THE CONSUMER-PERCEIVED RISK ASSOCIATED WITH THE INTENTION TO PURCHASE ONLINE

by

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“Release myself from holding back. I realise now my world's not flat. An open mind, an open court, open runways open the doors” *(Hello, Prime Circle).*

SUMMARY

The market share of online purchasing is under two percent of total retail spending, which provides an indication that consumers have been slow to adopt online purchasing. Previous research has shown that consumers perceive risks associated with purchasing online and these perceptions are likely to affect purchase intention. Little research, however, has been done on perceived risk relating specifically to online purchasing, and in particular, risk related to branded and non-branded retailer websites. Research has shown that brand knowledge has a direct effect on a consumer's intention to purchase from an online retailer and that this relationship between brand knowledge and intent to purchase online is mediated by perceived risk. The purpose of this exploratory study was therefore to investigate the consumer-perceived risks associated with the intention to purchase online.

The research problem considered the question whether the perceived risks (financial, performance, physical, time, social and psychological risks) associated with a branded website (Kalahari.net) are different from the perceived risks associated with a non-branded website (Books.com).

It was found that four types of perceived risk exist namely, performance, time, social, and personal risk. Of these risks, only performance risk had an influence on a consumer's purchase intention from a non-branded website whereas performance and personal risk influenced a consumer's intention to purchase from a branded website. It was also revealed that consumers perceive performance, time, and social risk as not statistically different when purchasing from a non-branded or a branded website. However, personal risk was perceived to be statistically differently for the two websites.

In addition, the brand image dimension of brand knowledge had an influence on a consumer's purchase intention from both the branded and non-branded

websites. The brand awareness dimension of brand knowledge did not influence purchase intention at all. For all four risk types on both the branded and non-branded websites (except social risk on Books.com), at least one and in some cases, both dimensions of brand knowledge influenced the degree of perceived risk associated with purchasing on the particular website. Finally, it was concluded that the more information search a consumer does before purchase of a book on a branded or non-branded website, the higher their perceived risk associated with purchasing from the particular website.

A number of recommendations were made. Methods for decreasing the amount of performance risk which consumers perceive when purchasing a book online were firstly suggested. It was further recommended that Kalahari.net investigate the dimensions of their brand such as brand image, brand awareness, and brand trust, to identify the reasons why consumers perceive performance, social and time risk as being not statistically different when purchasing on a branded and a non-branded website. Since consumers did not see a difference between the brand image of the branded and the non-branded websites, it was recommended that the branded website make every effort to investigate their current branding strategy to identify the reasons consumers view the branded website in the same manner as the non-branded website. Furthermore, since both dimensions of brand knowledge influenced the degree of perceived risk associated with purchasing on the particular website to a certain extent, it was recommended that online retailers focus on building familiarity, positive thoughts, feelings, associations, and beliefs concerning the online retailer brand. Finally, it was recommended that the influence of information search online on perceived risk associated with purchasing be further investigated; because this study found that an action that was traditionally initiated as a means for decreasing perceived risk can now be attributed to increased consumer-perceived risk associated with online shopping.

OPSOMMING

Die markaandeel van aanlynaankope is minder as twee persent van totale kleinhandel besteding, wat daarop dui dat verbruikers traag is om aan aanlynaankope deel te neem. Vorige navorsing het getoon dat verbruikers risiko's waarneem wat met aanlynaankope geassosieer word en hierdie persepsies waarskynlik aankoopsvoorneme kan beïnvloed. Daar is egter min navorsing gedoen oor risiko persepsies wat spesifiek met aanlynaankope verband hou, en in besonder, risiko wat verband hou met handelmerk- en nie-handelsmerk webtuistes. Navorsing het verder getoon dat handelsmerkkennis 'n direkte invloed het op 'n verbruiker se aankoopsvoorneme van 'n aanlynkleinhandelaar en dat die verhouding tussen handelsmerkkennis en die oogmerk om aanlyn te koop bemiddel word deur waargenome risiko. Die doel van hierdie studie was dus om die verbruiker se waargenome risiko wat geassosieer word met aanlynaankope te ondersoek.

Die navorsingsprobleem het die vraag oorweeg of die waargenome risiko's (finansiële-, prestasie-, fisiese-, tyd-, sosiale- en psigologiese risiko's) wat geassosieer word met 'n handelsmerk webtuiste (Kalahari.net) verskil van die waargenome risiko's wat geassosieer word met 'n nie-handelsmerk webtuiste (Books.com).

Daar is bevind dat vier tipes waargenome risiko's bestaan naamlik, prestasie-, tyd-, sosiale- en persoonlike risiko. Van die risiko's het slegs prestasie-risiko 'n invloed gehad op verbruikers se aankoopsvoorneme by 'n nie-handelsmerk webtuiste, in teenstelling met prestasie- en persoonlike risiko by 'n handelsmerk webtuiste. Dit is ook bevind dat verbruikers nie prestasie-, tyd- en sosiale risiko as statisties verskillend waargeneem het nie, wanneer aankope gedoen word vanaf 'n nie-handelsmerk en 'n handelsmerk webtuiste. Persoonlike risiko is egter statisties verskillend vir die twee tipes webtuistes.

Verder is bevind dat die handelsmerkbeeld as dimensie van handelsmerk-kennis ’n invloed het op aankoopsvoorneme vanaf beide handelsmerk en nie-handelsmerk webtuistes. Die handelsmerkbewustheid as dimensie van handelsmerkkennis het geen invloed op aankoopsvoorneme gehad nie. Van al vier risiko tipes van beide die handelsmerk en nie-handelsmerk webtuistes (behalwe sosiale risiko op Books.com) het ten minste een, en in sommige gevalle beide dimensies van handelsmerkkennis die omvang van waargenome risiko geassosieer met aankope op ’n spesifieke webtuiste beïnvloed. Die gevolgtrekking is dat hoe meer inligting verbruikers soek voor die aankoop van ’n boek vanaf ’n handelsmerk of nie-handelsmerk webtuiste, hoe hoër is hul waargenome risiko wat hul met die spesifieke webtuiste assosieer.

’n Aantal aanbevelings word voorgestel. Eerstens is maniere om die hoeveelheid prestasie risiko wat verbruikers waarneem as hul ’n boek aanlyn koop te verminder, voorgestel. Dit is verder aanbeveel dat Kalahari.net die dimensies van hul handelsmerk soos handelsmerkbeeld, handelsmerkbewustheid en handelsmerkvertroue, ondersoek om die redes te identifiseer hoekom verbruikers nie prestasie-, sosiale- en tydrisiko’s as statisties verskillend waarneem wanneer hulle vanaf ’n handelsmerk- of ’n nie-handelsmerk webtuiste aankoop nie. Aangesien verbruikers nie ’n verskil tussen die handelsmerkbeeld van handelsmerk- en nie-handelsmerk webtuistes ervaar nie, is dit aanbeveel dat die handelsmerk webtuiste pogings aanwend om die huidige handelsmerkstrategie te ondersoek om die redes te identifiseer waarom verbruikers handelsmerk webtuistes op dieselfde manier ervaar as nie-handelsmerk webtuistes. Verder, aangesien beide dimensies van handelsmerkkennis die graad van waargenome risiko, wat geassosieer word met aankope vanaf ’n spesifieke webtuiste tot ’n mate beïnvloed het, word aanbeveel dat aanlynkleinhandelaars op die bou van vertroudheid, positiewe denke, gevoelens, assosiasies en oortuigings wat die aanlynkleinhandelsmerk aangaan fokus. Laastens was dit aanbeveel dat die invloed van aanlyn informasiesoektogte wat met aankope geassosieer word verder ondersoek word. Die studie het bevind dat optrede wat tradisioneel geïnisieer is as ’n manier om waargenome risiko te veminder, nou toegeskryf kan word aan verhoogte verbruiker waargenome risiko wat met aanlynaankope geassosieer word.

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CHAPTER ONE
INTRODUCTION TO THE STUDY

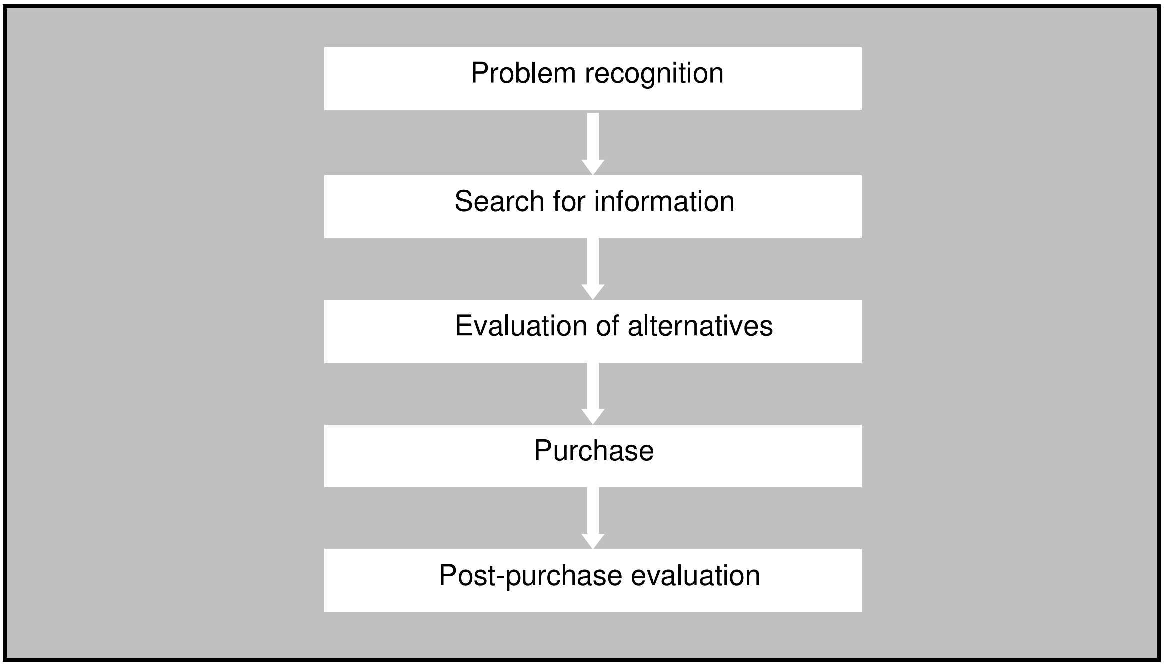
1.1 BACKGROUND

The internet, also known as the “International electronic network”, was started in 1986 (Pallab, 1996 as cited in Tan, 1999). Today, the internet offers consumers not only access to an extensive amount of information but also an alternative way of making purchases. The growth of online purchasing has been slow but steady, and is not yet reaching the high growth predictions made in the late 1990`s (Jarvelainen and Puhakainen, 2004; Chen and He, 2003). Research has found that consumers are doing more information searching on the internet than actual purchasing (Forsythe and Shi, 2003). Nearly two thirds of internet users have used the internet to research purchases online, but they have yet to buy over the internet (*Online Purchases*, 1999 as cited in Forsythe and Shi, 2003). Furthermore, the market share of online purchasing is under 2% of total retail spending (*Retail Forward*, 2003 as cited in Swinyard and Smith, 2003), which provides an indication that consumers have been slow to adopt online purchasing. Previous research has shown that consumers perceive the act of purchasing to be a risky endeavour, and that this risk could affect their likelihood of purchase (Wood and Sheer, 1996). *Risk* refers to the likelihood that actual results will differ from expectations. Previous studies include those by Lu, Hsu and Hsu, (2005); Ueltschy, Krampf and Yannopoulos, (2004); Forsythe and Shi, (2003); and Miyazaki and Fernandez, (2001). Little research, however, has been done on risk relating specifically to online purchasing. In particular, there is a paucity of research concerning risk related to branded and non-branded retailer websites.

Against this background, one may realise the importance for companies and marketing departments of understanding consumer behaviour. Marketers need to be certain of what their customers need and want, and they also need to know how consumers make decisions about purchasing online. Once this information is known and understood, it needs to be put to use effectively. Effective usage will require online retailer web presence to be customised in such a way that the consumer can relate to it on a personal or individual basis. One method often used to accomplish this effective usage of information is that of reducing the risks associated with online purchase intention. Whether this reduction in risk involves focusing on building the online retailer's brand is uncertain.

Previous research has shown that consumers associate risks with purchasing online (Tan, 1999). To identify these risks, one needs to understand how consumers make decisions when considering a purchase. Consumers move through a number of stages when deciding whether to make a purchase or not. As depicted in Figure 1.1, these stages are: problem recognition, search for information, evaluation of alternatives, purchase, and post-purchase evaluation (Statt, 1997).

FIGURE 1.1 THE CONSUMER DECISION- MAKING PROCESS

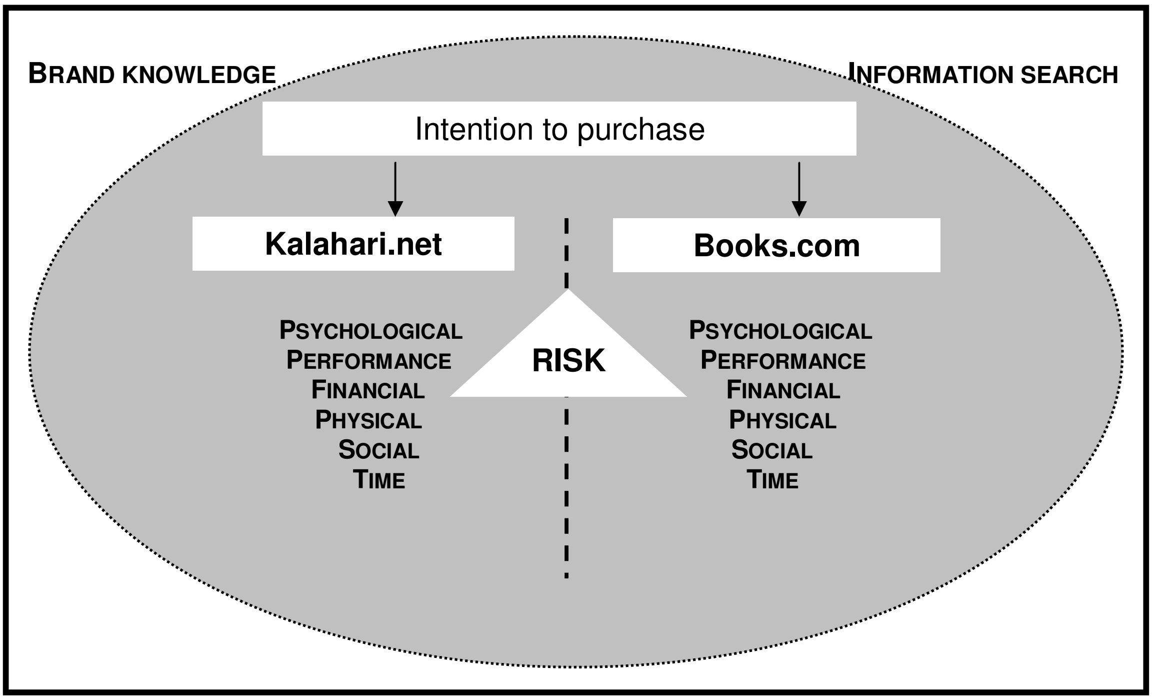


Source: Adapted from Statt (1997).

Risk, however, pertains primarily to the second stage, which is information search (Schiffman and Kanuk, 2004). Information search is therefore particularly important for this study. Consumers collect information in an attempt to reduce the risks associated with purchase (Wood and Sheer, 1996). Taking into account that risk is closely related to the level of uncertainty and the possibility of negative consequences of purchasing a good or service (Dowling and Staelin, 1994), the more knowledge internet users have, the more positive will be the impact on online purchases. Chen and He (2003) have found that the greater the consumer's brand knowledge of a particular online retailer, the more likely the consumer is to make an online purchase. More importantly, it has also been found by Chen and He (2003) that this relationship between brand knowledge and intent to purchase online is mediated to a large extent by perceived risk. Lastly, it should be noted that when consumers do not have much knowledge about a product category, the brand name becomes relatively important in their purchase decision (Hsu, Lai, and Chen, 2007). This is because when consumers are uncertain about a product, they base their choice on what is most familiar or most easily recognised (Jacobs and de Klerk, 2007).

This exploratory study focuses on the perceived risk associated with intention to purchase online. An overview of the study is depicted in Figure 1.2. For the purpose of the study, it is necessary to differentiate between the concepts of *risk* and *perceived risk*; *consumer behaviour*; *internet shopping*, *purchase intention, information search* and *brand knowledge*. These concepts are discussed below.

FIGURE 1.2 CONCEPTUAL FRAMEWORK OF THE STUDY



1.1.1 Risk

Anything new involves risk, or some likelihood that actual results will differ from expectations. Risk-taking refers to a willingness to pursue opportunities that have a reasonable likelihood of producing losses or significant performance discrepancies (Morris and Kuratko, 2002). Almost all kinds of shopping activities involve an element of risk, owing to the uncertainty in the purchasing decision. The amounts at stake and the buyer's subjective assessment of the chances of an unfavourable consequence, determine the total amount of risk in any purchase decision (Dowling and Staelin, 1994).

1.1.2 Perceived risk

The concept of perceived risk was originally introduced by Bauer, who defined risk in terms of the uncertainty and the consequences associated with a consumer's actions (Bauer 1960 as cited in Lu, Hsu and Hsu, 2005 and Cox, 1967). Also, as illustrated in Figure 1.2, perceived risk refers to the nature and amount of risk perceived by a consumer in contemplating a particular purchase decision (Cox and Rich, 1964). Consumers are apprehensive when they cannot be sure that purchases will allow them to achieve their buying goals. Perceived risk can therefore be considered a function of the uncertainty about the potential outcomes of a behaviour and the possible unpleasantness of these outcomes (Forsythe and Shi, 2003). The amount of risk perceived by the consumer is a function of two main factors, namely the amount at stake in the purchase decision, and the individual's feeling of subjective certainty that he/she will "win" or "lose" all or some of the amount at stake (Cox and Rich, 1964). Schiffman and Kanuk (2004) have identified six types of perceived risk, namely financial, functional, social, psychological, physical, and time/convenience risk, as illustrated in Figure 1.2. Overall perceived risk therefore consists the above-mentioned six types of perceived risks, and perceived risk can be described as a multi-dimensional construct.

1.1.3 Consumer behaviour

Consumer behaviour can be defined as the behaviour that consumers display in searching for, purchasing, using and evaluating products, services and ideas, which they expect will satisfy their needs (Williams, 1982). Bauer proposed that consumer behaviour be considered as an instance of risk-taking, based on the fact that any actions of consumers will produce consequences which they cannot anticipate with anything approximating certainty, and at least some of which are likely to be unpleasant (Bauer 1960 as cited in Cox, 1967 and Laroche, Bergeron and Goutaland, 2003). To consider the role of perceived risk in the context of online purchase intention, one needs to understand the consumer decision-making process which is discussed in more detail in Chapter 3.

1.1.4 Internet shopping

The internet offers a variety of different functionalities, the main functions of which are information collection, non-commercial and commercial communication, and shopping (*see* Figure 1.2). Shopping online has become the fastest-growing use of the internet, with about 53% of internet users reporting shopping as a primary use of the web (GVU's World Wide Web, 9th User Surveys, 1998 as cited in Forsythe and Shi, 2003). Research has shown that, although internet shopping is becoming an accepted way to purchase many kinds of products and services, most online consumers use it only as a source of information prior to making an offline purchase (Forsythe and Shi, 2003). In South Africa, the largest online retailers represent less than 0,1% of the country's R188 billion retail market (Bidoli, 2003). According to Prabhaker (2000), online commerce will only thrive with a build-up of consumer confidence and consumer acceptance. In order to build consumer confidence and acceptance, one needs to determine the extent and influence of the risks associated with online purchase intention.

1.1.5 Purchase intention

Purchase intention is the consumer's plan whether to participate in a transaction or not to. Online purchase intention (Figure 1.2) refers to an intention to transact with a website. Purchase intention is defined as the situation which manifests itself when a consumer is willing and intends to become involved in online transactions (Pavlou, 2003 as cited in Chen and Barnes, 2007). Online transactions differ from traditional transactions in that consumer-retailer interactions make use of extensive technology; the online transaction is uncertain, temporal, and impersonal in character, and the technological infrastructures used during the processes of online transactions are open and unpredictable (Pavlou, 2003 as cited in Chen and Barnes, 2007). These differences create a window for error and hence possibly create risks associated with online purchase intention. Previous research examining risk perceptions in marketing has found that risk perceptions are negatively correlated with willingness to buy (Shimp and Bearden, 1982; and White and Truly, 1989 as cited in Garbarino and Strahilevitz, 2004).

1.1.6 Information search

Information search is the second stage in the consumer decision-making process. This stage is concerned with accessing sources of information and becoming aware of product alternatives. Before the arrival of the internet, access to information was rather incomplete and subjective (Zeng and Reinartz, 2003). The internet, however, has emerged as a powerful source of information, having a significant impact on the information search stage in the consumer decision-making process.

Consumers collect information in an attempt to reduce the risks associated with purchase (Wood and Sheer, 1996). If risk is closely related to the level of uncertainty and likelihood of negative consequences of purchasing a good or service (Dowling and Staelin, 1994), then the more knowledge internet users have, the more positive the impact will be on the likelihood of online purchases. One source of information available to a potential purchaser is brand knowledge.

1.1.7 Brand knowledge

One method of understanding a consumer’s perception of an online retailer is by considering the brand knowledge held in the mind of the consumer. *Brand knowledge* refers to all the thoughts, feelings, images, experiences and beliefs that consumers associate with the brand (Kotler and Keller, 2006). In addition, brand knowledge is the consumer’s extent of familiarity and understanding of a brand’s awareness and image (Keller, 1993).

Brand awareness is the consumers’ ability to identify the brand under different conditions, as reflected by their brand recognition or recall performance (Kotler and Keller, 2006). *Brand recognition* relates to the consumers' ability to confirm prior exposure to the brand, where *brand recall* relates to the consumers' ability to retrieve the brand when given the associated product category (Keller, 1993). In this study, brand awareness refers to the consumers’ ability to recognise or recall the name of a particular online retailer and identify it as different to another online retailer. Brand name awareness therefore relates to the likelihood that a brand name will come to mind, as well as the ease with which it does so. *Brand image* is the perceptions and beliefs held by consumers, as reflected in the associations held in consumer memory (Kotler and Keller, 2006). It can therefore be concluded that brand knowledge of an online retailer is also a function of the consumer's ability to recognise and recall (brand awareness) the online retailer brand, as well as the perceptions and beliefs (brand image) the consumer has with respect to the online retailer brand (Schmitt and Geus, 2006).

1.2 JUSTIFICATION FOR THE STUDY

Worldwide internet use was projected to reach one billion in 2005 (Nielsen, 2003 as cited in Ueltschy *et al.*, 2004). This figure was an indication that the internet population was beginning to mirror the general population of the world. However, in order for e-commerce to live up to its full potential, online retailers must gain an understanding of which risks of online purchasing consumers are most concerned with, as well as what specific steps can be taken to help reduce such risk perceptions, particularly for those who perceive them as severe (Garbarino and Strahilevitz, 2004). Understanding perceived risks assists marketers in seeing e-commerce through their customers' eyes. Insight into consumers' risk perceptions will enable marketers to anticipate, manage and satisfy online consumers` needs and wants, thereby reducing their fears of purchasing online. Secondly, an analysis of risk perceptions can be helpful in brand-image development, targeting, positioning and segmentation (Mitchell, 1999). Finally, the examination of risk perceptions can lead to the generation of new product ideas. Therefore in order for online retailers to fully realise their potential profits, they must understand the impact of perceived risks associated with online purchase intention, and develop marketing programmes or make necessary adjustments to their online sales offerings. By determining exactly what risks consumers do perceive when deciding to purchase online, one may be able to implement strategies to reduce these and therefore change the perceptions associated with online purchase. Understanding a consumer's perception of an online retailer may be the first step towards the investigation of the perceived risks associated with that online retailer. One method of understanding a consumer's perception of an online retailer is to consider the brand knowledge held in the mind of the consumer.

To investigate the influence that brand knowledge has on perceived risk associated with online intention to purchase, it was decided to study the consumer-perceived risks associated with intention to purchase online, in the context of a well-known and an unknown online book retailer (*see* Figure 1.2). A book retailer was chosen since books are the most commonly purchased item online in South Africa (ACNielsen, 2005). Kalahari.net was chosen as the well-known online retailer, for the reason that this website has received a number of awards recently, such as Best e-Commerce store 2007 and Best Online Bookstore (Bredenhann, 2007). A fictitious website Books.com was chosen as the unknown online retailer. Since Kalahari.net has been identified as set apart from its fellow competitors by means of the above-mentioned awards, it can be classified as a branded website. A brand is a name, term, sign, symbol, or design, or combination of them which is intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of competitors (Keller, 1993). Based on this definition of a brand, it can be assumed that anything that has a name can therefore be considered a brand. Two examples would be wine.com (Wine, 2008) and chocolate.com (Chocolate, 2008). The online book retailer could, according to this definition, also be considered a brand. However, Books.com does not exist, it is fictitious and therefore unknown, and no previous marketing effort has been made to build the brand identity. For this reason Books.com is classified as a non-branded website in this study. It must be made clear that the main focus of the study concerns perceived risk and not branding; the use of a branded and a non-branded website is only part of the methodology for assessing the influence of brand knowledge on perceived risk and intention to purchase from an online retailer.

1.3 PROBLEM STATEMENT

Perceived risk is described as a function of the uncertainty about the potential outcomes of a particular behaviour and the possible unpleasantness of these outcomes (Forsythe and Shi, 2003). Furthermore, consumer behaviour can be considered as an instance of risk-taking, based on the fact that any action of a consumer will produce consequences which he/she cannot anticipate with anything approximating certainty, and at least some of which are likely to be unpleasant (Bauer 1960 as cited in Laroche, Bergeron and Goutaland, 2003). Research concerning consumer behaviour online has found that consumers are doing more information searching on the internet than actual purchasing (Forsythe and Shi, 2003). Nearly two thirds of internet users have used the internet to research purchases online, but they have yet to buy over the internet (One Third of Internet Users Have Made Online Purchases, 1999 as cited in Forsythe and Shi, 2003).

Previous research has shown that consumers perceive risks associated with purchasing, which is therefore likely to affect purchase intention (Wood and Sheer, 1996). Also, it was found by Chen and He (2003) that brand knowledge has a direct effect on a consumer's intention to purchase from an online retailer, and that this relationship between brand knowledge and intent to purchase online is mediated to a large extent by perceived risk. The purpose of this exploratory study was therefore to investigate the perceived risks associated with intention to purchase online.

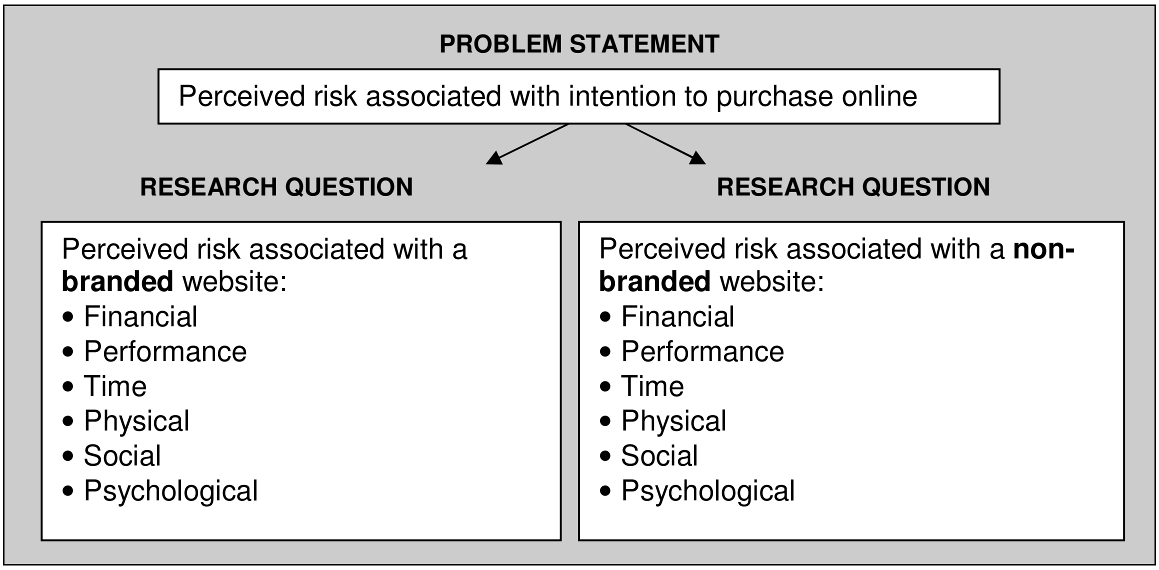
1.4 OBJECTIVES OF THE STUDY

Research objectives are derived from the research question, which in turn is derived from the problem statement (Zikmund and Babin, 2007). The problem statement was discussed in the previous section. Before one can state the research objectives, one first needs to propose the research question.

Considering the problem statement and background of the study, the research question is as follows:

> Are the perceived risks (financial, performance, physical, time, social and psychological risks) associated with online purchase intention on a branded website different from the perceived risks associated with a non-branded website? (Figure 1.3 depicts the initial procedure for the formulation of research objectives.)

FIGURE 1.3 RESEARCH QUESTION FOR THE STUDY



Given the purpose of the study, the research objectives for this study are:

1. To assess the relative influence of different risk types on intention to buy from a branded website as opposed to a non-branded website.
2. To determine whether a consumer's brand knowledge (brand awareness and brand image) and extent of information search when purchasing on a branded website influences his/her intention to make a purchase on a branded website.
3. To determine whether a consumer's brand knowledge (brand awareness and brand image) and extent of information search when purchasing on a

non-branded website influences his/her intention to make a purchase on a non-branded website.

4. To determine whether there is a difference between the perceived risks associated with purchasing on a branded website and the perceived risks associated with purchasing on a non- branded website.
5. To assess whether the perceived risks associated with purchasing on a branded website as opposed to a non-branded website are influenced by the brand knowledge (brand awareness and brand image) of the website.
6. To determine whether information search by a consumer has an influence on the overall perceived risk associated with purchasing on a branded and a non-branded website.

1.5 RESEARCH DESIGN

A research design is the strategy for the study and the plan by which the strategy is to be carried out. Therefore the research design specifies the methods and procedures for the collection, measurement and analysis of data (Coldwell and Herbst, 2004).

1.5.1 Secondary research

Secondary research includes acquiring research or data that have been previously collected for some project other than the one at hand (Zikmund, 2003). For this purpose, a literature review (*see* Chapters 2 to 5) was undertaken to review published articles and books discussing theories and past empirical studies concerning business management, the consumer decision-making theory, online purchasing, and risk. A review of perceived risk and the specific components of consumer behaviour identifies relations, contradictions, gaps, strengths, and inconsistencies in terms of what is known and what is not.

1.5.2 Primary research

Primary data are those gathered and assembled specifically for the project at hand (Zikmund, 2003). In order to address the main objectives of this study, primary research was undertaken to assess the impact of the perceived risks associated with online purchase intention.

1.5.2.1 Population of the study

A population is a group of individual persons, objects or items from which samples are taken for measurement (Coldwell and Herbst, 2004). In this study, the target population consisted of all consumers in South Africa above the age of 18, who have access to the internet.

1.5.2.2 Sampling method

Only a sample of the population was studied. Since no complete list exists of consumers in South Africa above the age of 18, who have access to internet, a sample frame could not be obtained. Therefore, a multi-stage non-probability sampling technique was implemented. The geographical area for data collection was first chosen on the basis of judgemental sampling, where the sample was selected by an experienced individual based upon some appropriate characteristic of the sample members (Zikmund, 2003). A list of all the possible malls which permit the collection of data was drawn up and then chosen once again by means of the judgment sampling technique. Finally, those consumers who were most conveniently available to the fieldworker were asked to participate in the study.

1.5.2.3 Data gathering

Following a pre-test of the questionnaire, a structured questionnaire was presented to the respondents. The questionnaire made use of multiple-item Likert scale questions as well as categorically-scaled questions. Data were collected using the mall intercept personal interview method of data collection (Zikmund and Babin, 2007). Data were collected by fieldworkers from an independent marketing research company.

1.5.2.4 Data processing

The data collected during the study were processed and analysed by the researcher using the statistical analysis programme, SPSS version 16.0. Data were coded, edited, and cleaned. Tests were also done for reliability and validity of the measuring instrument, as well as the items within the measuring instrument. Descriptive and inferential data were collected and interpreted using the appropriate tests of significance.

1.6 ORIENTATION OF THE STUDY

The orientation of the study is as follows:

Chapter 1 Introduction

This chapter outlines the background of the study, prepares the problem and objectives of the study, and also discusses the research design.

Chapter 2 Business management

The concept of business management is addressed in this chapter. The chapter begins by introducing economics, followed by business management as a discipline, where consumer needs, limited resources, and the functions of management are briefly discussed. This section leads to the relationship between economics and business management. Then follows a section which elaborates on the business functions and the tasks necessary to execute them. In this section, special attention is given to the marketing function in an attempt to clarify the position of this study in the context of business management.

Chapter 3 Consumer behaviour

The concept of consumer behaviour as related to the research problem is addressed in this chapter. The chapter therefore focuses on consumer behaviour as a component of marketing, the nature of consumer behaviour, consumer behaviour as a construct, and in particular the consumer decision-making process.

Chapter 4 Online shopping

This chapter aims to provide a general understanding of a relatively new channel of distribution, namely online shopping. Since *online* implies internet, the chapter begins by discussing the nature of the internet. This is followed by a discussion of a consumer's intention to adopt the internet as a method of purchase. Online shopping as a mode of purchase and the current status of online shopping is further discussed. Subsequently, online shopping as a marketing tool as well as a profile of the online consumer is presented. Lastly, online shopping in South Africa is considered.

Chapter 5 Risk

The aim of this chapter is to provide an overall understanding of consumer-perceived risk and its relation to consumer behaviour and online shopping. First, risk in general is discussed, followed by a detailed discussion of the concept of perceived risk including the components of perceived risk, the types of perceived risk, factors that influence risk perception by consumers, measurement of risk, and consumer risk-handling behaviour. Next, risk-reduction methods are briefly discussed. Lastly, perceived risk in the online environment is presented, where types of online perceived risk are discussed as well as the factors influencing online perceived risk applicable to this study.

Chapter 6 Research methodology

The marketing research process is discussed in detail in this chapter, as well as the research approach adopted in the study and the type of primary data collected.

Chapter 7 Research results

In this chapter, the results of the study are presented. The results deal with the profile of the sample and the reliability and validity of the data. In addition, the results of each objective are addressed by means of the appropriate test of significance.

Chapter 8 Conclusions and recommendations

In this chapter, the findings of the research results are interpreted, conclusions are drawn, recommendations are made, and areas of future research are suggested in detail. Limitations of the study are also discussed.

CHAPTER 2
BUSINESS MANAGEMENT

2.1 INTRODUCTION

The concept of business management is addressed in this chapter. The chapter begins by introducing economics, followed by business management as a discipline, where consumer needs, limited resources, and the functions of management are briefly discussed. This section leads to the relationship between economics and business management. Then follows a section which elaborates on the business functions and the tasks necessary to execute them. In this section, special attention is given to the marketing function in an attempt to clarify the position of this study in a business management context.

2.2. ECONOMICS

Lionel Robbins (1898-1984) defined *economics* as the science which studies human behaviour as a relationship between ends and scarce means which have alternative uses (Arnold, 2005). Also, economics refers to the allocation of scarce resources for the purpose of fulfilling society's needs. Therefore, economic activity is any kind of action aimed at satisfying human needs and providing compensation to the entrepreneur in such a way that the minimum sacrifices are made (Van Rensburg, de Klerk, Kroon, Lotz, Steyn and Verreynne, 1997). Furthermore, economics involves the way individuals and societies deal with the fact that wants are greater than the limited resources available to satisfy those wants (Arnold, 2005).

From the above definitions, it is clear that economics can be separated into two stakeholders. These are the individual and society. Economics that deals with a single market, an individual, a firm or an industry, is known as Microeconomics.

Economics that deals with the entire economy is known as Macroeconomics (Nickels, McHugh and McHugh, 2006). This study is associated with Microeconomics since it deals with the individual consumer. Economics and the individual consumer can be understood more clearly by considering the economic principle.

The *economic principle* refers to the consideration of how scarce factors of production are to be used to ensure optimal satisfaction of needs (Bosch, Tait and Venter, 2006). The distinction between the economic principle and the economic motive is important. The *economic motive* is seen as the underlying force of economic activity and refers merely to the striving to satisfy needs. The economic principle, however, weights the basic problem of economic life, namely to satisfy many needs with relatively scarce means (Du Plessis and Nortjie, 1981).

In order to understand how the economic principle influences Microeconomics, an individual, a firm, or an industry, it is necessary to examine business management as a discipline.

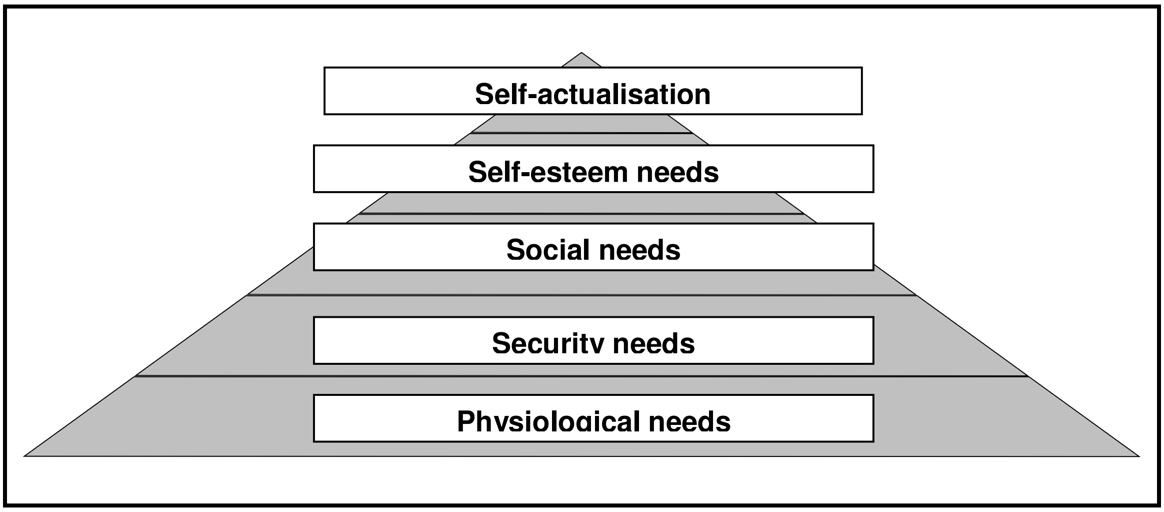
2.3 BUSINESS MANAGEMENT AS A DISCIPLINE

Business management can be rationally separated into two components. These are business and management. *Business* is referred to as an organised approach used by individuals for the purpose of providing goods and services to people. Usually business is done with the aim of making a profit, although some businesses are actually non-profit in nature (Hodgetts, 1981). *Management* is defined as the process of setting objectives and coordinating the efforts of personnel in order to attain them (Morris and Kuratko, 2002). Furthermore, management is referred to as getting things done through people by means of setting objectives, formulating plans, and then controlling operations (Hodgetts, 1981). Management has been defined by a number of authors. However, the most widely accepted definition describes management as a social process of planning, coordination, control, and motivation (Brech, 1984 as cited in Pettinger, 2002, Hodgetts, 1981, Everard and Shilt, 1979). This definition refers to the means by which managers get things done through people. One can infer that business management therefore involves satisfying consumer needs with a limited amount of resources through planning, coordination, control, and motivation of these resources. Consumer needs, scarce resources, and the four functions of management are discussed in turn.

2.3.1 Consumer needs

Human kind, no matter how primitive or sophisticated, has a wide and partly unlimited range of needs, wants and desires (Bosch *et al.*, 2006). These needs are described by means of a widely accepted theory developed by Dr. Abraham Maslow, a clinical psychologist. This theory is universal and is known as Maslow's hierarchy of human needs (Schiffman and Kanuk, 2004). Maslow's hierarchy identifies five basic human needs which rank in order of importance from lowest to highest (Bosch *et al.*, 2006) as illustrated in Figure 2.1.

FIGURE 2.1 MASLOW'S HIERARCHY OF HUMAN NEEDS



Source: Adapted from Schiffman and Kanuk (2004).

These needs are physiological needs, security needs, social needs, self-esteem, and Self actualisation (Bosch *et al.*, 2006, Nickels *et al.*, 2006, Schiffman and Kanuk, 2004, and Pettinger, 2002).

- *Physiological needs.* Physiological needs are the first and most basic level of human needs. Physiological needs refer to basic survival needs such as food, water, and shelter.
- *Security needs.* Security needs represent the next level and include the need for safety, stability, and security. Security needs also include order, stability, routine, familiarity, and control over one's life
- *Social needs.* Security needs are the third level of Maslow's hierarchy and include such needs as love, affection, belonging, and acceptance. People seek warm and satisfying human relationships with other people and are motivated by love for their families.
- *Self-esteem needs.* Self-esteem needs refer to the need for recognition and acknowledgment from others, as well as self-respect and a sense of status importance.
- *Self actualisation.* Self actualisation refers to an individual's desire to fulfil one's potential, to become everything one is capable of becoming. This involves doing that at which one is most talented.

As people's needs change and become more complex, and their level of development and general standard of living rise, the hierarchy may change (Bosch *et al.*, 2006). In order for the hierarchy to change, the needs must be satisfied. These needs can be satisfied by means of products and services. The urge to satisfy needs by means of products and services is commonly referred to as the *economic motive* (Du Plessis and Nortjie, 1981). The economic motive is the driving force behind all economic activities. As mentioned earlier, economic activity involves satisfying unlimited needs with limited resources.

2.3.2 Limited resources

In order for goods and services to satisfy needs, these goods and services first need to be produced by a business. To produce goods and services, a business requires certain inputs. These inputs, known as *factors of production,* include tangible as well as intangible items that are taken from the environment, namely natural resources, labour, capital, and human resources. (Du Plessis and Nortjie, 1981, Nickels *et al*,. 2006).

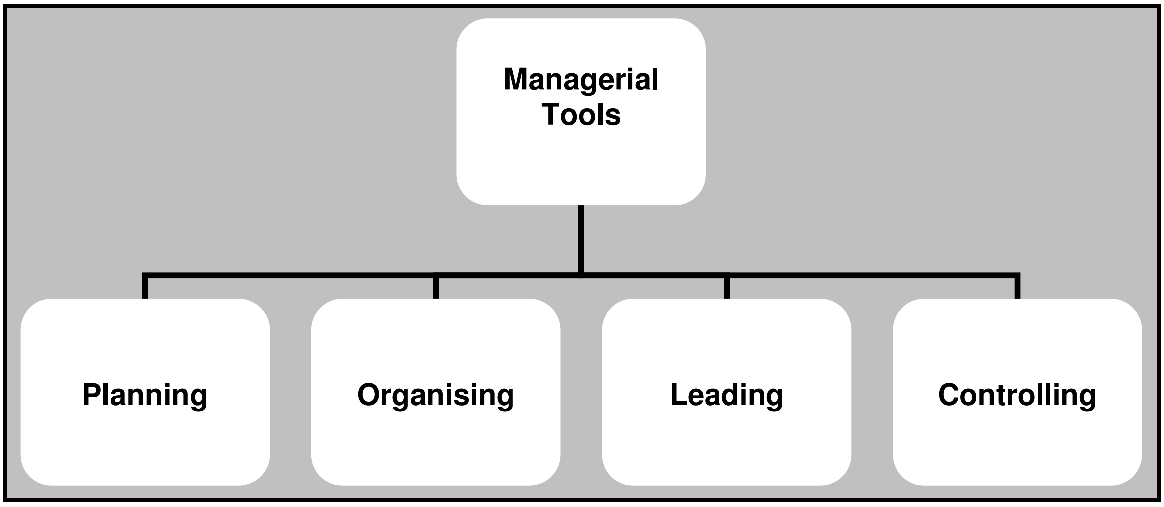
- *Natural resources.* Natural resources include all natural sources such as land, air, water, raw materials, forests, and crude oil.
- *Labour.* Labour refers to people employed to produce products and services, for example the factory worker, the shop assistant or manager.
- *Capital.* Capital is the funds or financial means used for financing the firm's activities.
- *Entrepreneurship.* Entrepreneurship is the intangible ability which brings together the capital, natural resources and human resources associated with the production of products and services. This intangible ability requires initiative, risk-taking, and a desire for profit.

The factors of production are, however, not unlimited. In fact, the factors of production are scarce and expensive to obtain and can be used for many different applications (Bosch *et al.*, 2006). For this reason, the business manager has to continuously make decisions on how best to use these limited resources while simultaneously maximising the satisfaction of needs. This consideration of scarce resources is known as the economic principle (Du Plessis and Nortjie, 1981). In order to make these decisions concerning scarce resources, a number of tools can be utilised by the business manager to aid in decision-making. These tools are referred to as *functions of management* and include planning, leading and controlling (Everard and Shilt, 1979, Hodgetts, 1981, Boch *et al.*, 2006, Nickels *et al.*, 2006).

2.3.3 Functions of management

Management is the process used to accomplish organisational goals through planning, organising, leading, and controlling people and other organisational resources (Nickels *et al.*, 2006). These managerial tools which aid the business manager in decision-making are depicted in Figure 2.2 below.

FIGURE 2.2 FUNCTIONS OF MANAGEMENT



Source: Adapted from Everard and Shilt (1979).

- *Planning* consists of two basic activities. These activities include setting objectives and deciding on a strategies and tactics that will attain these objectives (Hodgetts, 1981). Planning is concerned with the future and the anticipation of trends. Planning thus provides a base for the success of the other three functions of management.
- *Organising* includes designing the structure of the organisation and creating conditions and systems in which everyone and everything work together to achieve the organisation's goals and objectives (Nickels *et al.*, 2006). Organising concerns defining responsibility and dividing work into smaller units (Hogetts, 1981).
- *Leading* requires the manager to fulfil the functions of communicating, guiding, training, coaching, and motivating others to work effectively to

accomplish the organisation's goals and objectives (Nickels *et al.*, 2006). Leading seeks to empower employees by giving them as much freedom as possible to become self-directed and self-motivated.

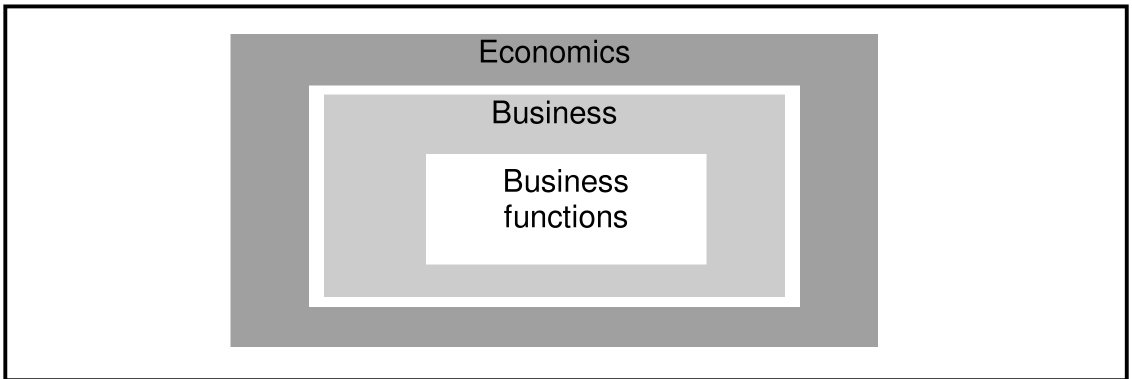
- Lastly, *controlling* involves judging the success of meeting the goals and then taking actions to correct the situation when goals are not achieved (Everard and Shilt, 1979).

2.4 THE RELATIONSHIP BETWEEN ECONOMICS AND BUSINESS

Business is closely associated with the economy (Hodgetts, 1981). Economics refers to the allocation of scarce resources for the purpose of fulfilling society's needs. Therefore, economic activity is any kind of action aimed at satisfying human needs and providing compensation to the entrepreneur in such a way that the minimum sacrifices are made (Van Rensburg *et al.*, 1997).

As depicted in Figure 2.3, whenever a business transaction takes place, economic activity occurs. Economic activity occurs because a business transaction stems from the need of an individual and the willingness of someone to satisfy the need owing to some form of compensation derived from it. These transactions take place through the means of a business. A business combines production factors and business functions in order to satisfy the needs in a beneficial way (Van Rensburg *et al.*, 1997).

FIGURE 2.3 BUSINESS MANAGEMENT IN PERSPECTIVE



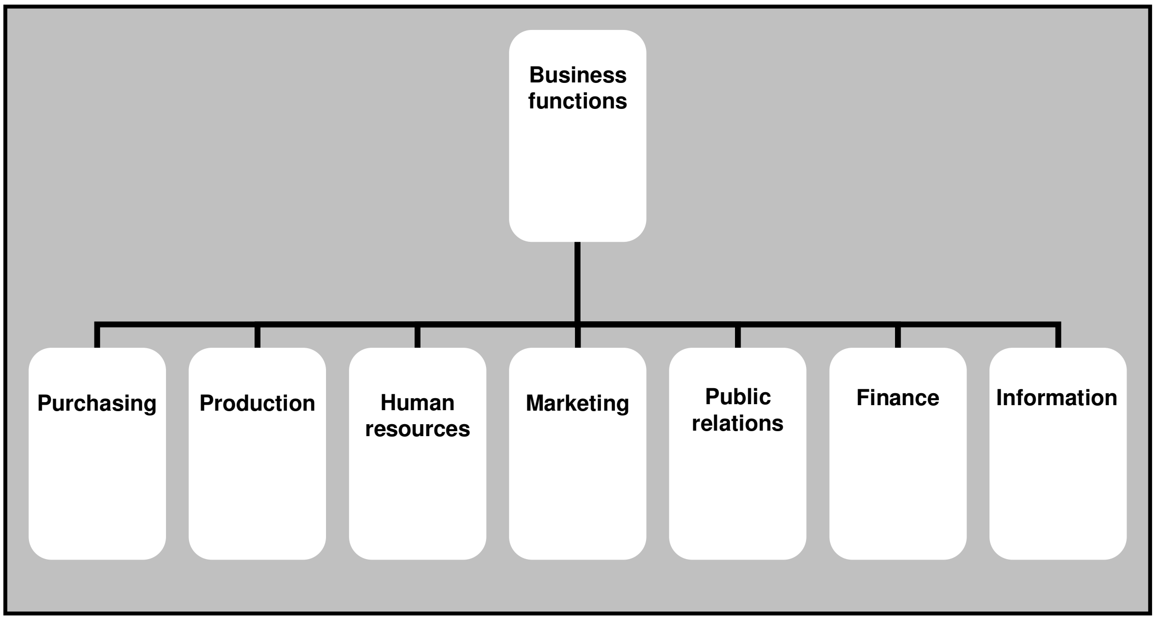
Source: Adapted from Bosch *et al.,* (2006).

Therefore, business helps to make the economic system work by producing and distributing the particular goods and services that people wish to have (Everard and Shilt, 1979). A business can accomplish this need fulfilment by means of a number of business functions and associated tasks which are undertaken in a coordinated manner (See Figure 2.3).

2.5 BUSINESS FUNCTIONS

Business functions represent activities performed by a business. These activities are further accomplished by means of setting tasks. A task therefore represents the method of execution for these activities and can only be set after the nature of the function has been determined (Bosch *et al.*, 2006). A number of business functions exist. The most common business functions identified include purchasing, production, human resources, marketing, public relations, finance, and information, as depicted in Figure 2.4.

FIGURE 2.4 BUSINESS FUNCTIONS



Source: Adapted from Bosch *et al.,* (2006).

The business functions as illustrated in Figure 2.4 represent the total area of business management. Each function requires independent consideration. Simultaneously, however, the business functions overlap and are dependent on one another. It is clear that business stems from economics. Therefore all business functions should apply the economic principle. That is, each business function should be managed in such a way as to achieve optimal output with limited resources. Each business function is discussed briefly, with the exception of the marketing business function. Due to the nature of the topic, the marketing business function is discussed in more detail towards the end of the chapter.

2.5.1 The purchasing function

The *purchasing function* as depicted in Figure 2.4 refers to all the activities related to the procurement of requirements by the business for the continuation of its activities (Van Rensburg *et al.*, 1997). This function involves purchasing materials and equipment necessary for the business in the right quantity, quality, and at the most appropriate time. Also, the purchase must be managed in such a way that it is made with the correct supplier, at the correct price and ensured delivery when and where the materials are needed (Bosch *et al.*, 2006).

In order for the above broad activities to be accomplished, it is necessary to group the purchasing function into smaller, more manageable tasks. These tasks are planned, organised, led, and controlled by a purchasing department. According to Van Rensburg *et al.,* (1997), the following tasks are performed within the purchasing function:

- *Developing a purchasing system.*
  This task involves creating an information system which records all the information concerning purchasing activities. The information is processed, stored, and made available for managing the purchasing function efficiently.

- *Investigating the purchasing environment.*

  This task takes into account information about the needs of other departments, the identification of new needs, familiarisation with managerial policies and procedures, monitoring of prices and available suppliers, awareness of legal issues that could affect the purchasing contract, as well as the available modes of transport.
- *Verification and quality evaluation*

  Each request for goods made with the purchasing department needs to be verified to ensure that the correct procedures were followed. Also, upon receiving the goods, the quality of the goods must coincide with the quality discussed during negotiations.
- *Finding suppliers*

  The task of finding suppliers requires the purchasing department to continuously identify new suppliers with better products, prices, or services. Finding suppliers involves planning and organising the whole process, as well as an evaluation and selection of suppliers.
- *Analysing and controlling inventory*

  Analysing and controlling is a very important task within the purchasing function, as carrying inventory is regarded as a large expense for the business. The purchasing department needs to analyse the inventory to be certain of those items which represent the largest cost percentage. Also, inventory is then controlled by keeping a record of inventory on a daily basis as well as determining the quantity of inventory available at a specific time.
- *Inspecting incoming goods and handling claims because of defective deliveries*

  This task requires the purchasing department to check the quality and quantities of the incoming goods. Also, damaged goods should be identified immediately.
- *Purchasing research*

  This final task of purchasing research refers to acquiring knowledge and the development of knowledge in the latest business methods and techniques.

This knowledge should be retained in the purchasing system for easy accessibility when required.

2.5.2 The production function

The production function as shown in Figure 2.4, has also been referred to as the *technical function* (Du Plessis and Nortje, 1981). More recently, the term *production* is often replaced by *operations*, to reflect both goods and services production (Nickels *et* al., 2006). Production is defined as the creation of goods and services using the factors of production, including land, labour, capital, and entrepreneurship (Nickels *et* al., 2006). This function relates to the purchasing function in that it processes the purchased materials or semi-manufactured items into end products (Hogetts, 1981). The production function can therefore be referred to as a *conversion process*. The main objective within the production function is to maintain and improve the reliability and efficiency of operations and to control the quantity and quality of end products. To do this, the production department needs to perform a number of tasks. These tasks include work improvement, production control, maintenance of equipment, and quality control and inspection (Glos, Steade and Lowry, 1980).

- *Work improvement*
  The work improvement task involves reducing effort, time, and cost in production operations. Work improvement can be done by understanding and studying each operation in the production system and finding better ways to perform the tasks. Also, production can be scheduled according to time requirements in order to provide the necessary quantities at the specified times. Furthermore, every effort should be made by the production department to obtain the lowest possible cost per production unit whilst taking effort and time into account (Du Plessis and Nortje, 1981).
- *Production control*
  This task requires coordination of all the factors in the production process including workers, machines, tools, and materials, into an efficient operating

procedure. This coordination of factors can be done by implementing four steps, which are planning, routing, scheduling, and performance follow-up and control.

- *Maintenance of equipment*

  The task of maintenance of equipment is very important for the production department. Insufficient attention to maintenance may result in the loss of many productive hours or even the temporary closing of the factory. Maintenance includes all activities involved in keeping machinery and equipment working at the desired level of reliability. Effective maintenance can be undertaken by constructing a repair facility within the premises as well as by ensuring standard periodic services on machinery.

- *Quality control and inspection*

  This task is required to set manufacturing standards. Requirements of customers with regards to quality must be met. If the required quality is not produced, the production department is placed in a position of liability. Quality is controlled by means of inspection. Inspection is a task that monitors how well production is meeting the standards, and rejects those end products that do not meet the standards (Glos *et al.*, 1980).

2.5.3 The human resources function

The human resource function as depicted in Figure 2.4 is also often referred to as *human resource management,* and deals with those individuals employed by a business to carry out the business functions. The management of these human resources is defined as a process of determining human resource needs and then recruiting, selecting, developing, motivating, evaluating, compensating, and scheduling employees to achieve the business goals (Nickels *et al.*, 2006). Most managers today consider their employees to be the most important asset to the company, and therefore it is essential that the tasks of human resources be carried out in an efficient and effective manner. As the definition of human resource management portrays, the tasks necessary to perform the human resource function include recruiting, selecting, training and developing, motivating, evaluating, compensating, and scheduling employees (Nickels *et al.*, 2006, Bosch *et al*,. 2006, Everard and Shilt, 1979).

- *Recruiting*

  Recruiting refers to the process by where suitable candidates are identified and convinced to apply for employment in the business (Nickels *et al.*, 2006). Recruitment usually takes place when there is a vacancy in position or when specific skills or knowledge are required to perform or enable production.
- *Selecting*

  Selecting involves choosing the candidate who is most suitable to fill the vacant position and whom is most likely to achieve the desired goals of the business. Once the new employee has been selected, the employee is placed in the business and made to feel part of the new work environment as soon as possible (Bosch *et al.*, 2006).
- *Training and developing*

  Training and developing refers to all attempts made to improve productivity by increasing an employee's ability to perform (Nickels *et al.*, 2006). Training focuses on short-term skills, whereas development focuses on long-term abilities. Thus training modifies attitudes, knowledge and skills by means of a learning experience, and development is where employees obtain the necessary experience, skills and attitudes to be promoted or become leaders in the business. The main reason why employees must be trained is due to continuous changes occurring in the business environment including changes in machines, jobs, policies, etc. (Everard and Shilt, 1979).
- *Motivating*

  The task of motivating is referred to as the process of creating organisational conditions that will result in employees striving to attain company goals (Hodgetts, 1981). People are willing to work, and to work hard, if they feel that their work makes a difference and is appreciated. Frederick Herzberg, a psychologist from the mid-1960's, discovered that the most important motivating factors include sense of achievement, earned recognition, interest in the work itself, opportunity for growth, importance of responsibility, and financial compensation among others (Nickels *et al.*, 2006).

- *Evaluating*

  Evaluation is a task performed by the human resource manager. The manager is required to determine whether or not the employees are doing an effective and efficient job. This can be done by means of a performance appraisal in which the performance level of employees is measured against established standards to make decisions about promotions, compensation, and additional training, among other decisions.

- *Compensating*

  Compensating involves rewarding employees in return for their services, and can be monetary or non-monetary. *Monetary compensation* refers to salaries, wages, and cash incentives while *non-monetary compensation* refers to special parking areas, employee of the month, and other rewards that appeal to needs such as recognition, status, and feelings of success.

- *Scheduling employees*

  This task undertakes to manage the arrangement of the employee's agenda. It is the task of the human resource manager to ensure that each employee is aware of and understands the duties necessary to perform the business activities as required.

2.5.4 The public relations function

The public relations function, as illustrated in Figure 2.4, is commonly referred to as *business or corporate communication (*Bosch *et* al., 2006). The public relations function comprises all the activities implemented to establish and maintain a mutual understanding between the business and persons and organisations outside the business (Jefkins, 1982 as cited in Van Rensburg *et al.*, 1997). The main reason for executing public relations is to deliberately create a favourable, yet objective image of the business with its interest groups, and also to establish a sound mutual relationship. In simple terms, the tasks employed to accomplish this goal consist of a large variety of communication mediums. These communication mediums include the following:

- Press kits
- Press releases and conferences
- Public service announcements
- Letters to the editor
- Media tours
- Special events
- Trade shows
- Speech writing
- Internet monitoring
- Community meetings
- Quarterly newsletters and annual reports.

All these communication mediums aim to increase credibility of the business, and can be especially useful as a means of crisis management should the need arise.

2.5.5 The finance function

The finance function, as shown in Figure 2.4, is concerned with the procurement of capital and financing methods, as well as the employment and use of capital

(Du Plessis and Nortje, 1981, Bosch *et al.*, 2006). It must be noted, however, that the finance function is not a process function such as purchasing and production, but rather the finance function is a facilitator of those functions (Van Rensburg *et al.*, 1997). The finance function is seen as a facilitator to all the other business functions for the reason that it is linked to each function, and each function in turn depends on the finance function in order to carry out their specific tasks or daily business activities. The tasks necessary to perform the financial function are grouped into four categories which are closely related. These categories are financial analysis, planning and control; management of the assets of the business; management of the liabilities of the business; and the provision of financial services (Bosch *et al.*, 2006).

- *Financial analysis*, *planning and control*
  This task considers how financial means are obtained and engaged in the activities of the business, how such funds generate income and once again become available for repayment, and also how the financial position of the business changes due to this (Du Plessis and Nortje, 1981). Financial analysis of the performance of the business is usually done by means of financial ratio analysis. Financial planning and control is usually done by means of an integrated budgetary system (Bosch *et al.*, 2006).
- *Management of the assets of the business*
  The potential of the business to earn income depends on the effective management of this task. The financial manager, together with the managers from all the other business functions, must identify the future investment needs of the business and suggest how many and which assets it will require.
- *Management of liabilities*
  The performance of this task requires the financial manger to ensure that the fixed and current assets in which the business invests are financed in

such a way that debt and interest payments can be met easily. When managing liabilities of a business, it is most important to consider the risk profile. The risk profile is influenced by the liquidity and solvency of the business. Liquidity and solvency are in turn influenced by the ratio between short-term and long-term financing as well as the balance between owner's capital and borrowed capital. The intention is to maintain both a favourable ratio and balance (Bosch *et al.*, 2006).

- *Provision of financial services*

  Due to the nature of the financial function, the financial manager is required to be responsible for the operation of a wide range of financial services in the business (Bosch *et al.*, 2006) such as:

  - The investment portfolio of the business.
  - Matters relating to the taxes of the business.
  - Credit management.
  - Management of international financial matters such as exchange rate, exposure, risk, and cover.
  - Internal audit and control measures.
  - The costing system.
  - Determining the procedures, methods and systems for financial accounting and profit determination. It is important to ensure that generally accepted accounting procedures are applied.
  - Providing financial services to other departments in the business.

2.5.6 The information function

This function acts as an aid to the management of all the business functions, and is therefore spread throughout the entire business. The information function as illustrated in Figure 2.4 provides the necessary information to determine the capacities of the means of production, provide documentation on buying and selling, make available data concerning sales and costs, and provide information for the preparation and control of budgets (Bosch *et al.*, 2006). These types of information are made available by implementing what is known as a *management information system*. A management information system is a formal method of making timely and accurate information available to management, which is necessary in facilitating the decision-making process and effective execution of managerial tasks (Stoner and Wankel as cited in Van Rensburg *et al.*, 1997). An information system allows for the performance of a number of capabilities (Bosch *et al.*, 2006) such as:

- *High volume data processing.* This high volume data processing refers to the computer's ability to perform high speed, high volume computational data processing.
- *Storage capacity.* Computers are able to store large amounts of data, which in turn allows for easy access, retrieval and data manipulation.
- *Automation.* The information system allows business processes to be implemented on a programmed or involuntary basis.
- *Business communication.* This business communication refers to the ability of information communication technology to provide internal and external business communication.
- *Effectiveness and efficiency.* The information system results in increased effectiveness and efficiency of employees utilising information communication technology.

2.5.7 The marketing function

The marketing function is the final business function to be discussed. This function is discussed in more detail since it is the marketing function which links this study to business management. The marketing function deals with identifying and meeting human and social needs (Kotler and Keller, 2006). Furthermore, the marketing function defines, measures, and quantifies the size of the identified market and its profit potential, and then designs and promotes the appropriate products and services to satisfy the needs of the market (Kotler, 2005). Thus, it is clear that the marketing function is centred on the consumer and the satisfaction of consumer needs. Not only does the marketing function focus on the consumer, but it also concentrates on those goods and services that will earn the most profit and enable the organisation to survive and expand to serve more consumer wants and needs (Nickels *et al.*, 2006).

The marketing function is no different from any of the other functions, in that the marketing manager is still required to perform tasks to carry out the marketing function effectively. The basic tasks of the marketing manager include market segmentation, target marketing, positioning of products, and the marketing mix.

2.5.7.1 Market segmentation

This first task of the marketing function involves a process of dividing a market into meaningful, relatively similar and identifiable segments or groups (Lamb, Hair, MacDaniel, Boshoff, and Terblanche, 2004). These segments can be formed by examining descriptive characteristics of the consumer, such as geographic, demographic, and psychographic characteristics. One can also form segments by examining behavioural characteristics such as consumer responses to benefits, use occasions, or brands (Kotler and Keller, 2006). Once the market segments have been identified, the marketing manager has to decide how many and which segments to target.

2.5.7.2 Target marketing

The task of target marketing involves distinguishing a group of people for whom the firm designs, implements and maintains a marketing mix intended to meet the needs of that group, resulting in mutually satisfying exchanges (Lamb *et al.*, 2004). It is the segment of the consumer market chosen to be served by the business. There are three general strategies for selecting target markets which the marketing manager can make use of. These strategies have been termed *mass marketing, micro-marketing* and *niche-marketing* (Bosch *et al.*, 2006). These strategies are also commonly referred to as *undifferentiated, concentrated* and *multi-segment targeting* (Lamb *et al.*, 2006).

- *Undifferentiated targeting* views the market as one big market with no individual segments. This strategy assumes that all individuals have similar needs that can be met with a common marketing mix. Hence, the mass-marketing approach.
- *Concentrated targeting* appeals to a single segment for concentrating its marketing efforts. The marketing manager must therefore select a market niche in which it can concentrate on understanding the needs, motives, and satisfactions of that individual segment.
- *Multi-segment targeting* refers to the target strategy that chooses to serve two or more well-defined market segments, and develops distinct marketing tactics for each segment.

Following the task of target marketing, the marketing manager needs to determine how to position the business or product or service with the target market.

2.5.7.3. Positioning

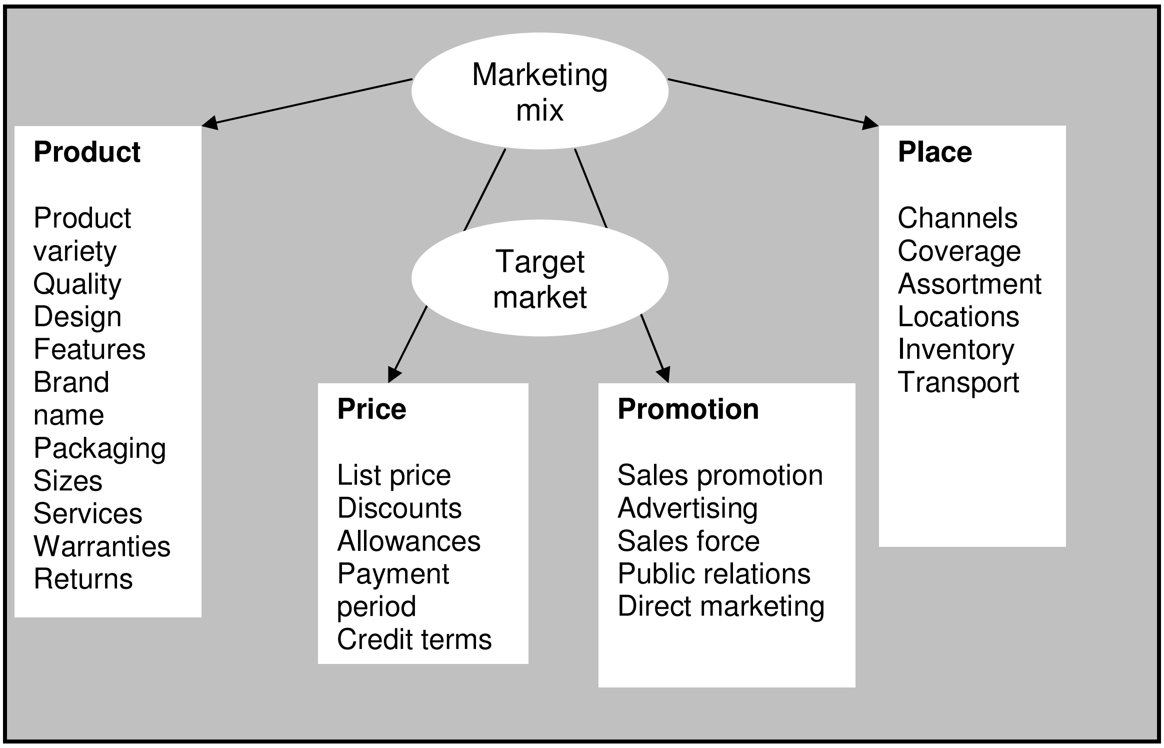
The task of positioning refers to designing the business offering and image to occupy a unique place in the mind of the target market (Kotler and Keller, 2006). Furthermore, the marketing manger will need to make decisions about how to situate the products and services of the business with regard to competitor products in the market (Bosch *et al.*, 2006). The result of positioning is the successful creation of a customer-focused value proposition. This proposition is the reason why the target market should buy the particular product or service. For example, Duracell batteries are positioned as lasting longer than any other battery on the market, and therefore customers should buy Duracell batteries because they will last longer.

Once the tasks of market segmentation, target marketing, and positioning have been accomplished, the next task, managing the marketing mix, needs to be considered.

2.5.7.4 The marketing mix

The marketing mix concept was first coined by Jerome McCarthy (Keegan and Green, 2005) and is now possibly the most dominant concept of the marketing function. The marketing mix is often referred to as "the 4P's" since the mix consists of four main tasks, namely product, price, place, and promotion (Belch and Belch, 2007, Kotler and Keller, 2006, Schiffman and Kanuk, 2004) (See Figure 2.5).

FIGURE 2.5 THE FOUR P COMPONENTS OF THE MARKETING MIX



Source: Adapted from Kotler and Keller (2006).

- *Product.* Product or service refers to what is offered to the consumer in terms of features, designs, brands, and packaging, along with post-purchase benefits such as warranties and return policies.
- *Price.* Price refers to the monetary value at which the product or service is offered and includes discounts, allowances, and payment methods.
- *Place.* Place is concerned with the distribution of the product or service through specific store and non-store channels.
- *Promotion.* Promotion involves building awareness and demand for the product or service by employing tactics such as advertising, sales promotion, public relations and other sales efforts.

As a whole, the marketing mix consists of an organisation's product and service offerings to consumers and the methods and tools it selects to accomplish the exchange. The formulation of the marketing mix requires information about consumers and an understanding of consumers (Williams, 1982).

According to Schiffman and Kanuk (2004), the key assumption underlying the marketing function is that to be successful, an organisation must determine the needs and wants of specific target markets and deliver the desired satisfaction better than the competition. This assumption is in accord with the definition of the marketing function, which refers to identifying and meeting human and social needs (Kotler and Keller, 2006). It must therefore be noted that the marketing function and more specifically, the marketing mix, is focused primarily on the consumer, as illustrated in Figure 2.5.

Logically, in order to perform the tasks of the marketing function, it is necessary for the marketing manager to gain an in-depth understanding of the consumer and the consumer’s behaviour with regard to purchasing products and services.

Consequently, the field of consumer behaviour has been rooted in the marketing concept since the late 1950’s (Schiffman and Kanuk, 2004), when marketers realised that they could sell goods more easily if they produced what consumers wanted instead of trying to persuade consumers to purchase what the business had already produced.

This study attempts to understand how consumers make purchase decisions within a certain environment and under certain circumstances. It is therefore important that consumer behaviour is understood, and in particular how consumers make their decisions. For that reason, consumer behaviour is examined in the following chapter.

2.6 CHAPTER SUMMARY

This chapter attempts to provide perspective on the position of this study within the broad discipline of business management. It shows business management as satisfying consumer needs with a limited amount of resources, through planning, coordination, control, and motivation of these resources. From this definition of business management, the chapter provides an exposition of how business management stems from economics. Business management is seen as a smaller unit within economics, since economics refers to the allocation of scarce resources for the purpose of fulfilling society's needs. This relationship between business management and economics is therefore cemented by means of the economic principle.

The discussion of business management is gradually narrowed by the introduction of the business functions. The business functions include purchasing, production, human resources, marketing, public relations, finance, and information. A brief explanation of the tasks involved in managing each business function has been presented. It has been noted as important that each function requires independent consideration. However, the business functions overlap and are dependent on one another at the same time. Once again, a link has been made between business management and economics where it was highlighted that each business function should be managed in such a way as to achieve optimal output with minimal resources.

The marketing function has been given particular attention since it involves identifying and meeting human and social needs. It is this focus on human needs which links the marketing function to business management and economics as well as to consumer behaviour. This study concerns consumer-perceived risks in online purchasing, and therefore it is necessary to examine the concept of consumer behaviour in more detail.

CHAPTER 3
CONSUMER BEHAVIOUR

3.1 INTRODUCTION

This concept of consumer behaviour as related to the research problem is addressed in this chapter. This chapter will therefore focus on consumer behaviour as a component of marketing, the nature of consumer behaviour, consumer behaviour as a construct, and in particular the consumer decision-making process.

3.2. CONSUMER BEHAVIOUR AS A COMPONENT OF MARKETING

Upon examination of the business management literature, it is clear that consumer behaviour is predominantly viewed from a marketing perspective, and therefore consumer behaviour will be discussed as a component of marketing. Marketing is the science and art of exploring, creating, and delivering value to satisfy the needs of a target market at a profit (Kotler and Keller, 2006). Marketing identifies unfulfilled needs and desires. Marketing defines, measures, and quantifies the size of the identified market and its profit potential, and then designs and promotes the appropriate products and services to satisfy the needs of the market (Kotler, 2005).

Consumer behaviour can be defined as all of the activities of buyers, ex-buyers and potential buyers from pre-purchase deliberation to post-purchase evaluation, and from continued consumption to discontinuance (Foxall, 2005). One may also say that consumer behaviour is the study of why people buy (Blackwell, Miniard and Engel, 2001). Consumer behaviour can also be defined as the behaviour that consumers display in searching for, purchasing, using and evaluating products, services and ideas which they expect will satisfy their needs (Williams, 1982).

In the marketing discipline, success depends on how much is known about potential customers, including who, how, when, where, and why they consume (Harrel, 1986). This information is used to design new products and services, determine appropriate prices, select methods of distribution, and build effective promotion and advertising, thereby fulfilling the four components of the marketing mix. An understanding of consumer behaviour has proved to be valuable in a number of instances. First, businesses are better able to address the needs and wants of consumers and to generate greater customer satisfaction. Secondly, an understanding of consumer behaviour decreases the potential of loss as firms are faced with expensive technologies and high product-development costs. Lastly, an understanding of consumer behaviour allows marketers to convert fragmented markets into systematically organised segments. With that in mind, the origin of consumer behaviour is presented as an introduction to understanding this behaviour.

3.3 THE ORIGIN OF CONSUMER BEHAVIOUR

The literature concerning consumer behaviour and its origin contains many perspectives and viewpoints. These perspectives are a result of the influence of four disciplines, namely economics, psychology, cultural anthropology, and sociology (Kollat, Blackwell, and Engel, 1970). The disciplines are as follows:

- *Economics.* The economist seeks to understand the workings of the system that provides a society with need-satisfying goods and services. The consumer is viewed as a highly rational and predictable individual who reacts to nothing but price and real product differences. Also, there are no product differences, since products are assumed to be homogeneous. This discipline can mainly be used to understand consumer price responses.

- *Psychology.* Psychology is the study of individual human behaviour. It includes needs, motivation, perception, learning, and personality, all of which potentially affect consumer behaviour. Many theories of consumer behaviour have been drawn from psychology to try and understand marketing phenomena.
- *Sociology.* Sociology is the study of group behaviour, and therefore contributes to an understanding of social class, group influence, socialisation, and the family. The underlying theory is that consumers are influenced by the actions of others because they want to fit in or be accepted. A sizeable amount of consumer behaviour literature is influenced by sociology perspectives.
- *Cultural anthropology.* This discipline studies the influence of culture on consumer behaviour because buying behaviour is affected by subcultures, cultural imperatives, cross-cultural influence, and cultural themes. The cultural anthropology discipline is important as it has been shown that certain marketing tactics have worked in one culture or subculture but not in another (Williams, 1982).

As noted in Chapter 1, Schiffman and Kanuk (2004) believe consumer behaviour to be rooted in the marketing concept and therefore business management, and therefore economics (See Chapter 1). However, from the 1950’s to the present, the orientation of business has moved from production to market orientation. During this dramatic move, consumer behaviour has evolved into a concept of its own. Currently, consumer behaviour is considered an interdisciplinary concept concerning a total area of human behaviour. According to Kotler (2005), marketing researchers must use their knowledge of all disciplines, including economics, psychology, culture, and social influence, to understand customer needs, perceptions, preferences, and behaviours, in order to develop more effective marketing strategies. This multidisciplinary concept of consumer behaviour concerns specific types of consumer behaviour that are market-related (Walters, 1978). It can therefore be concluded that consumer behaviour has its seeds in marketing, but has grown into a discipline of its own, with its own body of knowledge, independent of other related disciplines.

3.4 THE CONCEPT OF CONSUMER BEHAVIOUR

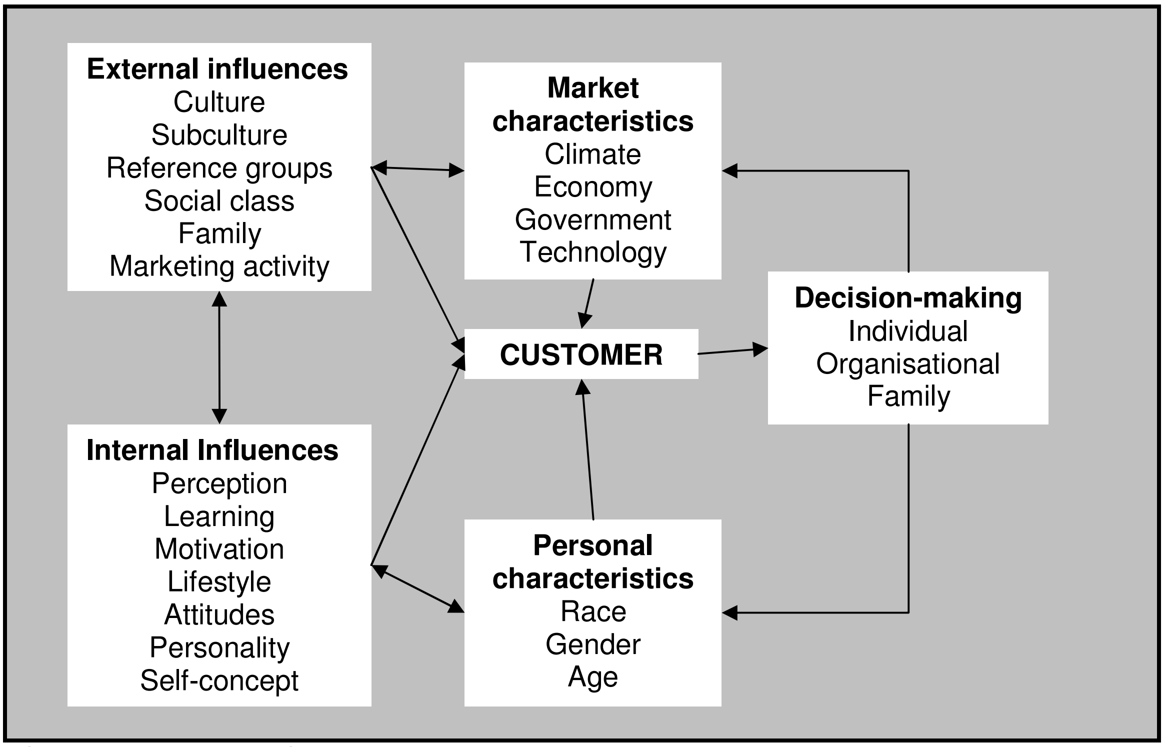
Consumer behaviour can be defined as all of the activities of buyers, ex-buyers and potential buyers from pre-purchase deliberation to post-purchase evaluation, and from continued consumption to discontinuance (Foxall, 2005). Bauer (1960) proposed that consumer behaviour be considered as

> an instance of risk taking, based on the fact that any actions of consumers will produce consequences which they cannot anticipate with anything approximating certainty, and some of which at least are likely to be unpleasant (Bauer 1960 as cited in Laroche, Bergeron and Goutaland, 2003).

With the above information in mind, one may realise the importance for organisations and marketing departments of understanding consumer behaviour. Marketers need to be certain of what their customers' needs and wants are. Also, marketers need to know how consumers make a decision when purchasing. A better understanding of consumer behaviour will aid in determining the perceived risks associated with the intention to make online purchases. An overall model of consumer behaviour is illustrated in Figure 3.1.

Individuals develop self-concepts, and subsequent lifestyles, based on a variety of internal and external influences (See Figure 3.1). These self-concepts and lifestyles produce needs and desires, many of which can only be satisfied by buying something.

FIGURE 3.1 AN OVERALL MODEL OF CONSUMER BEAVIOUR



Source: Adapted from Cant, Brink and Brijball (2002).

As individuals face particular situations, whether they are personal or market-related (as illustrated in Figure 3.1), the customer decision-making process is activated. The customer decision-making process is therefore affected by market and personal characteristics as well as by external and internal influences (Schiffman and Kanuk, 2004). *Internal influences* are psychological forces or individual factors and include perception, learning, motivation, personality, and attitude (Walters, 1978). For the purpose of this study, only the internal influence of perception will be discussed in more detail at a later stage. *External influences* are social and group factors. External influences include culture, subculture, reference groups, social class, family, and marketing activities. For the purpose of this study, the focus will be on the external influence of marketing activities. A substantial number of marketing activities exist, for example, direct marketing, relationship marketing, and e-commerce (Kotler and Keller, 2006) (Refer to Figure 3.1). Of these marketing activities, e-commerce is particularly relevant to this study. E-commerce as an external influence to consumer behaviour is therefore discussed at a later stage. In short, products and services are accepted or rejected on the basis of the extent to which they are perceived as relevant to needs and lifestyles (Blackwell *et al.,* 2001). The problem marketers' view is that the consumer is the only entity who knows what is relevant and what is not. When a product or service is rejected by the consumer, it is already too late for the marketer; this is why marketers need to be able to get into the minds of the consumer. Thus, in order to determine the risks associated with online purchase intention, marketers need to understand consumer behaviour and buyer behaviour in particular.

As illustrated in Figure 3.1, consumer behaviour is also influenced by market characteristics and personal characteristics. Consumers live in a physical place. Products and services are produced, transported, stored, and used in a physical space. In turn, these products and services affect the physical qualities of the place where they are produced and used. The physical characteristics of the market place, such as climate, the economy, government, and technology, all influence consumer behaviour. Personal characteristics are the characteristics customers possess as individuals. They include the biological and physical features a person is born with and those that develop as the person grows, but which are inherited. These characteristics include race, gender and age (Cant *et al.*, 2002).

Lastly, three types of consumer decision-making processes can be distinguished, namely individual decision-making, organisational buying, and family decision-making (as illustrated in Figure 3.1). In family decision-making, decisions are made in the context of one individual buying to satisfy the needs of several individuals, in order to reach a decision that affects one or more family members. Family decision-making is distinguished from individual decision-making in which individuals satisfy their own personal needs (Williams, 1982). Organisational buying refers to formal organisations which establish the need for purchased products and services and identify, evaluate, and choose among alternative brands and suppliers (Kotler and Keller, 2006). Therefore, individual, family, and organisational decision-making are all subject to the consumer decision-making process. The consumer decision-making process consists of the following stages: problem recognition, information search, evaluation of alternatives, purchase, and post-purchase (Hawkins, Best and Coney, 1998).

Next, the consumer behaviour concepts relevant to this study will be discussed in more detail, and in particular the internal influence of perception, the external influence of e-commerce, and the consumer decision-making process (as illustrated in Figure 3.1). The consumer decision-making process and purchase intention will also be elaborated on.

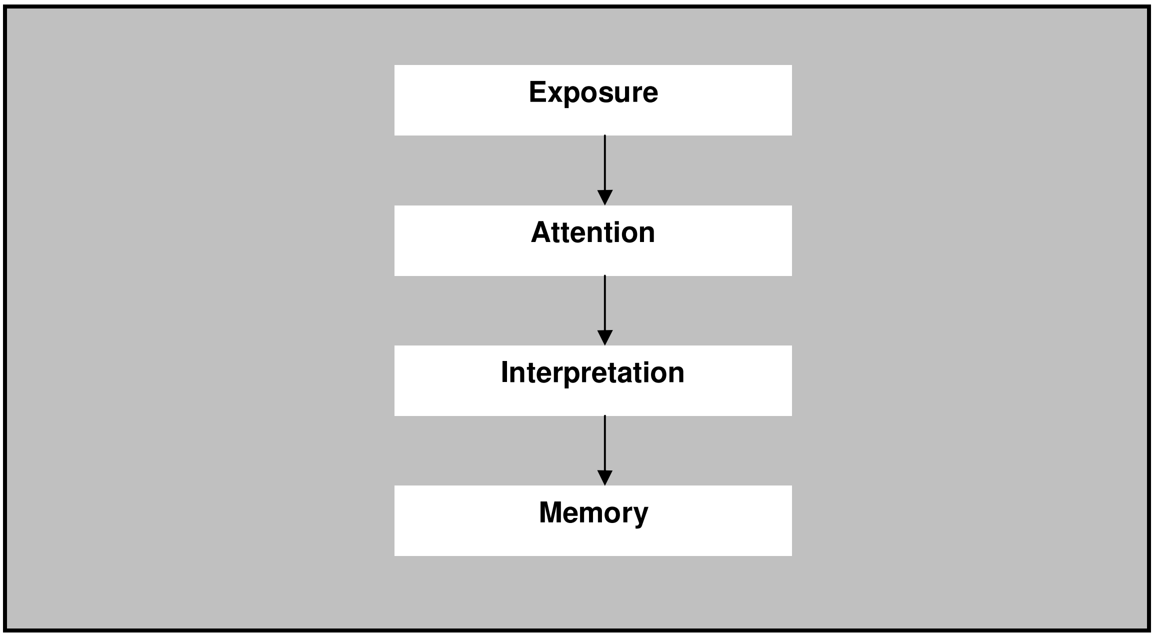
3.4.1 Internal influences of consumer behaviour

Internal influences in consumer behaviour include perception, learning, motivation, personality, and attitude (Schiffman and Kanuk, 2004). Their influence on consumer behaviour creates the perspective of an individual consumer facing the world (Statt, 1996). Individual consumers will experience each influence differently, and therefore the resulting consumer behaviour is different for different people (Wilkie, 1986). For the purpose of this study, only the internal influence of perception is discussed.

3.4.1.2 Perception

Perception is defined as the psychological processing of information received by the senses (Mullen and Johnson, 1990). Also, perception has been considered a process of sensing, selecting, and interpreting stimuli in the external, physical world into the internal, mental world (Chen and Dubinsky, 2003). It has been noted that consumers collect information in an attempt to reduce the risks associated with purchase (Wood and Sheer, 1996). One can therefore argue that the process of perception involves exposure to a stimulus, paying attention to it, and then interpreting its meaning in order to respond to it (Engel, Blackwell and Miniard, 1995). Limitations to this definition exist, because perception is selective because consumers often notice only a very small number of the stimuli in their environment. Stimuli are interpreted according to each individual's unique personality and needs. Lastly, perception is based on each individual's personal experiences (Schiffman and Kanuk, 2004). One can therefore say that perception is an estimation of reality. The perceptual process consists of four stages, as illustrated in Figure 3.2. These stages are exposure, attention, interpretation, and memory (Hawkins *et al.*, 1998). These stages will be discussed in turn.

FIGURE 3.2 STAGES IN THE PERCEPTUAL PROCESS



Source: Adapted from Hawkins, Best and Coney (1998).

- *Exposure*. Exposure refers to the extent to which we encounter a stimulus (Perner, 2007). An individual does not have to receive the stimulus for exposure to have taken place. For example, one could be talking to a friend in a room while a TV advertisement is aired, and one does not notice it. Exposure means that a message has been seen or heard. However this does not mean that the individual has paid attention to it. Generally, consumers seek information that is thought to help them achieve their goals (Hawkins *et al.*, 1998).

- *Attention***.** Attention occurs when the stimulus activates one or more sensory receptor nerves, and the resulting sensations go to the brain for processing (Hawkins *et al.*, 1998). Attention consists essentially of focusing an awareness upon the stimuli (Walters, 1978). Customers are more likely to be aware of stimuli that relate to their current needs. Characteristics of the stimulus also aid in what gets noticed and what is ignored. Characteristics represent “controllable” factors in the sense that they can be manipulated to gain or increase attention, and include factors such as size, colour, intensity, contrast, position and movement among others (Engel *et* al., 1995). Consumers are also influenced by the context in which the stimulus is noticed. For example, it could be that more attention will be paid by an individual who has experienced loss in online purchasing before or it could be that more attention will be paid to an online retailer who has a visible privacy policy than a retailer who does not.
- *Interpretation***.** Interpretation can be defined as the meaning that people assign to stimuli (Wilkie, 1986). Individuals tend to interpret information according to their existing beliefs, attitudes, and prior experiences. It would be safe to say that interpretation therefore involves making sense out of the stimulus. It is at this stage in the perceptual process that the cognitive theory will begin to take effect, as the individual combines thought and mental processing in order to arrive at a desired response. Cognitive interpretation is a process by which stimuli are placed into existing categories of meaning. Cognitive interpretation is an interactive process. The addition of new information to existing categories also alters those categories and their relationships with other categories (Hawkins *et al.*, 1998).
- *Memory.* Memory is the last stage in the process of perception as depicted in Figure 3.2. A limitation to this process is that consumers do not remember all the information they see, hear, or read, even after paying attention and interpreting it (Cant *et al.*, 2002). It is therefore the marketer's

responsibility to put forward the greatest effort in making sure that information will be retained in the consumer's memory.

3.4.2 External influences of consumer behaviour

External influences include culture, subculture, reference groups, social class, family, and marketing activities (Engel *et al.,* 1995). For the purpose of this study, only the external influence of marketing activities is focused upon. A substantial number of marketing activities exist, for example, market segmentation, customer loyalty, relationship based buying, and e-commerce (Kotler and Keller, 2006). Of these marketing activities, e-commerce is particularly relevant to this study.

3.4.2.1 E-commerce activities

E-commerce is most commonly referred to as business on the internet. There are, however, many different definitions of e-commerce. For the purpose of this study, e-commerce is defined as a dynamic set of technologies, applications, and management systems that enable and manage relationships between an enterprise, its functions and processes and those of its customers, suppliers, value chain, community, and industry (Cant *et al.*, 2002). From this definition, it is clear that e-commerce is linked not only to the internet but to all business that is conducted electronically. Therefore e-commerce also includes call centres, interactive CDs, short message service (SMS) on cell phones, smart cards, interactive voice response and other similar technologies.

A recent move towards customer-centred organisations and customer-relationship management has opened a gap for e-commerce to have an influence on consumer behaviour. E-commerce technologies make it possible to facilitate and automate customer interaction and two-way communication at any time and place. A contribution to consumer behaviour is made in that e-commerce systems are able to track customers and their preferences, habits and buying patterns, and to remember when they return. The collected information is made actionable and repeatable, meaning that organisations can proactively react to the behaviour of customers by personalising their online experiences (Cant *et al.*, 2002).

A problem with e-commerce, however, is that a situation is created in that consumers never really have face-to-face contact with an organisation, and the consumer becomes "invisible". The lack of face-to-face contact results in customers being treated more casually than before, which defeats the ultimate purpose of using technology, which is to bring customers closer to the organisation. For those organisations which have only an online presence and no physical infrastructure, the absence of face-to-face contact is a serious threat. In order to deal with this lack of physical interaction and to entice consumers to purchase online, one needs to gain an understanding of the consumer decision-making process.

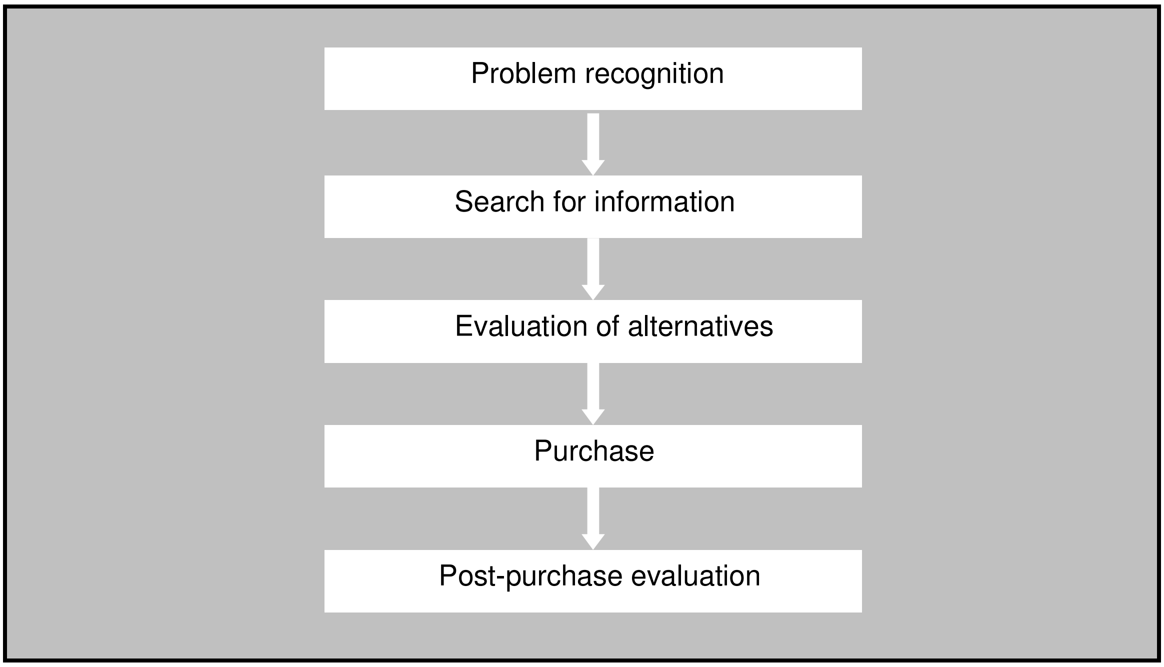
3.5 THE CONSUMER DECISION-MAKING PROCESS

The way in which consumers make decisions can be classified into four views, namely the economic view, passive view, cognitive view, and emotional view. (Schiffman and Kanuk, 2004). Before discussing the consumer decision-making process in this study, it must be made clear that the model used to describe the process in this study reflects the cognitive, and to some extent the emotional, consumer.

The cognitive view portrays the consumer as a thinking problem-solver. Consumers are often pictured as either receptive to, or actively searching for, products and services that fulfil their needs and enrich their lives. In the context of the cognitive model, consumers are viewed as information processors. Information processing leads to the formation of preferences and ultimately to the intention to purchase. According to this view, consumers are likely to stop searching for information once they think that they have enough information to make a satisfactory decision. Therefore the cognitive view describes a consumer who does not have total knowledge about available product alternatives and therefore cannot make perfect decisions, but who still actively seeks information and attempts to make satisfactory decisions (Schiffman and Kanuk, 2004). The emotional view describes consumers as associating deep feelings or emotions, such as joy, fear, love, hope and fantasy, with certain purchases. When a consumer makes an emotional purchase decision, less emphasis is placed on the search for pre-purchase information. Instead, more emphasis is placed on current mood and feelings (Schiffman and Kanuk, 2004).

A number of models exist depicting the consumer decision-making process. The models differ in their detail, but the most commonly used model to describe the consumer decision-making process is illustrated in Figure 3.3. It consists of five stages, namely problem recognition, search for information, evaluation of alternatives, purchase, and post-purchase evaluation. The span of time that will be discussed here is the time required by a potential buyer to reach a decision regarding the acquisition of a good or service (Kollat *et al.*, 1970).

FIGURE 3.3 THE CONSUMER DECISION- MAKING PROCESS



Source: Adapted from Statt (1997).

3.5.1 Problem recognition

Problem recognition represents the first stage of a consumer decision process as illustrated in Figure 3.3. During problem recognition, the consumer perceives a need and becomes motivated to solve the "problem" which has been recognised. Once the problem is recognised, the remainder of the decision-making process is initiated to determine exactly how the consumer will go about resolving the problem and satisfying the need.

Problem recognition therefore occurs when consumers perceive a gap or discrepancy between their current sate and the state in which the consumer realistically desires to be (Wilkie, 1986; Harrell, 1986). Thus, problem recognition is also described as an awareness of the need to change the actual state to conform to the desired or ideal state (Statt, 1997). A discrepancy can therefore arise from one of two sources, namely a change in the consumer's current state or a change in the consumer's desired state. According to Wilkie (1986), the major causes of changes in the current state can be grouped into the following:

- *Depletion of stock.* Depletion of stock refers to running down the available supply of products or services, usually through consumption. When the discrepancy between the current and the desired amount of a product is sufficiently large, the consumer will recognise there is a problem. Hence, the product has been consumed.
- *Dissatisfaction with current stock.* Changes in the current state may also occur when it is perceived that the products currently owned are insufficient to continue to serve their purpose.
- *Decrease in finances.* When funds run low, consumers recognise a decrease in funds as a problem that requires a reduction in consumer spending. A reduction in consumer spending usually begins with a decrease in discretionary purchases.

- *Increase in finances.* An unexpected increase in finances can lead to a different form of gap, in which the financial surplus encourages the consumer to rethink the desired state in order to spend the money.

According to Wilkie (1986), the major causes of changes in the desired state can be grouped into the following:

- *New "need" circumstances.* As one experiences changes in daily life, one often finds that entirely new categories of consumer needs arise. The family life cycle captures some of the major outlines of such events. For example, a young person is unlikely to experience problem recognition for nappies or anti-ageing treatments, but in a few years may well be having to make these decisions.
- *New "want" circumstances.* Taking into account a distinction between wants and needs, one can also see that new circumstances can arise that create problem recognition of a "want" variety. For students, for example, the move to a different city creates new possibilities for products and services. Travel to other cities and countries becomes possible.
- *New product opportunities.* Before one is aware of a new product, it is unlikely that one will experience problem recognition for it. However, once the product has been explained through advertising or friends, one might experience an increase in the desired state for it. For example, before the introduction of cellular telephones, consumers were not aware they existed, and did not have a desire to own a cellular telephone.
- *Purchases of other products.* Sometimes problem recognition is sparked by having purchased a different product. The purchase of a different product usually involves additions or complementary products. For example, once having bought a computer, consumers recognise opportunities for certain software packages, printers, and other complementary products.

Once the gap between the current and desired state is recognised, the consumer will need to begin seeking information that will aid in explaining, interpreting, and closing this gap.

3.5.2 Information search

Information search represents the second stage in the consumer decision-making process in which consumers recognise a problem that might be satisfied by the purchase and consumption of a product, and therefore proceed to collect information pertaining to the recognised problem (Schiffman and Kanuk, 2004, Mitchell and Boustani, 1994) (See Figure 3.2). The recollection of past experiences or long-term memory may provide consumers with adequate information to make the present choice. This activity is known as *internal search.* On the other hand, when consumers have had no prior experience, an extensive search of the outside environment is undertaken, on which to base a choice. This activity is known as *external search* (Schiffman and Kanuk, 2004; Hawkins *et al.*, 1998). External information can include opinions, attitudes and feelings of friends, chat forums on the internet, and marketing information presented in advertising.

A consumer requires three types of information in order to make a decision. Firstly, a consumer seeks appropriate evaluative criteria for the solution of a problem. These evaluative criteria are the features or characteristics required to meet needs. Marketers want consumers to use evaluative criteria that match their brand's strengths. Secondly, a consumer seeks the existence of various alternative solutions. The various brands thought to be potential solutions are known as the consumer's *consideration set*. The consideration set is composed of three subcategories including the *evoked set,* which is those brands one will evaluate for the solution of the problem, the *inept set* which includes those brands found to be unworthy of further consideration, and the *inert set,* which is those brands that the consumer is aware of but indifferent towards. Finally, the consumer searches for information on the performance level or characteristic of each alternative solution on each evaluative criterion (Hawkins *et al.*, 1998). Once sufficient information has been collected, the consumer will then evaluate this information in an attempt to find a suitable alternative.

3.5.3 Evaluation of alternatives

Evaluation of alternatives represents the third stage in the consumer decision-making process as depicted in Figure 3.3. At this stage, the consumer has recognised the existence of a problem, defined desired purchase goals, and searched for and processed information relevant to potentially viable alternatives. The consumer is now ready to choose the alternative that seems to have the best chance of solving the problem (Mitchell and Boustani, 1994). The first function to occur when evaluating alternatives is the formation of the intention to buy a particular “satisfaction bundle”. The intention may or may not result in actual purchase (Williams, 1982). The criteria consumers use to evaluate the alternative products that constitute their evoked sets are usually expressed in terms of important product attributes (Schiffman and Kanuk, 2004). For example, when deciding to purchase a camera, the consumer may use attributes such as auto focus, built-in flash, lens type, size, and weight to evaluate the different cameras that are considered.

In order to assist brand choice, consumers use decision rules to reduce the burden of making complex decisions, by providing guidelines or routines that make the process less complicated (Harrell, 1986). A large number of decision rules exist. This study, however, takes into account only the introductory decision rules. Consumer decision rules have been broadly classified into two categories, namely compensatory and non-compensatory decision rules (Hawkins *et al.*, 1998). In following a compensatory decision rule, very good performance on one evaluative criterion cannot compensate for poor performance on another evaluative criterion. Thus, under this rule, consumers can average out some very good features with some less attractive features of a product in determining overall brand preference (Hawkins *et al.*, 1998). The non-compensatory decision rule, on the other hand, does not permit consumers to average positive and negative attributes. If a negative attribute exists, the particular brand is disqualified from further consideration (Schiffman and Kanuk, 2004). It can therefore be said that the decision rule used is dependent on the level of attribute importance for the consumer. Once the consumer has made a choice, a decision to purchase follows.

3.5.4 Purchase

Purchase represents the fourth stage in the consumer decision-making process, where the consumer traditionally gives cash or obtains credit to acquire the rights of the product (Hawkins *et al.*, 1998). Therefore, broadly defined, the purchase stage involves the transfer of goods or services from retailer to consumer by means of a transaction. According to Schiffman and Kanuk (2004), consumers make three types of purchases, namely trial purchases, repeat purchases, and long-term commitment purchases. A product purchased for the first time or in a smaller quantity than normal is considered a trial, and is therefore an exploratory phase of purchase behaviour, where the consumer evaluates the product through direct use. Repeat purchase occurs when a new brand is found to be more satisfactory than a previous brand. This type of purchase signifies that the product meets the consumer's approval and that the consumer is willing to use it again and again in larger quantities. Sometimes, where trial is not feasible, a consumer will move directly from evaluation to a long-term commitment. This movement often occurs with the purchase of durable goods such as washing machines or cameras.

A deterrent to this stage of the consumer decision-making process is perceived risk, as the purchase of products involves the risk that they may not perform as expected. This study aims to identify the risks associated with online purchase intention, and therefore risk is a core concept and will be discussed in more detail at a later stage. It must, however, be made clear at this point that the internet's opportunity for consumers to shop online has had a significant effect on the purchase stage of the consumer decision-making process, and together with that, an increase in the number and intensity of risks associated with purchasing. Once a product has been purchased, however, the final step in the consumer decision-making process is that of post-purchase evaluation.

3.5.5 Post-purchase evaluation

Post-purchase evaluation refers to the final stage in the consumer decision-making process, in which the consumer compares the product's actual performance against its expected performance (Schiffman and Kanuk, 2004). There are three possible outcomes of this evaluation; first, where actual performance matches expectations, leading to a neutral feeling; second, where performance exceeds expectations, causing what is known as *positive disconfirmation of expectations*; last, where performance is below expectations, causing negative disconfirmation of expectations and dissatisfaction (Williams, 1982, Mitchell and Boustani, 1994). This negative disconfirmation may result in actions to achieve redress, such as complaint or brand switching (Cant *et* al., 2002). An important aspect to this stage is that when consumers analyse their purchase, they do not want to perceive it as being risky, and therefore they try to reassure themselves that their choice was a wise one. This reassurance is an attempt to reduce post-purchase cognitive dissonance (Schiffman and Kanuk, 2004). Reassurance can be accomplished by seeking advertisements that support their choice and avoid those of competitive brands, persuading friends or neighbours to buy the same brand, or turning to other satisfied owners for reassurance. The degree to which consumers analyse post-purchase decisions depends on the importance of the product decision and the experience acquired in using the product (Williams, 1982). It can therefore be said that the consumer's conclusion can be used as future reference for purchasing.

3.6 THE CONSUMER DECISION-MAKING PROCESS AND E-COMMERCE

The consumer decision-making process as discussed above consists of the following stages: problem recognition, information search, evaluation of alternatives, purchase, and post-purchase evaluation. E-commerce influences both the consumer and the marketer in each stage of the consumer decision-making process. This influence is discussed below.

Consumers generally know when they have a consumption problem or a need for a particular product, but this is not always the case. Either they may not know at all that they have a problem, or they may not know exactly what the problem is, or what they should do about it. The internet provides a platform for organisations to run a website that its customers can access in order to help them with problem-solving. By using collaborative and interactive methodologies, such as joint browsing and remote video cameras, organisations can provide a higher level of remote assistance to identify and solve problems (Cant *et al.*, 2002). For example, a consumer who has recognised a need for a camera may not know which model to choose. The camera manufacturer Nikon offers a consumer-assist website with a daytime expert advisory service either via e-mail or Skype call. The assistant is able to determine the correct model of camera to suit the consumer's photography abilities by asking the consumer some questions. For example, the consumer may be asked "Do you want to take pictures at night? Do you want to take pictures of moving objects? Or is the camera for professional or recreational purposes?" By answering these questions, the consumer may not have to search for more information.

In terms of information search, e-commerce technologies such as the internet, e-mail, call centres, cell phones, and smart cards put large amounts of interactive multimedia information at the disposal of decision makers (Cant *et al.*, 2002). On the internet, search engines make it easy to find specific information required for problem-solving. For example, a consumer wanting to know the difference between a film camera and a digital camera can simply type the problem into Google Search and a number of websites with explanatory material will appear at the consumer's choice. Therefore the consumer is able to consult a large number of references, opinions, and experiences with which to make a decision.

Another opportunity for consumers provided by the internet is the ability to comparison-shop. The ability to comparison-shop facilitates the evaluation-of-alternatives stage in the consumer decision-making process. An increasing number of websites offer a service that allows consumers to choose a particular set of specifications for a product and obtain comparative prices for it from different suppliers. Besides pricing information, these comparisons provide detailed product information, reviews, ratings, and a host of other value-added services. Another way to evaluate alternatives is to use intelligent agents to do the shopping for one. These shopping agents are software programmes that search the web automatically for certain product specifications and price parameters that the customer has entered into the programme. The results that they produce are usually presented in a table containing a list of alternative websites that offer for sale the product in question. The table also contains the prices of these products for comparison purposes, as well as any other relevant information that might help the consumer to make a buying decision (Karpen, 1999). As the number of web pages and online stores increases, and the amount of "clutter" that makes browsing the internet so difficult, gets worse, one can expect an increase in the number of shopping agents.

Once customers have had the opportunity to evaluate alternatives, the next stage in the decision-making process is the actual decision to purchase something. Again, the internet influences this stage by enabling consumers to buy online. There is, however, reluctance among consumers to purchase online, because many consumers perceive online shopping to be a risky activity (Tan, 1999). It is therefore important for marketers from the online environment to give customers as much information as possible about the buying process and its security, to put to rest any concerns consumers might have.

The internet serves as a powerful tool to deal with any dissatisfaction the consumer may have with the product in the final stage of the decision-making process. An online help desk can deal with frequently asked questions or provide any other information that will help the consumer use the product better and ensure post-buying satisfaction. In addition, consumers can fill out an online complaint form or an online survey. Consumer complaints should, however, be acknowledged, and feedback should be given as to what the retailer plans to do about the complaint.

3.7 CHAPTER SUMMARY

Chapter three has attempted to provide an understanding of the theory concerning consumer behaviour that is necessary for the execution of this particular study. The chapter began by discussing the link between consumer behaviour and marketing. In order for marketing to accomplish its goal, which is the satisfaction of needs, it depends on what is known about potential consumers, including who, how, when, where, and why they consume. Next, the origin of consumer behaviour was presented, in which it was concluded that consumer behaviour has developed into a discipline of its own, with its own body of knowledge, independent of other related disciplines. Consumer behaviour was therefore classified as all of the activities of buyers, ex-buyers and potential buyers from pre-purchase deliberation to post-purchase evaluation, and from continued consumption to discontinuance.

The chapter has also discussed the internal and external influence on the consumer decision-making process, perception, and e-commerce respectively. A detailed discussion of the process of consumer decision-making was presented. The consumer decision-making process was discussed in detail because it is in this process where perceived risk takes it position in relation to overall consumer behaviour theory. Of particular importance is the second stage in the process, namely information search. This stage is important since consumers search for information about a product or service as a means of reducing the perceived risk associated with its purchase (Schiffman and Kanuk, 2004). Perceived risk and information search will be further discussed in Chapter 5.

Lastly, the relationship between consumer decision-making process and e-commerce was discussed. E-commerce is a relatively new shopping environment where the dynamics of shopping differ somewhat from shopping in the traditional in-store sense. The consumer decision-making process is influenced by these differences. Variables influencing the consumer decision-making process include search engines, expert advisory services, comparative services, shopping agents, chat forums, reviews, payment facilities, and 24-hour assistance via e-mail or Skype.

The motive and perhaps the justification for this study are rooted in the significant statement made by Bauer (1960). Consumer behaviour may be considered as

> an instance of risk taking, based on the fact that any actions of consumers will produce consequences which they cannot anticipate with anything approximating certainty, and some of which at least are likely to be unpleasant (Bauer, 1960).

To understand the full extent of e-commerce and its function as a shopping channel, one needs to investigate the internet and the current situation regarding online shopping. The internet and online shopping will be discussed in the following chapter.

CHAPTER 4
ONLINE SHOPPING

4.1 INTRODUCTION

This chapter aims to provide a general understanding of a relatively new channel of distribution, online shopping. Since *online* implies internet, the chapter will begin by discussing the nature of the internet. This will be followed by a discussion of the internet as a type of innovation, and a consumer's intention to adopt the internet as a method of purchase. Online shopping as a retail channel and the current status of online shopping is further discussed. Subsequently online shopping as a marketing tool is considered. An attempt is made to provide a profile of the online consumer, and the benefits and drawbacks of online shopping for the consumer are presented. Lastly, online shopping in South Africa is considered, by focusing mainly on the types of items purchased and the method of payment.

4.2 THE NATURE OF THE INTERNET

The internet is a global "network of networks", allowing computers around the world to communicate with each other and to provide instant access to a large amount of information spanning the globe (Henrichs, 1995 as cited in Forsythe and Shi, 2003). This network has been in existence since the late 1980's (Pallab, 1996 as cited in Tan, 1999). In the early 1990's, a new platform for accessing information on this network was created. This platform was named Hypertext Markup Language (HTML). This platform allowed the creation of web pages as known today. An important feature of these pages is the ability to move from one page to another very simply, by clicking on a hyperlink. This simple means of movement allows for easy navigation between web pages, which are linked together to collectively make up the World Wide Web. The World Wide Web is therefore easily accessible. This ease of accessibility facilitated the rapid expansion of the internet and its transformation from a military and research tool into a form of mass communication and commerce. Each computer on the internet has a number similar to a telephone number; this is known as an IP address. IP numbers, however, are hard to remember. Therefore the addressing system has a second element known as the domain name system (DNS). This system uses names such as www.masters.co.za. One or more domain names can be associated with a particular IP address. This association of IP addresses and domain names allows a user to easily access a website in its physical location on a computer, on a network. The network is operated by internet service providers (ISP's), who have arrangements to exchange communications between one another (Office of Fair Trading, 2007).

4.2.1 Functions of the internet

The internet performs many functions. However, its main functions are communication, distribution channel, and source of information. As a communications channel, the internet offers cheaper, faster, and more effective communication between organisations and their customers through tools such as e-mail, chat services, video conferencing, and internet telephony (Cant *et al.,* 2002). Also, since the emergence of the internet, the opportunities for the distribution of goods and services have changed substantially. Firms are able to offer goods or services not only through traditional channels such as retail outlets, but also in an online virtual store (Van den Poel and Buckinx, 2003). The internet provides consumers with an unparallelled amount of information, virtually eliminating any information imbalance between consumer and retailer. The internet also enables organisations to collect information about their consumers including their profiles, online behaviour, and wants and needs (Cant *et al.,* 2002). As an information search tool, the internet can also be used by consumers to mitigate perceived risk and shop with relative ease. On the other hand, it is commonly recognised that just as online shoppers are one click away from making a purchase, they are always just one click away from a competitor's site or from simply leaving the internet (Cunningham, Gerlach, Harper, and

Young, 2005). Thus, as a marketer using the internet, it is vital to understand how consumers make decisions within the online purchase environment. To assist marketers in understanding how consumers make decisions within this online environment, one can make use of a number of tools including the Technology Readiness Index and the Innovation Adoption Theory.

4.3 TECHNOLOGY READINESS INDEX (TRI)

The Technology Readiness Index is a scale that was developed by Parasuraman (2000), to understand technology-related attitudes and behaviours of consumers. The technology-readiness construct refers to people's propensity to embrace and use new technologies for accomplishing goals in home life and at work (Parasuraman, 2000).

Literature concerning the adoption of new technologies suggests that consumers simultaneously hold favourable and unfavourable views about technology-based products and services. Taking this into account, the Technology Readiness Index aims to distinguish between consumer segments according to their predisposition to adopt new technologies. Thus, the process of research was undertaken by Parasuraman to operationalise the construct, develop and refine a multiple-item scale to measure it, and assess the scale's psychometric properties.

The ultimate scale explains technology readiness by means of four constructs, namely optimism, innovativeness, discomfort, and insecurity (Parasuraman, 2000).

- *Optimism*: A positive view of technology and a belief that it offers people increased control, flexibility, and efficiency in their lives.
- *Innovativeness*: A tendency to be a technology pioneer and thought leader.
- *Discomfort:* A perceived lack of control over technology and a feeling of being overwhelmed by it.

- *Insecurity*: Distrust of technology and scepticism about its ability to work properly.

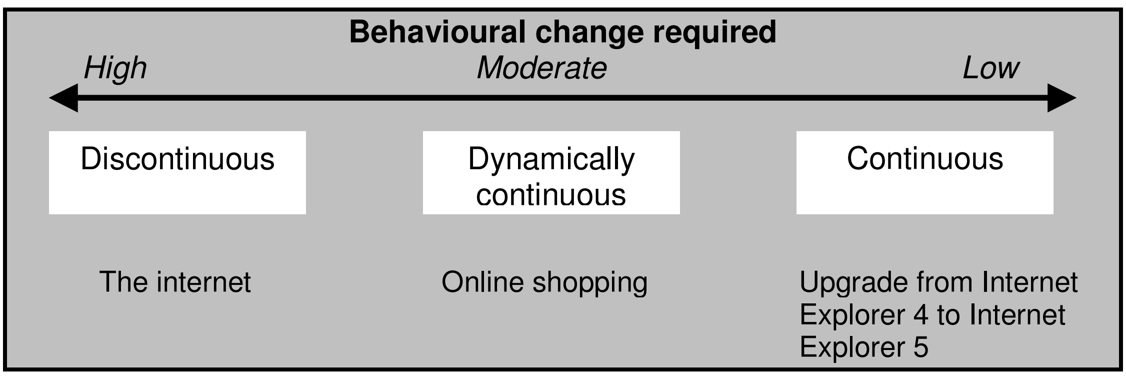
The first two constructs, optimism and innovativeness, are drivers of technology-readiness, whereas discomfort and insecurity are inhibitors.

Marketers can use the Technology Readiness Index to gain an in-depth understanding of the readiness of their customers to embrace and interact with technology, especially computer/internet-based technology. Technology-Readiness Index scores could possibly even be used to explain perceived risk associated with intention to purchase online. To gain further insight into a consumer's propensity to adopt a technology, and more specifically the internet as mode of purchase, the internet can be viewed from the perspective of an innovation.

4.4 THE INTERNET AS A TYPE OF INNOVATION

To understand how and when the internet might be adopted in the buying process, one needs to be certain of the behavioural changes required by the consumer in order to adopt the internet as a means of purchasing. These behavioural changes depend on the nature of the innovation. The behavioural changes and the nature of the innovation are depicted in Figure 4.1 and explained below.

FIGURE 4.1 BEHAVIOURAL CHANGES AND THE NATURE OF INNOVATION



Source: Adapted from Molesworth and Suortti (2001).

A distinction can be drawn amongst four innovation types, namely discontinuous innovation, dynamically continuous innovation, continuous innovation, and imitation (Morris and Kuratko, 2002). It is, however, only necessary to discuss the first three types of innovation.

- *Discontinuous innovation.* Discontinuous innovation is described as a breakthrough innovation. This type of innovation mostly results in products and services that address a need that has not been addressed before, or that change the way customers go about addressing a need (Morris and Kuratko, 2002). Discontinuous innovations are rare, and require individuals to learn a new set of skills. The internet is an example, as consumers had never known anything like it before.
- *Dynamically continuous innovation.* A dynamically continuous innovation is one that has a significant effect on consumption patterns by modifying or improving existing concepts and behaviour (Molesworth and Suortti, 2001). Assuming that a consumer has previously adopted the internet, the majority of online shopping can be placed in this category. Online shopping can be classified as a dynamically continuous innovation because online shopping is an advanced form of traditional shopping, requiring some changes in behavioural patterns.
- *Continuous innovation.* Continuous innovation is also referred to as *step-at-a-time innovation.* With this type of innovation, performance of an existing product is enhanced, new features or options are added, and new applications are developed (Morris and Kuratko, 2002). An example of this is the upgrade from Internet Explorer 4 to Internet Explorer 5.

Since the internet is viewed as a relatively new innovation in terms of purchase environment, and online shopping requires some changes in the behavioural patterns of consumers, the theory of innovation adoption may provide some insight into the process through which consumers proceed when deciding whether or not to use online shopping as a mode of purchase.

4.4.1 The innovation adoption theory

The earliest theory concerning adoption was called AIDA (awareness, interest, desire, action), followed by a number of alternative theories of this process which use different terminology but are attempts to describe the same process (Engel *et al.,* 1995). The most widely accepted model is that of Rogers. Rogers' (1995) innovation adoption theory provides valuable insights into understanding a consumer's decision to purchase on the internet. This theory presents a model describing the five-stage process of decision-making for innovation adoption. These five stages are knowledge, persuasion, decision, implementation, and confirmation.

- *Knowledge.* Knowledge is the first stage of the innovation adoption theory where an individual builds an understanding of an innovation and its functions. In terms of the internet, previous experience will influence knowledge formation, as well as the demographic characteristics of the individual. It is here that the consumer builds beliefs about the innovation based on the consumer's knowledge. For example, consumers who have participated in other direct marketing activities such as catalogue purchasing, may be more open to an internet purchase experience.
- *Persuasion.* In the persuasion stage, the consumer's beliefs and attitudes towards the innovation are built, based on his/her knowledge gained in the earlier stage. Certain factors increase the persuasion of a consumer to adopt a particular innovation. These factors include the relative advantages of the shopping method, compatibility of values and beliefs of individuals in the social system, low complexity in understanding how to use the innovation, the ability to try the innovation resulting in less uncertainty, and the ability to observe the innovation results (Rogers, 1995).
- *Decision.* According to Rogers (1995), in the decision stage most consumers will try out the innovation on a partial basis first; then, if they

like it, or find advantage in using it, they will develop an intention to actually adopt the innovation. Therefore the consumer will make a decision to adopt or reject online shopping based on his/her attitude.

- *Implementation.* Implementation is the fourth stage in the innovation adoption theory, where a consumer will finally adopt or reject the internet for shopping. A certain degree of uncertainty regarding the consequences of online shopping may be experienced by the consumer. Therefore he/she may continue to search for information regarding shopping online. It is here that perceived risk may take effect.
- *Confirmation.* In this final stage of confirmation, the consumer will reconsider the internet as a method of purchasing, and determine whether to continue use of the internet for purchasing. This decision is based on the consumer's satisfaction with the online shopping experience.

Adoption of the internet as a means of purchasing can also be explained by means of purchase intention.

4.5 PURCHASE INTENTION

Purchase intention refers to whether the consumer plans to enter a transaction or not. Purchase intention has also been defined as the situation which manifests itself when a consumer is willing, and intends to become involved in online transactions (Pavlou, 2003 as cited in Chen and Barnes, 2007). Intentions can provide a fairly accurate prediction of future behaviour. However, they are far from being a perfect prediction. A poor prediction of behaviour may be due to the fact that unexpected circumstances can cause intentions to change, for example, risk. Despite these confines, consumer intentions are still a company's best bet for predicting future behaviour (Blackwell *et al.*, 2001). Lui and Wei (2003) developed a model for investigating a consumer's intention to adopt purchasing on the internet. This model revealed that the perceived usefulness and ease of use of the internet will positively influence consumers' intentions to adopt the internet as a means of purchase. It was, however, also found that perceived risk will negatively influence consumers' intention to adopt the internet as means of purchase. Furthermore, Miyazaki and Fernandez (2001) found that the more experience consumers have with remote purchasing, the more likely they are to adopt the internet as a form of purchase environment. Therefore it can be inferred that those consumers who have had experience with catalogue, mail order, and telephone purchasing methods are more likely to adopt the internet as a method of purchase.

4.5.1 Online purchase intention

Online purchase intention involves an intention to transact with a website. Intentions are subjective judgements about how one will behave in the future. Purchase intentions therefore represent what consumers think they will purchase (Blackwell *et al.*, 2001).

Online transactions differ from traditional transactions in various ways: the extensive technology of interactions; the uncertain, temporal, impersonal character of the online transaction; the open and unpredictable environment; and the technological infrastructures present during the processes of online transactions (Pavlou, 2003 as cited in Chen and Barnes, 2007). These differences create a window for error and hence possibly create risks associated with online purchase intention. It is thought that consumers' perceived risks associated with online purchasing will have an influence on consumers' tendency to adopt the internet as an innovation for purchasing. Previous research examining risk perceptions in marketing has found that risk perceptions are negatively correlated with willingness to buy (Shimp and Bearden, 1982; and White and Truly, 1989 as cited in Garbarino and Strahilevitz, 2004). Therefore consumers who perceive fewer risks or concerns towards online shopping are expected to make more online purchases than more risk-attentive consumers (Miyazaki and Fernandez, 2001). Furthermore, it was found the online consumers with strong purchase intentions in e-commerce usually have previous online purchase experience that assists in lowering their uncertainties (Shim and Drake, 1990 as cited in Chen and Barnes, 2007).

4.6 ONLINE SHOPPING AS A RETAIL CHANNEL

Consumers can choose from a variety of different retail channels, including traditional retail stores, catalogue, mail order, TV shopping, and online shopping. Each shopping channel has different characteristics or attributes which influence the consumer's choice of a retail channel. *Online shopping* refers to the process of purchasing products or services via the internet (Li and Zhang, 2002). Online retailing in particular has created competition with all other shopping channels. It has reshaped consumers' shopping habits and has caused drastic changes to the distribution channel. This change is a direct result of the rapid advances in technology (Lin and Yu, 2006). These rapid advances have revolutionised the way business is done, but the internet as a place of business has not quite lived up to those expectations (Prabhaker, 2000).

Twenty percent of the world's population are using the internet, that is 1,2 billion people out of almost seven billion people (Internet statistics, 2007). According to a study done by ACNielsen (2005), only one-tenth of the world's population is shopping online, that is 627 million people. Compared with the expansion of internet users, the number of online shoppers has increased at a lower pace (Chen and He, 2003; US Census bureau, 2003 as cited in Jarvelainen and Puhakainen, 2004). There is, however, evidence that consumers see the introduction of online purchasing as something of a threat (Lin and Yu, 2006). This is evident since only 4% of total incomes in the retailing sector come from electronic transactions (OECD, 2003 as cited in Jarvelainen and Puhakainen, 2004). Of this 4%, internet shopping's market share is under 2% of total retail spending (Retail Forward, 2003 as cited in Swinyard and Smith, 2003).

According to Prabhaker (2000), online commerce will only thrive with an expansion of consumer confidence and consumer acceptance. It is therefore the responsibility of the marketing sector to instil this confidence and acceptance about online commerce amongst consumers.

4.7 ONLINE SHOPPING AS A MARKETING TOOL

The internet is a form of direct marketing tool and is said to be revolutionising marketing and advertising (Prabhaker, 2000). Each internet user's every movement is a source of possible marketing information. The internet can be used as a marketing tool to advertise products, transact sales and brand an organisation, as well as to collect information about consumers and markets. Furthermore, online shopping in particular can be used just as effectively as a marketing tool to carry out business functions. These business functions can be implemented by providing customer support, integrating suppliers and customers into the supply chain, bringing about cost savings through automation and integration, improving customer relationships, enabling electronic procurement, and facilitating electronic billing and payments (Cant *et al.,* 2002).

With regard more specifically to marketing and according to Kotler (2005:123-124), the internet can be used by marketers in a number of ways.

- To test new product and marketing concepts, using online focus groups and consumer panels.
- To research competitors' strategies, tactics, and resources.
- In relationship marketing, to train and communicate with employees, dealers, and suppliers.
- In promotions, to distribute coupons and product samples.
- As a market research tool, to monitor chat-room conversations to learn how people talk about products, companies, and brands related to one's business.

The internet can therefore be described as having the potential to change marketing practice and efficiency quite significantly. However, in order to be successful as marketers on the internet, one needs to gain an understanding of the online consumer.

4.8 THE ONLINE CONSUMER

Internet users can be classified into two main groups, namely internet shoppers/consumers and internet browsers. Internet shoppers are those who have made purchases on the internet. Internet browsers are those who have searched online for a product or service but have not made purchases there (Forsythe and Shi, 2003). In attempting to profile an online consumer, it has been found that internet consumers tend to be well educated, and are typically in a relatively higher income bracket. Internet shoppers are also more convenience-orientated, innovative, impulsive, and seeking variety (Donthu and Garcia, 1999 and Forsythe and Shi, 2003). Swinyard and Smith (2003) describe the online shopper as being younger, wealthier, better educated, having higher computer literacy, spending more time on the computer and on the internet, finding online shopping to be easier and more entertaining, and being less fearful about financial loss resulting from online transactions, than online browsers. Stores, (2001 as cited in Sorce, Perotti, and Widrick, 2005) argues, however, that as the internet has become more ubiquitous, the profile of the online shopper has come to resemble that of the general population. It has been found that consumers who purchase most often on the internet are convenience-orientated rather than experience-orientated (Li, Kuo, and Russel, 1999 as cited in Li and Zang, 2002). Consumers who use the internet as a routine tool to receive and send e-mails, to do work, to read news, to search for information, or for recreational purposes, are referred to as living “wired” lifestyles. Their routine use of the internet leads them to naturally make use of the internet as shopping channel as well. Thus, consumers who lead “wired” lifestyles can be profiled as online shoppers. In

South Africa, the internet is particularly popular amongst the youth, referred to as *Generation Y*, and recent findings show that the electronic community never sleeps, and knows no physical boundaries (Cant *et al.,* 2002). The world's biggest online consumers reside in Germany and the UK, averaging six and seven purchases per month (ACNielsen, 2005). These purchases serve as evidence that online shopping does have its benefits.

4.8.1 Benefits and drawbacks of online shopping

According to a recent internet shopping study by Ernst and Young (1999) as cited in Chiang and Dholakia (2003), the two major reasons for consumers to shop online are increased convenience and greater savings. Consumers can shop online from their home, thereby saving time and travelling cost. In addition, items are usually cheaper online, because warehouse and staff costs are lower. Two other advantages are a wide variety of choice, since one can purchase from shops all over the world, and quick delivery, since most online retailers propose to deliver within a few days.

Despite these advantages, many surveys have reported that most internet users are not conducting online transactions because they are concerned about internet security (Hassan, Kunz, Pearson, and Mohamed, 2006). A survey done in the United States (U.S.) has shown that although 78% of internet users plan to shop online in a year, more than 69% limit their online purchasing because of concerns associated with the safety of their personal information (Vijayan, 2005). Of the main factors concerning reluctance to purchase on the internet, it was found that concern about credit-card information was the most important deterrent to online shopping. This credit-card concern was followed by the inability to see and touch the product, not trusting that online ordering would go smoothly, having concerns about giving out personal information, and the expense of shipping (McQuivey, 2000 as cited in Swinyard and Smith, 2003). Another problem online consumers face today is information overload. It has been said that in the year 2004, almost 17 billion e-mails were exchanged daily and that 15 billion of these were automatically generated (Cant *et al.,* 2002). Online consumers are therefore finding it increasingly difficult to deal with this information overload. The degree to which shoppers are turning towards or away from the internet as a shopping channel confirms the need to better understand and predict consumers' online shopping behaviours. This study therefore aims to assess the perceived risks associated with intention to purchase online. Because this study is undertaken in South Africa, it is appropriate to discuss online shopping within South Africa.

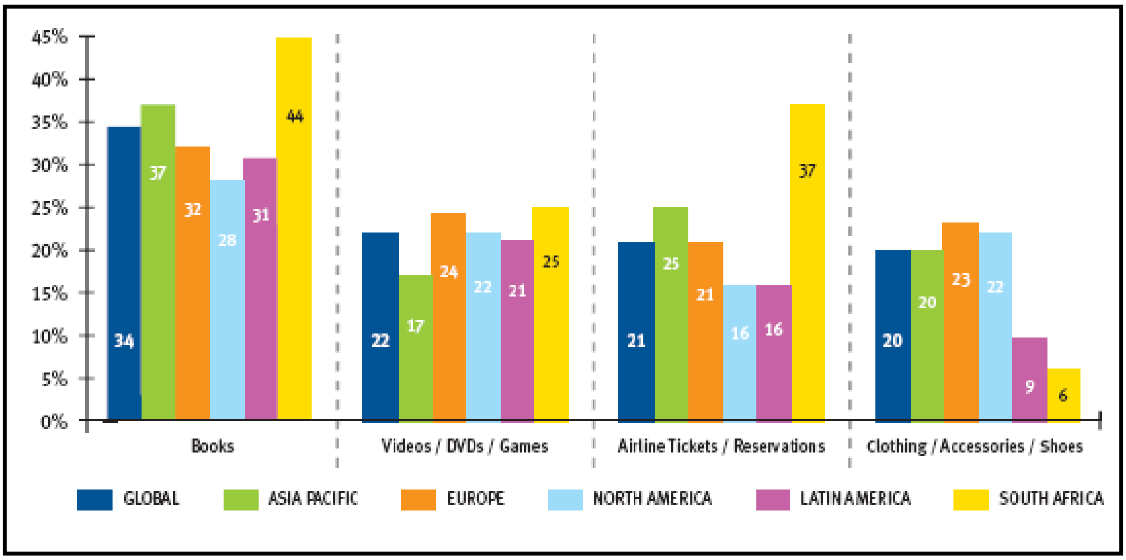
4.9 ONLINE SHOPPING IN SOUTH AFRICA

Africa yields a small 3,4% of the world's total internet usage, with only 11,5% of South Africa's population making use of the internet (Internet statistics, 2007). In South Africa, the largest online retailers represent less than 0,1% of the country's R188 billion retail market (Bidoli, 2003). This small percentage is an indication that online shopping is still in its infancy in South Africa. This conclusion can be explained in terms of Hofstede's cultural typology. According to this typology, uncertainty avoidance is the degree of risk aversion in a society (Keegan and Green, 2005). Countries that score low in uncertainty avoidance typically favour taking risks, trying new ways of accomplishing goals, and using novel approaches. Societies that score high on uncertainty avoidance, however, tend to put greater emphasis on the traditional methods of accomplishing goals, are unlikely to take on high risks, and are generally considered to be averse to ambiguity (Keegan and Green, 2005). South Africa`s uncertainty avoidance score is relatively high, with a total of almost 60 (Hofstede, 2008). Therefore it can be concluded that South Africans are typically unlikely to take on high risks. With that in mind, one can consider South Africans to be conservative people, and it can therefore be inferred that it is possibly the risks associated with online purchasing that are inhibiting the growth in online shopping in South Africa. Two elements of online purchasing in South Africa are considered with regard to risk: types of items purchased, and method of payment.

4.9.1 Types of items purchased

As depicted in Figure 4.2, the top four item categories purchased globally on the internet are: (1) books, (2) Video's, DVD's, games, (3) Airline tickets, and (4) Clothing, accessories, and shoes (ACNielsen, 2005).

FIGURE 4.2 COMPARISON OF TOP FOUR ITEM CATEGORIES PURCHASED ONLINE



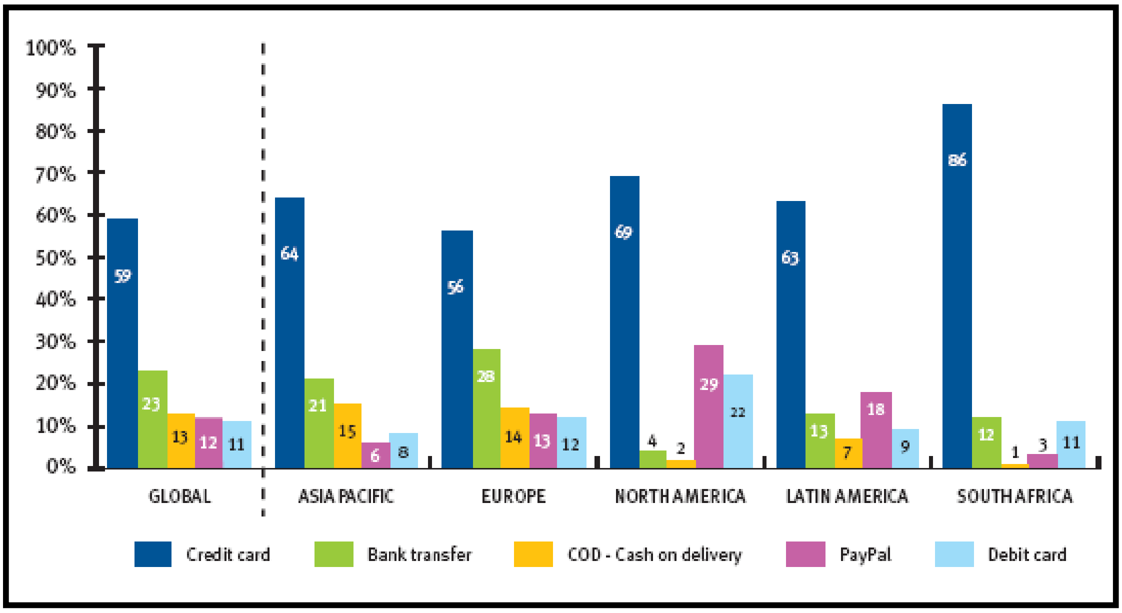
Source: Adapted from ACNielsen (2005).

The biggest contributors to the South African online retail sector are Pick 'n Pay Online grocery stores and book retailer Kalahari.net (Bidoli, 2003). The number of books purchased online in South Africa total 44%, which is not only higher than the global total of books purchased online, but the highest total within all the continents measured (see Figure 4.2). Also, it can be noted that the purchase of airline tickets in South Africa is significantly higher than in any other world area. Furthermore, South Africa scored the lowest in terms of purchasing clothing, accessories, and shoes online. This may once again be due to the uncertainty avoidance factor since it is considered relatively risky to purchase without the ability to fit, see, and feel.

4.9.2 Method of payment

A consumer's unwillingness to provide his/her credit card information has been cited as a major obstacle to online purchases (Maignan and Lukas, 1997 as cited in Forsythe and Shi, 2003; Hass, 1998, Romani, 1998). In addition, many consumers believe that it is too easy to have a credit card stolen (Caswell, 2000 as cited in Forsythe and Shi, 2003). Taking this information into account, as well as South Africa's uncertainty avoidance attitude, one would assume South Africans to be reluctant in parting with their credit-card information since this information is sent to a distant recipient over a public network. However, in Figure 4.3, it is shown that those South Africans who do purchase online, in fact pay by means of a credit card for online purchases.

FIGURE 4.3 PAYMENT METHOD USED IN ONLINE PURCHASING



Source: Adapted from ACNielsen (2005).

The use of a credit card is also significantly higher than the global use of credit cards with 86% for South Africa as opposed to 59% global (ACNielsen, 2005).

Other options for payment include bank transfer, cash on delivery, Paypal, and debit card.

The Paypal system as a means of sending and receiving money is available in 45 countries world wide, excluding South Africa. Paypal uses e-mail to send and receive payments electronically. The simplicity of this system, combined with a cash incentive when it was launched, caused an immediate growth in Paypal users. Right now, however, South Africans can only send money with Paypal and not receive it (Thomas, 2007). For South African's shopping at international websites a credit card is the most common payment option. Local online retail stores have been slow to adopt other methods of payment such as electronic transfers, however, they are beginning to realise the importance of these alternative methods (Thomas, 2007).

It would therefore seem that the extremely high usage of credit cards as a medium of payment in online purchase is a result of South Africans not having many other options. An increasing number of South African sites, like Kalahari.net, are offering alternatives like direct deposits, electronic transfers, eBucks rewards points, and various other options (Thomas, 2007).

4.10 CHAPTER SUMMARY

The gist of this chapter was that the concept of online shopping is still a relatively new form of purchase that seems it is here to stay. One noteworthy drawback, however, is that compared with the expansion of internet users, the number of online shoppers has increased at a lower pace.

This chapter has introduced online shopping by discussing its environment, the internet. Before consumers can shop online, it necessary for them to adopt the internet. Adoption of the internet can be understood from two different perspectives, innovation adoption, and purchase intention. Firstly, with regard to innovation adoption, the likelihood of this adoption was discussed by distinguishing between different types of innovations, such as discontinuous, dynamically continuous, and continuous innovation. Also, the innovation adoption theory is emphasised as a process of decision-making for innovation adoption. Secondly, the intention to purchase online was discussed with relevance to online and traditional transactions. It was noted that owing to the nature of online transaction, there is a wider margin for error, and therefore online transactions are perceived to be more risky

The chapter also focused on the internet as a marketing tool and highlighted its benefits in terms of product development, strategy formulation, promotion, and relationship marketing.

In this chapter an attempt was made to profile the online consumer. Two views are particularly dominant, the first view being that online consumers are younger, wealthier, and well educated, while the second view is that as the internet has become ever-present, online consumers are beginning to resemble the general population. In respect of benefits and drawbacks of online purchasing, it was noted that the most dominant factor limiting online purchase is that of security concerns regarding personal and credit-card information.

Finally, the online shopping situation in South Africa was highlighted. Online shopping in South Africa is still in its infancy. One reason for this is that South Africans are considered to be conservative people. This is justified by Hofstede's cultural typology. It is therefore inferred that it is possibly the risks associated with online purchasing that are inhibiting the growth of online shopping in South Africa. Despite this, South Africa is cited as purchasing the most books and airline reservations online. Also, South Africans make the most use of the credit card as a method of payment. Taking this into account, one may perceive an area that requires research.

CHAPTER 5
CONSUMER RISK PERCEPTIONS

5.1 INTRODUCTION

This chapter aims to provide an overall understanding of consumer-perceived risk and its relation to consumer behaviour and online shopping. First, risk in general is discussed, followed by a detailed discussion of the concept of perceived risk, including the components of perceived risk, the types of perceived risk, factors that influence risk perception by consumers, measurement of risk, and consumer risk-handling behaviour. Next, risk reduction methods are briefly discussed. Lastly, perceived risk in the online environment is presented, where types of online perceived risk is discussed as well as the factors influencing online perceived risk applicable to this study.

5.2 RISK

The concept of risk became a popular study in the field of economics in the 1920's (Dowling and Staelin, 1994), with economists such as Frank Knight and John Maynard Keynes advancing the study of risk through research in probability theory (Holton, 2004).

The literature is inundated with definitions of risk. Examples include: Risk is the actual exposure of something of human value to a hazard and is often regarded as the combination of probability and loss (Smith, 1996 as cited in Kelman, 2003). Risk can also be described as a combination of the chance of a particular event, with the impact that the event would cause if it occurred (Sayers, Gouldby, Simm, Meadowcroft and Hall, 2002). Risk therefore has two components, chance or probability of an event occurring, and the consequence associated with that event. Furthermore, the classical decision theory describes risk as reflecting variation in the distribution of possible outcomes, their likelihoods and their subjective values (Mitchell, 1999).

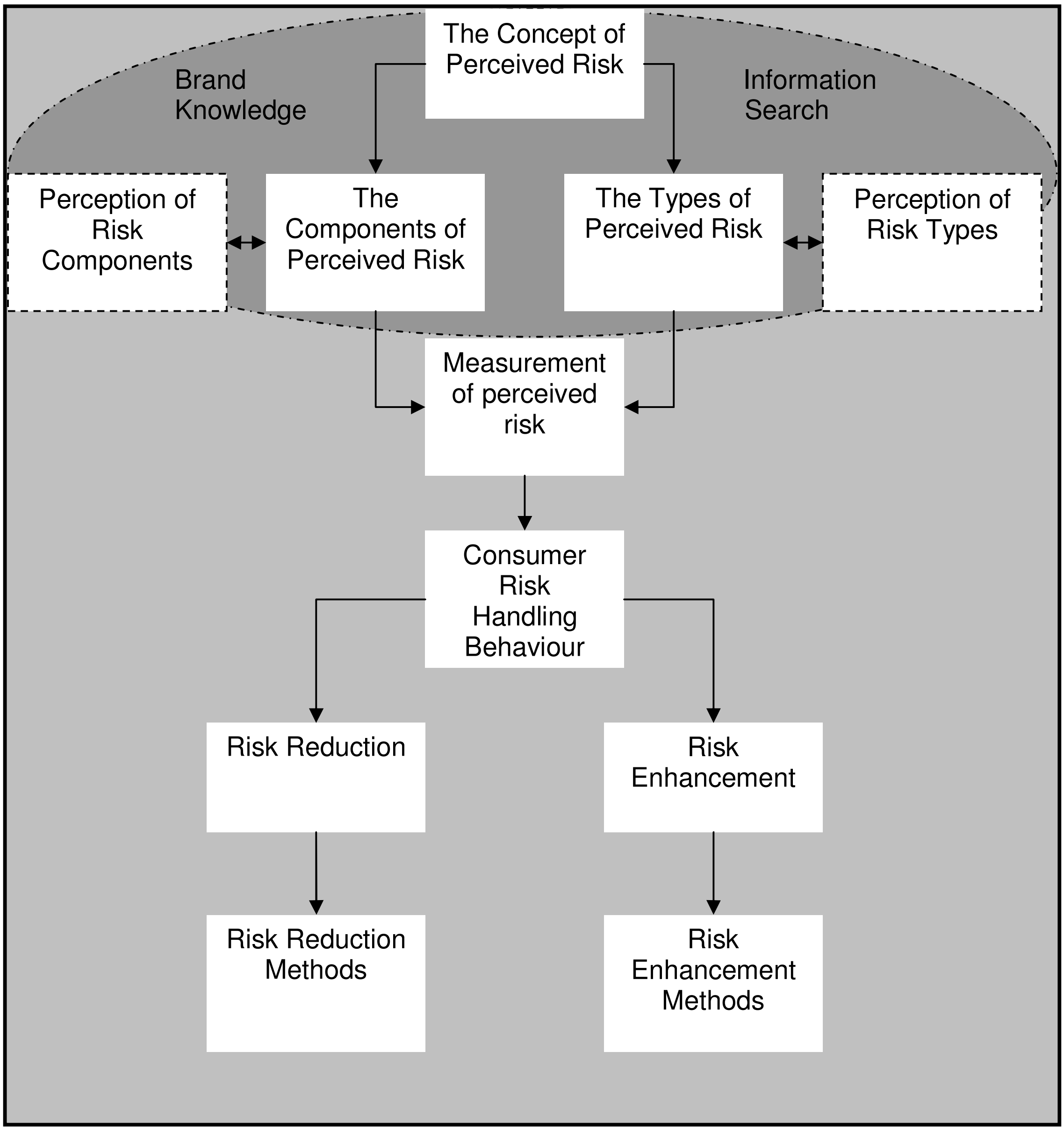
Perceived risk has a long history in consumer behaviour literature, where findings confirm that perceived risk is powerful in explaining consumers' behaviour since consumers are more often motivated to avoid mistakes than to maximise utility in purchasing (Mitchell, 1999). *Perceived risk* refers to the nature and amount of risk perceived by a consumer in contemplating a particular purchase decision (Cox and Rich, 1964). The concept of perceived risk is discussed below.

5.3 THE CONCEPT OF PERCEIVED RISK

Bauer (1960) introduced the concept of perceived risk to the marketing literature (Dowling and Staelin, 1994). A book on risk-taking and information-handling in consumer behaviour represents the early work in marketing (Cox, 1967). This early work was then followed by several conceptual models of consumer risk-perception and information-handling. The work of Stem, Lamb and MacLachlan (1977) is considered in this study.

Figure 5.1 illustrates that perceived risk can be conceptualised by considering a number of elements. These are the components of perceived risk, the types of perceived risk, factors that influence risk perceptions, measurement of perceived risk, and consumer risk-handling behaviour. The combination of these elements forms the concept of perceived risk, and they are discussed in turn.

FIGURE 5.1 A CONCEPTUAL FRAMEWORK OF PERCEIVED RISK



Source: Adapted from Stem *et al.,* (1977).

The concept of perceived risk falls within the general conceptual framework of consumer decision-making, the process by which consumers decide which product or brand to buy (Cunningham 1967). It was Bauer (1960) who explained the concept of perceived risk as follows:

> Consumer behaviour involves risk in the sense that any action of a consumer will produce consequences which he cannot anticipate with anything approximating certainty.

It is inconceivable that the consumer can consider more than a few of the possible consequences of his actions, and it is seldom that he can anticipate even these few consequences with a high degree of certainty (Bauer, 1960, Mitchell, 1999). The uncertainty and consequence are what define the concept of perceived risk as illustrated in Figure 5.1. Therefore risk is perceived when the consumer is viewed as having a set of “buying goals” associated with each purchase, to the extent that the consumer realises that he/she may not attain all of his/her buying goals (Cox, 1967).

Based on Bauer’s findings, Cox (1967) defined perceived risk in terms of two similar components, namely uncertainty and consequences. Cunningham (1967) describes perceived risk as the amount that would be lost if the consequences of an act were not favourable, and the individual’s subjective feeling of certainty that the consequences will be unfavourable. This definition involving uncertainty and consequence is the most common definition for perceived risk cited in the literature.

Mitchell (1999) has reported on the theoretical and model developments of risk over the past 30 years. It was concluded that Cunningham’s two-component model of uncertainty and consequences appears to be the most appropriate model in terms of usability, practical implications, prediction, suitability for reliability and validity testing, and developing understanding. Researchers therefore agree that perceived risk is a combination of the perception of the likelihood that something will go wrong and the perception of the seriousness of the consequences if it does (Garbarino and Strahilevitz, 2004). Therefore, perceived risk is comprised of two main components, uncertainty and avoidance.

5.3.1 THE COMPONENTS OF PERCEIVED RISK

A consumer must consider whether a product may be bad, not as good as expected, or at least different from what was anticipated (uncertainty). In addition, a consumer must consider what will happen if such a situation should occur (consequences).

Cox (1967) describes uncertainty as a special instance of cognitive clarity. Uncertainty is used more commonly to explain a state of not knowing whether a proposition is true or false (Holton, 2004). Uncertainty in the concept of perceived risk and consumer behaviour is derived from numerous sources.

First, the consumer's knowledge of his/her own needs, purchase goals, acceptance levels, and goal importance is frequently inadequate (Cox, 1967, Cox and Rich, 1964). For example, "How important is it that my camera can focus at 200mm?" Secondly, consumers can be uncertain about defining the range of decision alternatives (Pras and Summers, 1978). For example, the number of suitable cameras and the relative importance of a brand's attributes are not precisely known. Third, consumers may be uncertain about the predictive validity of the attributes which can be assessed beforehand, meaning how well they will predict future performance (Cox, 1967). The fourth uncertainty is the consumer's own ability to accurately judge the outcome levels he/she has experienced (Bennett and Harrell, 1975). This has also been described by Cox (1967) as one's confidence value, which is a measure of a consumer's confidence when he/she is categorising a signal as "good" or "bad". Fifth, consumers may find it difficult to make an overall brand evaluation (Cox and Rich, 1964). For example is a Nikon camera better than a Canon camera? Lastly, uncertainty can be found in the potential difference between the anticipated and the actual experience of the outcome (Kahneman and Tversky, 1984).

The second component of perceived risk is that of consequences. The concept of consequences in Bauer's original paper was not explicitly defined. It has however been interpreted by Cox and Rich (1964) to mean the amount at stake in a buying situation, which is determined by the costs involved in attempting to achieve a particular set of buying goals. Since then, consequences have been further defined as the importance of loss (Taylor, 1974). According to Cox (1967), the basic assumption is that consumer behaviour is goal-orientated. A person behaves in a certain way because he/she stands to gain the satisfaction of certain needs. If risk is involved, one thing which is at stake is the possibility of not satisfying those needs or goals that motivated the risk-taking behaviour in the first place. Also, if the individual's goals are not achieved, the individual may have to pay the penalties that could result from this failure. Moreover, the individual risks losing the means used in the attempt to satisfy the needs. It therefore follows that the amount at stake is a function of the importance of the goals to be achieved, the seriousness of the penalties of failure, and the amount of means committed to achieving the goals (Cox, 1967). Consequences will therefore differ in degree and importance depending on the types of perceived risk involved.

5.3.2 TYPES OF PERCEIVED RISK

Parallel to the components of perceived risk, uncertainty and consequences, different types of perceived risk exist within overall perceived risk as illustrated in Figure 5.1. Many different types of perceived risks exist. Table 5.1 provides a brief summary of the major types of perceived risk. It is clear from Table 5.1 that perceived risk can be grouped into six main categories of risk, namely functional, physical, financial, time, psychological, and social risk. Overall risk can thus include any of the above-mentioned six types of risk, and it can be concluded that perceived risk is a multi-dimensional construct. Table 5.1 shows that time risk was not initially considered to be part of overall perceived risk. It was Roselius (1971) who first identified time risk as a sixth type of perceived risk.

TABLE 5.1 TYPES OF PERCEIVED RISK

Schiffman and Kanuk	Shimp and Bearden	Peter and Tarpey	Jacoby and Kaplan
Functional Physical Financial Social Psychological Time	Performance Physical Financial Social Psychological	Performance Physical Financial Social Psychological Time	Performance Physical Financial Social Psychological

Source: Adapted from Schiffman and Kanuk, (2004), Shimp and Bearden (1982), Peter and Tarpey, (1975), Jacoby and Kaplan (1972).

The different perceived risks are defined in the following section.

5.3.2.1 Functional risk

Functional risk, also referred to as *performance risk,* is defined as the uncertainty and the consequence of a product not functioning at some expected level (Shimp and Bearden, 1982, Horton 1976). Product performance risk may result from a poor product choice owing to the shopper's inability to accurately judge the quality of the product.

5.3.2.2 Physical risk

Physical risk refers to the probability that a product purchased may result in personal injury (Chen and He, 2003). Schiffman and Kanuk, (2004) define physical risk as the risk to self and others that the product may pose. Physical risk has also been defined as the potential threat to an individual's safety, physical health, and well-being (Lu, Hsu, and Hsu, 2005).

5.3.2.3 Financial risk

Financial risk is defined as the probability of monetary loss associated with buying a product (Horton, 1976). Jacoby and Kaplan (1972) define financial risk as the chance that one will lose money from the trial of an unfamiliar brand. Financial risk is also defined as the probability that the product will not be worth the financial price (Schiffman and Kanuk, 2004) and would have been available more cheaply somewhere else (Lu *et al.,* 2005). Furthermore, financial risk involves the uncertainty of not receiving the product at all, even after paying for it (Biswas and Biswas, 2004), as well as the possibility that one's credit-card information may be misused (Forsythe and Shi, 2003).

5.3.2.4 Social risk

Social risk reflects the disappointment in the individual by friends and family in case of a poor product or service choice (Ueltschy *et al.*, 2004). Social risk is also defined by Peter and Tarpey (1975) and Jacoby and Kaplan (1972) as the likelihood of the purchase resulting in others thinking of the consumer less favourably. Lu *et al.,* (2005), however, describe social risk as being concerned with an individual's ego and the effect that a purchase will have on the opinions of reference groups. The overlap between Schiffman and Kanuk's (2004) definition of psychological risk and Lu *et al.'s* (2005) definition of social risk should be noted, since both refer to the effect of risk on ego. Ego is an internal state of self-image control (Schiffman and Kanuk, 2004). The viewpoint of Schiffman and Kanuk (2004) is that ego is a definition of psychological risk and is accepted for the purpose of this study.

5.3.2.5 Psychological risk

Psychological risk reflects an individual's disappointment in oneself in case of a poor product or service choice (Ueltschy *et al.*, 2004). Psychological risk is also defined as the chances of the specific purchase being inconsistent with the personal or self-image of the consumer (Chen and He, 2003, Peter and Tarpey, 1975 and Jacoby and Kaplan, 1972). Schiffman and Kanuk (2004) define psychological risk as the risk that a poor product choice will bruise the consumer's ego. Thus, it can be conlcuded that psychological risk relates to the consumer's internal and personal assessment of disappointment.

5.3.2.6 Time risk

Time risk results when a passage of time reduces the ability of the product to satisfy wants, such as when a product rapidly becomes obsolete (Ross, 1975). Time risk also refers to the probability that a purchase results in loss of time to buy or retain the product (Chen and He, 2003). In more simple terms, time risk refers to the possibility that a purchase will take too long or waste too much time. Furthermore, time risk relates to the time and effort lost in returning or exchanging the product, and any technological problems such as a slow website server (Hassan *et al.,* 2006). Roselius (1971) described this time risk as the time, convenience, and effort wasted in getting a product adjusted, repaired, or replaced.

Overall perceived risk is therefore a function of performance, physical, financial, social, psychological, and time risk. From that conclusion, overall risk can be described as a multi-dimensional construct. Each of these risk types appears to be linked to what Cox describes as the consequence component of perceived risk. These types of risk have been used to measure overall perceived risk in several previous studies (Ueltschy *et al*., 2004, Pires, Stanton, and Eckford., n.d., Lu *et al*., 2005, Chen and Dubinsky, 2003, Biswas and Biswas, 2004, Forsythe and Shi, 2003, and Chen and He, 2003).

5.3.3 FACTORS THAT INFLUENCE CONSUMER RISK PERCEPTION

A number of factors can influence how consumers perceive risk. According to Schiffman and Kanuk (2004), consumers are influenced by risks that they perceive, whether or not such risks actually exist. Risk that is not perceived will not influence consumer behaviour. Upon examination of the literature, it is clear that the perception of risk by the consumer varies, depending on culture, the situation, the person, the product, and intangibility. A number of other influences also exist.

5.4.1 Risk perception and culture

It has been found that not all people around the world exhibit the same level of risk perception. This conclusion concurs with Hofstede's cultural typology and specifically, uncertainty avoidance (See Chapter 4). Research done by Ueltschy *et al.*, (2004) has investigated whether national culture significantly influences the risk perceived by consumers. It was found that consumers in Canada, the U.K. and the United States perceived risks differently from each other. In a study by Choi and Lee (2003), it was found that perceived risks associated with online shopping were different for Korean and American consumers. Korean consumers tended to have higher levels of perceived risk than Americans.

5.4.2 Risk perception and mode of shopping

The degree of risk perceived by a consumer is also affected by the shopping situation, for example, traditional retail store, online, catalogue, or direct mail (Schiffman and Kanuk, 2004). A study conducted by Cox and Rich (1967) reported on perceived risk and consumer decision-making when shopping by telephone. This study revealed that respondents perceived a higher degree of risk when they shopped by telephone than when they did their shopping in person.

5.4.3 Risk perception and personality

The amount of risk perceived in a particular situation often depends on the consumer (Schiffman and Kanuk, 2004). Some consumers tend to perceive high degrees of risk in various consumption situations, while others tend to perceive little risk. Research has shown that consumers who are more risk-averse perceive less risk (Donthu and Garcia, 1999).

5.4.4 Risk perception and product category

Perceived risk has been shown to vary with the product category in which a purchase is considered (Cunningham, 1967). For example, purchasers of headache remedies were found to perceive a higher degree of risk than did purchasers of dried spaghetti. In a study carried out by Ueltschy *et al.,* (2004), perceived risk was different across product and service categories. Perceived risk was measured for clothing, computers, and airline tickets, where airline tickets experienced the lowest amount of perceived risk. The same study also found that risk type varied across product categories. More specifically, Ueltschy *et al.,* (2004) found that financial and performance risk were perceived as much greater in the purchase of clothing than in the purchase of computers or airline tickets.

5.4.5 Risk perception and intangibility

Laroche, Bergeron and Goutaland (2003) addressed the impact of intangibility on perceived risk. The major finding was that perceived risk was poorly associated with physical intangibility, but strongly associated with the mental dimension of intangibility. For example, a repairman who explains to his client how he is going to fix the washing machine may help him to make tangible the service in his mind and therefore reduce the client's perceived risk.

5.4.6 Other factors that influence risk perception

According to Cox (1967), one or more of the following factors may influence how consumers perceive risk:

- Consumers may be uncertain as to what their buying goals are. Goal uncertainty can include uncertainty about:
    - the nature of the goals
    - goal acceptance levels or levels of aspiration
    - the relative importance of achieving the goal
    - current degree of goal attainment

- Consumers may be uncertain as to which purchase (brand, model, style, size, etc.) will best match or satisfy their acceptance levels of buying goals.
- Consumers may perceive possible adverse consequences if the purchase is made (or not made) and the result fails to satisfy their buying goals.

If one or more of these factors are present in the mind of the consumer, the situation can be defined as one of perceived risk.

5.3.4 MEASUREMENT OF RISK

It has already been noted that perceived risk is a multi-dimensional construct. In order to examine overall perceived risk, one needs to examine each dimension of perceived risk. However, multiple measures for each of the dimensions are needed by researchers (Stone and Gronhaug, 1993). Multiple measures are crucial, because it is unlikely that a single indicator will capture the essence of a given risk dimension sufficiently. Use of multiple indicators also allows discriminant validity of the various dimensions to be examined. Discriminant validity assesses the extent to which a measure correlates or not with other constructs from which it is supposed to differ (Malhotra, 2004).

Consumer perception of perceived risk was first measured by Cunningham (1967). Cunningham measured risk using a three-point scale consisting of a combination of two indirect questions on certainty and consequences. The two scales were then combined to develop risk categories. Although this classification of risk is consistent with Cox's two-component theory, it does result in an ordinal scale which is of limited analytical usefulness.

More recently, a scale to measure the perceived benefits and risks of online shopping was developed by Forsythe, Liu, Shannon and Gardner (2006). Perceived risks were first identified from the existing literature and then from the results of pilot studies. Eleven potential dimensions of perceived risk were identified. Scale items were then generated for each of the potential domains. By means of factor analysis, three final dimensions emerged for perceived risk, namely financial risk, product risk, and time risk.

From the above two research studies, it is clear that one can measure the concept of perceived risk by focusing either on the components of perceived risk, uncertainty and consequences, or by focusing on the types of perceived risk (See Figure 5.1).

The next area in the conceptual framework of perceived risk is that of consumer risk-handling behaviour, as depicted in Figure 5.1.

5.3.5 CONSUMER RISK-HANDLING BEHAVIOUR

This section deals with the manner in which consumers attempt to reduce risk in specific buying situations. Risk handling is thought mostly to be concerned with the risk reduction process. Risk handling is typically characterised as the process of reducing risks perceived pre-purchase, by using risk-reduction methods until the level of risk perceived reaches a level which is tolerable to the individual consumer and is consistent with the consumer's purchase goals (Stem *et al.,* 2001).

5.3.5.1 Coping with risk

Consumers try to reduce the amount of perceived risk by reducing the amount at stake, and/or by becoming more certain that the consequences will be favourable. Cox (1967) and Cox and Rich (1964) have investigated this process. Dowling and Staelin (1994) addressed the topic of perceived risk and risk handling activity. The major finding was that product-specific perceived risk can greatly affect the intensity of the intended use of risk-handling strategies, and that there appears to be an acceptance value below which this product-specific risk has little effect on intended behaviour.

It has also been noted that sometimes consumers increase perceived risk by searching for incompatible information (Cox, 1967). This is known as risk enhancement (Deering and Jacoby, 1972). It is thought that under conditions of low perceived risk, consumers will search for information which may signal increased risk, as a means of precaution before making a purchase decision.

When a consumer perceives risk in a purchase, he/she can pursue one of four broad strategies of risk resolution:

- Reduce perceived risk by either decreasing the probability that the purchase will fail, or reducing the severity of the loss suffered if the purchase does fail.
- Shift from one type of perceived loss to another for which the consumer has more tolerance.
- Postpone the purchase, in which case the consumer would be shifting from one general risk type to another.

- Make the purchase and absorb the unresolved risk (Roselius, 1971).

5.3.5.2 METHODS OF RISK REDUCTION

Within these strategies of risk resolution, various methods for reducing perceived risk by consumers have been identified in the literature. For example, consumers may seek information from formal and informal sources, use brand reputation or price as a quality guide, or shop only in stores with a high-quality image (Akaah and Korgaonkar, 1988). Also, marketers can reduce a consumer's risk perception by making use of tools such as money-back guarantees, warranties, and free trials (Schiffman and Kanuk, 1987). Furthermore, Cox (1967) cited advertising as a means for reducing risk. According to Schiffman and Kanuk (2004), consumers develop their own risk-reduction strategies which enable them to act with increased confidence. As depicted in Table in 5.2, some of these risk-reduction strategies include information seeking, brand loyalty, brand image, store image, most expensive model, and seeking reassurance.

TABLE 5.2 METHODS OF RISK REDUCTION

Schiffman and Kanuk	Roselius
Information seeking	Endorsements
Brand loyalty	Brand loyalty
Brand image	Major brand image
Store image	Private testing
Most expensive model	Store image
Seeking reassurance	Free sample
	Money-back-guarantee
	Government testing
	Shopping
	Expensive model
	Word-of-mouth

Source: Adapted from Schiffman and Kanuk (2004) and Roselius (1971).

Roselius (1971) presents the most complete reference for methods of risk reduction, which includes endorsements, brand loyalty, major brand image, private testing, store image, free sample, money-back guarantee, government testing, shopping, expensive model, and word-of-mouth, as illustrated in Table 5.2.

Although Cox (1967) cites advertising as a means for reducing perceived risk, Roselius (1971) does not include advertising in his list above, and the reason for this is not explained by the author. The various risk reduction methods are discussed in more detail below.

5.3.5.2.1 Information search

Information search is a common method implemented by consumers to reduce perceived risk (Mitra, Reiss, Capella, 1999). Consumers seek information about the product and product category through word-of-mouth communication from friends and family and other people whose opinions they value. These are known as *informal sources of information*. Consumers also seek information from retailers, salespeople and general media. These information providers are known as *formal sources.* When consumers associate their purchase with a high degree of risk, they spend more time thinking about their choice and searching for more information (Schiffman and Kanuk, 2004). The internet has emerged as one of the most powerful sources of information, and information search in relation to perceived risk in the online environment is discussed later.

5.3.5.2.2 Endorsements

Roselius (1971) is of the opinion that risk can be reduced by buying the brand whose advertising has endorsements or testimonials from a person similar to the consumer, a celebrity, or an expert. It was revealed by Tan (1999) that the most preferred risk reliever is that of reference groups, and specifically, experts and celebrity endorsers.

5.3.5.2.3 Brand loyalty

According to Roselius (1971) and Schiffman and Kanuk (2004), consumers can reduce risk by buying the brand which they have used before and have been satisfied with in the past, instead of purchasing new or untried brands. In this case, risk is reduced by the quality of the product being inferred from the brand image of the organisation with which the product is associated (Mitchell and Boustani, 1992).

5.3.5.2.4 Major brand image

Roselius (1971) revealed that a further method to reduce risk is to buy a major, well-known brand of a product, and rely on the reputation of the brand. Schiffman and Kanuk (2004) agree that consumers often think well-known brands are better and are worth buying for the implied assurance of quality, dependability, performance, and service. In addition, products with a major brand image are heavily promoted, which gives the consumer reassurance that the product purchased is popular and therefore better in terms of quality (Mitchell and Boustani, 1992).

5.3.5.2.5 Store image

In the opinion of Schiffman and Kanuk (2004), when consumers have no other information about a product, they often trust the judgement of the merchandise buyers of a store with a favourable reputation, and depend on them to have made careful decisions in selecting products for resale. Roselius (1971) states that consumers can reduce risk by buying the brands that are carried by a store which is viewed as dependable, and that they should rely on the specific reputation of the store.

5.3.5.2.6 Seeking reassurance

Consumers who are uncertain about the wisdom of a product choice can seek assurance in a number of ways, including money-back guarantees, government and private laboratory test results, and free samples (Schiffman and Kanuk, 2004). Consistent with Schiffman and Kanuk, Roselius (1971) maintains that perceived risk can be reduced by purchasing the product with a money-back guarantee. Roselius (1971) is also of the opinion that buying whichever brand has been tested and approved by a private testing company or an official branch of the government will create more confidence in the consumer and therefore reduce perceived risk. Furthermore, it was found by Roselius (1971) that providing the consumer with the opportunity to make use of the product in the form of a free sample before purchase can reduce risk associated with the purchase of the particular product to a certain degree.

5.3.5.2.7 Shopping around

Shopping as a method of risk reduction involves visiting different places of purchase to compare brands and ultimately to choose one brand (Mitchell and Boustani, 1992). It was also proposed by Roselius (1971) that consumers could reduce perceived risk associated with a particular purchase by shopping around by themselves, and comparing product features on several brands in several stores.

5.3.5.2.8 Expensive model

According to Schiffman and Kanuk (2004) and Roselius (1971), when consumers are in doubt, they feel that the most expensive model is probably the best in terms of quality, therefore they associate price with quality. Consumers can buy the most expensive and elaborate model of the product as a means of reducing perceived risk.

5.4 PERCEIVED RISK IN THE ONLINE ENVIRONMENT

Perceived risk refers to the nature and amount of risk perceived by a consumer in contemplating a particular purchase decision (Cox and Rich, 1964). Almost all kinds of shopping activities involve an element of risk, because of uncertainty in the purchasing decision. The amounts at stake, and the buyer's subjective assessment of the chances of an unfavourable consequence, determine the total amount of risk in any purchase decision (Dowling and Staelin, 1994). The behaviour of consumers in the face of risk has been the subject of a number of studies over the past 40 years (Bauer 1960, Mitchell 1999). Most of the studies have focused primarily on analysing consumers' perceived risk, and on identifying the different dimensions of risk. However, the perceived risk prompted by the mode of shopping has rarely been studied, compared to the risk associated with the purchase of the product and service. Very little research has been done on the perceived risks associated with online purchasing in particular (Miyazaki and Fernandez, 2001, Cunningham *et al.,* 2005). Most non-store research has focused on telephone shopping (Cox and Rich, 1964) or mail-order-catalogue shopping (McCorkle, 1990 as cited in Andrews and Boyle, 2008). The general conclusion regarding these direct marketing-related studies is that consumers associate a higher level of risk with non-store purchases than store purchase decisions (Akaah and Korgaonkar, 1988). It was found by Tan (1999) that consumers perceive internet shopping to be of higher risk than in-store shopping. In addition, consumers who perceive fewer risks or concerns towards online shopping make more online purchases than consumers who are more risk-laden (Miyazaki and Fernandez, 2001). Some research suggests that risk perceptions may play a minor role in the adoption of online shopping, while others have deemed consumer risk perceptions to be a primary obstacle to the future growth of online commerce (Miyazaki and Fernandez, 2001).

Internet shopping is, however, very different from shopping in stores. Internet shopping technologies are essentially self-service technologies that offer the benefits of 24-hour convenience, ever-present availability, time and money savings, and a reduction in the anxiety caused by judgemental service representatives (Bitner, 2001 as cited in Cunningham *et al.,* 2005). Although research does exist on the subject of perceived risk and online shopping, most of these studies have made use of the six types of risk identified by Peter and Tarpey, (1975) and Jacoby and Kaplan (1972) in the earlier years (see Figure 5.2). The internet, with the introduction of online shopping, has revolutionised the in-home or remote shopping environment. For this reason, it would be expected that this drastic change in mode of shopping would influence the dynamics of these perceived risks and therefore produce new types of perceived risks, or at least modify the definition of the traditional types of perceived risk.

5.4.1 Types of perceived risk in the online environment

Two recent studies (Hassan *et al.,* 2006; Cases, 2002) have attempted to redefine perceived risks in the context of online shopping. Since the present study is concerned with perceived risk online, it is felt necessary to view perceived risk from the perspective of the online shopping situation. It has been found that perceptions of risk with online transactions are often associated with using the medium, rather than obtaining the products or services, and can outweigh a consumer's perceptions about the benefits involved with this modern form of non-store channels (Bhatngar and Ghose, 2004 as cited in Andrews and Boyle, 2008). For this reason, the six main categories of risk as depicted in Table 5.2 are redefined and expanded, to suit the context of online shopping.

The findings of the study carried out by Cases (2002) are felt to be the most comprehensive and therefore appropriate for redefining perceived risk in the context of online shopping. Before defining types of risk associated with online shopping, Cases (2002) first distinguishes between four potential risk sources for the online shopping context. These risk sources are risk associated with the product, risk ensuing from a remote transaction, risk associated with the use of the internet as a mode of purchase, and risk related to the site on which the transaction takes place. In relation to these four sources, Cases (2002) identifies eight types of risk, namely performance, time, financial, delivery, social, privacy, payment, and source risk, as depicted in Table 5.3. Of these eight risks, only three are equivalent to the traditional risks as identified by Peter and Tarpey (1975), Jacoby and Kaplan (1972).

TABLE 5.3 RISK SOURCES AND RISK TYPES IN THE ONLINE SHOPPING CONTEXT

Risk source	Risk type
Product	Performance risk
Remote transaction	Time risk
	Financial risk
	Delivery risk
Internet	Social risk
	Privacy risk
	Payment risk
Website	Source risk

Source: Adapted from Cases (2002).

Hassan *et al.,* (2006) have also defined risk in the context of online shopping. The method used to define risks associated with online shopping differs from that of Cases (2002) in that risks are not determined according to risk sources but rather by merely redefining the already existing types of risk from the perspective of the online shopping context. Therefore it can be said that Hassan *et al.,* (2006), redefine perceived risk based on the view that some of the risks associated with online shopping are inherent. The types of risk as identified by Hassan *et al.,* (2006) are financial, performance, time, social, physical, psychological, source, and privacy risk. These authors have therefore identified two additional risks, source risk and privacy risk. Taking the studies of Cases (2002) and Hassan *et al.,* (2006) into account, it can be concluded that it is necessary to view perceived risk from the appropriate perspective in order to understand its context.

It can therefore be argued that perceived risk has been redefined over time and within the context of the shopping environment. This evolution is depicted in Table 5.4 below.

TABLE 5.4 EVOLUTION OF PERCEIVED RISK

Traditional context			Online context		
Schiffman and Kanuk	Shimp and Bearden	Peter and Tarpey	Jacoby and Kaplan	Hassan *et al*	Cases
Functional	Performance	Performance	Performance	Performance	Performance
Physical	Physical	Physical	Physical	Physical	Payment
Financial	Financial	Financial	Financial	Financial	Financial
Social	Social	Social	Social	Social	Social
Psychological	Psychological	Psychological	Psychological	Psychological	Delivery
Time	Time	Time		Time	Time
				Source	Source
				Privacy	Privacy

Source: Adapted from Cases (2006), Schiffman and Kanuk (2004), Hassan *et al* (2002), Shimp and Bearden (1982), Peter and Tarpey, (1975), Jacoby and Kaplan (1972),

For the purpose of this study, risk can be redefined in the context of online shopping by taking the above-mentioned literature sources into account. Types of perceived risk in the online environment are financial, performance, time, physical, social, psychological, and source risk.

Financial risk is defined as concern over any financial loss that might be incurred because of online shopping. Online financial loss concerns the potential expense of returning a product, the likelihood of additional hidden cost such as shipping, difficulty in getting money back, and the lack of protection of credit-card information (Hassan *et al.*, 2006). Cases (2002), distinguishes between payment risk and financial risk by means of the risk source, internet, and remote transaction respectively. Payment risk concerns the financial consequences engendered by giving one's credit-card number on the internet, whereas financial risk refers to money lost in the case of shipping, bad purchase or exchange. For the purpose of this study, payment and financial risk are viewed as financial risk.

Performance risk is defined as concern over the functionality of the communication channel, the internet, that is, uncertainty about whether the internet might not perform as expected (Mitchell, 1999). This risk includes the difficulty of obtaining the characteristics of the products mostly from web pictures. This leads to a concern that the product may not be exactly as it appeared when displayed on the website (Hassan *et al.*, 2006). When purchasing in an online environment, the consumer does not have the opportunity to physically inspect the product before purchase, and therefore psychological risk as well as product performance risk is likely to be higher online because of this lack of physical inspection and doubts about the product performing as expected (Biswas and Biswas, 2004). Product performance risk may also result from a poor product choice because of the shopper's inability to accurately judge the quality of the product online. The ability to judge the product or service quality online may be limited by barriers to touching, feeling, and trying the product or service, inaccurate product colours, and insufficient information on quality attributes relevant to the consumer resulting in increased product performance risk (Forsythe and Shi, 2003).

Time risk involves the amount of time required to receive the product. This risk includes the time and effort lost in returning or exchanging the product, technological problems such as a slow website server, delivery time, and waiting time (Hassan *et al.*, 2006). Furthermore, when purchasing on the internet, the consumer does not pay for the product and receive the product immediately, but he/she has to wait for delivery of the already paid-for product, and this delivery could take too long, thus wasting the time where the consumer could already have been using the product. Cases (2002) refers to this delay in delivery as a separate type of risk, namely independent risk. However, for the purpose of this study, delivery risk is included in time risk since both are a result of a remote transaction.

Social risk refers to the likelihood that online shopping will affect the way others think of the online prospective shopper (Hassan *et al.*, 2006). It is the concern that those whose opinion the online shopper values will think of the online prospective shopper as being foolish or showy. Cases (2002) states that the source of social risk is the internet, and it is therefore the fear of the reaction of friends and family concerning the use of the internet as a mode of purchase.

Physical risk refers to chances of any physical injury caused by online shopping (Hassan *et al.*, 2006). This concern involves possible eyestrain from overuse of the computer.

Psychological risk reflects concern about the psychological discomfort and tension that may arise because of online shopping (Hassan *et al.*, 2006). This refers to the consumer possibly feeling a sense of anxiety or unwanted tension from shopping online. A consumer may fear the level of credibility and reliability of a website. The consumer may feel that his/her private life is being invaded. Cases (2002) did not identify psychological risk as a type of perceived risk in the online situation. Rather, privacy and source risk were identified as a result of the risk sources, the internet and the website respectively. For the purpose of this study, source and privacy risk are included in psychological risk.

The types of perceived risk presented above exist in the online purchasing environment. Together, they constitute overall perceived risk. Overall perceived risk in the online environment is influenced by a number of factors.

5.5 FACTORS INFLUENCING ONLINE PERCEIVED RISK

There are many factors which may influence a consumer's perceived risk with online purchase. For the purpose of this study, only two of these factors, information search and retailer reputation, are focused upon.

5.5.1 Perceived risk and online information search

Information search is the second stage in the consumer decision-making process. This stage is concerned with accessing sources of information and becoming aware of product alternatives. Before the arrival of the internet, access to information was rather incomplete and biased (Zeng and Reinartz, 2003). The internet, however, has emerged as a powerful source of information, having a significant impact on the information-search stage in the consumer decision-making process.

Consumers collect information in an attempt to reduce the risks associated with purchase (Wood and Sheer, 1996). Bearing that in mind, if risk is closely related to the level of uncertainty and likelihood of negative consequences of purchasing a good or service (Dowling and Staelin, 1994), then the more knowledge internet users have, the greater the impact on online purchases.

The internet offers an abundance of knowledge in the form of websites and search engines which are altering information search in ways that are not yet entirely understood. The internet not only provides consumers with the opportunity to search for product-related information quickly, but allows consumers to directly compare product alternatives. Thus information acquisition on the internet is efficient and effective. The benefits of the efficiency and effectiveness with which the internet provides information is an advantage to the consumer since these benefits outweigh the search costs (perceived time, travel, access to media) involved in obtaining information from an alternative source (Shim, Eastlick, Lotz, and Warrington, 2001). Although the search costs on the internet are low, many consumers do not continue to make a purchase over the internet. Research has found that consumers are doing more information search on the internet than actual purchasing (Forsythe and Shi, 2003, Ramaswami, Strader and Brett, 2000-2001). This may be due to perceived risk associated with the internet as a mode of purchase. It has been found that the degree of risk perceived by a consumer is affected by the shopping situation (retail store, online, catalogue, direct mail) (Schiffman and Kanuk, 2004). Research has also shown that consumers who are more risk-averse perceive less risk (Donthu and Garcia, 1999). Furthermore, it has been found that a consumer's perception of risk varies with product category (Ueltschy *et al.,* 2004). Consumers are likely to perceive a higher degree of risk in the purchase of high-involvement goods such as a computer, and a lower degree of risk in the purchase of low-involvement goods such as a book (Schiffman and Kanuk, 2004). In terms of information search, Moorthy, Ratchford, and Talukdar (1997) believe:

> The benefit of search is driven by how a consumer perceives the uncertainty in her choice environment, the importance she gives to the product category (involvement), and her risk aversion (Moorthy, Ratchford, and Talukdar, 1997).

Therefore it is concluded that information search and perceived risk are interdependent. The amount of information collected varies proportionately with the level of risk perceived with the purchase (Sundaram and Taylor, 1998). The perceptions of risk are therefore related to the perceived benefits of the search. As the uncertainty of the outcome of a purchase increases, consumers tend to engage in an information search, with the primary expectation that the search will help them reduce the perceptions of risk, and because of the costs associated with the search, they also tend to expect certain benefits such as obtaining better deals or more satisfaction. Overall, as the level of risk associated with the purchase increases, the expected benefits from the search will also increase (Srinivasan and Ratchford, 1991).

5.5.2 Perceived risk and brand knowledge

A brand can be defined as “a name, term, sign, symbol, or design, or combination of them which is intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of competitors” (Lamb *et al.,* 2004). By nature, one tends to associate branding with goods. However, since this study concerns the online purchasing environment, branding is viewed from a new perspective in order to gain an understanding of consumer behaviour in the online purchasing environment. Therefore it must be made clear that the word *brand* in this context refers to the online retailer’s brand.

The brand of an online retailer is different from any product brand that the retailer sells, because the brand of an online retailer is not named after any product brand it sells, and judgement of the retailer's brand is far beyond the physical condition of any particular product it provides (Chen and He, 2003).

One can understand a consumer’s perception of an online retailer in a number of ways. One method of understanding this is by determining the brand knowledge held in the mind of the consumer. *Brand knowledge* refers to all the thoughts, feelings, images, experiences and beliefs that consumers associate with the brand (Kotler and Keller, 2006). In addition, brand knowledge is the consumer’s extent of familiarity and understanding of a brand’s awareness and image (Keller, 1993).

Brand awareness is the ability of consumers to identify the brand under different conditions, as reflected by their brand recognition or recall performance (Kotler and Keller, 2006). Brand recognition relates to the consumer's ability to confirm prior exposure to the brand, while brand recall relates to the consumer's ability to retrieve the brand when given the product category (Keller, 1993). In this study, brand awareness refers to the consumer's ability to recognise or recall the name of a particular online retailer, and identify it as different to another online retailer. Brand name awareness therefore relates to the likelihood that a brand name will come to mind, as well as the ease with which it does so. Brand image is the perception and belief held by consumers, as reflected in the associations held in consumer memory (Kotler and Keller, 2006). It can therefore be concluded that brand knowledge of an online retailer is a function of the consumer's ability to recognise and recall the online retailer brand, as well as the perceptions and beliefs the consumer has with respect to this online retailer brand. Schmitt and Geus (2006) have found that brand awareness affects brand image, and that both aspects of brand knowledge are direct determinants of current consumer purchase decisions.

A relationship between brand knowledge and perceived risk has been found in a number of studies. It was found by Chen and He (2003) that brand knowledge has a direct effect on a consumer’s intention to purchase from an online retailer. It was found that the greater the consumer's brand knowledge of a particular online retailer, the more likely the consumer is to make an online purchase. More importantly, it was also found by Chen and He (2003) that this relationship between brand knowledge and intent to purchase online is mediated to a large extent by perceived risk. Previous research has also found that when consumers do not have much knowledge about a product category, they predominantly look towards the brand name (Hsu, Lai, and Chen, 2007). It would therefore seem that the brand name is used as a form of risk reduction when little is known about the product, and possibly about the retailer too.

5.6 CHAPTER SUMMARY

The gist of this chapter was that perceived risk is a broad discipline that has been the focus of a number of studies over the past four decades. Perceived risk therefore has had a long history in consumer behaviour literature, where findings confirm that perceived risk is most powerful at explaining consumers' behaviour since consumers are more often motivated to avoid mistakes than to maximise utility in purchasing.

Perceived risk has been defined a number of times, but the most common definition refers to perceived risk in terms of uncertainty and consequence as well as types of perceived risk. Six types of perceived risk were presented, namely performance, financial, time, physical, social, and psychological risk.

The chapter continued with a discussion of the factors that influence how consumers perceive risk. The factors discussed included culture, mode of shopping, personality, product category, and intangibility. Next, consumer risk-handling behaviour was discussed, where the typical ways in which consumers handle risk were highlighted, followed by a more detailed discussion of the specific methods which consumers employ to reduce risk in the purchase situation. These methods include information search, endorsements, brand loyalty, major brand image, store image, seeking reassurance, shopping around, and expensive model.

The final section of this chapter focused on perceived risk in the online environment where the types of perceived risk were redefined to suit the online purchase environment. Perceived risks were redefined because perceptions of risk with online transactions are often associated with using the medium, rather than with obtaining the products or services, and can outweigh a consumer's perceptions about the benefits involved with non-store channels.

Lastly, the factors influencing online perceived risk were discussed. Of the many factors, only two are relevant to this study. Thus, perceived risk and information search and perceived risk and brand knowledge were discussed. In terms of information search, it was noted that information search and perceived risk are interdependent. The amount of information collected varies proportionately with the level of risk perceived with the purchase. Therefore, the perceptions of risk are related to the perceived benefits of search. The influence of brand knowledge on perceived risk was discussed under the context of the brand name of the online retailer. It was concluded that the brand name of the online retailer is used as a form of risk reduction when little is known about the product and possibly about the retailer too.

CHAPTER 6
RESEARCH METHODOLOGY

6.1 INTRODUCTION

This chapter on research methodology provides an overview of the methodology used in this study. The use of the appropriate methodology is important as the methodology forms the basis from which scientifically valid findings and conclusions can be made. In order to judge whether the appropriate research methodology was used, the research question and the objectives of this study are revisited. The remainder of this chapter will focus on a discussion of the methodology used to address the objectives of this study.

6.2 RESEARCH QUESTION REVISITED

The purpose of this study is to expand the existing body of knowledge with regard to perceived risks, by examining the consumer perceived risks associated with intention to purchase online. Since little information regarding perceived risks associated specifically with online purchase intention is available, secondary research has assisted in answering this question. Owing to the nature of online purchasing, it was decided to study the consumer-perceived risks associated with intention to purchase online in the context of a well-known and an unknown online book retailer. Kalahari.net was chosen as the well-known online retailer, because this website has received a number of awards recently, such as Best e-Commerce store 2007 and Best Online Bookstore in South Africa’s first e-commerce awards (Bredenhann, 2007). A fictitious Books.com was chosen as the unknown online retailer. Since Kalahari.net has been identified as set apart from its fellow competitors by means of the above-mentioned awards, it can be classified as a branded website. A brand is a name, term, sign, symbol, or design, or combination of them which is intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of competitors (Keller, 1993). Taking this definition of a brand into account, it can be assumed that anything that has a name can therefore be considered a brand, for example chocolate.com (Chocolate, 2008) or wine.com (Wine, 2008). The online book retailer could, according to this definition, also be considered a brand. However, Books.com does not exist, it is fictitious and therefore unknown, and no previous marketing effort has been made to build the brand identity. For this reason Books.com is classified as a non-branded website in this study. Therefore, the research question for this study refers to the consumer-perceived risks associated with intention to purchase from a branded as opposed to a non-branded website.

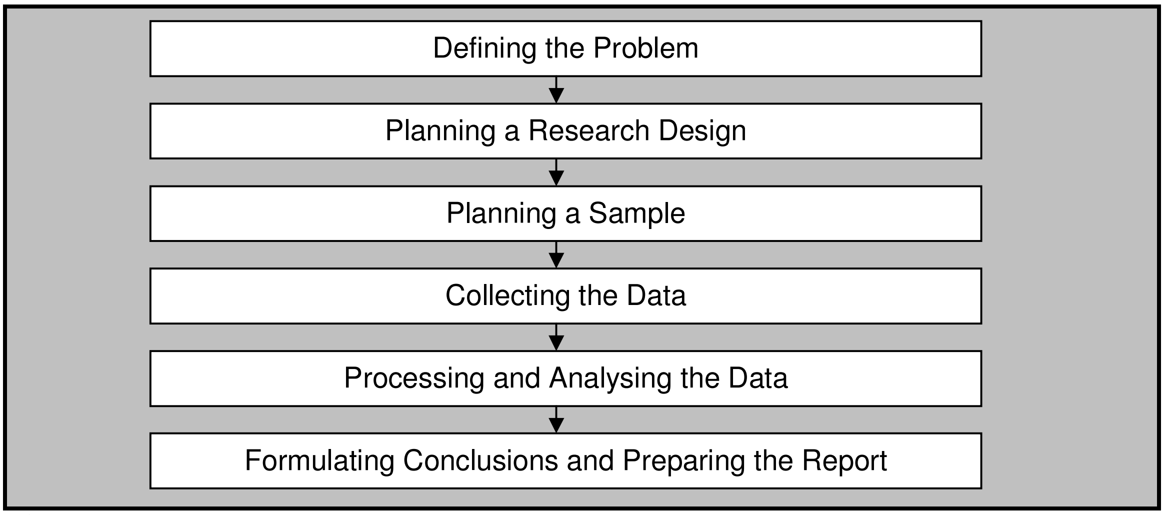
The above-mentioned research question demanded a thorough literature search and review in order to formulate the objectives. The previous chapters dealt with the nature of business management, consumer-behaviour theory applicable to this study, including the consumer decision-making process, the concept of perceived risk, the internet, and online shopping. This chapter will focus on the research methodology of the study.

In order to address this study's objectives, the process of marketing research was implemented.

6.3 THE MARKETING RESEARCH PROCESS

Marketing research is the systematic and objective identification, collection, analysis, dissemination, and use of information for the purpose of improving decision making related to the identification and solution of problems and opportunities in marketing (Malhotra, 2004). The process of collecting data and converting it into useful information consists of six stages, namely defining the problem, planning the research design, planning a sample, collecting data, analysing data, and formulating conclusions and preparing the report (Zikmund, 2003) as depicted in Figure 1.7.

FIGURE 6.1 THE MARKETING RESEARCH PROCESS



Source: Adapted from Zikmund (2003).

The marketing research process was implemented in this study to make certain that scientifically valid findings and conclusions could be made. Each stage in the market research process, illustrated in Figure 1.7, is now briefly discussed.

6.4 DEFINING THE PROBLEM

The identification of a marketing problem or opportunity is an indication of a specific market-related decision area that will be clarified by answering some research questions (Zikmund, 2003). Careful attention to this stage is necessary since the problem definition allows the researcher to set the research question and proper research objectives.

In Chapter 1, exploratory research was conducted to fully identify and formulate the research problem, which is to determine the perceived risks associated with intention to purchase online. Once the problem has been precisely defined, the research can be designed and conducted properly.

6.5 PLANNING A RESEARCH DESIGN

A research design is a framework or blueprint for conducting the marketing research project (Malhotra, 2004). This research design considers the research objectives, the research method, and the research instrument. Research objectives explain the purpose of the research in measurable terms; it can therefore be said that an objective is a definition of what the research should accomplish (Zikmund, 2003). Research objectives are included in the research design since it details the procedures necessary for obtaining the required information.

Research objectives are, however, derived from the research question, which in turn is derived from the problem statement (Zikmund and Babin, 2007). Therefore, before one can state the research objectives, one first needs to propose the research question. Considering the problem statement and background of the study, the research question was as follows:

> Are the perceived risks (financial, performance, physical, time, social and psychological risks) associated with online purchase intention on a branded website different from the perceived risks associated with a non-branded website? (Figure 6.2 depicts the initial procedure for the formulation of research objectives.)

The completion of the literature review exposed a number of gaps concerning consumers' online purchasing behaviour. It has already been noted that consumers perceive risk to be associated with online purchasing, but little research has examined the types of risk and the extent of this risk. More importantly, the dynamics of this risk in the context of a consumer's knowledge or lack of knowledge concerning the online retailer have not yet been examined. It became clear that the internet offers a consumer immediate access to product information in a most convenient manner. An aspect that merits investigation is the influence of this information capability on the consumer decision-making process, and therefore its effect on purchase intention and a consumer's perceived risk associated with online purchasing.

FIGURE 6.2 FORMULATING RESEARCH OBJECTIVES FOR THE STUDY

PROBLEM STATEMENT

Perceived risk associated with intention to purchase online

RESEARCH QUESTION	**RESEARCH QUESTION**
Perceived risk associated with a **branded** website: • Financial • Performance • Time • Physical • Social • Psychological	Perceived risk associated with a **non-branded** website: • Financial • Performance • Time • Physical • Social • Psychological

Given the purpose of the study, the research objectives for this study were:

- To assess the relative influence of different risk types on intention to buy from a branded website as opposed to a non-branded website.
- To determine whether a consumer’s brand knowledge (brand awareness and brand image) and extent of information search when purchasing on a branded website influences his/her intention to make a purchase on a branded website.
- To determine whether a consumer’s brand knowledge (brand awareness and brand image) and extent of information search when purchasing on a non-branded website influence his/her intention to make a purchase on a non-branded website.

- To determine whether there is a difference between the perceived risks associated with purchasing on a branded website as opposed to the perceived risks associated with purchasing on a non-branded website.
- To assess whether the perceived risks associated with purchasing on a branded website as opposed to a non-branded website are influenced by the brand knowledge (brand awareness and brand image) of the website.
- To determine the influence of online information search by a consumer, on the overall perceived risk associated with purchasing on a branded and a non-branded website

Next, the research objectives need to be transformed into hypotheses. Hypotheses are a means of providing answers to the study's objectives (Zikmund and Babin, 2007). One is able to make inferences about a population by means of hypothesis testing. The main aim in testing hypotheses is to examine whether a particular proposition concerning a population is likely to hold or not (Diamantopoulos and Schlegelmilch, 2000). The above-mentioned research objectives are therefore translated into specific data requirements. This study's hypotheses are stated below:

H_1: Perceived risks associated with online purchasing will influence a consumer's intention to purchase from a branded website.

H_2: Perceived risks associated with online purchasing will influence a consumer's intention to purchase from a non-branded website.

H_3: A consumer's brand knowledge and extent of information search when purchasing on a branded website influence his/her intention to make a purchase on a branded website.

H_4: A consumer's brand knowledge and extent of information search when purchasing on a non-branded website influences his/her intention to make a purchase.

H_5: There is a difference between the perceived risks associated with purchasing on a branded website as opposed to a non-branded website.

H_6: Perceived risks associated with purchasing on a branded website are influenced by the brand knowledge (brand awareness and brand image) of the website.

H_7: Perceived risks associated with purchasing on a non-branded website are influenced by the brand knowledge (brand awareness and brand image) of the website.

H_8: An online information search will influence the overall perceived risk associated with purchasing on a branded and a non-branded website.

To address the research problem, secondary research was collected. By collecting secondary research, the researcher was able to specify relationships between variables using descriptive information which acted as a support for decision making. The secondary research sources, both internal and external, are reflected in the discussion of Chapters 2, 3, 4, and 5. For the purpose of this study, the secondary sources are collated in the bibliography at the end of the thesis.

A number of secondary information sources were consulted, but were not sufficient to answer the research objectives of this study. It was therefore necessary to conduct primary research. Once the decision to conduct primary research was made, a primary research method was chosen by the researcher.

6.5.1 THE PRIMARY RESEARCH METHOD

There are three basic quantitative methods of collecting and analysing the needed information, namely surveys, experiments, and observation (McGown, 1979). The chosen method for this study was selected by taking into account the objectives of the research methods, the available data sources, the urgency of the decision, and the cost of obtaining the data (Zikmund, 2003). For the purpose of this study, the survey research technique was used, where information was collected from a sample of people by the use of a questionnaire. This technique was chosen because it was less costly to perform than an experiment or observation.

6.5.2 The survey research method

The survey research method of data collection is based on communication with a representative sample of individuals. Survey questioning is structured, meaning a formal questionnaire is prepared and the questions are asked in a prearranged order. These questions may be asked verbally, in writing, or via a computer, and the responses may be obtained in any of these forms (Malhotra and Birks, 1999). Survey questionnaires can be administered either by door-to-door personal interviews, mall-intercept personal interviews, telephone interviews, mail survey or an internet survey (Zimund and Babin, 2007).

The population of this study constituted all those consumers who had access to the internet. In order to reach this geographically diverse population, while considering time and money constraints, it was decided to use the mall-intercept personal interview as a method of survey. In this method, the respondent and interviewer speak face-to-face at a shopping mall (Proctor, 2000). The interviewers, who are also known as fieldworkers, made an attempt to stop and question consumers at a central point in the mall or at an entrance. Placing the interviewers in a shopping mall, gave them access to a number of potential respondents from a single location, and therefore interviewer travel costs were eliminated.

A survey always requires a measuring instrument. The next section of the research design focuses the development of the instrument with which the information was to be collected.

6.5.2.1 THE MEASURING INSTRUMENT

In this study the information was collected by means of a questionnaire. The design of a questionnaire was influenced by a number of factors, including the type of research being conducted and the way in which it is to be conducted (Proctor, 2000). For example, in a shopping mall there were time limitations which are not necessarily encountered in other situations. Since this study involves exploratory research conducted by means of a survey, a questionnaire was designed to meet these requirements (*see* Annexure A).

Designing the questionnaire involved identifying the specific information needed to accomplish this study's objectives, the correct phrasing of the questions, the sequence in which the questions would be arranged, and the layout that would best serve the research objectives (Zikmund, 2003).

The information needed to accomplish this study's objectives required that the questionnaire be designed to measure a number of constructs including the consumer's perceptions of risk with regard to online purchasing in general and specifically to a particular website, intention to purchase, extent of information search, and brand knowledge of the particular website, as well as descriptive information such as internet accessibility, online purchase history, and demographics.

Since the study concerned a comparison of risk perceptions between a branded and non-branded website, two separate but identical questionnaires were designed, each customised to suit the website in question (*see* Annexure A). It was decided to choose a specific product in order to create a context within which the study took place. This was done to control for the fact that consumers perceive risk differently, depending on the type of product or product category for which they are shopping (Cunningham, 1967). For the purpose of this study, the product purchased online was a book. A book was chosen because it is one of the most commonly purchased items online (*see* Chapter 1, section 1.2.7), thus allowing the research not only to focus on the perceived risk associated with online shopping, but also the risk associated with shopping on a branded website as opposed to a non-branded website. The two websites chosen for comparison were Kalahari.net (branded) and a fictitious Books.com (non-branded). Therefore, respondents were questioned about purchasing online at either Kalahari.net or at Books.com.

6.5.2.2 Design of the questionnaire

The questionnaire was designed with structured questions only. In other words, each question had a pre-specified set of response alternatives and response format (Malhotra and Birks, 1999). The majority of questions in the questionnaire consisted of 5-point multiple-item Likert scale questions. These scale questions originate from pre-determined scales where they were adapted and modified by the researcher. Additional items were developed by the researcher. The pre-determined scales used in the design of this questionnaire were taken from previous studies concerning risk by Chen and He (2003) and Hassan *et al.,* (2006).

The questionnaire made use of multiple-item Likert scale questions as well as categorically scaled questions. The multiple-item scale questions consisted of a number of statements to which the respondent would react. An overall score was then determined by combining the reactions to each (Proctor, 2000). The Likert scale questions measured attitudes and were designed to allow respondents to indicate how strongly they agreed or disagreed with carefully constructed statements that ranged from very positive to very negative toward an attitudinal object (Zikmund, 2003). The categorical scale questions consisted of several response categories to provide the respondent with alternative ratings (Zikmund, 2003). A summary of the questions can be viewed in Table 6.1.

Careful attention was given to the layout of the questionnaire, to control for any order bias. Order bias is a preference caused by the influence of earlier questions in a questionnaire or by an answer's position in a set of answers (Zikmund, 2003). The questionnaire was laid out using the funnel technique, where general questions were asked before specific questions in order to obtain unbiased responses. The questionnaire was laid out in the following sequence:

- Demographics including gender, age, population group, and home language.
- Screening question, to ensure that each respondent had access to internet at home or at work.
- Previous online purchasing experience in general, followed by website-specific.
- Overall risk concerning internet purchasing in general.
- Intention to purchase from branded or non-branded website.
- Brand knowledge of branded/non-branded website.
- Extent of information search prior to purchase on branded/non-branded website.
- Performance risk when purchasing on branded/non-branded website.
- Financial risk when purchasing on branded/non-branded website.
- Time risk when purchasing on branded/non-branded website.
- Social risk when purchasing on branded/non-branded website.
- Physical risk when purchasing on branded/non-branded website.
- Psychological risk when purchasing on branded/non-branded website.
- Additional questions for LSM purposes.

6.5.2.3 The pilot study

An essential step prior to the collection of data was to pilot the draft questionnaire and revise if necessary. A *pilot study* is defined as a small-scale exploratory research technique that uses sampling but does not apply any rigorous standards

(Zikmund, 2003). A pilot study was used as a pre-testing mechanism for the questionnaire. The questionnaire was pilot-tested on two different occasions among a total of n=55 respondents and revised where applicable. The main purpose of the pilot study was to detect flaws in the measurement procedures such as time limits and instructions, identify unclear or ambiguously formulated items, test reliability of the multiple scale questions, and search for non-verbal behaviour from the respondents which might be useful.

The questionnaire was first tested amongst n=20 respondents, third-year students from the University of Stellenbosch. Although these respondents were not entirely representative of South African consumers as a whole, it was certain that each respondent did have access to the internet and was therefore qualified to answer the questionnaire. The respondents were not personally interviewed but the questionnaire was self-administered owing to time restraints. The respondents were asked please to notify the researcher of any inconsistency, irregularity, or ambiguity experienced while completing the questionnaire.

The main focus of the pilot studies was to ensure that the scales which were developed to measure the constructs in the study were reliable. Thus, the reliability of the measurement scales were tested using the internal consistency method of reliability (*see* section 6.10.3). Cronbach's coefficient alpha measures the internal consistency of a measurement scale. The coefficient alpha ranges from 0 to 1. A coefficient alpha of 0.7 or greater is considered to report a reliable measurement scale (Nunnally and Bernstein, 1994). The outcome of the pilot studies on each occasion were as follows:

6.5.2.3.1 Pilot study one

The majority of constructs revealed satisfactory as well as relatively high Cronbach alpha scores; however, the following were cause for concern since the Cronbach alpha scores were below 0.7:

Items	Cronbach Alpha
A 1-4 Purchase intention	0.681
D 1-4 Performance risk	0.262
G 1-4 Social risk	0.466

It was decided by the researcher that items A1-4 would remain the same since a reliability score of 0.681 was expected to increase with a larger number of respondents. However, in the case of items D 1-4, a decision was made to modify the multiple scale questions by placing an additional item in the scale. The following item was added:

D 5	**I am concerned that the book will not be what I thought it would be**

Concerning items G 1-4, an attempt was made to increase the reliability score by revising the wording of the statements. Two of the items, G1 and G2 were framed in a positive direction, while the other two items, G3 and G4, were framed in a negative direction. It was felt by the researcher that the two opposing directions resulted in response error and therefore items G1 and G2 were modified to be framed negatively.

G1	If I bought a book at Kalahari.net, I think my friends would hold me in higher esteem.
G1	**Buying a book at Kalahari.net will lower my esteem amongst my friends.**
G2	If I bought a book at Kalahari.net, I think my friends will think that I am cool.
G2	**If I bought a book at Kalahari.net, I think my friends will think that I am not cool.**

6.5.2.3.2 Pilot study two

The adjusted questionnaire was once again tested in the same manner, however a larger pool or respondents were used, where n=35. The solutions to the reliability issues in pilot study one were satisfactory with the following improvements:

Items	Pilot study one	Pilot study two
A 1-4 Purchase intention	0.681	0.736
D 1-4 Performance risk	0.262	0.807
G 1-4 Social risk	0.466	0.790

In pilot study two however, the following reliability scores were unsatisfactory:

Items	Cronbach Alpha
B1-4 Brand knowledge	0.557
F1-4 Time risk	0.670

After evaluating the phrasing and wording of each item, it was decided by the researcher to place an additional item in each of the brand knowledge and time risk scales. The following items were added:

B5	**I am familiar with the Kalahari.net brand**
F5	**I am concerned about the time it takes to buy a book on Kalahari.net**

The final questionnaire was adjusted for the above-mentioned changes, and its content validity was assessed by two academic experts in the marketing research field.

Table 6.1 provides a summary of the questionnaire used in this study as well as the objective of each question and the relevant measurement scales used.

TABLE 6.1 SUMMARY OF THE QUESTIONNAIRE**

Question		Objective	Scale
1	Gender	Demographic information	Nominal
2	Age	Demographic information	Ratio
3	Population group	Demographic information	Nominal
4	Home language	Demographic information	Nominal
5	Do you have access to internet at home or at work?	Screening question	Nominal
6	Have you ever bought a product or service online before?	Descriptive information	Nominal
7 *	Have you ever bought a book on Kalahari.net before?	Descriptive information	Nominal
8	I will lose money if I buy on the internet	Overall financial risk – online in general	Scale
9	If I buy a product online, there is a chance that it may not perform as expected	Overall performance risk – online in general	Scale
10	I feel uneasy if I buy products from an online retailer	Overall psychological risk – online	Scale
11	It will be questioned by my friends and relatives if I buy online	Overall social risk – online in general	Scale
12	Online retailers do not deliver bought products on time	Overall time risk – online in general	Scale
13	I do not think it is safe to buy products from online retailers	Overall physical risk – online in general	Scale
14	I would buy a book from Kalahari.net if needed	Determine purchase intention for branded website	Scale
15	If Kalahari.net has the product I need, I will probably buy it from them	Determine purchase intention for branded website	Scale
16	I will recommend Kalahari.net to friends and relatives as a place to purchase books	Determine purchase intention for branded website	Scale
17	I wouldn't mind buying a book from Kalahari.net on behalf of someone else	Determine purchase intention for branded website	Scale
18	I feel it is safe to buy online at Kalahari.net	Determine brand knowledge for branded website	Scale
19	If I were to buy online I will recall Kalahari.net as a place to buy books	Determine brand knowledge for branded website	Scale
20	I have previously seen or heard of Kalahari.net	Determine brand knowledge for branded website	Scale
21	I feel that one is likely to have a satisfying experience when shopping on Kalahari.net	Determine brand knowledge for branded website	Scale
22	I am familiar with the Kalahari.net brand	Determine brand knowledge for branded website	Scale
23	I would search for more information through search engines before buying a book from Kalahari.net	Determine extent of information search for branded website	Scale
24	I would acquire more information to confirm whether I should buy a product from Kalahari.net	Determine extent of information search for branded website	Scale
25	I would visit chat forums to view previous shopping experience at Kalahari.net before buying from Kalahari.net	Determine extent of information search for branded website	Scale

26	I will not buy directly from Kalahari.net before making a detailed comparison through an online information search	Determine extent of information search for branded website	Scale
27	I am concerned that the book delivered may not be exactly as it appeared when displayed on the computer screen	Determine perceived performance risk for branded website	Scale
28	I don't like the fact that I cant feel, read, or/and experience the book before buying during online shopping	Determine perceived performance risk for branded website	Scale
29	It is difficult to ascertain the characteristics of the book such as quality, weight, and size just by looking at its cover and back page provided on the computer screen	Determine perceived performance risk for branded website	Scale
30	I am concerned that the rating of the book is a false indication of the actual read	Determine perceived performance risk for branded website	Scale
31	I am concerned that the book will not be what I thought it would be	Determine perceived performance risk for branded website	Scale
32	It is not safe to give my credit card number when I order at Kalahari.net	Determine perceived financial risk for branded website	Scale
33	Kalahari.net may not send the book after payment	Determine perceived financial risk for branded website	Scale
34	I am concerned about the ultimate price of the book when shopping at Kalahari.net because there might be hidden costs.	Determine perceived financial risk for branded website	Scale
35	I am concerned that my financial details might not be adequately protected if I shop at Kalahari.net	Determine perceived financial risk for branded website	Scale
36	I am afraid that the book bought at Kalahari.net will not be delivered when expected	Determine perceived time risk for branded website	Scale
37	I am concerned about the time delay between ordering and receiving books bought at Kalahari.net.	Determine perceived time risk for branded website	Scale
38	Kalahari.net might not have my book in stock and I will have to wait for Kalahari.net to get it in stock	Determine perceived time risk for branded website	Scale
39	It would take too much time to return something to Kalahari.net	Determine perceived time risk for branded website	Scale
40	I am concerned about the time it takes to buy a book on Kalahari.net	Determine perceived time risk for branded website	Scale
41	Buying a book at Kalahari.net will lower my esteem amongst my friends	Determine perceived social risk for branded website	Scale
42	If I bought a book at Kalahari.net I think my friends would think that I am not cool	Determine perceived social risk for branded website	Scale
43	If I bought a book at Kalahari.net, some friends would think I am trying to show off	Determine perceived social risk for branded website	Scale
44	My friends would not encourage me to buy a book from Kalahari.net	Determine perceived social risk for branded website	Scale
45	I am concerned that shopping at Kalahari.net could lead to eyestrain because of frequent exposure to computer screen during shopping.	Determine perceived physical risk for branded website	Scale

46	I am concerned about viruses infecting my computer while I shop at Kalahari.net	Determine perceived physical risk for branded website	Scale
47	I am concerned about getting carpel tunnel syndrome (pain in wrist) while shopping online at Kalahari.net	Determine perceived physical risk for branded website	Scale
48	I am concerned that shopping on Kalahari.net could lead to back pain because of my posture when sitting in front of the computer for extended periods of time	Determine perceived physical risk for branded website	Scale
49	I think shopping at Kalahari.net will harm my self image	Determine perceived psychological risk for branded website	Scale
50	The thought of shopping at Kalahari.net causes me to experience unnecessary tension	Determine perceived psychological risk for branded website	Scale
51	The thought of shopping at Kalahari.net makes me feel uncomfortable.	Determine perceived psychological risk for branded website	Scale
52	Shopping at Kalahari.net will lead to too much social isolation	Determine perceived psychological risk for branded website	Scale

** Summary of questionnaire for branded website (Kalahari.net), questions remained identical for the non-branded questionnaire.

* Question 7 however was modified for the Books.com question, since Books.com does not actually exist. See Annexure A.

The next stage in the marketing research process is that of planning a sample.

6.6 PLANNING THE SAMPLE

Planning the sample is the third step in the research process. Sampling involves any procedure that uses a small number of items or a portion of a population to make a conclusion regarding the whole population (Zikmund, 2003). When dealing with people, as in this study, a sample can be defined as a set of respondents selected from a larger population for the purpose of a survey (Coldwell and Herbst, 2004). According to Malhotra (2004), sampling requires the following steps:

6.6.1 Step 1: Identification and specification of a target population

The *target population* refers to the complete group relevant to a research study (Zikmund, 2003). The target population also concerns the collection of elements who possess the information sought by the researcher and about which inferences are made (Malhotra and Birks, 1999). It was very important to carefully define the target population so that the proper source from which the data were collected could be identified. Since this study was conducted in South Africa and aimed to assess the perceived risks associated with intention to purchase online, the target population relevant to this study included all South African consumers who had access to the internet. For the purpose of this study, only adults aged 18 and older were included in the research.

6.6.2 Step 2: Obtaining a sampling frame

The next step concerned acquiring a sampling frame, a list of elements from which the sample was to be drawn (Zikmund, 2003). In this case, however, there was no complete list of all the consumers in South Africa who had access to the internet. Since probability sampling assumes that a suitable sampling frame must be available (Diamantopoulos and Schlegelmilch, 2000), this study could only be classified as using a non-probability sample.

6.6.3 Step 3: Determining the sample size

Sample size refers to the number of respondents to be included in the study (Malhotra and Birks, 1999). The determination of sample size played an important role in the research, because a sample that was too small might have provided data that was not necessarily representative. When calculating sample size, information regarding some study parameters is usually required. These parameters usually include basic statistics such a variance, mean, normal distribution and standard deviation (Kress, 1988). These parameters, however, are mostly unknown and are usually estimated from literature or some pilot study. Estimation of these parameters can be done by an experienced researcher, or one may simply estimate sample size on the basis of managerial judgement (Zikmund, 2003). Taking cost, time, and availability of personnel into account, a sample of 400 (200 for each sub-group) respondents was chosen on the basis of judgement for the purpose of this study.

The sample of this study was split into two sub-groups, those responding to the questionnaire concerning the branded website and those responding to the questionnaire concerning the non-branded website. This was taken into account when determining the sample size. There is a judgemental rule of thumb when selecting minimum sub-group sample size. It has been suggested that each sub-group that is to be analysed separately should have a minimum of 100 respondents in each category (Zikmund, 2003). In this case, a sample size of 200 respondents was chosen for each category, branded and non-branded websites, thereby totalling 400 respondents.

6.6.4 Step 4: Choosing the sampling method

This study used a non-probability sampling technique. The selection of the sampling methodology was based on the availability of a sample frame (Zikmund, 2003). Since no sample frame was obtained for consumers who had access to internet, non-probability sampling techniques were used (Diamantopoulos and Schlegelmilch, 2000 and Zikmund, 2003). More specifically, a multi-stage sampling technique was applied to finally select the sample respondents. The stages used to sample the population are shown below:

- **Stage one**

  With the target population being consumers who had access to the internet located across South Africa, it was decided to employ the non-probability technique of judgement sampling. Judgement sampling involves the selection of the sample by an experienced individual based upon some appropriate characteristic of the sample members (Zikmund, 2003). The first step in the sampling process was therefore to choose the sample based on geographic location. The Gauteng province of South Africa was chosen by judgement of the researcher, and more specifically, the cities of Johannesburg and Tshwane (Pretoria) were chosen as the primary sampling units. Johannesburg and Tshwane were chosen since these cities are known to be the most multi-cultural and industrialised cities in South Africa (Statistics South Africa, 2001). It was therefore felt by the researcher that these cities would best represent South African consumers in general, especially since 20% of South Africa's population resided in Gauteng at the time (UJ, *s.a.*).

- **Stage two**

The *secondary sampling units* refer to the units selected in the second stage of sampling. In this case, a number of shopping malls in the Johannesburg and Pretoria area were chosen for conducting the research. A list of all the possible malls which permitted the collection of data was drawn up and then chosen once again by means of the judgement sampling technique. As stated, judgement sampling involves the selection of the sample by an experienced individual based upon some appropriate characteristic of the sample members (Zikmund, 2003). In this case, the characteristic of the sample members used to select the shopping malls was that of LSM (Living Standards Measure).

The Living Standards Measure, (LSM) was developed by the South African Advertising Research Foundation (SAARF, 2008). It is an index used for segmentation specifically in South Africa, and measures social class, or living standard, regardless of race, income or education (SAARF, 2008). LSM quantifies the ownership of certain durable goods, access to services, and the like, to yield a composite measure of social class (Lamb *et al.,* 2004). For the purpose of this study, shopping malls considered to be patronised by LSM groups 7 to 10 were chosen as the secondary sampling units (see Annexure B for description of LSM 7 to 10). LSM groups 7 to 10 were chosen by the researcher since these groups were expected to have access to the internet (see Annexure B). Furthermore, these groups also represented the part of the South African population with the highest living standards. This was applicable since the literature (see Chapter 4, section 4.8), describes online consumers as being well educated and typically in a relatively higher income bracket (Donthu and Garcia, 1999 as cited in Forsythe and Shi, 2003). The shopping malls selected for sampling are depicted in Table 6.2 below.

TABLE 6.2 SHOPPING MALLS SELECTED FOR SAMPLING

Shopping mall	Area
Hatfield Square	Pretoria
The Mall @ Reds	Centurion Pretoria
Spar Centre	Centurion Pretoria
Woodmead Value Mart	Johannesburg
Northcliff Square	Johannesburg
Southgate	Johannesburg
Nevada Centre	Alberton Johannesburg

- **Stage three**

The sample respondents were finally selected by means of the non-probability convenience sampling technique. The convenience sampling technique obtains those units or people who are most conveniently available (Zikmund, 2003). Convenience sampling allowed for the data to be collected quickly and economically. Therefore respondents most conveniently available to the fieldworker were selected to partake in the study. The fieldworkers approached consumers walking in the mall who appeared to be from the LSM 7 to 10 categories, and requested a few minutes of their time to conduct an interview. To make certain that the respondents were in fact from the LSM groups 7 to 10, their living standards were measured by questions in the questionnaire. Those respondents who did not fall within LSM groups 7 to 10 were omitted from the sample. The sampling process is illustrated in Figure 6.3 below.

FIGURE 6.3 THE SAMPLING PROCESS

Stage 1: Judgement sampling based on geographic areas Johannesburg and Tshwane

↓

Stage 2: Judgement sampling based on shopping malls characterized by LSM 7-10.

↓

Stage 3: Convenience sampling

Once the research design has been completed, the process of collecting information from respondents can begin. It is at this stage in the research process that the survey method is utilised. Data are collected by fieldworkers. The tasks of the fieldworkers include selecting the correct respondents, motivating them to take part in the research, eliciting the correct answers from them, accurately recording the answers, and conveying those answers for analyses (Malhotra and Birks, 1999). Although the fieldworkers complete the questionnaire, some form of direct participation by the respondent is necessary (Zikmund, 2003).

This study used the personal interview survey method, whereby data were collected by a fieldworker who personally interacted with the respondent to complete the questionnaire. The respondent was required to complete the questionnaire in the presence of a fieldworker; in this way the fieldworker was able to control the interview and prompt the respondent to provide a response. This allowed the fieldworker to better control errors such as non-response, misunderstandings, and sample bias. Respondents provided answers with the help of a scorecard. The scorecard illustrated the scale to which each of the questions was applied, where strongly agree (5) was depicted by a smiley face and strongly disagree (1) was depicted by a sad face (*see* Annexure A). Also, data was only collected from respondents who met the requirements of Living Standards Measure (LSM) 7 to 10.

Although fieldworkers are trained and supervised while collecting data, errors may still occur. The very act of questioning a respondent may have undesirable and unexpected effects, where the answers may be subject to distortions and errors caused by faulty memory, a desire to impress, distraction, poor motivation, and a lack of understanding (Ferber, 1974).

The primary data collected in this study were collected over a period of two weeks, during weekdays and on weekends. Twelve contract fieldworkers were employed and managed by *Interserv Market Research*, an independent marketing research firm. The questionnaire took six to eight minutes to complete. After the collection of data, 20% of the total questionnaires were back-checked as a means of quality control.

6.7 PROCESSING AND ANALYSING DATA

At this stage of the research process, it is necessary for the data to be converted into a format that can be “read” by a computer (Ferber, 1974) and ultimately result in meeting the researcher’s objectives. Each questionnaire was checked by the researcher for omissions, legibility, and consistency in classifications. Those questionnaires that were not completed according to those requirements were disregarded in order to keep the quality of response at maximum level. Each response was given a code which was used for interpreting and recording the data (Zikmund, 2003). The coding was done by the researcher, and numbers were read into the computer. Mistakes such as typing errors were corrected before the actual data analyses were done. Data were analysed using SPSS version 16.0.

The first step in the analysis was to examine the reliability and validity of the questionnaire.

6.7.1 Reliability and validity

Measures were taken to examine the reliability and validity of the collected data. Reliability and validity of the questionnaire were tested, and the results are discussed in detail in Chapter 7 (section 7.3).

- ***Reliability***

  The internal consistency reliability method was used in this study to determine the reliability of the scale questions (questions A to J), by determining the coefficient alpha. Cronbach's coefficient alpha is a measure of the internal consistency of a measurement (Welman, Kruger, and Mitchell, 2005). The coefficient ranges from 0 to 1 and shows the degree to which all items in a measurement scale measure the same attribute. A value of 0.7 and above generally indicates satisfactory internal consistency reliability (Nunnally and Bernstein, 1994).

- ***Validity***

  Validity is the ability of a scale or measuring instrument to measure what it is intended to measure, that is, the internal consistency (Zikmund, 2003). If a scale is valid, the attitude scores will reflect differences among the individuals on the characteristic being measured.

In this study, the internal consistency was determined by using the construct method of validity (*see* Chapter 7, section 7.4). An exploratory factor analysis was used to assist in determining the construct validity of all the items measuring the six risk constructs. The principal component method of extraction was applied and the varimax method of rotation was utilised. The principal component method was chosen since it focuses on the total variation in the data set and seeks to reduce the original set of variables into a smaller set of variables which are uncorrelated to one another (Diamantopoulos and Schlegelmilch, 2000). Exploratory factor analysis was considered appropriate, as the dual purpose of the factor analysis was firstly to assist in increasing the reliability of the questionnaire by including only items that loaded on a specific factor. Secondly, factor analysis was applied to reveal the underlying factorial structure of the various constructs. The results are discussed in Chapter 7, section 7.4.

The next step involved two types of analysis, namely descriptive analysis and inferential analysis. The methods used for analysis were chosen and applied in accordance with the objectives of the study and the discretion of the researcher. Descriptive analysis will be discussed next.

6.7.2 Descriptive analysis

The purpose of the descriptive analysis is to transform the raw data into a form that will make it easier to understand. The data was therefore rearranged into tables and manipulated into descriptive information so that it could be more easily understood. The descriptive statistics therefore provide the researcher with an overview of the characteristics of the sample. The following descriptive statistical analyses were used in this study:

- *Frequency distribution.*
- *Mean.*

- *Standard deviation.*
- *Cross tabulation.*

6.7.3 Inferential analysis

Inferential statistical analysis was used by researcher to make inferences or judgements about the population on the basis of the sample (Zikmund, 2003). Inferential statistical analysis involved testing the stated hypotheses (*see* section 6.4.2). To do this, a number of statistical tests in conjunction with a significance level were used to decide on whether or not to reject the null hypotheses (Diamantopoulos and Schlegelmilch, 2000).

A significance level (α) indicates the maximum risk one is willing to take in rejecting a true null hypothesis (Diamantopoulos and Schlegelmilch, 2000). Typical values for α are 0.05, 0.01, and 0.001. If the result of the statistical test is such that the value obtained has a probability of occurrence less than or equal to α, then the null hypothesis is rejected and the alternate hypothesis is accepted and the test result is declared to be significant (Diamantopoulos and Schlegelmilch, 2000). For the purpose of this study, a significance level (α) of 0.05 was deemed to be significant.

The following statistical significance tests were used in this study:

- *T – test for difference of means***.** The t-test is a technique used to test the hypothesis that the mean scores on some interval-scaled variable are significantly different for two independent samples or groups (Zikmund, 2003). A t-test therefore determines whether the means of two groups are sufficiently large to be attributed to a change in some variable, or if it could have occurred by chance (Welman, Kruger, and Mitchell, 2005). In this study, a t-test was conducted to address the fourth objective (see Chapter 7).

- *Multiple Regression.* Multiple regression analysis allows for the simultaneous investigation of two or more independent variables on a single, dependent variable (Zikmund, 2003). Both the dependent and the independent variables need to be interval- or ratio-scaled (Diamantopoulos and Schlegelmilch, 2000). Therefore regression provides information about the relationship between two variables in order to predict the behaviour of one variable from the other. Regression analysis thus allows one to determine the direction and strength of a relationship among variables. The majority of this study's objectives were addressed using the multiple regression method of analysis.

- *Pearson's product correlation.* The Pearson product correlation is used as a measure of association for examining relationships between interval and/or ratio variables. The Pearson product correlation coefficient focuses specifically on linear relationships and ranges from -1 to +1 (Diamantopoulos and Schlegelmilch, 2000).

  A Pearson product correlation cannot prove a causal relationship, that is, a change in one variable is not caused by a change in another variable. But rather, a correlation test only determines whether two variables are related by a statistically significant result (Diamantopoulos and Schlegelmilch, 2000). The final hypothesis of this study was tested by means of the product moment correlation.

6.8 FORMULATING CONCLUSIONS AND PREPARING THE REPORT

In this stage (*see* Figure 6.1) of the marketing research process, researchers interpret the collected information, extract conclusions and convey the findings. A report is then prepared to communicate the conclusions and recommendations to the marketing decision-makers in a more formal manner. This is done in the next chapter.

6.8 CHAPTER SUMMARY

This chapter discussed the methodology used to accomplish this study's research objectives. The measuring instrument and the sampling technique used in the study were given particular attention. The results of the study are discussed in the next chapter.

CHAPTER 7
RESULTS

7.1 INTRODUCTION

Chapter 7 provides the results, interpretation and discussion of the data analysis. Chapter 6 presented the methodology that was followed in order to collect the data and gave an overview of the statistical procedures utilised. This chapter will therefore focus on the implementation of the data analysis, including reliability, validity, and the appropriate statistical tests. First, the descriptive statistics are presented, followed by the inferential statistics.

7.2 DESCRIPTIVE STATISTICS

The purpose of descriptive statistics is to provide the researcher with an overview of the sample and the data collected. The descriptive statistics are reported in two main sections: those descriptive statistics concerning the nominal and the ordinal scaled data, and those descriptive statistics concerning the interval-scaled data. This section will attempt to provide a profile of the sample and a better understanding of the data by means of frequency tables and cross tabulations. It will then be followed by an overview of the nature of the data, using means, minimum and maximum, standard deviation, and variance.

7.2.1 Profile of the sample

The purpose of this study was to assess the perceived risk associated with intention to purchase online, and not to provide a profile of online consumers. For this reason, no sampling quotas in terms of age, race, or gender were specified (*see* Chapter 6, section 6.8). The sample consisted of a total of 400 respondents (200 interviewed about Books.com and 200 interviewed about Kalahari.net). In terms of gender, the total sample consisted of 189 (47.2%) males and 211 (57.8%) females. The age distribution of the total sample is reported in Table 7.1.

TABLE 7.1 AGE DISTRIBUTION

Age category	Kalahari.net		Books.com		Total	
	f	%	*f*	%	*f*	%
18-24	20	10.0	20	10.0	40	10.0
25-34	58	29.0	64	32.0	122	30.5
35-49	61	30.5	55	27.5	116	29.0
50+	61	30.5	61	30.5	122	30.5
Total	**200**	**100**	**200**	**100**	**400**	**100**

A near equal representation of respondents in the age category 25-34 (n=122 or 30.5%), 35-49 (n=116 or 29%), and 50+ (n=122 or 30.5%) was obtained, except category 18-24 (n=40 or 10%) which was noticeably lower than the other age groups. This difference in age distribution could possibly have been due to the fact the many of respondents in this age category (18-24) are students and therefore do not qualify according to the LSM 7 to 10 requirements of the study. Also, because many of the interviews were conducted during weekdays, many younger people may not have been present in shopping malls at the time.

The language distribution of the total sample is reported in Table 7.2.

TABLE 7.2 LANGUAGE DISTRIBUTION

Language category	Kalahari.net		Books.com		Total	
	f	%	*f*	%	*f*	%
English	95	47.5	101	50.5	196	49
Afrikaans	100	50.0	92	46.0	192	48
Zulu	4	2.0	1	.5	5	1.2
Other	1	.5	6	3.0	7	1.8
Total	**200**	**100**	**200**	**100**	**400**	**100**

The large number of English (49%) and Afrikaans (48%) respondents can possibly be attributed to the geographical regions in which the data collection took place. Pretoria is a predominantly Afrikaans region, while the large percentage of English respondents could possibly be due the selection of malls being located in predominantly white suburbs, where English and Afrikaans speaking people would be most prevalent. It is for this same reason that the Zulu (1.2%) and respondents in the other (1.8%) language categories are much lower in comparison to Afrikaans and English. This language distribution corresponds with the LSM groups 7 to 10 (SAARF, 2008).

The population group distribution of the total sample is reported in Table 7.3.

TABLE 7.3 POPULATION GROUP DISTRIBUTION

Population group	Kalahari.net		Books.com		Total	
	f	%	*f*	%	*f*	%
Black	9	4.5	8	4.0	17	4.2
White	167	83.5	166	83.0	333	83.2
Coloured	16	8.0	13	6.5	29	7.2
Asian	8	4.0	13	6.5	21	5.2
Total	**200**	**100**	**200**	**100**	**400**	**100**

The main population group participating in this study was that of white (n=333 or 83.2%), followed by coloured (n=29 or 7.2%), Asian (n=21 or 5.2%), and black (n=17 or 4.2%). The reason for the high prevalence of the white population could again be due to the fact that the data were collected in predominantly white suburbs of Johannesburg and Tshwane. These suburbs are also representative of the LSM groups 7 to 10 (SAARF, 2008).

Only respondents who qualified for the LSM (Living Standards Measure) groups 7 to 10 were included in the study (*see* Chapter 6). There was a fairly equal distribution amongst the top three LSM groups, with LSM 10 (n=122 or 30.5%), LSM 9 (n=135 or 33.8%), and (LSM 8 n=142 or 35.5%). Therefore the greatest number of respondents were from the LSM 8 group, and the smallest number of respondents qualified for the LSM 7 group (n=1 or 0.2%). The distribution of LSM groups is presented in Table 7.4 below.

TABLE 7.4 DISTRIBUTION OF LSM GROUPS

LSM group	Kalahari.net		Books.com		Total	
	f	%	*f*	%	*f*	%
7	0	0	1	.5	1	0.2
8	68	34.0	74	37.0	142	35.5
9	67	33.5	68	34.0	135	33.8
10	65	32.5	57	28.5	122	30.5
Total	**200**	**100**	**200**	**100**	**400**	**100**

Since this study concerned online purchasing, only respondents who had access to the internet were included in the study. The total number of respondents (n=400) had access to the internet at work or at home. The number of respondents who had bought a product or service online were 47.8% (n=191) of the total sample, and the number of respondents who had not bought a product or service online were 52,2% (n=209). This previous online purchase experience is depicted below in Table 7.5.

TABLE 7.5 PREVIOUS ONLINE SHOPPING EXPERIENCE

Online purchase experience	*f*	%
Yes	191	47.8
No	209	52.2
Total	**400**	**100**

Of those respondents who had purchased a product or service online before, 22.3% (n=89) were female and 25.5% (n=102) were male (Table 7.6).

TABLE 7.6 CROSS TABULATION: GENDER AND PREVIOUS ONLINE SHOPPING EXPERIENCE

Online purchase experience		Male	Female	Total
Bought a product/service online before	**Yes**	102	89	**191**
	No	87	122	**209**
	Total	**189**	**211**	**400**

Taking into account the indication that a larger percentage of males shop online as opposed to females, it is necessary to acquire an indication which age groups these male versus female shoppers belong to for strategic marketing purposes, such as developing a target market strategy. Table 7.7 depicts a cross tabulation between gender and previous online purchase experience with a first layer moderating variable, age.

TABLE 7.7 CROSS TABULATION: PREVIOUS ONLINE SHOPPING PURCHASE EXPERIENCE WITH GENDER AND AGE

Age			Gender Male (n_M)	 Female (n_F)	Total
18-24	Bought a product/service online before	**Yes**	7	6	**13**
		No	12	15	**27**
		Total	**19**	**21**	**40**
25-34	Bought a product/service online before	**Yes**	33	31	**64**
		No	25	33	**58**
		Total	**58**	**64**	**122**
35-49	Bought a product/service online before	**Yes**	27	31	**58**
		No	24	34	**58**
		Total	**51**	**65**	**116**
50+	Bought a product/service online before	**Yes**	35	21	**56**
		No	26	40	**66**
		Total	**61**	**61**	**122**

From the above table, it can be seen that on three loadings, the number of males who had bought a product or service online before exceeded the number of females (**18-24:** $n_M=7$; $n_F=6$, **25-34:** $n_M=33$; $n_F=31$, **50+:** $n_M=35$; $n_F=21$). The majority of males who had purchased a product or service online before fell into the age categories 25-34 (n=33) and 50+ (n=35). This distribution could possibly be due to the fact that males in these age categories are either bachelors/retired or corporates who do not have the female influence or time availability to shop at a physical store and therefore find it more convenient to shop online. However, in the age category of 35-49, more females than males had bought a product or service online before with $n_F=31$ and $n_M=27$.

Also, it is clear that of the predominantly spoken languages of this study's sample, English and Afrikaans (*see* Table 7.8), more English-speaking respondents (n=111) had bought a product or service online before than Afrikaans-speaking respondents (n=77). The reason for the lower online patronage amongst Afrikaans-speaking respondents could perhaps be due to more conservative cultural behaviours amongst Afrikaans-speaking respondents (Afrikaans youth, 2006). Although there was not an equal proportion of Zulu and other language types to make a comparison in this manner, cultural reasons could also possibly be the reason the reason for low online patronage in general amongst Zulu and other language types.

TABLE 7.8 CROSS TABULATION: PREVIOUS ONLINE SHOPPING PURCHASE EXPERIENCE AND LANGUAGE

Bought a product or service online before		Yes	No	Total
Language	English	111	85	**196**
	Afrikaans	77	115	**192**
	Zulu	0	5	**5**
	Other	3	4	**7**
	Total	**191**	**209**	**400**

Since the data for this study were collected in the context of purchasing a book from a branded or a non-branded website, half of the respondents (n=200) were asked whether they had ever bought a book online before (Books.com sample), while the other half (n=200) were asked whether they had ever bought a book from Kalahari.net before (Kalahari.net sample). Table 7.8 represents this distribution.

TABLE 7.9 BOOK PURCHASE DISTRIBUTION

Book purchase	f (n=200)	**%**
Bought a book online before	58	29%
Bought a book from Kalahari.net before	37	18.5%

Table 7.8 indicates that almost a third (n=58 or 29%) of the respondents had purchased a book online before, and almost one fifth (n=37 or 18.5%) of the respondents had purchased a book from Kalahari.net before. It is uncertain whether, of those who indicated that they had purchased a book online before, this purchase was made at Kalahari.net. However, it can be deduced that of the total respondents (n=400 or 100%), 23.8% (n=95) had purchased a book online before.

The final aspect of the sample, as depicted in Table 7.9, is the distribution of respondent occupation. The occupation distribution question suffered from some non-response, and a sample of n=395 was collected for this question. The majority of respondents to this study were employed either in sales/managerial (n=90 or 22.5%), administration (n=69 or 17.2%), or the service industry (n=47 or 11.8%).

TABLE 7.10 RESPONDENT OCCUPATION DISTRIBUTION

Occupation	Kalahari.net		Books.com		Total	
	f	%	*f*	%	*f*	%
Sales/managerial	45	22.5	45	22.5	90	22.5
Administration	29	14.5	40	20.0	69	17.2
Government/education	23	11.5	10	5.0	33	8.2
Artist	5	2.5	5	2.5	10	2.5
Medical	6	3.0	9	4.5	15	3.8
Service industry	26	13.0	21	10.5	47	11.8
Student	16	8.0	17	8.5	33	8.2
Construction/engineer	19	9.5	16	8.0	35	8.8
Human resources	4	2.0	1	.5	5	1.2
Finance	14	7.0	20	10.0	34	8.5
Retired/homemaker	11	5.5	13	6.5	24	6.0
Total	**198**	**99.0**	**197**	**98.5**	**395**	**98.8**

From the above descriptive statistics, it is clear that the profile of the majority of the respondents represents those consumers aged 25 to 50 and above, who speak English or Afrikaans, are mostly white, and reside in the upper LSM groups. This profile does in fact represent the sample population (*see* Annexure B). The sample population consisted of those consumers in South Africa who have access to the internet. According to SAARF (South African Advertising Research Foundation), the consumers who have access to internet are grouped into the LSM (Living Standards Measure) 7 to 10 categories (*see* Chapter 6, section 6.8.4). These groups are the more affluent, higher-income bracket population. Thus, all respondents in this study match these criteria, and it can be argued that the sample is representative of the population.

4.2.2 Descriptive statistics for interval-scaled data

The descriptive statistics concerning the interval-scaled data are presented for each sub-sample, which is Kalahari.net and Books.com. The interval-scaled data includes all the multiple-item Likert scale questions (J1-I4). The minimum and maximum for these items are 1 and 5 respectively, since respondents were asked to agree or disagree with a statement, where 1 meant *strongly disagree* and 5 meant *strongly agree*. All the items listed in Table 7.11a and Table 7.11b were questions measuring the following constructs (refer to Chapter 1):

- Online risk in general
- Purchase intention
- Brand knowledge
- Information search
- Performance risk
- Financial risk
- Time risk
- Social risk
- Physical risk
- Psychological risk

The mean, standard deviation and variance of each item are presented in Table 7.11. The *mean* refers to the average response for the question by the sample. The means range from 1.32 (item I1 psychological risk on Kalahari.net) to 3.97 (item A1 purchase intention on Kalahari.net). Table 7.11 shows that the means for performance risk, financial risk, and time risk are higher than the means for social risk, physical risk, and psychological risk in both cases. This discrepancy indicates that consumers perceive performance, financial and time risk to be higher-risk factors than social, physical, or psychological risk.

A *standard deviation* indicates the degree of dispersion in response to the mean. The lower the standard deviation, the less discrepancy in response to the mean. The data from the Kalahari.net sub-sample, items G1 and G2 (social risk) and item H3 (physical risk) display highly satisfactory standard deviations, with scores of 0.991, 0.918 and 0.913 respectively. From the data for both Books.com and Kalahari.net, the item I1 (psychological risk) displayed highly satisfying standard deviation scores of 0.840 and 0.748 respectively. The descriptive statistics for the interval-scaled data from Books.com and Kalahari.net are presented below in two separate tables for the purpose of comparison.

TABLE 7.11 DESCRIPTIVE STATISTICS FOR INTERVAL-SCALED DATA

BOOKS.COM							
Q no:	**SCALE ITEMS**	**n**	**Min**	**Max**	**Mean**	**Std. Deviation**	**Variance**
J1	Online risk in general	200	1	5	2.28	1.288	1.658
J2	Online risk in general	200	1	5	3.23	1.293	1.673
J3	Online risk in general	200	1	5	2.75	1.333	1.776
J4	Online risk in general	200	1	5	1.90	1.192	1.421
J5	Online risk in general	200	1	5	2.63	1.123	1.261
J6	Online risk in general	200	1	5	2.68	1.363	1.857
A1	Purchase intention	200	1	5	3.90	1.319	1.739
A2	Purchase intention	200	1	5	3.84	1.309	1.713
A3	Purchase intention	200	1	5	3.54	1.256	1.577
A4	Purchase intention	200	1	5	3.44	1.290	1.665
B1	Brand knowledge	200	1	5	3.52	1.173	1.377
B2	Brand knowledge	200	1	5	3.54	1.240	1.536
B3	Brand knowledge	198	1	5	2.40	1.564	2.445
B4	Brand knowledge	200	1	5	3.24	1.090	1.188
B5	Brand knowledge	200	1	5	2.39	1.499	2.248
C1	Information search	200	1	5	3.62	1.333	1.776
C2	Information search	199	1	5	3.72	1.276	1.627
C3	Information search	200	1	5	2.81	1.433	2.054
C4	Information search	200	1	5	3.47	1.272	1.617
D1	Performance risk	200	1	5	3.01	1.352	1.829
D2	Performance risk	200	1	5	3.05	1.459	2.128
D3	Performance risk	200	1	5	3.41	1.304	1.699
D4	Performance risk	200	1	5	2.85	1.272	1.619
D5	Performance risk	200	1	5	3.05	1.275	1.626
E1	Financial risk	200	1	5	3.24	1.393	1.939
E2	Financial risk	200	1	5	2.85	1.333	1.776
E3	Financial risk	200	1	5	3.17	1.363	1.857
E4	Financial risk	200	1	5	3.42	1.323	1.752
F1	Time risk	200	1	5	3.17	1.280	1.639
F2	Time risk	200	1	5	3.12	1.200	1.439
F3	Time risk	200	1	5	3.27	1.137	1.294
F4	Time risk	200	1	5	3.53	1.169	1.366
F5	Time risk	200	1	5	2.85	1.261	1.589
G1	Social risk	200	1	5	1.69	1.096	1.202
G2	Social risk	200	1	5	1.62	1.068	1.141
G3	Social risk	200	1	5	1.66	1.119	1.252
G4	Social risk	200	1	5	1.94	1.165	1.358
H1	Physical risk	200	1	5	1.86	1.234	1.522
H2	Physical risk	200	1	5	2.36	1.442	2.079
H3	Physical risk	200	1	5	1.70	1.152	1.327
H4	Physical risk	200	1	5	1.78	1.195	1.429
I1	Psychological risk	200	1	5	1.42	.840	.706

I2	Psychological risk	200	1	5	1.69	1.068	1.140
I3	Psychological risk	200	1	5	1.69	1.105	1.222
I4	Psychological risk	200	1	5	1.67	1.067	1.138

KALAHARI.NET							
Q no:	**SCALE ITEMS**	**n**	**Min**	**Max**	**Mean**	**Std. Deviation**	**Variance**
J1	Online risk in general	200	1	5	2.49	1.280	1.638
J2	Online risk in general	200	1	5	3.20	1.193	1.424
J3	Online risk in general	200	1	5	2.97	1.403	1.969
J4	Online risk in general	199	1	5	1.99	1.318	1.737
J5	Online risk in general	199	1	5	2.74	1.210	1.464
J6	Online risk in general	200	1	5	2.70	1.330	1.769
A1	Purchase intention	200	1	5	3.97	1.256	1.577
A2	Purchase intention	200	1	5	4.03	1.134	1.286
A3	Purchase intention	200	1	5	3.57	1.172	1.373
A4	Purchase intention	200	1	5	3.49	1.389	1.930
B1	Brand knowledge	200	1	5	3.63	1.237	1.531
B2	Brand knowledge	200	1	5	3.73	1.199	1.437
B3	Brand knowledge	199	1	5	4.01	1.389	1.929
B4	Brand knowledge	200	1	5	3.70	1.103	1.216
B5	Brand knowledge	199	1	5	3.61	1.486	2.208
C1	Information search	200	1	5	3.51	1.349	1.819
C2	Information search	200	1	5	3.37	1.361	1.852
C3	Information search	200	1	5	2.65	1.530	2.341
C4	Information search	200	1	5	3.06	1.390	1.932
D1	Performance risk	200	1	5	3.06	1.300	1.690
D2	Performance risk	200	1	5	3.09	1.433	2.052
D3	Performance risk	200	1	5	3.35	1.369	1.875
D4	Performance risk	200	1	5	2.99	1.260	1.588
D5	Performance risk	200	1	5	3.02	1.293	1.673
E1	Financial risk	199	1	5	3.13	1.415	2.003
E2	Financial risk	200	1	5	2.61	1.307	1.708
E3	Financial risk	200	1	5	3.02	1.432	2.050
E4	Financial risk	200	1	5	3.29	1.369	1.875
F1	Time risk	200	1	5	3.20	1.311	1.719
F2	Time risk	200	1	5	3.29	1.270	1.614
F3	Time risk	200	1	5	3.32	1.231	1.515
F4	Time risk	200	1	5	3.67	1.257	1.581
F5	Time risk	200	1	5	2.94	1.368	1.870
G1	Social risk	200	1	5	1.55	.991	.983
G2	Social risk	200	1	5	1.46	.918	.842
G3	Social risk	200	1	5	1.53	1.027	1.055
G4	Social risk	200	1	5	1.72	1.108	1.228
H1	Physical risk	199	1	5	1.67	1.151	1.324
H2	Physical risk	200	1	5	2.04	1.335	1.783
H3	Physical risk	200	1	5	1.47	.913	.833
H4	Physical risk	200	1	5	1.52	1.042	1.085
I1	Psychological risk	200	1	5	1.32	.788	.621
I2	Psychological risk	200	1	5	1.52	1.037	1.075
I3	Psychological risk	200	1	5	1.52	1.027	1.055
I4	Psychological risk	200	1	5	1.47	1.007	1.014

7.3 RELIABILITY

A multi-item questionnaire was developed for measuring all the variables in the theoretical model, namely overall perceived online risk, purchase intention, brand knowledge, information search, performance risk, financial risk, time risk, social risk, physical risk, and psychological risk. These variables were subjected to a reliability analysis.

Reliability is the degree to which measures are free from error and therefore yield consistent results (Zikmund, 2003). Reliability is also referred to as the extent to which a scale produces consistent results if repeated measurements are made over time (Malhotra and Birks, 1999). A researcher cannot with any confidence depend on further analysis of data unless the reliability of the questionnaire is determined.

Cronbach Alpha co-efficients were calculated to assess the internal consistency of each of the multiple-scale questions measuring the following constructs: Online risk in general, purchase intention, brand knowledge, information search, performance risk, financial risk, time risk, social risk, physical risk, and psychological risk. Table 7.12 depicts the reliability coefficients for each construct. These ranged from 0.768 to 0.867.

TABLE 7.12 RELIABILITY SCORES

Q	Construct	Cronbach's Alpha	Number of items
J	Online risk in general	0.812	6
A	Purchase intention	0.840	4
B	Brand knowledge	0.814	5
C	Information search	0.768	4
D	Performance risk	0.851	5
E	Financial risk	0.827	4
F	Time risk	0.843	5
G	Social risk	0.864	4
H	Physical risk	0.828	4
I	Psychological risk	0.867	4

Since all the reliability coefficients exceed the customary cut off of 0.7, these scores depict very good reliability and therefore internal consistency (Nunnally and Berstein, 1994). All items' correlation with total Cronbach Alpha coefficients was inspected. The tables did not identify any items that could be deleted to increase any Alpha values. As a result all the original items were retained in subsequent analyses.

Once the reliability of the data had been confirmed, the next step in the data analysis was to evaluate the validity of the data.

7.4 VALIDITY

Validity is the ability of a scale or measuring instrument to measure what it is intended to measure (Zikmund, 2003). In this study, discriminant validity was assessed using a statistical technique known as factor analysis. An exploratory factor analysis was conducted, firstly for the independent variables as a group, and then for each dependent variable.

The first exploratory factor analysis was conducted to determine whether the constructs used to measure the six types of perceived risk (performance, financial, time, social, physical, and psychological) revealed sufficient discriminant validity. That is, each construct should correlate poorly with each of the other constructs. In other words, an exploratory factor analysis was conducted to determine whether the underlying constructs existed within the data as expected.

The first step in this validity assessment process was to determine whether the data were appropriately scaled for factor analysis (*see* Table 7.13). This assessment can be done by means of the KMO (Kaiser-Meyer-Olkin) measure of sampling adequacy, which gave a score of 0.913, and Bartlett's test of sphericity which provided a significance of 0.000. The closer the KMO score is to 1.00, the more appropriate the data are, and where the significance level is <0.05, the data are appropriate for being subjected to an exploratory factor analysis. Based on these two indices it was concluded that the data were appropriately scaled for factor analysis.

TABLE 7.13 KMO AND BARTLETT'S TEST

Kaiser – Meyer – Olkin Measure of sampling adequacy	0.913
Bartlett` s test of Sphericity: Significance	0.000

Since the six risk constructs were not expected to correlate, the principal component method of extraction was applied, and the varimax method of rotation was utilised. The principal component method was chosen since it focuses on the total variation in the data set, and seeks to reduce the original set of variables into a smaller set of variables which are uncorrelated with one another (Diamantopoulos and Schlegelmilch, 2000). The varimax rotation was used since it ensures an orthogonal factor rotation (Hair, Black, Babin, Anderson, and Tatham, 2006). That is, it ensures that each factor is independent of all other factors. Furthermore, this method seems to produce a clearer separation of factors (Hair *et al.,* 2006). This simplifies the interpretation of the factor (Harman, 1976).

A number of factor solutions were considered. The most appropriate factor solution was that of four factors as depicted in Table 7.14. Only loadings greater than 0.40 were regarded as significant, (refer to Annexure C for the complete factor loadings). Table 7.14 depicts the initial factor solution, where five items cross-loaded on more than one factor. These items were E3; E4; F1; G3; and H1. Consequently, these items were removed, and the factor analysis was re-run.

TABLE 7.14 INITIAL FACTOR SOLUTION: ROTATED FACTOR MATRIX

Item			Factor			
			1	2	3	4
PrR	Exact appearance	D1	0.705			
PrR	Intangible: read/feel	D2	0.795			
PrR	Intangible: weight/size	D3	0.717			
PrR	False rating	D4	0.737			
PrR	Not as expected	D5	0.767			
FR	Credit card	E1	0.530			
FR	Not send after pay	E2	0.593			
FR	Hidden costs	E3	0.578	**0.458***		
FR	Financial details	E4	0.570	**0.467***		
TR	Not delivered on time	F1	**0.489***	0.635		
TR	Time delay: order/receive	F2		0.746		
TR	No stock delay	F3		0.743		
TR	Too long to return book	F4		0.706		
TR	Time takes to buy online	F5		0.679		
SR	Lower esteem	G1			0.791	
SR	Friends think I'm not cool	G2			0.808	
SR	Friends think I'm show off	G3			0.745	**0.432***
SR	No encouragement buy	G4			0.613	
PhR	Eystrain	H1			**0.406***	0.650
PhR	Computer virus	H2				0.638
PhR	Pain in wrist	H3				0.760
PhR	Back pain	H4				0.807
PscR	Harm self image	I1				0.725
PscR	Unnecessary tension	I2				0.785
PscR	Feel uncomfortable	I3				0.696
PscR	Social isolation	I4				0.738

* Cross-loadings are indicated in bold print

The secondary factor solution produced four clear factors. In other words, there was no cross loading on any factor as depicted in Table 7.15 below. The exploratory factor analysis, however, revealed two unexpected factors. According to the literature, perceived risk was expected to comprise six constructs. However, the factor analysis of this study revealed there to be in fact only four constructs. Table 7.15 shows that financial risk collapsed into performance risk, forming one construct, and physical risk collapsed into psychological risk, forming one construct. In other words, the respondents who participated in this study viewed financial risk and performance risk as the same construct, and physical risk and psychological risk as the same construct. The four factors extracted (performance, time, social, personal), explained 62.09% of the total variance. This result was satisfactory since the aim of the factor analysis was not to explain an optimal amount of variance in the different constructs, but rather to assess the discriminant validity of the measuring instrument.

TABLE 7.15 SECONDARY FACTOR SOLUTION: ROTATED FACTOR MATRIX

Item			Factor			
			Personal risk	Performance risk	Time risk	Social risk
PhR	Computer virus	H2	0.621			
PhR	Pain in wrist	H3	0.746			
PhR	Back pain	H4	0.801			
PscR	Harm self image	I1	0.746			
PscR	Unnecessary tension	I2	0.795			
PscR	Feel uncomfortable	I3	0.712			
PscR	Social isolation	I4	0.767			
PrR	Exact appearance	D1		0.714		
PrR	Intangible: read/feel	D2		0.803		
PrR	Intangible: weight/size	D3		0.736		
PrR	False rating	D4		0.752		
PrR	Not as expected	D5		0.777		
FR	Credit card	E1		0.506		
FR	Not send after pay	E2		0.587		
TR	Time delay: order/receive	F2			0.741	
TR	No stock delay	F3			0.748	
TR	Too long to return book	F4			0.722	
TR	Time takes to buy online	F5			0.715	
SR	Lower esteem	G1				0.801
SR	Friends think I'm not cool	G2				0.806
SR	No encouragement buy	G4				0.654

Owing to the fact that the items subjected to the factor analysis revealed four as opposed to the expected six factors, the classification of these factors should be revised. The four factors of perceived risk are discussed in full in the following section.

7.4.5 **Perceived risk (Factor 1)**

Items D1 – D5, E1 and E2 (7 items) loaded on Factor 1. The items included the following statements:

- I am concerned that the book delivered may not be exactly as it appeared when displayed on the computer screen.
- I don't like the fact that I can't feel, read, or/and experience the book before buying during online shopping.
- It is difficult to ascertain the characteristics of the book such as quality, weight, and size just by looking at its cover and back page provided on the computer screen.
- I am concerned that the rating of the book is a false indication of the actual read.
- I am concerned that the book will not be what I thought it would be.
- It is not safe to give my credit card number when I order at Kalahari.net.
- Kalahari.net may not send the book after payment.

From the above it can be concluded that the items that loaded on Factor 1 reflect what could be described as *performance risk*, since four out of the seven items constitute the original performance risk scale.

7.4.6 **Perceived risk (Factor 2)**

Items F2 – F5 (4 items) loaded on Factor 2. The items included the following statements:

- I am concerned about the time delay between ordering and receiving books bought at Kalahari.net.
- Kalahari.net might not have my book in stock and I will have to wait for Kalahari.net to get it in stock

- It would take too much time to return something to Kalahari.net
- I am concerned about the time it takes to buy a book on Kalahari.net

All the items used to measure *time risk* loaded on one factor as expected, except for item F1 (I am afraid that the book bought at Kalahari.net will not be delivered when expected) which was dropped owing to cross-loading.

7.4.7 **Perceived risk (Factor 3)**

Items G1, G2 and G4 (3 items) loaded on Factor 3. The items included the following statements.

- Buying a book at Kalahari.net will lower my esteem amongst my friends.
- If I bought a book at Kalahari.net I think my friends would think that I am not cool.
- My friends would not encourage me to buy a book from Kalahari.net.

All the items used to measure *social risk* loaded on one factor as expected, except for item G3 (If I bought a book at Kalahari.net, some friends would think I am trying to show off) which cross-loaded and was therefore deleted.

7.4.8 **Perceived risk (Factor 4)**

Items H2 – H4 and I1 – I4 (7 items) loaded on Factor 4. Items included the following statements:

- I am concerned about viruses infecting my computer while I shop at Kalahari.net.
- I am concerned about getting carpel tunnel syndrome (pain in wrist) while shopping online at Kalahari.net.

- I am concerned that shopping on Kalahari.net could lead to back pain because of my posture when sitting in front of the computer for extended periods of time.
- I think shopping at Kalahari.net will harm my self image.
- The thought of shopping at Kalahari.net causes me to experience unnecessary tension.
- The thought of shopping at Kalahari.net makes me feel uncomfortable.
- Shopping at Kalahari.net will lead to too much social isolation.

From the above it can be concluded that the items loaded on Factor 4 reflect *personal risk***.** Personal risk is therefore a combination of physical risk and psychological risk.

Therefore the four types of perceived risk that emerged from this study are performance risk, time risk, social risk, and personal risk.

Since four new perceived risk constructs had emerged, as opposed to the original six perceived risk constructs, it was necessary to assess the reliability of the revised scales.

7.5 RELIABILITY OF REVISED PERCEIVED RISK SCALES

Cronbach Alpha's were calculated to assess the internal consistency of each of the multiple-item scales (as instruments) measuring the following constructs: performance risk, time risk, social risk, and personal risk. Coefficient alpha's ranged from 0.802 to 0.880. Table 7.16 depicts the reliability coefficients for each construct.

TABLE 7.16 RELIABILITY SCORES OF NEW RISK CONSTRUCTS

Risk construct	Cronbach's Alpha	Number of items	Mean $\bar{x}_K$	Mean $\bar{x}_B$
Performance risk (PrR)	0.863	7	3.03	3.06
Time risk (TR)	0.802	4	3.30	3.19
Social risk (SR)	0.803	3	1.57	1.75
Personal risk (PsR)	0.880	4	1.55	1.76

Since all the reliability coefficients are above 0.7, these scores reflect very good reliability and therefore internal consistency (Nunnally and Berstein, 1994).

7.6 VALIDITY OF DEPENDENT VARIABLES

Further factor analyses were also conducted to determine whether the dependent variables used in this study were uni-dimensional, meaning that each item loads only on one factor. The questions that were subjected to a factor analysis were those measuring purchase intention, information search, online risk in general, and brand knowledge.

For each construct, a separate factor analysis was conducted. All scales were subjected to the KMO's (Kaiser-Meyer-Olkin) measure of sampling adequacy and Bartlett's test of sphericity. The results indicated that all constructs were appropriately scaled for factor analysis.

To measure the uni-dimensionality of each construct, purchase intention, information search, and online risk in general were subjected to a separate factor analysis. The factor matrix for each of these constructs loaded on one factor only, thus indicating that each of these constructs was uni-dimensional and that their scales in fact measured what they were intended to measure.

Brand knowledge, however, produced a factor solution containing two factors, while one item (B4) cross-loaded and was removed. This factor solution is depicted in Table 7.17. Only loadings greater than 0.40 are reported here, (refer to Annexure C for the complete factor matrix).

TABLE 7.17 FACTOR ANALYSIS: BRAND KNOWLEDGE

Item			Factor	
			1	2
BK	I Feel it is safe to buy	B1	0.878	
BK	Recall as a place to buy	B2	0.850	
BK	Previously seen or heard	B3		0.932
BK	Satisfying experience	B4	**0.713***	0.442
BK	I am familiar	B5		0.925

* Cross-loadings are indicated in bold print

The secondary factor solution produced two clear factors, meaning that the items loaded on one factor only as depicted in Table 7.18. This finding is interesting since according to the literature (*see* Chapter 5), brand knowledge is comprised of two factors, namely brand awareness and brand image (Keller, 1993).

TABLE 7.18 SECONDARY FACTOR ANALYSIS: BRAND KNOWLEDGE

Item			Factor	
			Brand awareness	Brand image
BK	I feel it is safe to buy	B1		0.898
BK	Recall as a place to buy	B2		0.865
BK	Previously seen or heard	B3	0.941	
BK	I am familiar	B5	0.934	

The factors produced in the above factor analysis should therefore reflect brand awareness and brand image in order to be considered as measuring brand knowledge. These factors are discussed in full below:

7.8.1 Brand image (Factor 1)

Items B1 and B2 loaded on factor 1. These items included the following statements:

- I feel it is safe to buy online at Kalahari.net.
- If I were to buy online I will recall Kalahari.net as a place to buy books.

From the above, it can be concluded that these items reflect brand trust and brand association. The definition of brand image refers to the perceptions and beliefs held by consumers, as reflected in the associations held in consumer memory (Kotler and Keller, 2006). Since brand image constitutes brand associations (*see* Chapter 5, section 5.6.2), Factor 1 in Table 7.18 was named *brand image*.

7.8.2 **Brand awareness (Factor 2)**

Items B3 and B5 loaded on factor 2. These items include the following statements:

- I have previously seen or heard of Kalahari.net.
- I am familiar with the Kalahari.net brand.

These items both reflect a consumer's confirmation to prior exposure to the brand and therefore brand recognition. Since brand awareness concerns brand recognition and brand recall (Keller, 1993), this factor was named *brand awareness.* It can therefore be said that the above two factors do in fact measure brand knowledge. However, this brand knowledge is measured on two levels, brand image and brand awareness. These levels are congruent with the literature concerning brand knowledge (*See* Chapter 5, section 5.6.2). Therefore, for the purpose of this study, brand knowledge consists of two dimensions, namely brand image and brand awareness.

The following section addresses the study's research objectives. The research objectives examine the influences and relationships among a number of variables including brand knowledge, purchase intention, perceived risks, and information search on different occasions. Hypotheses are a means for testing the research objectives. Therefore, the study's objectives are addressed by empirically testing the stated hypotheses, and the results are presented and discussed in the following section.

In all cases where regression analyses were employed, multi-collinearity (the degree of correlation between variables) was not a problem since the VIF (variance inflation factor) statistics were smaller than 10 and the tolerance statistics were greater than 0.511, where zero indicates multi-collinearity on a scale from zero to one (Menard, 1995).

7.9 **RISK PERCEPTIONS AND INTENTION TO BUY**

The first objective addresses the relative influence of different risk types on intention to buy from a branded website as opposed to a non-branded website. The mean scores for the dependent variable, intention to buy, were, 3.76 for Kalahari.net and 3.68 for Books.com. The mean scores for the independent variables, types of risk, were performance risk, 3.06 (Books.com) and 3.03 (Kalahari.net), time risk, 3.19 (Books.com) and 3.30 (Kalahari.net), social risk, 1.75 (Books.com) and 1.57 (Kalahari.net), and personal risk, 1.76 (Books.com) and 1.55 (Kalahari.net). Previous research has shown that consumers perceive risks associated with purchasing, and risk is therefore likely to affect purchase intention (Wood & Sheer, 1996). In order to address this objective, two separate hypotheses were developed, one for the branded website, and the other for the non-branded website.

H_1: Perceived risks associated with online purchasing will influence a consumer's intention to purchase from a branded website

H_2: Perceived risks associated with online purchasing will influence a consumer's intention to purchase from a non-branded website

A multiple regression analysis was conducted to test the above hypotheses and therefore determine whether significant differences exist between the different risk types and intention to buy for a branded website as well as a non-branded website. The results reported in Table 7.19 revealed that perceived risks associated with online purchasing do in fact influence a consumer's intention to purchase from a branded website as opposed to a non-branded website. In the case of Books.com, 11.7% of a consumer's intention to purchase online can be explained by the four constructs of perceived risk. In the case of Kalahari.net, 22% of a consumer's intention to purchase online can be explained by the four constructs of perceived risk. Therefore, it can be concluded in both cases that there may be other variables in addition to perceived risk which influence a consumer's intention to purchase online. However, it must be noted that of the four risk constructs (performance, time, social, and personal), only performance risk (t= -3.586; p<0.001) was statistically significant. In the case of a branded website, performance (t= -4.170; p<0.001) and personal (t= value -2.019; p<0.05) risks were statistically significant (Table 7.19 and Table 7.20).

TABLE 7.19 REGRESSION ANALYSIS RESULTS: INFLUENCE OF RISK PERCEPTIONS ON INTENTION TO BUY FROM BOOKS.COM

Website	Risk construct	Beta coefficient	t-values	Level of significance
Books.com	Constant		17.329	0.000
	Performance risk	-0.306	-3.586	0.000***
	Time risk	-0.010	-0.115	0.909
	Social risk	-0.113	-1.271	0.205
	Personal risk	0.030	0.318	0.751

*** $p<0.001$
$R^2 = 0.117$

TABLE 7.20 REGRESSION ANALYSIS RESULTS: INFLUENCE OF RISK PERCEPTIONS ON INTENTION TO BUY FROM KALAHARI.NET

Website	Risk construct	Beta coefficient	t-values	Level of significance
Kalahari.net	Constant		21.724	0.000
	Performance risk	-0.334	-4.170	0.000***
	Time risk	-0.082	-1.045	0.297
	Social risk	-0.035	-0.441	0.659
	Personal risk	-0.160	-2.019	0.045*

*** p<0.001
$R^2 = 0.220$

It can therefore be concluded that performance risk will influence a consumer's intention to purchase from a non-branded website, and personal risk as well as performance risk will influence a consumer's intention to purchase from a branded website. These influences on both the branded and non-branded websites depict a negative linear relationship (*see* Table 7.20). In other words, the higher the performance risk associated with purchasing from Books.com, the lower the consumer's intention to make a purchase. Also, the higher the performance and personal risk associated with Kalahari.net, the lower the consumer's intention to make a purchase.

7.10 BRAND KNOWLEDGE, INFORMATION SEARCH AND INTENTION TO BUY ON A BRANDED WEBSITE

The next objective of this study investigated whether a consumer's brand knowledge (brand awareness and brand image) and extent of information search when purchasing on a branded website influences his/her intention to make a purchase on the branded website. It was found by Chen and He (2003) that brand knowledge has a direct effect on a consumer's intention to purchase from an online retailer. This effect is assessed here in the context of a branded and a non-branded website. Since this objective and the next objective are almost identical, the mean scores of the independent variables for both objectives are discussed here so that one may compare them. Interestingly, there was very little difference between the mean scores of brand image on Books.com ($\bar{x}$= 3.53) and Kalahari.net ($\bar{x}$= 3.6). However, the brand image of Kalahari.net was stronger than Books.com, as expected. The brand awareness differed to quite an extent with a fairly low mean score of 2.40 on Books.com and a much higher score of 3.81 on Kalahari.net. The extent to which a consumer will search for information on Books.com ($\bar{x}$= 3.40) before purchasing is higher than on Kalahari.net ($\bar{x}$= 3.14). It was investigated, the influence of these independent variables on purchase intention, the dependent variable.

H_3: A consumer's brand knowledge and extent of information search when purchasing on a branded website does influence his/her intention to make a purchase on a branded website

The above hypothesis was addressed by subjecting the variables to a multiple regression analysis. The analysis indicated that these constructs do in fact influence a consumer's purchase intention. In total 53.5% of a consumer's intention to purchase from the branded website (Kalahari.net) can be explained by the constructs brand awareness, brand image, and information search. However, brand image (t=13.59; p<0.001) is the only variable that was statistically significant in influencing a consumer's intention to purchase from the branded website. This relationship was also positive, which means that the more positive the perceived brand image, the more likely the consumer is to purchase from Kalahari.net. Table 7.21 shows this result.

TABLE 7.21 REGRESSION ANALYSIS RESULTS: BRAND KNOWLEDGE, INFORMATION SEARCH, AND INTENTION TO BUY FROM KALAHARI.NET

Website	Independent variables	Beta coefficient	t-values	Level of significance
Kalahari.net	Constant		3.626	0.000
	Information search	0.050	0.998	0.319
	Brand awareness	0.058	1.101	0.272
	Brand image	0.715	13.590	0.000***

*** $p < 0.001$
$R^2 = 0.535$

Taking the results of Table 7.21 into account, one can conclude that a consumer’s intention to purchase from Kalahari.net is influenced by the consumer's brand image of the online retailer. Furthermore, if a consumer perceives the brand image of Kalahari.net in a negative manner, he/she is less likely to make a purchase from the website.

The next objective concerns the influence of brand knowledge and information search on intention to buy, but this time on a non-branded website as opposed to the previous one, which was on a branded website.

7.9 BRAND KNOWLEDGE, INFORMATION SEARCH AND INTENTION TO BUY ON A NON-BRANDED WEBSITE

The third objective in this study examined whether a consumer’s brand knowledge (brand awareness and brand image) and extent of information search when purchasing on a non-branded website influences their intention to make a purchase on a non-branded website. The hypothesis addressing this objective is:

H_4: A consumer’s brand knowledge and extent of information search when purchasing on a non-branded website does influence his/her intention to make a purchase

A multiple regression analysis was conducted to address the above hypothesis. Results revealed that these constructs (brand knowledge and information search) do in fact influence a consumer's purchase intention. However, brand image (t=10.252; p<0.001) is the only construct that was statistically significant in influencing a consumer's intention to purchase from the non-branded website. A positive linear relationship is depicted between the two variables, brand image and intention to purchase. Table 7.22 shows this result. The R^2 showed that 41% of a consumer's intention to purchase from the non-branded website (Books.com) can be explained by the independent variables brand awareness, brand image, and information search.

TABLE 7.22 REGRESSION ANALYSIS RESULTS: BRAND KNOWLEDGE, INFORMATION SEARCH AND INTENTION TO BUY FROM BOOKS.COM

Website	Independent variables	Beta coefficient	t-values	Level of significance
Books.com	Constant		4.150	0.000
	Information search	0.064	1.151	0.251
	Brand awareness	0.066	1.094	0.276
	Brand image	0.616	10.252	0.000***

*** $p< 0.001$
$R^2 = 0.410$

Thus, it is true that a consumer's intention to purchase from Books.com is influenced by the consumer's brand image of the online retailer. The more positive the consumers brand image of Books.com, the more likely he/she is to make a purchase from the website. Information search and brand awareness had no statistically significant influence on a consumer's intention to purchase from the non-branded website.

It is clear that brand image influences purchase intention on both a branded and a non-branded website.

7.10 DIFFERENCES IN RISK PERCEPTIONS

The fourth objective addressed was whether there was a difference between the perceived risks associated with purchasing on a branded website as opposed to the perceived risks associated with purchasing on a non- branded website. To address this objective, the following hypothesis was considered:

H_5: There is a difference between the perceived risks associated with purchasing on a branded website as opposed to a non-branded website

An independent sample t-test was conducted to address the above objective. An independent sample t-test considers whether significant differences exist between the means of the different types of perceived risks associated with purchasing on a branded website as opposed to a non-branded website (*see* table 7.23). Results revealed that performance risk ($\bar{x}_B$ = 3.06 and $\bar{x}_K$ = 3.03) and time risk ($\bar{x}_B$ = 3.19 and $\bar{x}_K$ = 3.30) are no different when purchasing on a branded as opposed to a non-branded website. The mean scores of performance and time risk, however, indicated that although there is no significant difference between these risks for a branded versus a non-branded website, the performance and time risk are still relatively high. The difference in social risk approached significance with a p-value of 0.054. The mean score for social risk on Kalahari.net ($\bar{x}_K$ = 1.57) is less than that for Books.com ($\bar{x}_B$ = 1.75), thus indicating that although consumers perceive very little social risk, they perceive even less social risk when purchasing on Kalahari.net as opposed to Books.com. Furthermore, results revealed there to be a significant difference between the means of personal risk for a branded ($\bar{x}_K$ = 1.55) versus a non-branded ($\bar{x}_B$ = 1.76) website. Again, although the means are relatively low, they are still significantly different when purchasing on Kalahari.net as opposed to Books.com. It can therefore be said that the personal risk perceived by consumers on Kalahari.net is different from the personal risk perceived by consumers on Books.com, though this risk is still relatively low. These results are depicted in Table 7.23.

TABLE 7.23 T-TEST RESULTS: DIFFERENCES IN RISK PERCEPTIONS

Type of risk	Website	Mean $\bar{x}_B ; \bar{x}_K$	Mean diff $\bar{x}_B - \bar{x}_K$	Significance
Performance risk	Books.com	3.06	0.03	0.754
	Kalahari.net	3.03		
Time risk	Books.com	3.19	-0.11	0.252
	Kalahari.net	3.30		
Social risk	Books.com	1.75	0.18	0.054
	Kalahari.net	1.57		
Personal risk	Books.com	1.76	0.21	0.013*
	Kalahari.net	1.55		

* p< .05

7.11 RELATIONSHIP BETWEEN RISK PERCEPTIONS AND BRAND KNOWLEDGE

The fifth objective of this study examined whether the perceived risks associated with purchasing on a branded website as opposed to a non-branded website were influenced by the brand knowledge (brand awareness and brand image) of the website. The general contention is that there is a relationship between brand knowledge and perceived risk (Chen and He, 2003). Thus, it was undertaken to determine whether a consumer's extent of familiarity with the online retailer had an influence on his/her perceived risks associated with purchasing from the particular retailer. Two hypotheses were considered, one for Kalahari.net and the other for Books.com.

H_6: Perceived risks associated with purchasing on a branded website are influenced by the brand knowledge (brand awareness and brand image) of the website

H_7: Perceived risks associated with purchasing on a non-branded website are influenced by the brand knowledge (brand awareness and brand image) of the website

Since four separate types of risk existed, four separate regression analyses were conducted to address the above hypotheses.

7.11.1 Performance risk

The results of the first regression analyses revealed that brand awareness and brand image do influence the perceived performance risk associated with branded and non-branded websites. The R^2 indicates that 23.6% of the performance risk associated with purchasing on the branded website is explained by brand awareness and brand image. On the other hand, 15% of the performance risk associated with purchasing on the non-branded website is explained by brand awareness and brand image. In the case of Books.com, only brand image ($t= -4.916$; $p<0.001$) was statistically significant in influencing performance risk associated with purchasing on the non-branded website. This relationship between performance risk and brand image was also negative. In other words, the more positive the brand image of the non-branded website, the lower the performance risk associated with purchase from the non-branded website. In the case of Kalahari.net, both brand awareness ($t= -2.857$; $p<0.01$) and brand image ($t= -5.717$; $p<0.001$) were statistically significant in influencing performance risk associated with purchasing on the branded website. A negative linear relationship is also depicted in this case. This means that the stronger a consumer's brand knowledge concerning the branded website, the lower the perceived performance risk associated with purchasing from the branded website. Results are depicted in Table 7.24.

TABLE 7.24 IMPACT OF BRAND KNOWLEDGE ON PERFORMANCE RISK

Website	Brand knowledge construct	Beta coefficient	t-values	Level of significance
Books.com	Constant		19.296	0.000
	Brand awareness	-0.069	-0.965	0.336
	Brand image	-0.354	-4.916	0.000***
Kalahari.net	Constant		19.798	0.000
	Brand awareness	-0.192	-2.857	0.005**
	Brand image	-0.384	-5.718	0.000***

** p< 0.01
***p< 0.001
$R^2_K = 0.236$
$R^2_B = 0.150$

Based on the results summarised in Table 7.24, it can be concluded that the lower a consumer's brand image of Books.com, the higher the perceived performance risk associated with purchasing on Books.com. Furthermore, the more consumers know about Kalahari.net, the lower their perceived financial risk associated with purchasing on Kalahari.net.

7.11.2 Time risk

To assess whether brand knowledge (brand awareness and brand image) can lower a consumer's perceived time risk, a regression analysis was conducted. The R^2 indicated that only 8.7% of the time risk associated with purchasing on the non-branded website is explained by brand awareness and brand image. On the other hand, only 6.8% of the time risk associated with purchasing on the branded website is explained by brand awareness and brand image. Furthermore, the regression analysis results showed that for the non-branded website, a more positive brand image (t= -3.083; p<0.01) was statistically significant in lowering perceived time risk. Brand awareness had no influence on the perceived time risk associated with purchasing on Books.com. In the case of the branded website, a stronger brand awareness (t= -2.385; p<0.05) was statistically significant in lowering the time risk. Brand image also had no influence on the perceived time risk associated with purchasing from Kalahari.net. Results of the regression analysis are summarised in Table 7.25.

TABLE 7.25 IMPACT OF BRAND KNOWLEDGE ON TIME RISK

Website	Brand knowledge construct	Beta coefficient	t-values	Level of significance
Books.com	Constant		18.901	0.000
	Brand awareness	-0.114	-1.527	0.128
	Brand image	-0.230	-3.083	0.002**
Kalahari.net	Constant		15.195	0.000
	Brand awareness	-0.177	-2.385	0.018*
	Brand image	-0.138	-1.865	0.064

* $p < 0.05$
** $p < 0.01$
$R^2_K = 0.068$
$R^2_B = 0.087$

Based on the results reported in Table 7.25, the more positive a consumer's brand image of Books.com, the lower the perceived time risk associated with purchasing on Books.com. Furthermore, the stronger a consumer's brand awareness of Kalahari.net, the lower the perceived time risk associated with Kalahari.net.

7.11.3 Social risk

It was expected that both dimensions of brand knowledge would have an influence on perceived social risk. To assess whether this was true, a regression analysis was conducted. A regression analysis was conducted to examine whether brand awareness and brand image can lower consumers' perceived social risk. The results of the regression analysis revealed that brand awareness and brand image only influence the perceived social risk associated with the branded website and not the non-branded website. In the case of Kalahari.net, both brand image (t= -2.646; p<0.05) and brand awareness (t= -2.037; p<0.01) were statistically significant in influencing the social risk associated with purchasing on the branded website. The R^2 showed that only 8.1% of the social risk associated with purchasing on the branded website is explained by brand awareness and brand image. Results are summarised in Table 7.26.

TABLE 7.26 IMPACT OF BRAND KNOWLEDGE ON SOCIAL RISK

Website	Brand knowledge construct	Beta coefficient	t-values	Level of significance
Books.com	Constant		8.819	0.000
	Brand awareness	0.113	1.467	0.144
	Brand image	-0.151	-1.955	0.052
Kalahari.net	Constant		10.964	0.000
	Brand awareness	-0.150	-2.037	0.043*
	Brand image	-0.194	-2.646	0.009*

* $p < 0.05$

** $p<0.01$

$R^2_K = 0.081$

Thus, brand image and brand awareness had no influence on the perceived social risk associated with purchasing on Books.com. However, brand image and brand awareness do influence the perceived social risk associated with purchasing on Kalahari.net. Also, the t-values report a negative linear relationship for both brand awareness and brand image on social risk. In other words, the more positive the consumer's brand image and the stronger the brand awareness of Kalahari.net, the lower the perceived social risk associated with purchasing on Kalahari.net.

7.11.4 Personal risk

Finally, to assess whether brand knowledge (brand image and brand awareness) had an influence in lowering the perceived personal risk associated with purchasing on a branded and a non-branded website, a regression analysis was conducted. Only 3% of the personal risk (R^2) associated with purchasing on the non-branded website is explained by brand awareness and brand image. On the other hand, only 8% of the personal risk associated with purchasing on the branded website is explained by brand awareness and brand image. It must be noted, however, that other variables may exist that also have an influence on the perceived personal risk associated with the branded and non-branded websites. Furthermore, the results show that in the case of both Books.com and Kalahari.net, only brand image (t= -2.472; p<0.05 and t= -3.221; p<0.01 respectively) was statistically significant in influencing the personal risk associated with purchasing on the websites. The relationship between brand image and personal risk was also negative for both Books.com and Kalahari.net. In other words, the more positive the brand image, the lower the perceived personal risk associated with purchasing from both the branded and the non-branded websites. Results are depicted in Table 7.27.

TABLE 7.27 IMPACT OF BRAND KNOWLEDGE ON PERSONAL RISK

Website	Brand knowledge construct	Beta coefficient	t-values	Level of significance
Books.com	Constant		10.652	0.000
	Brand awareness	0.070	0.907	0.366
	Brand image	-0.190	-2.472	0.014*
Kalahari.net	Constant		11.157	0.000
	Brand awareness	-0.098	-1.333	0.184
	Brand image	-0.237	-3.221	0.001**

* $p < 0.05$
** $p<0.01$
$R^2_K = 0.080$
$R^2_B = 0.030$

In conclusion, the lower a consumer's brand image of Books.com and Kalahari.net, the higher the perceived personal risk associated with purchasing on Books.com and Kalahari.net. Brand awareness is not statistically significant in influencing the perceived personal risk associated with purchasing on both Books.com and Kalahari.net.

A summary of the results of the relationship between brand knowledge and the perceived risks associated with online purchasing is provided in Table 7.28.

TABLE 7.28 SUMMARY OF RESULTS: BRAND KNOWLEDGE AND PERCEIVED RISKS

	BOOKS.COM	
Risk	**Variable**	**Significance**
Performance risk	Brand awareness	0.336
	Brand image	0.000***
Time risk	Brand awareness	0.128
	Brand image	0.002**
Social risk	Brand awareness	0.144
	Brand image	0.052
Personal risk	Brand awareness	0.366
	Brand image	0.014*
	KALAHARI.NET	
Risk	**Variable**	**Significance**
Performance risk	Brand awareness	0.005**
	Brand image	0.000***
Time risk	Brand awareness	0.018*
	Brand image	0.064
Social risk	Brand awareness	0.043*
	Brand image	0.009**
Personal risk	Brand awareness	0.184
	Brand image	0.001**

* $p< 0.05$
** $p< 0.01$
*** $p<0.001$

It is clear from Table 7.28 that brand image has a stronger influence on the perceived risks associated with purchasing from a branded and a non-branded website relative to brand awareness.

7.12 RELATIONSHIP BETWEEN INFORMATION SEARCH AND PERCEIVED RISK

The final objective of this study assessed whether information search by a consumer has an influence on the overall perceived risk associated with purchasing on a branded and a non-branded website. Overall perceived risk on Kalahari.net had a mean score of 2.36, while overall perceived risk on Books.com scored a similar, but higher, mean of 2.44. The extent to which consumers search for information before purchasing on Kalahari.net ($\bar{x}$ = 3.14) was lower than on Books.com ($\bar{x}$ = 3.40). Thus, overall perceived risk and extent of information search is relatively higher on Books.com. It is the general contention that consumers collect information in an attempt to reduce the risks associated with purchase (Wood and Sheer, 1996). The following hypothesis is therefore considered.

H_8: Information search by a consumer will have an influence on the overall perceived risk associated with purchasing on a branded and a non-branded website

This relationship was tested using a two-tailed Pearson's product moment correlation analysis. Results revealed there to be a significant relationship between a consumer's extent of information search and the overall perceived risk associated with purchasing on both a branded website and a non-branded website. Also, the pearson correlation score depicts a positive linear relationship. This means that the more consumers search for information, the higher their overall perceived risk associated with the intention to purchase on both a branded and a non-branded website. Table 7.29 summarises these results.

TABLE 7.29 CORRELATION RESULTS: INFORMATION SEARCH AND OVERALL PERCEIVED RISK

Website			Overall risk	Information search
Books.com	Overall risk (μ_{IS})	Pearson Correlation	1	0.248
		Sig. (2-tailed)		0.000***
	Information search (μ_{IS})	Pearson Correlation	0.248	1
		Sig. (2-tailed)	0.000***	
Kalahari.net	Overall risk (μ_{IS})	Pearson Correlation	1	0.357
		Sig. (2-tailed)		0.000***
	Information search (μ_{IS})	Pearson Correlation	0.357	1
		Sig. (2-tailed)	0.000***	

*** $p < 0.001$

Thus, alternate hypothesis ($\mu_{IS} = \mu_{PR}$) as stated above is supported, and therefore the null hypothesis ($\mu_{IS} \neq \mu_{PR}$) is not supported. In other words, it is held valid that the more consumers search for information, the higher the overall perceived risk associated with purchasing on both a branded and a non-branded website. It must be made clear that a greater amount of information search by a consumer does not cause an increase in the consumer perceived risk, though there is a correlation between these two variables. To conclude that this is a causal relationship would require further investigation.

7.13 CHAPTER SUMMARY

This chapter investigated the study's research objectives by addressing the research hypotheses with the appropriate statistical analyses.

First, descriptive analyses were conducted whereby a profile of the sample was presented. It was clear that the sample used in this study did in fact represent the sample population for the study, namely all consumers above the age of 18 who had access to the internet. These consumers were categorised as representing the LSM groups 7 to 10. The profile of the sample was therefore representative of these living standard measures.

The data were then tested for reliability and validity. All the multiple-item scales used in the measuring scale were regarded as reliable. It was also found that perceived risk, in this case, consisted of four (performance, time, social and personal) rather than six constructs.

Lastly, a number of inferential statistical analyses were employed to test the research hypotheses. These included multiple-regressions, independent sample t-test, and a two-tailed Pearson product moment correlation. A detailed explanation of these results and their implications is presented in Chapter 8. The implications of the findings, limitations to the study, and the areas for further research are discussed in the next Chapter.

CHAPTER 8
FINDINGS AND RECOMMENDATIONS

8.1 INTRODUCTION

This study was designed to examine the perceptions of risk associated with intention to purchase online. This was done by means of comparing the perceived risks associated with the purchase of a book from a branded versus a non-branded online book retailer. In the first five chapters, introductory perspectives on the research problem and an in-depth literature review were presented to refine the theoretical point of departure for the study. In the sixth chapter, the research methodology was explained. The empirical results were presented and discussed in the seventh chapter.

This chapter highlights the findings of the statistical analysis for online book retailers. The implications for online book retailers, the limitations of the study, and recommendations for further research are discussed.

8.2 ONLINE PERCEIVED RISK

An important finding in this study refers to the factors of online perceived risk. Based on the data collected, the concept of perceived risk was redefined to consist of four rather than six underlying risks. The exploratory factor analysis presented in Chapter 7 of this study revealed four underlying constructs within the global concept of perceived risk. Two of the original types of risk, physical risk and financial risk, emerged from the exploratory factor analysis as psychological risk and performance risk respectively. Thus, the six constructs of perceived risk were reduced to four dimensions of perceived risk. The concept of perceived risk was therefore redefined to consist of performance risk, time risk, social risk and personal risk. The reason for this re-configuration of the underlying dimensions of overall risk could possibly be due to the product category chosen (a book) as the product of purchase.

Consumers may view the purchase of a book as a relatively low-risk transaction and therefore view certain risks as coinciding with each other. This contention will, however, need to be further investigated in future studies. All inferential analyses were therefore conducted using these four types of risk.

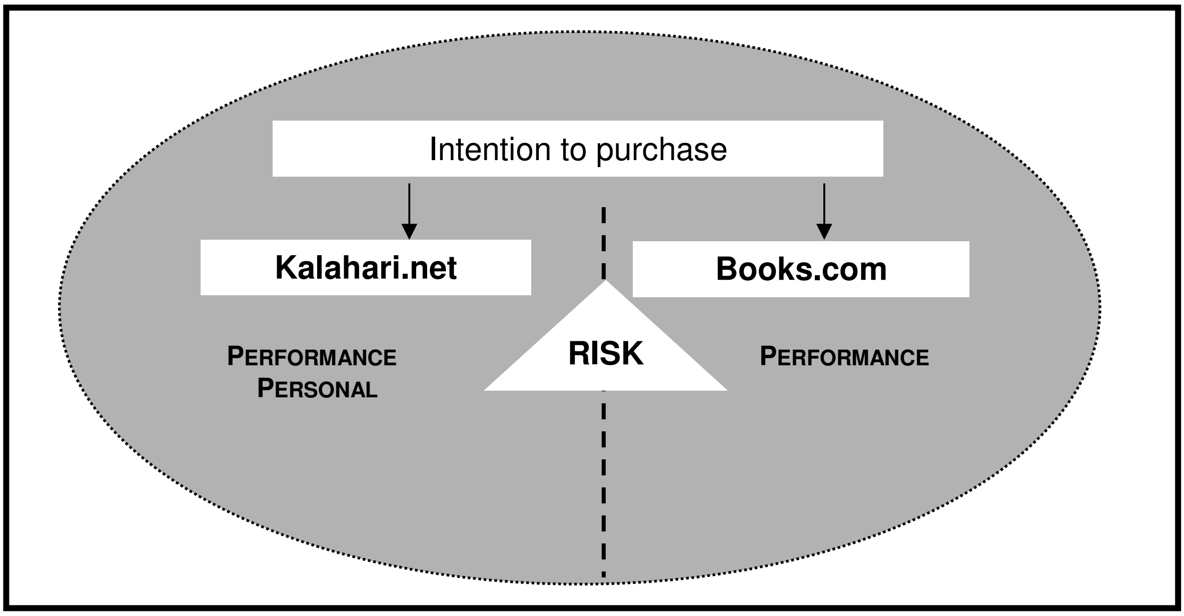
8.3 EMPIRICAL FINDINGS

Each of the study's research objectives was addressed by means of the appropriate statistical test. Results were reported in Chapter 7. The findings and implications of these results are discussed in the context of each research objective.

8.3.1 Risk perceptions and intentions to buy

The first objective of this study was to assess the relative influence of different risk types on intention to buy from a branded website as opposed to a non-branded website. In comparing the two websites, Books.com and Kalahari.net (*see* Chapter 6, section 6.2), it was found that the risk associated with the branded website had a stronger influence (performance and personal) on a consumer's purchase intention than the risk associated with the non-branded website (only performance). The findings indicated that in the case of Kalahari.net, both performance risk and personal risk would influence a consumer's likelihood of purchase from this website (*see* Figure 8.1). Furthermore, this relationship was negative, which means that the higher the perceived performance and personal risk associated with purchasing on Kalahari.net, the less likely it will be that the consumer will purchase from the branded website. However, the mean scores (*see* Chapter 7, Table 7.16) for performance risk and personal risk were different from eachother, with personal risk being much lower than that of performance risk. This finding indicates that although consumers perceive performance risk and personal risk associated with intention to purchase from Kalahar.net, personal risk is perceived as a less serious risk than performance risk in influencing intentions to buy.

FIGURE 8.1 RISK PERCEPTIONS AND INTENTION TO BUY



In the case of Books.com, only performance risk would influence a consumer's likelihood of purchasing from the non-branded website (*see* Figure 8.1), and therefore, the higher the perceived performance risk, the less likely the consumer will be to purchase from the non-branded website. Therefore purchase intention is influenced to a greater extent by perceived risk when purchasing a book on a branded website as opposed to a non-branded website. However, the difference in risk between the two websites is the personal risk. Personal risk is a combination of physical risk and psychological risk. This risk therefore includes items such as uncomfortable feelings, unnecessary tension, a virus infecting the computer, and damage to one's self image.

It is therefore recommended that an online book retailer, whether branded or non-branded, should focus on decreasing the amount of performance risk which consumers perceive when purchasing a book online. Methods of decreasing performance risk could be:

- Provide a three-dimensional illustration of the book to be purchased. In this way the consumer is able to see its thickness, height, width, and general appearance in one glance.

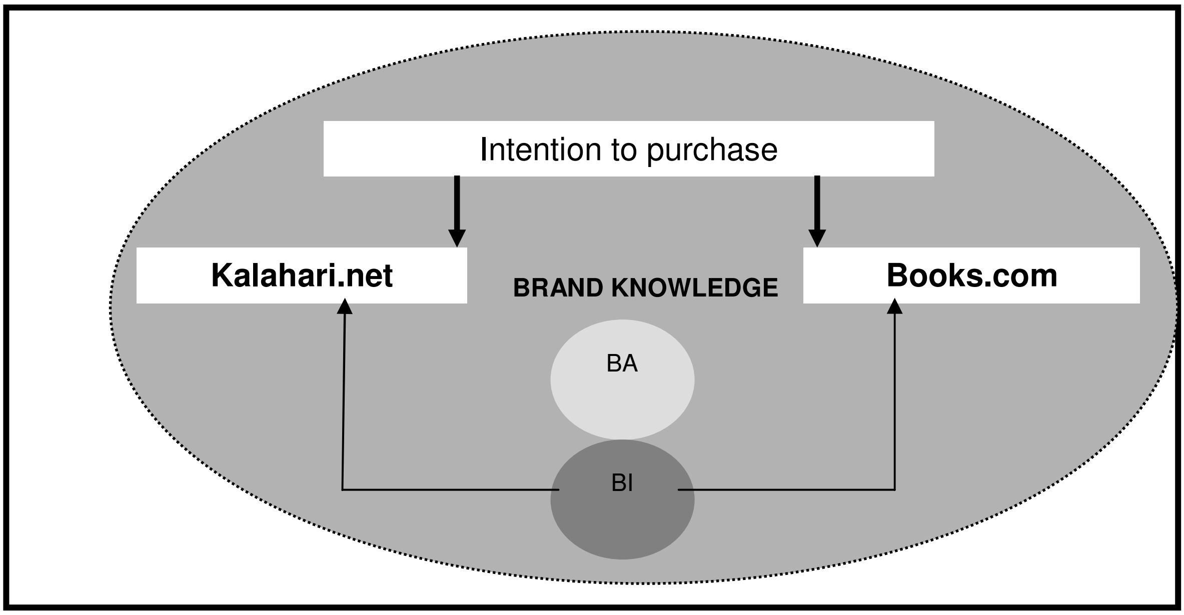
- Provide the consumer with the written specifications of the book, including information such as whether the book is hardcover or soft cover, using recycled or non-recycled paper, number of pages, whether the book contains pictures, and a list of the chapters.
- Provide links to chat forums or blogs where consumers may view the opinions of those who have already read the proposed book. In this way consumers are better able to decide whether they would consider the book to be a "good" read.
- Implement a money-back guarantee. If the book is not delivered within a certain period after payment, the consumer can be offered the option of withdrawing from the transaction and is re-compensated immediately after filing the withdrawal. This facility should be easy to invoke and be hassle-free. In other words, the consumer should be able to type in a reference number which takes them to their account, and then click on the option for withdrawal due to non-delivery of product. Possibly, once the consumer has indicated he/she would like to withdraw, an operator should be notified and immediately email or telephone the respondent to settle the matter.
- The consumer should have the option of viewing the front and back cover, table of contents, and short snippets from a few chapters.
- If a book is provided with a rating, that is, one to five stars, the rating should be accompanied by the source of the rating. For example, 4/5 stars: 562 readers. In this way, consumers may see that the ratings are independent and objective, and are not a biased attempt by the retailer to convince the consumer that he/she will be making the right purchase.
- Furthermore, an online book retailer can consider implementing fingerprint technology as a means for decreasing perceived risk associated with intention to purchase. *Fingerprint technology* refers to a new technological advancement which aids in online transactions. A consumer can purchase a USB fingerprint scanner, or a mouse with a built-in fingerprint scanner. Since each individual's fingerprint is unique, this technology allows for individual consumer identification. This identification is linked to the consumer's online banking account, and the necessary funds are transferred from the consumer's bank account to the online retailer.

Therefore, the consumer does not have to type in any credit card information (McCarthy, 2005)

8.3.2 Brand knowledge, information search, and intention to buy

The second objective examined was whether a consumer's brand knowledge (brand awareness and brand image) and extent of information search when purchasing on a branded website influenced his/her intention to make a purchase on the branded website. As depicted in Figure 8.2, only the brand image portion of consumer brand knowledge influenced a consumer's intention to purchase from Kalahari.net. The empirical results revealed that this relationship was positive. In other words, the more positive the consumer's brand image of Kalahari.net, the more likely the consumer was to purchase from Kalahari.net. Brand awareness and information search, however, did not have any statistically significant influence on a consumer's intention to purchase from Kalahari.net. It was therefore concluded that the extent to which consumers search for information regarding their proposed purchase will not increase their likelihood of purchase from Kalahari.net. Also, an increased awareness of the Kalahari.net brand will not increase their likelihood of purchase from Kalahari.net. This result indicates that it is not sufficient for a consumer to simply be aware of the Kalahari.net brand, but rather the consumer must have perceptions and beliefs regarding the Kalahari.net brand as reflected in the associations held in consumer memory. Thus, it is recommended that if Kalahari.net wants to increase the purchase intention of their consumers, the retailer should focus on building a positive brand image amongst their consumers. Further research will therefore need to be carried out in order to assess the current brand image of Kalahari.net. The retailer will then be able to distinguish the brand segments that may require modification and rejuvenation in the minds of the consumers.

FIGURE 8.2 BRAND KNOWLEDGE, INFORMATION SEARCH AND INTENTION TO BUY



BI=Brand image
BA=Brand awareness

8.3.3 Brand knowledge, information search and intention to buy

The third objective mirrored the second objective. However, unlike the second objective, the third objective refers to the non-branded website, Books.com. The objective was therefore to determine whether a consumer's brand knowledge (brand awareness and brand image) and extent of information search when purchasing on a non-branded website influence his/her intention to make a purchase on the non-branded website. The findings were the same as those found in the second objective, where only the brand image portion of consumer brand knowledge influenced a consumer's intention to make a purchase on Books.com (*see* Figure 8.2). Furthermore, this relationship was positive, meaning, the more positive the consumer's brand image of Books.com, the more likely the consumer was to purchase from Books.com. This finding indicates that although Books.com is a non-branded website, respondents view it as having a brand image, therefore indicating no difference between the Books.com website and the Kalahari.net website. Also, brand awareness and information search did not have any statistically significant influence on a consumer's intention to purchase from Books.com. It was therefore concluded that the extent to which consumers search for information regarding their proposed purchase would not increase their likelihood of purchase from Books.com. Also, an increased awareness of the Books.com brand would not increase their likelihood to purchase from Books.com.

Since consumers do not see a difference between the brand image of Kalahari.net and Books.com, it indicates that the brand image of Kalahari.net is not strong enough to differentiate it from a "fictitious" non-branded Books.com.

It was found by Chen and He (2003) that brand knowledge exerts a direct effect on a consumer's intention to purchase from an online retailer. It was also found that the greater the consumer's brand knowledge of a particular online retailer, the more likely the consumer is to make an online purchase. The results pertaining to objective two and three are consistent with those reported by Chen and He (2003), but only for one of the dimensions of brand knowledge. Brand image had an influence on purchase intention whereas brand awareness did not. Taking these results into account, it can be assumed that a consumer's intention to purchase from a book retailer, whether it is branded (known) or non-branded (unknown), is influenced by the brand image of the book retailer and not the brand awareness or the extent of information search the consumer undertakes before purchase. In this case, however, the fact that purchase intention from a non-branded website is influenced by brand image of the website indicates that the brand image of the branded website is not strong enough to be differentiated in a manner influential enough to set the branded website apart from the non-branded website. It would have to be further investigated whether one would get the same result when purchasing from another online book retailer such as Amazon.com or Exclusivebooks.com.

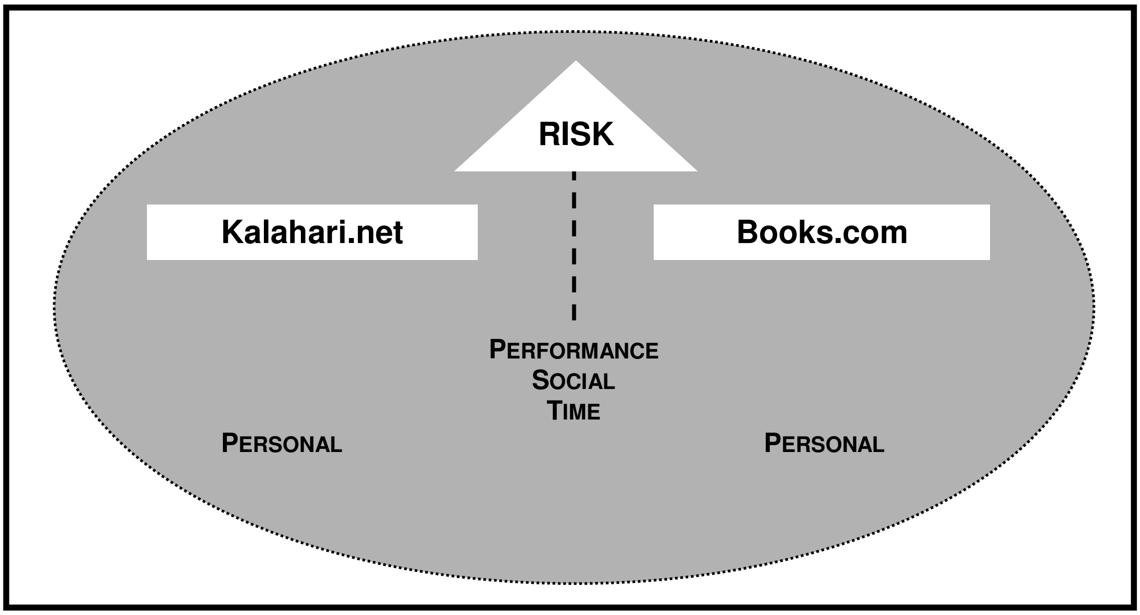
It is therefore recommended that Kalahari.net make every effort to investigate their current branding strategy. The current brand image of Kalahari.net needs to be considered in order to determine the reasons consumers view the Kalahari.net brand in the same manner as the non-branded Books.com.

8.3.4 Differences in risk perceptions

Objective four examined whether there was a difference between the perceived risks associated with purchasing on a branded website as on a non-branded website. As illustrated in Figure 8.3, the findings indicated that performance risk and time risk are perceived as being not statistically different when purchasing on Kalahari.net as opposed to Books.com. This finding is interesting since the mean scores for both performance risk and time risk are relatively high, and therefore consumers perceive performance risk and time risk to be relatively high risk factors when purchasing online irrespective of the site (branded vs. non-branded) they purchase from. If consumers perceive the high-risk factors performance and time risk to be not statistically different when purchasing on Kalahari.net and Books.com, it means that the branding of Kalahari.net does not have a large enough impact on reducing performance and time risk to distinguish it from a non-branded Books.com.

Social risk, however, approached significance, which means that although it cannot be said that social risk was perceived as being statistically different when purchasing on Kalahari.net as opposed to Books.com, it can be said that the mean score (*see* Chapter 7, Table 7.16) for social risk on Kalahari.net was lower than that of Books.com. This discrepancy in means indicates that consumers perceived social risk less seriously on Kalahari.net than on Books.com. Personal risk was found to be significantly different when purchasing a book on Kalahari.net as opposed to Books.com (*refer* to Figure 8.3). The mean scores indicate that personal risk was higher on Books.com than on Kalahari.net. Therefore, consumers perceived more personal risk when shopping on the non-branded website than on the branded website. It can be said that in terms of personal risk, consumers feel safer shopping on Kalahari.net than on Books.com. This finding is possibly due to the fact that Kalahari.net is a branded website, that is, it is familiar amongst consumers, whereas Books.com is a non-branded website where consumers do not have any brand knowledge concerning the website. It must be noted, however, that in the case of both social risk and personal risk, the mean scores are fairly low, thus indicating that although social risk tends to differ, and personal risk differs between a branded to a non-branded website, these risks are still not perceived as particularly high risk factors.

FIGURE 8.3 DIFFERENCES IN RISK PERCEPTIONS



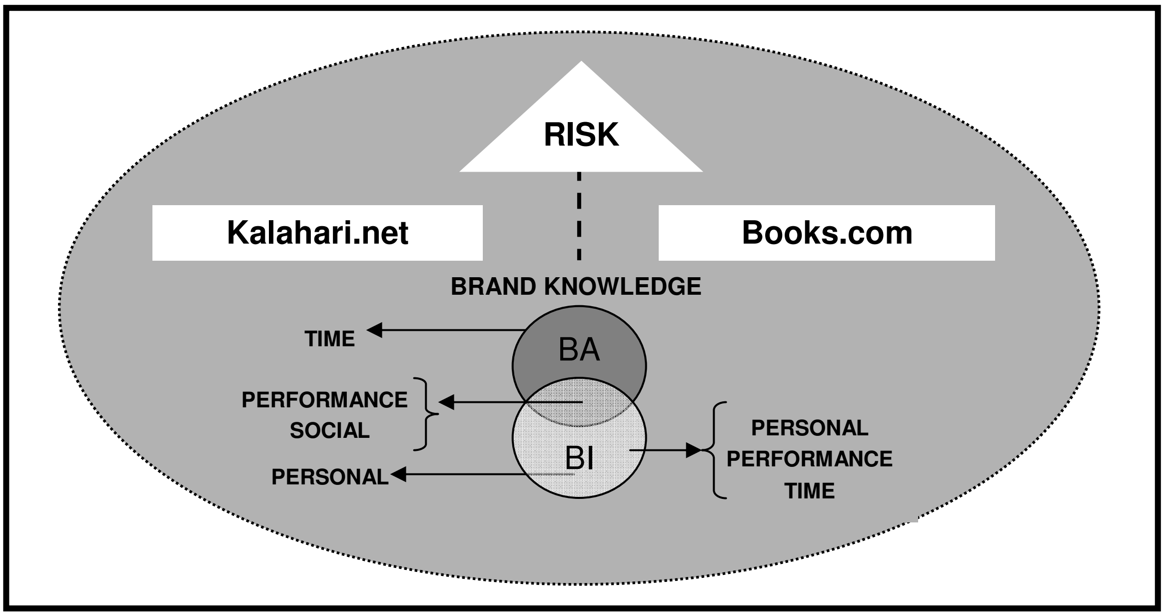
An online book retailer should focus on reducing the perceived risk of the high-risk factors, in this case performance risk and time risk. The ideal situation is one in which consumers perceive less performance risk and time risk when purchasing on the branded website than on the non-branded website. Since this is not the case, it is suggested that Kalahari.net investigate the dimensions of their brand, such as brand image, brand awareness, and brand trust, to identify the reasons why consumers perceive performance, social and time risk as being not statistically different when purchasing on a branded and a non-branded website.

8.3.5 Relationship between risk perceptions and brand knowledge

The fifth objective addressed the question whether the perceived risks associated with purchasing on a branded website as opposed to a non-branded website were influenced by the brand knowledge (brand awareness and brand image) of the website.

As illustrated in Figure 8.4, the findings revealed that for all four risk types on both Kalahari.net and Books.com (except social risk on Books.com), at least one and in some cases both dimensions of brand knowledge influenced the degree of perceived risk associated with purchasing on the particular website.

FIGURE 8.4 RISK PERCEPTIONS AND BRAND KNOWLEDGE



BI=Brand image
BA=Brand awareness

In the case of Performance risk (*see* Figure 8.4), when purchasing on Books.com, the more positive the brand image, the lower the perceived performance risk. This finding indicates that the brand awareness of a non-branded website is not sufficient to sustain lowering perceived performance risk, and that a consumer must actually possess positive thoughts, feelings, images, and beliefs in order for performance risk to decrease when purchasing on an unknown, non-branded website such as Books.com. When purchasing on Kalahari.net, the more positive the brand image and the brand awareness, the lower the perceived performance risk. This means that if a consumer is able to recall Kalahari.net as a place to purchase books, to recognise the Kalahari.net brand, and to carry positive thoughts, feelings, and beliefs about the brand, risks such as the book not being delivered after payment, provision of credit card details, false ratings, and the constraints of viewing the physical characteristics of the book, will be reduced.

In the case of time risk, when purchasing on Books.com, the more positive the brand image, the lower the perceived time risk. Again, this result indicates that brand awareness of a non-branded website is not sufficient to sustain lowering perceived time risk, and that a consumer must actually have positive thoughts, feelings, images, and beliefs towards an online retailer in order for time risk to decrease when purchasing on a non-branded website such as Books.com. When purchasing on Kalaharil.net, the stronger the brand awareness, the lower the perceived time risk. In this case, brand image does not influence perceived time risk associated with purchasing on Kalahari.net. This result indicates that a consumer needs only to recognise the Kalahari.net brand and recall Kalahari.net as a place to buy books in order for the perceived time risk associated with purchasing a book from Kalahari.net to be diminished. It can therefore be concluded that when purchasing on a non-branded website, a consumer's brand knowledge requires that the consumer have positive thoughts, feelings, images, and beliefs concerning the brand if time risk is to be reduced. However, when purchasing on a branded website, a consumer's brand knowledge requires that the consumer only be familiar with the brand in order for time risk associated with purchasing to be reduced. Therefore, in order for risks relating to delayed delivery, length of transaction, and depleted stock to be reduced in the minds of the consumer, it is required that a consumer has a deeper sense of brand knowledge when purchasing from a non-branded website than from a branded website.

In the case of social risk, the dimensions of brand knowledge do not have any influence on the perceived risk associated with purchasing on Books.com (*refer* to Figure 8.4). Thus, brand knowledge and brand image neither lower nor increase the perceived social risk associated with purchasing on a non-branded website. On Kalahari.net, however, both dimensions of brand knowledge influence the social risk associated with purchasing on Kalahari.net, as depicted in Figure 8.4. Thus, the higher the brand awareness and the more positive the brand image of Kalahar.net, the lower the perceived social risk associated with purchasing from the branded website. Social risk mainly concerns risks regarding the likelihood that a consumer will be negatively judged by his/her friends should the consumer purchase a book online. Social risk was also viewed by consumers as a relatively low risk factor. The absence of a relationship between social risk and consumers' brand knowledge on Books.com, yields interesting insights since it would be expected that when purchasing on a non-branded website, a consumer does not know the website. It would therefore be expected that a consumer is unable to recognise the “brand”, unable to recall the website as a place to purchase books, and will not possess any thoughts, feelings, images, and beliefs regarding the particular online retailer. Therefore, a consumer’s brand knowledge concerning Books.com has no influence on reducing or even enhancing the perceived social risk associated with purchasing on the non-branded website. In the case of Kalahari.net, a branded, familiar online retailer, an increase in brand awareness is not sufficient to decrease the perceived social risk associated with purchasing on the website. However, Kalahari.net must focus on building a positive brand image as well, in order to reduce this risk.

It was proposed that both dimensions of brand knowledge (brand image and brand awareness) are necessary to reduce social risk associated with purchasing on Kalahari.net. The reason for this contention is that social risk refers to the consumer's self-image. Social risk concerns the opinions that the consumer's friends may hold in respect of the consumer, should the consumer purchase from Kalahari.net. It is suggested that when a risk becomes personal or detrimental to one’s reputation, the risk is mediated by the familiarity, thoughts, feelings, associations, and beliefs which a consumer has about the particular brand.

In the case of personal risk, on both Books.com and Kalahari.net, only the brand image dimension of brand knowledge exerted an influence on personal risk (*See* Figure 8.4). Therefore on both the branded and the non-branded websites, the more positive the brand image of the website, the lower the perceived personal risk associated with purchasing from those websites. The brand awareness of neither Kalahari.net nor Books.com has any influence on the perceived personal risk associated with purchasing from these websites. Once more, in order for the perceived social risk associated with purchasing on both the branded and the non-branded websites, consumers need to have positive thoughts, feelings, images and beliefs concerning the online retailer. Personal risk is made up of physical risk and psychological risk and therefore concerns risk relating to self-image, social isolation, not feeling comfortable, tension, computer viruses, back tension, and pain in one's wrist when shopping online. Personal risk, was not viewed by consumers to be a very high risk factor, and it is therefore questioned why a positive brand image will influence personal risk and not just an increase in brand awareness. It is proposed that since personal risk refers to risk that affects one personally, a consumer may therefore need to positively associate one's personal self-image with the brand image of the online retailer in order for personal risk to decrease. Further research will need to be conducted to verify this proposition.

8.3.6 The relationship between information search and perceived risk

Objective six considered the influence of information search by a consumer, on the overall perceived risk associated with purchasing from a branded and a non-branded website. Findings indicated that there was in fact a significant relationship between information search by a consumer and overall perceived risk on a branded and a non-branded website. Furthermore, this relationship was positive. This result implies that the more information search a consumer pursues before purchase of a book on Kalahari.net or Books.com, the higher his/her perceived risk associated with purchasing from the particular website. This finding is of particular interest since the literature shows that a consumer conducts a search for more information regarding his/her purchase transaction in order to reduce the risks involved in purchasing (Schiffman and Kanuk, 2004). It would be expected that an increased amount of information search would have more of an impact on lowering the overall perceived risk associated with an unknown website, since the information collected by the potential buyer would ease the mind of the consumer intending to purchase from the unknown website. However, this was not the case, and in fact an increasing amount of information search by the consumer would not lower, but rather increase, the overall perceived risk associated with purchasing on a branded compared to a non-branded website.

It is proposed that a consumer's opportunity for information search has changed to a large extent since the introduction of the internet. Previously, consumers were able to search for more information from sources such as sales people, friends, family, magazines, newspapers and television advertisements. Most of these sources of information can be classified as being subjective since they are controlled by the advertiser (Lamb *et al.*, 2004). It took much effort and time to obtain information from these sources, and most often, consumers would only consider a couple of these sources at a time. The internet, however, allows consumers to search for large volumes of information quickly, and conveniently, with very little effort. Consumers are able to critique information from sources all over the world via chat forums, blogs, service-quality websites, customer-review panels, online consumer communication channels, newspaper articles, advertisements and company websites. The availability of information is global, and opinions are freely known and acquired, and therefore they are both subjective and objective. According to Faith Popcorn's Brain Reserve (a strategic trend based marketing consultancy), a current trends sees consumers searching for information online based on secondary experiences in the form of authority figures such as Askgranny.com (Kingston, 2007). Consumers are able to search for as much information as desired, and this information may be positive or negative and biased or non-biased. With so many different opportunities for the consumer to collect information, it makes it difficult for him/her to form an individual opinion and he/she may therefore become confused. The consumer may be exposed to opinions or facts concerning his/her particular purchase which he/she was not aware of to begin with. These facts, depending on the view of the consumer, may be negatively associated with the particular purchase and therefore increase the perceived risk associated with the intention to purchase. Therefore, the consumer may associate more risk with the purchase after an information search than before the search was conducted. For this reason, the findings related to objective six would make sense, and an increasing amount of information search by the consumer would not lower, but rather increase the overall perceived risk associated with purchasing on a branded and a non-branded website.

8.4 IMPLICATIONS FOR BUSINESS MANAGEMENT

The subject Business Management studies the optimal satisfaction of consumer needs with a limited amount of resources, through planning, coordination, control, and motivation of these resources. A business can accomplish this need fulfilment by means of a number of business functions and associated tasks which are undertaken in a coordinated manner. The most common business functions include purchasing, production, human resources, marketing, public relations, finance, and information. The results of this study hold implications for the marketing function.

The key assumption underlying the marketing function is that, to be successful, an organisation must identify the needs and wants of specific target markets and deliver the desired satisfaction better than the competition (Schiffman and Kanuk 2004). In this study, an attempt was made to better understand how consumers make purchase decisions in a certain environment and under certain circumstances. The environment was that of online purchasing, where a consumer was either to shop on a branded, familiar website, or an unfamiliar non-branded website where the likelihood of certain risks was exposed to the consumers.

The general outcome for the management of online book retailers such as Kalahari.net is that in order to satisfy consumer needs, i.e. in this case, reduce perceived risk associated with online purchase, Kalahari.net needs to focus on developing the consumer brand knowledge of the website to such an extent that consumers are able to distinguish between purchasing on Kalahari.net and a non-existent, unfamiliar online book retailer such as Books.com.

The fact that the number of risks influencing a consumer's intention to purchase from Kalahari.net are higher than those risks influencing intention to purchase from Books.com indicates that the marketing tactics of Kalahari.net are not emphasising the fact that Kalahari.net, because it is a branded and familiar website, is safer to purchase from than a website consumers do not know and are not familiar with. This finding is confirmed by the fact that a consumer's intention to purchase from either of these websites is influenced by the brand image of the website held in the mind of the consumer. To lower risk perceptions, it is necessary that Kalahari.net therefore instil this distinction into the minds of their consumers, in order to increase purchase intention.

Therefore in order for Kalahari.net to secure delivery of a higher standard than that of its competition, the online retailer must be seen as distinguishable from non-branded online book retailers in terms of the amount of risk perceived in shopping on Kalahari.net as opposed to a non-branded website.

8.5 IMPLICATIONS FOR CONSUMER BEHAVIOUR

Since the marketing function is focused on the satisfaction of consumer needs, consumer behaviour theory is predominantly viewed from a marketing perspective. Consumer behaviour is defined as all of the activities of buyers, ex-buyers and potential buyers from pre-purchase deliberation to post-purchase evaluation, and from continued consumption to discontinuance (Foxall, 2005). The findings in this study suggest many implications for the theory of consumer decision-making, where consumers pass through a number of stages in order to make the final purchase decision. The most interesting finding presents new consequences for the second stage in the decision-making process, namely the information search.

The information search stage is concerned with accessing sources of information and becoming aware of product alternatives. For a number of years, the consumer behaviour theory has concurred that consumers collect information in an attempt to reduce the risks associated with purchase (Wood and Sheer, 1996). This study, however, has found that the more consumers search for information on the internet, the higher their perceived risks associated with making a purchase are. It is therefore suggested that the utilisation of the internet as a mechanism for information search presents a new element in contradiction to the traditional theory of consumer behaviour.

It is predicted, that since the internet is so advanced in terms of its access and availability to a global expanse of knowledge, as consumers collect information, their perceived risk increases in response to the great variety of opinions and information sources to which they are exposed. This exposure can cause a negative effect on consumers' judgements because they are now aware of risks that perhaps they were not aware of before the information search was conducted. This reasoning is in accordance with the statement made by Bauer (1960), who referred to consumer behaviour as:

> an instance of risk-taking, based on the fact that any actions of consumers will produce consequences which they cannot anticipate with anything approximating certainty, and some of which at least are likely to be unpleasant (Bauer 1960 as cited in Laroche, Bergeron and Goutaland, 2003).

When conducting an information search on the internet, consumers are unable to anticipate what information they are going to find, and owing to the nature of the internet, it is highly likely that they will be presented with both pleasant and unpleasant information. It is the possibility of receiving unpleasant information which renders the consumer-perceived risk to increase. The consequence for consumer behaviour theory is that an action that was traditionally initiated as a means for decreasing perceived risk can now be attributed to increased consumer-perceived risk associated with online shopping.

8.6 IMPLICATIONS FOR ONLINE SHOPPING

Findings from this study have implications for the online retailing industry. Firstly, the descriptive findings from this sample confirm that more males than females are purchasing books online. This trend could possibly be due to the fact that males are attracted to the convenience of online shopping, and therefore find shopping online to be easier and faster than shopping from a physical store. It has previously been found that males view online shopping as less risky than females do (Garbarino and Strahilevitz, 2004). Perceived risk associated with online shopping by gender is a topic for further research. Online retailers, however, can target males with their advertising and promotional campaigns in an attempt to increase sales and market share.

Secondly, the findings indicate that consumers perceive performance risk and time risk to be the highest-risk factors associated with online purchasing. These risks include factors relating to the book not being delivered after payment, provision of credit card details, false ratings, the constraints of viewing the physical characteristics of the book, delayed delivery, length of transaction, and depleted stock. In order for these risks to be perceived by consumers as low-risk factors, online retailers should consider every effort to decrease or eliminate as many of these risks as possible. A number of suggestions have already been presented in section 8.2.1 of this chapter, but the following actions could also be implemented:

- Emphasise or illuminate the “trusted site seal” for consumers, so that they may become more aware that it exists. Also, educate the consumers to the fact that they may at any time view the validity of the certificate on the web server to which they are connected.
- Provide visible links to information where consumers are able to view the procedure concerning returns, replacements, delivery costs, delivery times, delivery methods and restrictions.
- Make certain that consumers are made aware of the projected time it will take to deliver the ordered goods. Should there be a delay in the delivery, provide notice of this delay in the area of the consumer’s account so that communication between consumer and online retailer is efficient at all times.
- Provide alternative methods of payment so that those consumers who do not feel safe providing their credit cards details may have the option of choosing another form of payment such as bank deposits or electronic fund

transfers. In addition, considerable effort should be made to form alliances with reward programmes such as First National Banks Ebucks and Nedbank's Greenbacks. In this way consumers are provided with another form of payment. Lastly, and very importantly, consumers must be aware that the online retailer offers these alternative forms of payment.

Although consumers perceive performance risk and time risk to be the highest risk factors, they do not perceive these risks differently when purchasing from a branded website as opposed to a non-branded website. It was expected that consumers would feel safer purchasing from the well-known Kalahari.net website as opposed to the unknown, fictitious Books.com, and that performance and time risk would therefore be lower on Kalahari.net than on Books.com. However, this was not the case. The implications of this finding for online retailers are that consumers do not perceive the performance and time risks associated with purchasing from a branded online book retailer to be any different from purchasing from a non-branded online book retailer. However, since the lower risk factors such as social risk and personal risk are perceived differently when purchasing on a branded as opposed to a non-branded website, it is indicative that the branding or familiarity with a website does influence the perceived risk associated with purchasing from the website. Taking this into account, it can be concluded that if the high-risk factors such as performance and time are not perceived to be different, then the branding effort of the branded or known website is not strong enough to make a notable difference with regard to the non-branded website. It is therefore suggested that in the case of Kalahari.net, further investigation should be undertaken to determine the reasons why consumers did not perceive the performance and time risk associated with purchasing from Kalahari.net to be different and therefore lower than the performance and time risk associated with purchasing from Books.com.

In the case of Kalahari.net in specific, there is cause for concern. The overall findings that emerged from comparing Kalahari.net to Books.com indicated that consumers do not perceive much difference in terms of perceived risk and intention to purchase from a branded as opposed to a non-branded website. Either consumers did not know that Books.com does not exist, and it was therefore perceived as a branded website, or they did not perceive a difference between Kalahari.net and Books.com. That is to say, the branded Kalahari.net was viewed in the same manner as the non-branded Books.com. This ought to be a cause for concern for Kalahari.net as the online retailer is a truly branded website. It should be the goal of the marketing department at Kalahari.net to ensure that in the minds of consumers, their website is distinguishable from other online book retailers, especially from those that do not even exist.

Finally, the findings provide strong support that a consumer's brand knowledge influences his/her perceived risk associated with online shopping. The findings indicate that brand knowledge is an important tool that can be used for reducing perceived risk in online shopping. It is, however, the brand image dimension of brand knowledge that has the stronger impact on the perceived risks associated with online shopping, with brand image influencing perceived risk more often than brand awareness. This finding indicates to online retailers that although they are operating in a relatively new and different shopping environment, some traditional concepts in marketing are still important and useful in the new online shopping environment. Therefore, traditional marketing tactics should not be overlooked when developing strategies for online marketing performance.

8.7 IMPLICATIONS FOR THE PERCEIVED-RISK LITERATURE

Perceived risk refers to the nature and amount of risk perceived by a consumer in contemplating a particular purchase decision (Cox and Rich, 1964). The behaviour of consumers in the face of risk has been the subject of a number of studies over the past 40 years (Mitchell 1999). In Chapter 5 (section 5.5) of this study, the evolution of perceived risks was presented. It was noted that perceived risks have been defined and redefined a number of times over the years, mostly due to changing shopping environments and consumer trends.

This study made use of the most frequently cited and most influential dimensions of perceived risk. These dimensions are performance risk, financial risk, time risk, psychological risk, physical risk, and social risk. These six types of perceived risk were previously used in a number of studies concerning purchase at non-store locations such as mail order or telephone shopping (McCorkle, 1990 as cited in Andrews and Boyle, 2008).

The findings of this study, however, revealed that the construct of perceived risk needs to be redefined again, according to the particular context in which this study was undertaken. The exploratory factor analysis presented in Chapter 7 of this study revealed some unexpected dimensions underlying the construct perceived risk. It became clear that in this study the respondents did not in fact perceive six types of risk associated with purchasing online, but only four types of risk. Two of the original types of risk, physical risk and financial risk, collapsed into psychological risk and performance risk respectively. Thus, the construct of perceived risk was reduced to four underlying dimensions as opposed to six. The concept of perceived risk was therefore redefined to consist of performance risk, time risk, social risk and personal risk.

It is not certain why this study's respondents viewed fewer risks, or viewed the risks as overlapping. It is suggested that perhaps a reason for this "downsizing" in perceived risk is due to a current global and local consumer behaviour trend. The daily schedules of consumers are demanding, and lead to an overloaded, stressful lifestyle. Consumers are living in a world of information overload. According to Gordon Hooper of Bateleur Research in South Africa, marketers have bombarded consumers with choice, so much so that consumers are now demanding simplicity (Gordon, 2007). Consumers are looking for balance and convenience that will bring solutions to their overloaded schedules (Seopa, 2008).

It is for this reason that perhaps consumers are unconsciously making an effort to simplify matters in as many areas of their lives as possible. It is suggested that when it comes to online buying, consumers are unconsciously implementing this process of simplification. Instead of considering a number of possible risks when purchasing online, it is possible that consumers have simplified their perceptions regarding risk into more general risk categories as a means decreasing the amount of information transfer in their minds, in an attempt to simplify their buying decision-making. The four types of online risk that emerged in this study, performance, time, social and personal risk therefore represent the main uncertainty priorities which consumers perceive to be associated with shopping online. In more general terms, these priorities concern whether one will experience a satisfying transaction (performance), whether the transaction will be experienced in a timely manner (time), whether others may be disappointed owing to the transaction (social), and lastly whether one will emerge from the transaction unharmed in any way (personal).

The above suggestion for the simplification of perceived risk could possibly be supported by the theory of heuristics. It is already known that perceived risk has an influence on a consumer's decision-making (Schiffman and Kanuk, 2004). It has been suggested that consumers make use of judgemental heuristics as a means of simplifying the decision process (Jordan and Kaas, 2002). Judgemental heuristics are shortened, often by sub-optimal information processing strategies, so-called "mental shortcuts" which are used systematically but often unconsciously to simplify decision-making (Jordan and Kaas, 2002). It is therefore suggested that in this study, it is possible that owing to busy lifestyles of the respondents, the respondents took "mental shortcuts" when assessing the perceived risks associated with purchasing online. Thus, the perceived risks were simplified in their minds, from six types of risk to four.

8.8 LIMITATIONS OF THE STUDY

Several limitations concerning this exploratory study should be noted. Firstly, the sample in this study contains a wide age distribution, where a relatively equal spread of age groups was represented in this study. The results therefore reflect that of the general adult South African population. The risks associated with intention to purchase online are assumed to be different for the separate age groups, and therefore age groups would have to be studied in isolation to assess the attitudes of the various age groups.

Secondly, only certain aspects of the consumer decision-making process were addressed, including information search and purchase intention. The influences of perceived risk on information search and purchase intention were studied in isolation from the other components of the consumer decision-making process.

The context of the study was restricted to the purchase of a book from an online book retailer. The product category chosen may be viewed as a limitation since consumers perceive risks differently for different product categories. Also, when consumers do not know much about the product category, the importance of the brand name may be different. Therefore there is a possibility that in this study, the respondents did not perceive the product category as very risky, and perhaps did not have much knowledge concerning the product category, especially since Kalahari.net is South Africa's highest performing online retailer.

There is also a possibility of response error in that consumers did not recognise Books.com as being a non-branded website. The study would therefore have to be executed again, taking further precautions to control for this type of response error. This could be controlled by means of changing the research design from the survey method to an experimental design.

8.9 AREAS FOR FURTHER RESEARCH

When reflecting on the conceptual framework used in this study, a few areas may be noted for further research.

Firstly, other independent variables such as brand trust or technology readiness could be included to assess the influence of a consumer's level of trust for the online retailer or the consumer's likelihood to adopt a new technology and the perceived risk associated with purchasing from the online retailer.

The study could be repeated, changing the methodology from a survey to an experiment. In this way one would be able to better control for the confusion concerning the branded and non-branded websites since in an experiment, the websites do not have to be given a name and can therefore control for any perceived identities that may accompany an online retailer's name.

Once the level of perceived risk associated with intention to purchase from an online retailer has been investigated, the elements that constitute each type of risk may be investigated. In this way, the specific issues which consumers perceive to be risks when purchasing online would become clearer. By noting the specific issues, online retailers will be able to take actions to eliminate or decrease these risks more specifically and therefore more efficiently and effectively.

Further investigation could also be undertaken to determine whether information search conducted on the internet in fact increases a consumer's risk associated with an online purchase to be higher than the risk that existed at the stage of need recognition.

Lastly, one could investigate whether consumers perceive purchasing from an international online retailer to be more risky than purchasing from a local online retailer, and whether the perceived risks associated with a local online retailer are different from those associated with purchasing from an international online retailer.

8.10 CONCLUSION

The purpose of this study was to examine the perceived risks associated with intention to purchase from a branded website as opposed to a non-branded website. It was found that four types of perceived risk exist, namely performance risk, time risk, social risk, and personal risk. Of these risks, only performance risk had an influence on a consumer’s purchase intention from Books.com, whereas performance and personal risk influenced a consumer’s purchase intention from Kalahari.net. It was also revealed that consumers perceive performance, time, and social risk to be the same when purchasing from Books.com or Kalahari.net. However, personal risk was perceived differently for the two websites.

The brand image dimension of brand knowledge had an influence on a consumers' purchase intention from both Books.com and Kalahari.net. The brand awareness dimension of brand knowledge did not influence purchase intention at all. For all four risk types on both Kalahari.net and Books.com (except social risk on Books.com), at least one and in some cases, both dimensions of brand knowledge influenced the degree of perceived risk associated with purchasing on the particular website.

Finally, it was concluded that the more information search a consumer pursues before purchase of a book on Kalahari.net or Books.com, the higher his/her perceived risk associated with purchasing from the particular website.

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ANNEXURE A

PURCHASING ON THE INTERNET	
NAME:……………………………………………………………..	TEL: (H) (AREA CODE:) ( )…………………………………….
ADDRESS:…………………………………………………………	TEL: (W) (AREA CODE:) ( )……………………………………
……………………………………………………………………..	DATE:………………INTERVIEWER……………………………
……………………………………………CODE:……………	BACKCHECK:…..PERSONAL…1…TELEPHONE……2……

SAY: Good day. My name is…………………Today we are talking to people about online purchasing. May I ask you a few questions? **IF YES, CONTINUE.**

GENDER		AGE		POP.GROUP		HOME LANGUAGE		LSM 8 - 10
Male	1	18 – 24	1	Black	1	English	1	
Female	2	25 – 34	2	White	2	Afrikaans	2	
		35 – 49	3	Coloured	3	Zulu	3	
		50+	4	Asian	4	Other (………)	4	

1. Do you have access to internet at home or at work?	**Yes** **No**	**Continue** **Close interview**	**1** **2**
2. Have you ever bought a product or service online before?	**Yes** **No**	**Continue** **Continue**	**1** **2**
3. Have you ever bought a book on Kalahari.net before?	**Yes** **No**	**Continue** **Continue**	**1** **2**

SAY: Using the scale on this card, please indicate to what extent you agree OR disagree with each of the statements; where 5 means you strongly agree and 1 means you strongly disagree. **Please circle the answer.**

		Strongly agree				Strongly disagree
J1	I will lose money if I buy on the internet	5	4	3	2	1
J2	If I buy a product online, there is a chance that it may not perform as expected	5	4	3	2	1
J3	I feel uneasy if I buy products from an online retailer	5	4	3	2	1
J4	It will be questioned by my friends and relatives if I buy online	5	4	3	2	1
J5	Online retailers do not deliver bought products on time	5	4	3	2	1
J6	I do not think it is safe to buy products from online retailers	5	4	3	2	1

SAY: Lets pretend that you are buying a book from the **Kalahari.net** website. Using the scale on this card, please indicate to what extent you agree OR disagree with each of the statements; where 5 means you strongly agree and 1 means you strongly disagree. **Please circle the answer.**

A1	I would buy a book from Kalahari.net if needed	5	4	3	2	1
A2	If Kalahari.net has the product I need, I will probably buy it from them	5	4	3	2	1
A3	I will recommend Kalahari.net to friends and relatives as a place to purchase books	5	4	3	2	1
A4	I wouldn't mind buying a book from Kalahari.net on behalf of someone else	5	4	3	2	1
B1	I feel it is safe to buy online at Kalahari.net	5	4	3	2	1
B2	If I were to buy online I will recall Kalahari.net as a place to buy books	5	4	3	2	1
B3	I have previously seen or heard of Kalahari.net	5	4	3	2	1
B4	I feel that one is likely to have a satisfying experience when shopping on Kalahari.net	5	4	3	2	1
B5	I am familiar with the Kalahari.net brand	5	4	3	2	1
C1	I would search for more information through search engines before buying a book from Kalahari.net	5	4	3	2	1
C2	I would acquire more information to confirm whether I should buy a product from Kalahari.net	5	4	3	2	1
C3	I would visit chat forums to view previous shopping experience at Kalahari.net before buying from Kalahari.net	5	4	3	2	1
C4	I will not buy directly from Kalahari.net before making a detailed comparison through an online information search	5	4	3	2	1

D1	I am concerned that the book delivered may not be exactly as it appeared when displayed on the computer screen	5	4	3	2	1
D2	I don't like the fact that I cant feel, read, or/and experience the book before buying during online shopping	5	4	3	2	1
D3	It is difficult to ascertain the characteristics of the book such as quality, weight, and size just by looking at its cover and back page provided on the computer screen	5	4	3	2	1
D4	I am concerned that the rating of the book is a false indication of the actual read	5	4	3	2	1
D5	I am concerned that the book will not be what I thought it would be	5	4	3	2	1
E1	It is not safe to give my credit card number when I order at Kalahari.net	5	4	3	2	1
E2	Kalahari.net may not send the book after payment	5	4	3	2	1
E3	I am concerned about the ultimate price of the book when shopping at Kalahari.net because there might be hidden costs.	5	4	3	2	1
E4	I am concerned that my financial details might not be adequately protected if I shop at Kalahari.net	5	4	3	2	1
F1	I am afraid that the book bought at Kalahari.net will not be delivered when expected	5	4	3	2	1

F2	I am concerned about the time delay between ordering and receiving books bought at Kalahari.net.	5	4	3	2	1
F3	Kalahari.net might not have my book in stock and I will have to wait for Kalahari.net to get it in stock	5	4	3	2	1
F4	It would take too much time to return something to Kalahari.net	5	4	3	2	1
F5	I am concerned about the time it takes to buy a book on Kalahari.net	5	4	3	2	1
G1	Buying a book at Kalahari.net will lower my esteem amongst my friends	5	4	3	2	1
G2	If I bought a book at Kalahari.net I think my friends would think that I am not cool	5	4	3	2	1
G3	If I bought a book at Kalahari.net, some friends would think I am trying to show off	5	4	3	2	1
G4	My friends would not encourage me to buy a book from Kalahari.net	5	4	3	2	1
H1	I am concerned that shopping at Kalahari.net could lead to eyestrain because of frequent exposure to computer screen during shopping.	5	4	3	2	1
H2	I am concerned about viruses infecting my computer while I shop at Kalahari.net	5	4	3	2	1
H3	I am concerned about getting carpel tunnel syndrome (pain in wrist) while shopping online at Kalahari.net	5	4	3	2	1
H4	I am concerned that shopping on Kalahari.net could lead to back pain because of my posture when sitting in front of the computer for extended periods of time	5	4	3	2	1
I1	I think shopping at Kalahari.net will harm my self image	5	4	3	2	1
I2	The thought of shopping at Kalahari.net causes me to experience unnecessary tension	5	4	3	2	1
I3	The thought of shopping at Kalahari.net makes me feel uncomfortable.	5	4	3	2	1
I4	Shopping at Kalahari.net will lead to too much social isolation	5	4	3	2	1

SAY: MAY I PLEASE ASK YOU SOME ADDITIONAL QUESTIONS?				
A. What type of work do you do? **(If scholar or student ask:** what work does the main breadwinner from your household do?)	…………………………………………………………………………………			
B. What type of work does your spouse/partner do?	…………………………………………………………………………………			
C. Which of these do you have in the household where you live? **READ OUT EACH**		**YES**	**NO**	
	Microwave	1	0	
	Fridge/freezer	1	0	
	Tumble dryer	1	0	
	Computer/PC at home	1	0	
	DSTV or MNET	1	0	
	Hot running water	1	0	
	Home telephone	1	0	
	Car	1	0	
	Credit facility/accounts (credit card/clothing accounts)	1	0	
	Automatic dishwasher	1	0	
ADD UP THE YES COLUMN (ALL THE 1'S)	**LSM NUMBER**			
D. Are you…….	A child, scholar or student living at home	**CLOSE INTERVIEW**		1
	Renting your flat/house/cottage	**CONTINUE**		2
	Owner of your home	**CONTINUE**		3
E. Is the **total monthly household income** more or less than R10 000 **per month?** (i.e. everyone who is working or has money coming in)	R10 000 or more	**ASK QUESTION F ONLY**		1
	Less than R10 000	**ASK QUESTION G ONLY**		2
	Don't know			3
F. Is it more or less than R20 000 per month?	R20 000 or more			1
	Less than R20 000			2
	Don't know			3
G. Is it more or less than R5000 per month?	R5000 or more			1
	Less than R5000			2
	Don't know			3

THANK THE RESPONDENT FOR THEIR TIME AND CLOSE INTERVIEW

I hereby declare that this is a true interview and I was briefed fully on this interview by Interserv Market Research.

SIGNED:………………………………………………………........................	INTERVIEWER CODE:			

PURCHASING ON THE INTERNET	
NAME:…………………………………………………………….. ADDRESS:………………………………………………………… ……………………………………………………………………….. ……………………………………………CODE:……………	TEL: (H) (AREA CODE:) ( )……………………………………. TEL: (W) (AREA CODE:) ( )…………………………………… DATE:……………….INTERVIEWER………………………… BACKCHECK:…..PERSONAL…1…TELEPHONE…….2……

SAY: Good day. My name is…………………Today we are talking to people about online purchasing. May I ask you a few questions? **IF YES, CONTINUE.**

GENDER		AGE		POP.GROUP		HOME LANGUAGE		LSM 8 - 10
Male	1	18 – 24	1	Black	1	English	1	
Female	2	25 – 34	2	White	2	Afrikaans	2	
		35 – 49	3	Coloured	3	Zulu	3	
		50+	4	Asian	4	Other (………)	4	

1. Do you have access to internet at home or at work?	**Yes** **No**	**Continue** **Close interview**	**1** **2**
2. Have you ever bought a product or service online before?	**Yes** **No**	**Continue** **Continue**	**1** **2**
3. Have you ever bought a book online before?	**Yes** **No**	**Continue** **Continue**	**1** **2**

SAY: Using the scale on this card, please indicate to what extent you agree OR disagree with each of the statements; where 5 means you strongly agree and 1 means you strongly disagree. **Please circle the answer.**

		Strongly agree				Strongly disagree
J1	I will lose money if I buy on the internet	5	4	3	2	1
J2	If I buy a product online, there is a chance that it may not perform as expected	5	4	3	2	1
J3	I feel uneasy if I buy products from an online retailer	5	4	3	2	1
J4	It will be questioned by my friends and relatives if I buy online	5	4	3	2	1
J5	Online retailers do not deliver bought products on time	5	4	3	2	1
J6	I do not think it is safe to buy products from online retailers	5	4	3	2	1

SAY: Lets pretend that you are buying a book from the **Books.com** website. Using the scale on this card, please indicate to what extent you agree OR disagree with each of the statements; where 5 means you strongly agree and 1 means you strongly disagree. **Please circle the answer.**

A1	I would buy a book from Books.com if needed	5	4	3	2	1
A2	If Books.com has the product I need, I will probably buy it from them	5	4	3	2	1
A3	I will recommend Books.com to friends and relatives as a place to purchase books	5	4	3	2	1
A4	I wouldn't mind buying a book from Books.com on behalf of someone else	5	4	3	2	1
B1	I feel it is safe to buy online at Books.com	5	4	3	2	1
B2	If I were to buy online I will recall Books.com as a place to buy books	5	4	3	2	1
B3	I have previously seen or heard of Books.com	5	4	3	2	1
B4	I feel that one is likely to have a satisfying experience when shopping on Books.com	5	4	3	2	1
B5	I am familiar with the Books.com brand	5	4	3	2	1
C1	I would search for more information through search engines before buying a book from Books.com	5	4	3	2	1
C2	I would acquire more information to confirm whether I should buy a product from Books.com	5	4	3	2	1
C3	I would visit chat forums to view previous shopping experience at Books.com before buying from Books.com	5	4	3	2	1
C4	I will not buy directly from Books.com before making a detailed comparison through an online information search	5	4	3	2	1

D1	I am concerned that the book delivered may not be exactly as it appeared when displayed on the computer screen	5	4	3	2	1
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D3	It is difficult to ascertain the characteristics of the book such as quality, weight, and size just by looking at its cover and back page provided on the computer screen	5	4	3	2	1
D4	I am concerned that the rating of the book is a false indication of the actual read	5	4	3	2	1
D5	I am concerned that the book will not be what I thought it would be	5	4	3	2	1
E1	It is not safe to give my credit card number when I order at Books.com	5	4	3	2	1
E2	Books.com may not send the book after payment	5	4	3	2	1
E3	I am concerned about the ultimate price of the book when shopping at Books.com because there might be hidden costs.	5	4	3	2	1
E4	I am concerned that my financial details might not be adequately protected if I shop at Books.com	5	4	3	2	1
F1	I am afraid that the book bought at Books.com will not be delivered when expected	5	4	3	2	1

F2	I am concerned about the time delay between ordering and receiving books bought at Books.com.	5	4	3	2	1
F3	Books.com might not have my book in stock and I will have to wait for Books.com to get it in stock	5	4	3	2	1
F4	It would take too much time to return something to Books.com	5	4	3	2	1
F5	I am concerned about the time it takes to buy a book on Books.com	5	4	3	2	1
G1	Buying a book at Books.com will lower my esteem amongst my friends	5	4	3	2	1
G2	If I bought a book at Books.com I think my friends would think that I am not cool	5	4	3	2	1
G3	If I bought a book at Books.com, some friends would think I am trying to show off	5	4	3	2	1
G4	My friends would not encourage me to buy a book from Books.com	5	4	3	2	1
H1	I am concerned that shopping at Books.com could lead to eyestrain because of frequent exposure to computer screen during shopping.	5	4	3	2	1
H2	I am concerned about viruses infecting my computer while I shop at Books.com	5	4	3	2	1
H3	I am concerned about getting carpel tunnel syndrome (pain in wrist) while shopping online at Books.com	5	4	3	2	1
H4	I am concerned that shopping on Books.com could lead to back pain because of my posture when sitting in front of the computer for extended periods of time	5	4	3	2	1
I1	I think shopping at Books.com will harm my self image	5	4	3	2	1
I2	The thought of shopping at Books.com causes me to experience unnecessary tension	5	4	3	2	1
I3	The thought of shopping at Books.com makes me feel uncomfortable.	5	4	3	2	1
I4	Shopping at Books.com will lead to too much social isolation	5	4	3	2	1

SAY: MAY I PLEASE ASK YOU SOME ADDITIONAL QUESTIONS?				
A. What type of work do you do? **(If scholar or student ask:** what work does the main breadwinner from your household do?)	…………………………………………………………………………			
B. What type of work does your spouse/partner do?	…………………………………………………………………………			
C. Which of these do you have in the household where you live? **READ OUT EACH**		**YES**	**NO**	
	Microwave	1	0	
	Fridge/freezer	1	0	
	Tumble dryer	1	0	
	Computer/PC at home	1	0	
	DSTV or MNET	1	0	
	Hot running water	1	0	
	Home telephone	1	0	
	Car	1	0	
	Credit facility/accounts (credit card/clothing accounts)	1	0	
	Automatic dishwasher	1	0	
ADD UP THE YES COLUMN (ALL THE 1'S)	**LSM NUMBER**			
D. Are you…….	A child, scholar or student living at home	**CLOSE INTERVIEW**		1
	Renting your flat/house/cottage	**CONTINUE**		2
	Owner of your home	**CONTINUE**		3
E. Is the **total monthly household income** more or less than R10 000 **per month?** (i.e. everyone who is working or has money coming in)	R10 000 or more	**ASK QUESTION F ONLY**		1
	Less than R10 000	**ASK QUESTION G ONLY**		2
	Don't know			3
F. Is it more or less than R20 000 per month?	R20 000 or more			1
	Less than R20 000			2
	Don't know			3
G. Is it more or less than R5000 per month?	R5000 or more			1
	Less than R5000			2
	Don't know			3

THANK THE RESPONDENT FOR THEIR TIME AND CLOSE INTERVIEW

I hereby declare that this is a true interview and I was briefed fully on this interview by Interserv Market Research.

SIGNED:………………………………………………………........................	INTERVIEWER CODE:			

<u>SHOW CARD B</u>

Using the scale shown here how much do you agree with the following statements?

 **Strongly agree**	**Agree slightly**	 **Neither agree nor disagree**	**Disagree slightly**	 **Strongly disagree**
5	4	3	2	1

ANNEXURE B

ANNEXURE B: CHARACTERISTICS OF LSM CATEGORIES 7 TO 10

LSM 7 (8.5%)	LSM 8 (6.2%)
DEMOGRAPHICS	**DEMOGRAPHICS**
Male 35-49 Matric and higher, Urban R7 579 average household income per month	Male 35+ Matric and higher, Urban R10 015 average household income per month
MEDIA	**MEDIA**
Wide range of commercial & community radio TV: SABC 1,2,3, e.tv, M-Net Daily/Weekly Newspapers, Magazines Accessed internet 4 weeks Cinema & Outdoor	Wide range of commercial & community radio TV: SABC 1,2,3, e.tv, M-Net, DStv Daily/Weekly Newspapers, Magazines Accessed internet 4 weeks Cinema & Outdoor
GENERAL	**GENERAL**
Full access to services Increased ownership of durables plus motor vehicle Participation in all activities	Full access to services Full ownership of durables, incl. DVD, PC and satellite dish Increased participation in activities

LSM 9 (7.2%)	LSM 10 (6.2%)
DEMOGRAPHICS	**DEMOGRAPHICS**
35+ Matric and higher, Urban R13 500 average household income per month	35+ Matric and higher, Urban R20 278 average household income per month
MEDIA	**MEDIA**
Wide range of commercial & community radio TV: SABC 2,3, e.tv, M-Net, DStv Daily/Weekly Newspapers, Magazines Accessed internet 4 weeks Cinema & Outdoor	Wide range of commercial & community radio TV: SABC 2,3, e.tv, M-Net, DStv Daily/Weekly Newspapers, Magazines Accessed internet 4 weeks Cinema & Outdoor
GENERAL	**GENERAL**
Full access to services Full ownership of durables, Incl. PC, DVD and satellite dish Increased participation in activities, excluding stokvel meetings	Full access to services Full ownership of durables, Incl. PC, DVD and satellite dish Increased participation in activities, excluding stokvel meetings

ANNEXURE C

ANNEXURE C: FULL FACTOR LOADINGS

INITIAL FACTOR SOLUTION: ROTATED FACTOR MATRIX

Item		Factor			
		1	2	3	4
PrR Exact appearance	D1	.047	**.705**	.129	.068
PrR Intangible: read/feel	D2	.087	**.795**	.096	.075
PrR Intangible: weight/size	D3	.049	**.717**	.162	.026
PrR False rating	D4	.056	**.737**	.184	.119
PrR Not as expected	D5	.031	**.767**	.250	.074
FR Credit card	E1	.121	**.530**	.319	-.031
FR Not send after pay	E2	.201	**.593**	.361	.121
FR Hidden costs	E3	.159	**.578**	**.458***	.019
FR Financial details	E4	.147	**.570**	**.467***	-.082
TR Not delivered on time	F1	.123	**.489**	**.635***	.084
TR Time delay: order/receive	F2	.141	.272	**.746**	.011
TR No stock delay	F3	-.010	.211	**.743**	.092
TR Too long to return book	F4	.033	.275	**.706**	-.059
TR Time takes to buy online	F5	.083	.241	**.679**	.223
SR Lower esteem	G1	.335	.140	.011	**.791**
SR Friends think I'm not cool	G2	.357	.097	.079	**.808**
SR Friends think I'm show off	G3	**.432***	.080	.076	**.745**
SR No encouragement buy	G4	.381	-.015	.088	**.613**
PhR Eystrain	H1	**.650**	.077	.082	**.406***
PhR Computer virus	H2	**.638**	.124	.271	.039
PhR Pain in wrist	H3	**.760**	.162	.015	.211
PhR Back pain	H4	**.807**	.134	.014	.101
PscR Harm self image	I1	**.725**	.091	-.004	.333
PscR Unnecessary tension	I2	**.785**	.085	.093	.242
PscR Feel uncomfortable	I3	**.696**	.076	.120	.296
PscR Social isolation	I4	**.738**	-.008	.024	.162

* Cross-loadings

SECONDARY FACTOR SOLUTION: ROTATED FACTOR MATRIX
FULL FACTOR LOADING

Item		Factor			
		Personal risk	Performance risk	Time risk	Social risk
PhR Computer virus	H2	.058	**.714**	.129	.041
PhR Pain in wrist	H3	.101	**.803**	.103	.052
PhR Back pain	H4	.076	**.736**	.192	-.038
PscR Harm self image	I1	.083	**.752**	.186	.093
PscR Unnecessary tension	I2	.044	**.777**	.250	.059
PscR Feel uncomfortable	I3	.094	**.506**	.331	.032
PscR Social isolation	I4	.192	**.587**	.338	.163
TR Time delay: order/receive	D1	.165	.290	**.741**	-.022
TR No stock delay	D2	.015	.234	**.748**	.042
TR Too long to return book	D3	.045	.284	**.722**	-.058
TR Time takes to buy online	D4	.077	.259	**.715**	.249
SR Lower esteem	D5	.337	.147	.003	**.801**
SR Friends think I'm not cool	E1	.367	.102	.074	**.806**
SR No encouragement buy	E2	.369	-.017	.090	**.654**
PrR Exact appearance	F2	**.621**	.113	.286	.044
PrR Intangible: read/feel	F3	**.746**	.161	.019	.214
PrR Intangible: weight/size	F4	**.801**	.127	.017	.107
PrR False rating	F5	**.746**	.087	-.011	.345
PrR Not as expected	G1	**.795**	.088	.092	.246
FR Credit card	G2	**.712**	.078	.119	.300
FR Not send after pay	G4	**.767**	-.003	.005	.109

FACTOR ANALYSIS: BRAND KNOWLEDGE

Item		Factor	
		1	2
BK I Feel it is safe to buy	B1	0.878	0.085
BK Recall as a place to buy	B2	0.850	0.187
BK Previously seen or heard	B3	0.180	0.932
BK Satisfying experience	B4	**0.713***	**0.442***
BK I am familiar	B5	0.210	0.925

* Cross-loadings

SECONDARY FACTOR ANALYSIS: BRAND KNOWLEDGE

FULL FACTOR LOADING

Item	Factor	
	Brand awareness	Brand image
BK I feel it is safe to buy B1	0.119	**0.898**
BK Recall as a place to buy B2	0.220	**0.865**
BK Previously seen or heard B3	**0.941**	0.165
BK I am familiar B5	**0.934**	0.188

FACTOR MATRIX: PURCHASE INTENTION

Item	Factor
	1
A1 I would buy from Books.com	.870
A2 If Books.com have what I need, I would buy	.857
A3 I would recommend to friends and family	.851
A4 I wouldn't mind buying on behalf of someone else	.718

FACTOR MATRIX: INFORMATION SEARCH

Item	Factor
	1
C1 I would search through search engines	.697
C2 I would search for confirmation before buying	.846
C3 I would visit chat forums before purchase	.791
C4 I would make a detailed comparison	.742

FACTOR MATRIX: ONLINE RISK IN GENERAL

Item	Factor
	1
J1 I will lose money	.810
J2 Product may not perform as expected	.798
J3 I feel uneasy	.756
J4 It will be questioned by my friends and relatives	.737
J5 Online retailers do not deliver bought products on time	.654
J6 I do not think it is safe to buy online	.537