than 20% of non-shoppers, who have been Online for between one and less than two years as well as those who have been using the Net for two to less than three years, consider purchasing from 25 categories respectively;

- more than 20% of non-shoppers, who have been using the Net for between three and less than four years as well as those who have been Online for four years and more, consider purchasing from 21 product and service categories respectively;

Table A10.3 details the product and service categories that Internet shoppers consider purchasing via the Internet by considering the different time periods. The following observations can be made from the detail provided in Table A10.3:

- more than 20% of Internet shoppers, who have been using the Internet for less than one year, those who have been Online for one to less than two years as well as those who have been using the Net for two to less than three years, consider purchasing from 23 product and service categories respectively;

- more than 20% of Internet shoppers, who have been using the Net for between three and less than four years, consider purchasing from 20 categories;

- more than 20% of Internet shoppers, who have been using the Internet for four years and more, consider purchasing from 24 product and service categories;

Two main findings can be derived from the observations highlighted for Internet shoppers and non-shoppers (when considering the product and service categories they have purchased/consider to purchase from and the period of Internet usage):

(AP1) **at least 20% of all non-Internet shoppers across all time periods (with the exception of those who have been using the Net for four years or more) consider to purchase from more product and service categories via the Internet in the future than Internet shoppers falling within the same periods;**

(AP2) **at least 45% of Internet shoppers and non-shoppers, who have been using the Internet for less than one year, consider purchasing from product and service categories that current Internet shoppers (who have been using the Net for between one and less than two years) have purchased from before.**

TABLE A10.1: PRODUCT AND SERVICE CATEGORIES INTERNET SHOPPERS, ACROSS ALL TIME PERIODS, HAVE PURCHASED VIA THE INTERNET BEFORE

Product and Service Category	V	Less than one year (V8.2) (n = 23)		1 year to less than 2 years (V8.3) (n = 50)		2 years to less than 3 years (V8.4) (n = 100)		3 years to less than 4 years (V8.5) (n = 112)		4 or more years (V8.6) (n = 258)	
		Freq.	Perc.	Freq.	Perc.	Freq.	Perc.	Freq.	Perc.	Freq.	Perc.
Adult entertainment	V149	4	17.39%	8	16.00%	13	13.00%	15	13.39%	43	16.67%
Airline tickets	V150	1	4.35%	13	26.00%	30	30.00%	29	25.89%	74	28.68%
Baby products	V151	0	0.00%	2	4.00%	4	4.00%	4	3.57%	6	2.33%
Beauty products	V152	1	4.35%	3	6.00%	8	8.00%	5	4.46%	12	4.65%
Books and magazines	V153	9	39.13%	31	62.00%	58	58.00%	76	67.86%	171	66.28%
Cars and related	V154	0	0.00%	1	2.00%	6	6.00%	3	2.68%	17	6.59%
CD's (music)	V155	7	30.43%	13	26.00%	39	39.00%	42	37.50%	121	46.90%
Cellular phones and accessories	V156	2	8.70%	4	8.00%	8	8.00%	9	8.04%	14	5.43%
Clothing and accessories	V157	0	0.00%	4	8.00%	11	11.00%	7	6.25%	21	8.14%
Computer games	V158	3	13.04%	9	18.00%	26	26.00%	22	19.64%	63	24.42%
Computer hardware	V159	3	13.04%	8	16.00%	15	15.00%	21	18.75%	58	22.48%
Computer software	V160	8	34.78%	12	24.00%	33	33.00%	36	32.14%	123	47.67%
Cosmetics	V161	0	0.00%	2	4.00%	4	4.00%	6	5.36%	8	3.10%
DVD's / videos	V162	2	8.70%	6	12.00%	25	25.00%	20	17.86%	60	23.26%
Flowers	V163	3	13.04%	3	6.00%	17	17.00%	10	8.93%	46	17.83%
Electronic equipment (TV, Hi-Fi, Video machine; etc)	V164	0	0.00%	2	4.00%	12	12.00%	11	9.82%	19	7.36%
Household appliances (Washing machine, Fridge, etc)	V165	0	0.00%	1	2.00%	5	5.00%	3	2.68%	4	1.55%
Outdoors equipment and accessories (e.g. tents and camping gear)	V166	0	0.00%	1	2.00%	6	6.00%	3	2.68%	7	2.71%
Food (groceries)	V167	1	4.35%	5	10.00%	10	10.00%	8	7.14%	27	10.47%

Product and Service Category	V	Less than one year (V8.2) (n = 23)		1 year to less than 2 years (V8.3) (n = 50)		2 years to less than 3 years (V8.4) (n = 100)		3 years to less than 4 years (V8.5) (n = 112)		4 or more years (V8.6) (n = 258)	
Food (take away)	V168	0	0.00%	1	2.00%	8	8.00%	4	3.57%	13	5.04%
Furniture	V169	0	0.00%	1	2.00%	5	5.00%	3	2.68%	6	2.33%
Gifts	V170	4	17.39%	9	18.00%	22	22.00%	25	22.32%	72	27.91%
Gift vouchers	V171	1	4.35%	2	4.00%	9	9.00%	9	8.04%	17	6.59%
Garden related	V172	0	0.00%	2	4.00%	1	1.00%	4	3.57%	7	2.71%
Health products	V173	1	4.35%	8	16.00%	11	11.00%	11	9.82%	24	9.30%
Hotel reservations	V174	5	21.74%	11	22.00%	25	25.00%	28	25.00%	68	26.36%
Insurance: Car	V175	1	4.35%	4	8.00%	2	2.00%	3	2.68%	12	4.65%
Insurance: Household	V176	0	0.00%	6	12.00%	2	2.00%	3	2.68%	11	4.26%
Insurance: Life	V177	1	4.35%	1	2.00%	2	2.00%	2	1.79%	5	1.94%
Interior decorating / renovations	V178	0	0.00%	1	2.00%	4	4.00%	2	1.79%	1	0.39%
Jewellery	V179	0	0.00%	1	2.00%	6	6.00%	1	0.89%	6	2.33%
Movie or event tickets	V180	5	21.74%	10	20.00%	36	36.00%	36	32.14%	103	39.92%
Property	V181	1	4.35%	0	0.00%	3	3.00%	2	1.79%	1	0.39%
Sporting goods	V182	1	4.35%	1	2.00%	11	11.00%	9	8.04%	14	5.43%
Toys	V183	0	0.00%	1	2.00%	14	14.00%	6	5.36%	20	7.75%
Unit trust / Shares	V184	1	4.35%	5	10.00%	7	7.00%	10	8.93%	26	10.08%
Wine	V185	0	0.00%	0	0.00%	4	4.00%	2	1.79%	5	1.94%
Other Liquor	V186	0	0.00%	3	6.00%	10	10.00%	15	13.39%	21	8.14%

Appendix 10

TABLE A10.2: PRODUCT AND SERVICE CATEGORIES NON-INTERNET SHOPPERS, ACROSS ALL TIME PERIODS, SERIOUSLY CONSIDER PURCHASING VIA THE INTERNET

Product and Service Category	V	Less than one year (V8.2) (n = 66)		1 year to less than 2 years (V8.3) (n = 68)		2 years to less than 3 years (V8.4) (n = 83)		3 years to less than 4 years (V8.5) (n = 73)		4 or more years (V8.6) (n = 81)	
		Freq.	Perc.	Freq.	Perc.	Freq.	Perc.	Freq.	Perc.	Freq.	Perc.
Adult entertainment	V48	8	12.12%	9	13.24%	7	8.43%	10	13.70%	12	14.81%
Airline tickets	V49	42	63.64%	37	54.41%	57	68.67%	47	64.38%	61	75.31%
Baby products	V50	5	7.58%	6	8.82%	3	3.61%	5	6.85%	6	7.41%
Beauty products	V51	13	19.70%	10	14.71%	9	10.84%	5	6.85%	7	8.64%
Books and magazines	V52	40	60.61%	43	63.24%	55	66.27%	47	64.38%	56	69.14%
Cars and related	V53	17	25.76%	16	23.53%	17	20.48%	9	12.33%	17	20.99%
CD's (music)	V54	42	63.64%	46	67.65%	67	80.72%	55	75.34%	47	58.02%
Cellular phones and accessories	V55	19	28.79%	19	27.94%	29	34.94%	18	24.66%	17	20.99%
Clothing and accessories	V56	16	24.24%	14	20.59%	11	13.25%	11	15.07%	11	13.58%
Computer games	V57	17	25.76%	22	32.35%	30	36.14%	28	38.36%	30	37.04%
Computer hardware	V58	20	30.30%	32	47.06%	30	36.14%	21	28.77%	32	39.51%
Computer software	V59	30	45.45%	40	58.82%	46	55.42%	35	47.95%	58	71.60%
Cosmetics	V60	9	13.64%	10	14.71%	9	10.84%	5	6.85%	4	4.94%
DVD's / videos	V61	22	33.33%	22	32.35%	39	46.99%	31	42.47%	23	28.40%
Flowers	V62	22	33.33%	14	20.59%	24	28.92%	17	23.29%	19	23.46%
Electronic equipment (TV, Hi-Fi, Video machine; etc)	V63	16	24.24%	28	41.18%	30	36.14%	20	27.40%	30	37.04%
Household appliances (Washing machine, Fridge, etc)	V64	14	21.21%	19	27.94%	17	20.48%	12	16.44%	9	11.11%
Outdoors equipment and accessories (e.g. tents and camping gear)	V65	16	24.24%	16	23.53%	21	25.30%	16	21.92%	18	22.22%
Food (groceries)	V66	16	24.24%	22	32.35%	31	37.35%	23	31.51%	24	29.63%

Product and Service Category	V	Less than one year (V8.2) (n = 66)		1 year to less than 2 years (V8.3) (n = 68)		2 years to less than 3 years (V8.4) (n = 83)		3 years to less than 4 years (V8.5) (n = 73)		4 or more years (V8.6) (n = 81)	
Food (take away)	V67	14	21.21%	18	26.47%	28	33.73%	15	20.55%	27	33.33%
Furniture	V68	6	9.09%	10	14.71%	8	9.64%	8	10.96%	8	9.88%
Gifts	V69	27	40.91%	28	41.18%	35	42.17%	25	34.25%	22	27.16%
Gift vouchers	V70	30	45.45%	26	38.24%	34	40.96%	17	23.29%	23	28.40%
Garden related	V71	14	21.21%	14	20.59%	11	13.25%	10	13.70%	10	12.35%
Health products	V72	15	22.73%	16	23.53%	14	16.87%	8	10.96%	10	12.35%
Hotel reservations	V73	42	63.64%	38	55.88%	58	69.88%	44	60.27%	53	65.43%
Insurance: Car	V74	21	31.82%	20	29.41%	18	21.69%	22	30.14%	18	22.22%
Insurance: Household	V75	18	27.27%	11	16.18%	18	21.69%	18	24.66%	16	19.75%
Insurance: Life	V76	15	22.73%	10	14.71%	9	10.84%	12	16.44%	10	12.35%
Interior decorating / renovations	V77	12	18.18%	7	10.29%	7	8.43%	7	9.59%	4	4.94%
Jewellery	V78	11	16.67%	5	7.35%	5	6.02%	6	8.22%	6	7.41%
Movie or event tickets	V79	31	46.97%	38	55.88%	62	74.70%	53	72.60%	45	55.56%
Property	V80	15	22.73%	10	14.71%	6	7.23%	6	8.22%	11	13.58%
Sporting goods	V81	12	18.18%	18	26.47%	18	21.69%	11	15.07%	10	12.35%
Toys	V82	15	22.73%	13	19.12%	24	28.92%	14	19.18%	16	19.75%
Unit trust / Shares	V83	21	31.82%	19	27.94%	23	27.71%	21	28.77%	27	33.33%
Wine	V84	13	19.70%	11	16.18%	26	31.33%	15	20.55%	22	27.16%
Other Liquor	V85	6	9.09%	8	11.76%	14	16.87%	8	10.96%	9	11.11%

TABLE A10.3: PRODUCT AND SERVICE CATEGORIES INTERNET SHOPPERS, ACROSS ALL TIME PERIODS, SERIOUSLY CONSIDER PURCHASING VIA THE INTERNET

Product and Service Category	V	Less than one year (V8.2) (n = 23)		1 year to less than 2 years (V8.3) (n = 50)		2 years to less than 3 years (V8.4) (n = 100)		3 years to less than 4 years (V8.5) (n = 112)		4 or more years (V8.6) (n = 258)	
		Freq.	Perc.	Freq.	Perc.	Freq.	Perc.	Freq.	Perc.	Freq.	Perc.
Adult entertainment	V149.5	5	21.74%	5	10.00%	9	9.00%	7	6.25%	28	10.85%
Airline tickets	V150.5	11	47.83%	25	50.00%	52	52.00%	59	52.68%	148	57.36%
Baby products	V151.5	3	13.04%	5	10.00%	12	12.00%	5	4.46%	14	5.43%
Beauty products	V152.5	3	13.04%	6	12.00%	16	16.00%	14	12.50%	32	12.40%
Books and magazines	V153.5	15	65.22%	40	80.00%	75	75.00%	90	80.36%	210	81.40%
Cars and related	V154.5	4	17.39%	7	14.00%	9	9.00%	17	15.18%	36	13.95%
CD's (music)	V155.5	17	73.91%	30	60.00%	62	62.00%	64	57.14%	175	67.83%
Cellular phones and accessories	V156.5	4	17.39%	15	30.00%	23	23.00%	25	22.32%	67	25.97%
Clothing and accessories	V157.5	6	26.09%	9	18.00%	20	20.00%	14	12.50%	49	18.99%
Computer games	V158.5	9	39.13%	18	36.00%	38	38.00%	39	34.82%	106	41.09%
Computer hardware	V159.5	7	30.43%	16	32.00%	29	29.00%	43	38.39%	109	42.25%
Computer software	V160.5	16	69.57%	22	44.00%	51	51.00%	55	49.11%	179	69.38%
Cosmetics	V161.5	2	8.70%	5	10.00%	13	13.00%	17	15.18%	26	10.08%
DVD's / videos	V162.5	13	56.52%	23	46.00%	42	42.00%	45	40.18%	132	51.16%
Flowers	V163.5	8	34.78%	15	30.00%	25	25.00%	33	29.46%	92	35.66%
Electronic equipment (TV, Hi-Fi, Video machine; etc)	V164.5	5	21.74%	9	18.00%	25	25.00%	27	24.11%	75	29.07%
Household appliances (Washing machine, Fridge, etc)	V165.5	4	17.39%	9	18.00%	14	14.00%	16	14.29%	47	18.22%
Outdoors equipment and accessories (e.g. tents and camping gear)	V166.5	4	17.39%	12	24.00%	24	24.00%	19	16.96%	52	20.16%
Food (groceries)	V167.5	9	39.13%	13	26.00%	26	26.00%	32	28.57%	79	30.62%

Product and Service Category	V	Less than one year (V8.2) (n = 23)		1 year to less than 2 years (V8.3) (n = 50)		2 years to less than 3 years (V8.4) (n = 100)		3 years to less than 4 years (V8.5) (n = 112)		4 or more years (V8.6) (n = 258)	
Food (take away)	V168.5	7	30.43%	8	16.00%	20	20.00%	21	18.75%	63	24.42%
Furniture	V169.5	1	4.35%	8	16.00%	13	13.00%	8	7.14%	27	10.47%
Gifts	V170.5	9	39.13%	23	46.00%	50	50.00%	52	46.43%	146	56.59%
Gift vouchers	V171.5	6	26.09%	17	34.00%	36	36.00%	35	31.25%	86	33.33%
Garden related	V172.5	2	8.70%	11	22.00%	18	18.00%	17	15.18%	40	15.50%
Health products	V173.5	6	26.09%	19	38.00%	32	32.00%	29	25.89%	67	25.97%
Hotel reservations	V174.5	13	56.52%	26	52.00%	52	52.00%	55	49.11%	155	60.08%
Insurance: Car	V175.5	6	26.09%	14	28.00%	16	16.00%	18	16.07%	52	20.16%
Insurance: Household	V176.3	5	21.74%	14	28.00%	13	13.00%	19	16.96%	56	21.71%
Insurance: Life	V177.5	4	17.39%	7	14.00%	10	10.00%	11	9.82%	36	13.95%
Interior decorating / renovations	V178.5	2	8.70%	5	10.00%	11	11.00%	7	6.25%	27	10.47%
Jewellery	V178.5	2	8.70%	3	6.00%	10	10.00%	6	5.36%	30	11.63%
Movie or event tickets	V180.5	14	60.87%	25	50.00%	57	57.00%	66	58.93%	162	62.79%
Property	V181.5	1	4.35%	4	8.00%	7	7.00%	11	9.82%	27	10.47%
Sporting goods	V182.5	4	17.39%	11	22.00%	26	26.00%	23	20.54%	53	20.54%
Toys	V183.5	7	30.43%	15	30.00%	29	29.00%	23	20.54%	70	27.13%
Unit trust / Shares	V184.5	6	26.09%	12	24.00%	20	20.00%	34	30.36%	76	29.46%
Wine	V185.5	4	17.39%	4	8.00%	14	14.00%	16	14.29%	40	15.50%
Other Liquor	V186.5	6	26.09%	15	30.00%	25	25.00%	38	33.93%	78	30.23%