INTERNET'S INFLUENCE ON THE MARKETING ACTIVITIES OF SOUTH AFRICAN COMPANIES

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Vanderbijlpark

2012

DECLARATION

I declare that:

"Internet's influence on the marketing activities of South African companies"

is my own work, that all the sources used or quoted have been identified and acknowledged by means of complete references, and that this dissertation has not previously been submitted by me for a degree at any other university.

Kirsty-Lee Sharp

October 2011.

TO WHOM IT MAY CONCERN

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HOE DIE INTERNET BEMARKINGSAKTIWITEITE VAN SUID AFRIKAANSE BESIGHEDE BEïNVLOED

Sleutelwoorde: Internet, bemarkingsaktiwiteite, bemarkingsdefinisies, waarde skepping, Suid Afrika

Die internet is een van die mees gevorderde tegnologiese ontwikkelings van die moderne eeu en is besig om teen ‘n eksponensieële spoed tussen besigheid-na-verbruiker en besigheid-na-besigheidsorganisasies te versprei. Dit het veroorsaak dat dit ‘n onherroeplike en onkeerbare neiging geword het en beslis essensieël is vir besighede om dit in hul werksaamhede te inkorporeer.

Die Internet, Internet tegnologie en Internet dienste, veral webruimtes, word wyd erken en is daarvoor bekend dat dit ‘n aansienlike impak op die praktyk van bemarking gehad het en nogsteeds het. Die aanneem van die Internet en die webruimtes is ‘n onafhanklike veranderlike wat twee onderling verbonde aspekte, naamlik die onderneming se voorstelling van hul bemarkingsaktiwiteite en die beskrywing van hul markte, beïnvloed en tesame ‘n direkte invloed op die skepping van groter verbruikers waarde het. Alhoewel navorsingsstudies, oor die Internet se impak op bemarking in verskillende lande en op verskillende tye in die verlede dieselfde neigings getoon het, het vooruitgang in inligtings tegnologie en ‘n toename in Internet verbruik van die 1990’s ‘n vereiste geword om bemarkingspersepsies en die veranderlikes in bemarkingspraktyke wat deur die Internet veroorsaak was te herondersoek. Die studie beoog om die veranderlikes te bepaal wat van die Internet ontstaan het, deur die voorstelling van bemarkingsaktiwiteite, die beskrywing van markte en die skep van groter verbruikers waarde, gebasseer op hersiende literatuur van ervaringsleer wat gevind word in die opinies van Suid-Afrikaanse bemarkingsverbruikers.

Die doel van die studie was om te bepaal hoe die Suid Afrikaanse bemarkingsverbruikers se persepsies deur die intenet beïnvloed word in die praktyk van bemarking. Vyf belangrike vrae was tydens die studie gevra en beantwoord:

1. Hoe het die internet, besighede se begrip ten opsigte van hulle bemarkingsaktiwiteite verander?

2. Hoe het die internet besighede se markte gedefinieër?

3. Hoe het die internet besighede se maniere verander om meer waarde vir die verbruiker te skep?

4. In watter mate het Suid-Afrikaanse bemarkers se persepsies ten opsigte van die internet se invloed vanaf die 1990's tot 2011 verander?

5. Tot watter mate het Suid Afrikaanse bemarkers se persepsies 'n invloed op die internet ten opsigte van bemarking gehad in vergelyking met studies in Australië in 2001 (Leong, Ewing & Pitt, 2003) en in Iran in 2007 (Ghazisaeedi, Pitt & Chaharsooghi, 2007)?

Suid-Afrikaanse verbruikers populasie is gebruik vir die studie. Die proefraamwerk bestaan uit die Top 200 Suid Afrikaanse maatskappye wat volgens hul omset op die ranglys is, wat op die Johannesburgse Aandelebeurs gelys is en in die "Financial Mail" (2009) gepubliseer is. 'n Nie-waarskynlike proefraamwerk van 100 maatskappye was in April 2011 geneem. Die telefoongids was gebruik om telefoonnommers van die maatskappye te kry om sodoende die sekretaresses te kontak om sekere besonderhede van hul bemarkingsbestuurders en bemarkings direkteure te bekom om sodoende toestemming te kry om die vraelyste aan te stuur na die onderskeie individue. 'n Gestruktureerde self-geadministreerde vraelys was aan die persone ge-e-pos wat toestemming daarvoor verleen het.

Die individue is gevra om op die vraelys volgens 'n 5-punt Likertskaal aan te toon tot watter mate hul persepsies beïnvloed is deur die internet en hoe hulle bemarkingspraktyke binne die besighede op 31 items wat gedeel is in 3 gekonstruktueerde ontledings van her-begrippe van hul bemarkingsaktiwiteite en veranderlike bemarkingsdefinisies en om meer waarde vir die verbruiker te skep. Die individue is ook gevra om sekere demografiese data in te sluit.

Die bevindinge het bewys dat die internet wel besighede se begrip verander het, ten opsigte van hul bemarkingsaktiwiteite, hoe hulle, hul markte definieer en hoe hulle meer waarde vir hul verbruikers skep. Wanneer die verskeie navorsingstudies vergelyk word van 1)1997 en die 2011 Suid Afrikaanse proefraamwerk en die 2) 2001 Australiese en die 2011 Suid-Afrikaanse proefraamwerk, is dit duidelik dat die proefraamwerk nie betekenisvol verskil in hul persepsies teenoor die items in elk van die 3 gekonstruktueerde ontledings en algehele skaal nie. Gevolglik is die verskille tussen die rou skaal en die twee navorsingstudies aangaande die 3 gekonstruktueerde ontledings en die algehele skaal beide statisties en prakties nie-betekenisvol nie.

Wanneer die 2005 Iranese studie teenoor die 2011 Suid-Afrikaanse studie vergelyk word, wys die resultate dat beide die eerste ontledings en die algehele skaal betekenisvol statisties verskil teen $p<0.05$. Aangaande die eerste ontleding is die omvang wat die besighede se begrip t.o.v internet en die verandering van hul besigheidsaktiwiteite betekenisvol en statisties verskil tussen die twee studies met $p=0.002<0.05$. Na aanleiding van die algehele skaal is die internet se invloed op die bemarkingsaltiwiteite van ‘n besigheid, betekenisvol statisties verskillend tussen die tweede studie met $p=0.046<0.05$. Met die uitsondering van die eerste ontleding en die algehele skaal is daar geen betekenisvolle statistiese verskille tussen die 2005 Iranese en die 2011 Suid-Afrikaanse studie en die tweede en derde ontleding nie. Die resultate bewys dat die proefraamwerk van die twee studies wat uitgevoer is in Iran 2005 en die onlangse Suid-Afrikaanse studie in 2011 nie betekenisvol verskil in hul persepsies teenoor die items in die tweede en derde ontledings nie. Om te bepaal of daar betekenisvolle praktiese verskille in die items tussen die twee studies is, is “Cohen’s D-statistic” gebruik. Daar is ‘n klein effek wat na die praktiese beweeg in die eerste ontleding ($D=0.422$) en die algehele skaal ($D=0.268$).

Na aanleiding van bogenoemde is dit duidelik dat al die belangrike areas van bemarking betekenisvol beïnvloed word deur die internet. Gevolglik het internet bemarking onontbeerlik geword so ook ‘n onherroeplike en onkeerbare neiging en besighede moet ‘n doelbewuste poging aanwend om die tegnologie wat beskikbaar is te gebruik in die nuwe digitale besigheidsomgewing.

ABSTRACT

INTERNET'S INFLUENCE ON THE MARKETING ACTIVITIES OF SOUTH AFRICAN COMPANIES

KEY WORDS: Internet, marketing activities, market definitions, value creation, South Africa

The Internet is one of the most advanced technologies of modern times and it is diffusing at an exponential rate amongst business-to-consumer and business-to-business organisations. This has resulted in it becoming an irrevocable and an unstoppable trend, thereby making it vital for companies to incorporate it into their businesses.

The Internet, Internet technologies and Internet services, particularly the Web, are widely acknowledged to have had and to continue to have a considerable impact on the practice of marketing. The adoption of the Internet and the Web is an independent variable influencing two interrelated aspects of the marketing function, namely the company's conceptualisation of its marketing activities and the definition of its markets, which together directly influence the creation of greater customer value. Although research studies regarding the Internet's impact on marketing conducted in the past in different countries and at different times produced quite similar trends in responses, advances in information technology (IT) and the increased Internet usage since the late 1990s necessitated reinvestigating marketers' perceptions as to the changes in market practices brought about by the Internet. This study sought to determine the changes arising from the Internet in the conceptualisation of marketing activities, the definition of markets and the creation of greater customer value, based on a literature review and on empirical evidence founded on the opinions of South African marketing practitioners.

The purpose of this study was to determine the South African marketing practitioners' perceptions of the Internet's influence on the practice of marketing. Five focal questions were asked and answered by the study:

1. How has the Internet changed the way that companies conceptualise their marketing activities?

2. How has the Internet changed the way that companies define their markets?

3. How has the Internet changed the way that companies create value for their customers?

4. To what extent have South African marketers' perceptions of the influence of the Internet on marketing changed from the late 1990s to 2011?

5. To what extent do South African marketers' perceptions of the influence of the Internet on marketing differ to those in studies conducted in Australia in 2001(Leong, Ewing & Pitt, 2003) and in Iran in 2007 (Ghazisaeedi, Pitt & Chaharsooghi, 2007)?

For this study, the target population comprised South African marketing practitioners. The sampling frame consisted of the top 200 South African companies of 2009, ranked according to turnover, listed on the Johannesburg Stock Exchange (JSE), as published by the Financial Mail (2009). A non-probability, judgment sample of the 100 of these top South African companies was taken in April 2011. The study was conducted without replacement sampling. The telephone directory was used to obtain the telephone numbers of these companies so that the secretaries could be contacted to obtain the particulars of the marketing managers or marketing directors of the companies and permission to forward the questionnaire to the respective individuals. A structure self-administered questionnaire was then be emailed to those respondents from whom telephonic permission had been obtained.
The questionnaire requested respondents to indicate on a five-point Likert scale their perceptions as to the extent to which the Internet influences the marketing practices within their company on 31 items divided into the three constructs of re-conceptualising marketing activities, changing market definition and creating greater customer value. In addition, the respondents were asked to provide certain demographic data.

The findings indicate that the Internet has changed the way companies conceptualise their marketing activities, define their markets and create value for their customers in a variety of ways. When comparing this study against the results of the other three studies it is evident, that between the 1997 and the 2011 South African study and the 2001 Australian study and the 2011 South African study, the respondents did not vary significantly in their perceptions towards the items in each of the three constructs and the overall scale. Hence, the differences between the mean scores of the two studies concerning the three constructs and the overall scale are both statistically and practically non-significant.

When comparing the 2005 Iranian study against the 2011 South African, the results show that for both the first construct and the overall scale there is a significant statistical difference at $p < 0.05$. Concerning to Construct 1, the extent to which the Internet has changed the way that companies conceptualise their marketing activities, a significant statistical difference exists between the two studies, with $p = 0.002 < 0.05$. Furthermore, with regard to the overall scale, the Internet's influence on the marketing activities of companies, a significant statistical difference exists between the two studies, with $p = 0.046 < 0.05$. With the exception of Construct 1 and the overall scale, there is no significant statistical difference between the 2005 Iranian and the 2011 South African studies on Construct 2 and Construct 3. These results indicate that the respondents from the two studies conducted in Iran in 2005 and more recently in South Africa in 2011 did not vary significantly in their perceptions towards items in the second construct and the third construct. In order to assess whether there was a significant practical difference in the item means between the two studies, Cohen's D-statistic was used. There is a small effect, moving toward practical significance on Construct 1 ($D = 0.422$) and the overall scale ($D = 0.268$).

From this, it is evident that all main areas of marketing are being significantly influenced by the Internet. Therefore, Internet marketing has become a business imperative owing to it being an irrevocable and an unstoppable trend and, as a result, companies must make a concerted effort to collaborate the technologies available to them to avoid failure in the new digital business environment.

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CHAPTER 1

INTRODUCTION AND PROBLEM STATEMENT

1.1 INTRODUCTION

The Internet, Internet technologies and Internet services, particularly the World Wide Web (Web), are widely acknowledged to have had and to continue to have a considerable impact on the practice of marketing (Palumbo & Herbig, 1998; Morris, Marais & Weir 1997; Leong, Ewing & Pitt 2003; Ghazisaeedi, Pitt & Chaharsooghi, 2007; Schiffman, Kanuk & Wisenblit, 2010: 32). Experts state that the Internet, which first became commercially available in 1991 (Hamill & Gregory, 1997), represents the most significant marketing channel that has been developed in years. The Internet offers companies inexpensive and sophisticated tools for advertising, taking and placing orders, promoting the philosophies of their companies and communicating with customers all over the world (Schiffman *et al*., 2010: 32).

Eid and Trueman (2002) propose that the Internet has changed some of the elements of the marketing mix and that Internet marketing is very different compared to traditional marketing. Corbitt (1996:58) argues this point further by stating that the costs of promoting and marketing products and services on the Internet are very low compared to the cost of traditional marketing and advertising and that these lower costs allow companies, no matter what size they are, to reach international markets (Palumbo & Herbig: 1998).

Avlonitis and Karayanni (2000) suggest that the Internet provides marketers with an effective way to identify customer needs, customise products in accordance with the customers' needs and encourage faster product testing, thereby leading to shorter product life cycles. The Internet provides companies with a tool to communicate interactively with their customers and reduce many distribution problems.

According to McGrath (2008), technology affects almost every aspect of individuals' lives. As a result, virtually anything an individual desires may be delivered to their door in a matter

of days. Philp (2010a:8) adds that the Internet has fundamentally changed human culture as well as commerce and that these changes have, as yet, probably not been fully grasped. McGrath (2008) goes on to say that as much as the personal lives of individuals have changed, the business world has revolutionised almost beyond recognition in the past few decades.

Mohammed, Fisher, Jaworski and Paddison (2003:3) indicate that the Internet was designed to foster connectivity and to allow efficient exchange of information. McGrath (2008) suggests that the Internet has eradicated distance when it comes to communication. As communication and information travel faster and faster, the world seems smaller and smaller. As a result, it is bringing people in different countries together within seconds. This has significant implications for the way companies conduct their organisational activities. Morris *et al.* (1997) note that rapid changes in information technology (IT) are redefining many aspects of the organisational management activity. These technological advances are fundamentally about the new ways in which information can be processed, stored and conveyed. The Web is currently the most noteworthy example of IT to have a significant impact on global commercial activity.

According to McGrath (2008), business organisations have been at the forefront of technology for ages. Anything that is able to speed up production will draw in more business. It is evident that nowadays a significant portion of organisational activities is conducted via personal computers and communication devices. Computers offer companies a way to organise dense databases, personal schedules and various other forms of essential information. From its early days as a repository of free information, group discussions and non-commercial linkages, the Internet has evolved into a highly commercial medium replete with advertising and targeting opportunities (Mohammed *et al.* 2003:2).

In general, the Internet has proven to be an inexpensive way to reach more customers and is unrivalled in terms of its ability to provide customers with richly informative and entertaining marketing communications (Morris *et al*., 1997). Nowadays, if an individual cannot find a company online or if it has a Web site that is perceived as being outdated or unattractive, it is

viewed as being completely unprofessional. Many companies have succeeded in using the Internet as their primary or sometimes only medium, for conducting business. Nevertheless, it is not always as simple as it sounds. Any company doing business online must consider security, privacy and even copyright issues (McGrath, 2008).

The Internet has changed the way South Africans do business and go about their daily activities. By the end of December 2010, the number of South Africans online was expected to be 6.3 million, of which about three million use the Internet to shop (Swart, 2010:9). As of 30 June 2010, the total number of Internet users worldwide was 1966 514 816, which amounts to 28.7 percent of the world population. The growth percentage from 2000 to 2010 was 444 percent. In 2009, the latest population estimate for South Africa, according to the US Census Bureau, was 49 052 489 of which 5 300 000 are Internet users, representing 10.8 percent of the South African population (Internetworldstats.com, 2010).

1.2 PROBLEM STATEMENT

According to Morris *et al.* (1997), adoption of the Web is an independent variable influencing two interrelated aspects of the marketing function, namely, the company's conceptualisation of its marketing activities and the definition of its markets. The potential changes to key marketing practices include the Internet's impact on segmentation, targeting, the four Ps (product, price, place and promotion), customer service and value creation. Changes in market definition imply new target markets and market segments, including global markets, better segmentation and the elimination of less profitable segments or customers. Ghazisaeedi *et al.* (2007) state that companies that are at the first levels of Internet adoption only enjoy a small portion of the marketing opportunities created by the Internet and that it is only when higher levels of Internet adoption are reached that the Internet's true interactive potential can be utilised.

Morris *et al.* (1997) empirically determined that the Internet has influenced, and will continue to influence, South African companies in the future in a variety of ways. They predicted that the Internet would influence the marketing activities of these companies by allowing the effective communication of product or service information, the establishment of two-way

interactive relationships with customers, doing a better job of selling and enhancing marketers' capabilities to bring new products to their respective markets. In addition, they indicated that the Internet prompts the expansion of target market size, the targeting of global customers and the add-on of new segments to existing target markets, thereby resulting in South African companies having to redefine their markets. Tied in with market definition and marketing activity is value creation, which, according to the findings of Morris *et al.* (1997), may be created in South African companies by improving their ability to keep customers informed, enabling customers to make more informed buying decisions, serving customers faster and making it easier for new customers to purchase the products. Of the respondents in the 1997, study 72 percent believed that their Internet-related revenue would continue to grow in the future.

The aforementioned study was replicated in the Australian market in 2001, wherein Leong *et al.* (2003) found the same changes in marketing activities, as did Morris *et al.* (1997), with the addition of the impact on promotional activities. In addition, the findings of Leong *et al.* (2003) indicate that Australian marketers had no plans on using the Internet to expand target markets aggressively but did find using the Internet as a tool to create value for customers by keeping them informed to be viable. Most respondents of the participating Australian-based companies did not foresee using the Internet to improve the new product development process and they were not convinced of its ability to lower marketing costs.

In a study of the Iranian market, Ghazisaeedi *et al.* (2007) found that marketers perceive that the Internet will result in companies having to redefine their markets, marketing activities and value creation, although the changes were not seen as dramatic. Iranian companies that had adopted the Internet as a marketing tool felt strongly about the influence it will have on most of the important elements of their current marketing functions. Findings from this Iranian study indicate that industry categories differ in their opinions on the influence of the Internet on marketing activities. There was a large difference between the different industry categories regarding the Internet's influence on the conceptualisation of marketing activities but a small difference in perceptions regarding its influence on changes in market definition and value creation.

Morris *et al.* (1997) were of the opinion that their findings indicated that South African companies with an Internet presence had not chosen to do so because it is relatively inexpensive to establish such a presence but rather because they believed that their presence would enable them to be successful participants in the markets of the future.

Ghazisaeedi *et al.* (2007) note that although the research studies conducted in the past regarding the impact of Internet in marketing were conducted in three different countries and at four different times, the trends reported are quite similar.

Although more recent studies on the influence of the Internet on the marketing activities of organisations have been conducted in Australia (Leong *et al.*, 2003) and Iran (Ghazisaeedi *et al.*, 2007), there has been a paucity of research on this topic in the South African market since the study conducted by Morris *et al.* (1997). Given the advances in IT and the increase in Internet usage since the late 1990s, there is a need to re-investigate South African marketers' perceptions of the changes in marketing practices brought about by the Internet. This is especially true in light of the 2000 dot.com crash and South Africa's ongoing digital divide (Jacobs & Sewry, 2009). This study seeks to address this gap in research by replicating the study conducted by Morris *et al.* (1997) and making a comparison between the different time periods.

1.3 STUDY OBJECTIVES

The following objectives were formulated for the study:

1.3.1 Primary objective

The main purpose of this study was to investigate South African marketing practitioners' perceptions of the Internet's influence on the practice of marketing in 2011.

1.3.2 Theoretical objectives

In order to achieve the primary objective, the following theoretical objectives were formulated for the study:

- Outline the history of the Internet, as given in the literature.
- Identify the various developments, potential problems and opportunities brought about by the Internet and Web over the past 20 years.
- Review the literature on the growth in Internet usage internationally, as well as in South Africa.
- Conduct a review of the literature regarding the Internet's influence on marketing according to the framework of the World Wide Web marketing model proposed by Morris *et al.* (1997).

1.3.3 Empirical objectives

In accordance with the primary objective of the study, the following empirical objectives were formulated:

- Investigate South African marketers' perceptions of the degree to which the Internet has changed their conceptualisation of marketing activities.
- Determine South African marketers' perceptions of the degree to which the Internet has redefined their market(s).
- Investigate South African marketers' perceptions of the degree to which the Internet has changed the way they create value for their customers.
- Determine the extent to which South African marketers' perceptions of the impact of the Internet has changed from the late 1990s to 2011 by comparing the findings emanating from this study with those of Morris *et al*. (1997).
- Determine the extent to which South African marketers' perceptions of the impact on marketing differ to those in studies conducted in Australia in 2001(Leong *et al*., 2003) and in Iran in 2007(Ghazisaeedi *et al.*, 2007).

1.4 HYPOTHESES

Churchill (1995:109) defines a hypothesis as a statement that stipulates how two or more variables, which are measurable, are related. When hypotheses are stated, the characteristics of the population involved are then explored. The information obtained is then compared against the supposition in the hypotheses, which will, in turn, be accepted or rejected according to the probability that it is true. Tests of significance are used in order to accept or reject statistical hypotheses. The results are used to determine the relationships that may exist between two or more variables in a sample, which may then be generalised to a population (Marshall, 1998).

In this study, hypotheses were formulated to test whether South African marketing practitioners' perceptions of the impact of the Internet on marketing have changed between the late 1990s and 2011. In addition, hypotheses were formulated to test whether South African marketing practitioners' perceptions of the impact of the Internet on marketing differ from those emanating from the 2001 Australian study (Leong *et al*., 2003) and the 2007 Iranian study(Ghazisaeedi *et al.*, 2007).

The following section outlines the research design and methodology employed in the study.

1.5 RESEARCH DESIGN AND METHODOLOGY

The study compromises a literature review and an empirical study. Quantitative research, using the survey method, was used for the empirical study.

1.5.1 Literature Review

In order to underpin the empirical study, a review of South African and international literature was conducted using secondary data sources that included the Internet, textbooks, business journals, academic journals and online academic databases.

1.5.2 Empirical Study

The empirical portion of this study comprises the following methodology dimensions:

1.5.2.1 Target population

The target population for this study are senior marketing personnel employed at South African organisations. The target population is defined as follows:

- Element: The heads of marketing or the marketing managers
- Sampling Unit: South African companies' marketing departments
- Extent: South Africa
- Time: 2011

1.5.2.2 Sampling frame

The sampling frame comprised a list of the top 200 South African companies of 2009, ranked according to turnover, as published by the Financial Mail 2009. The industry sectors covered by this sampling frame included telecommunications, media, transport, information technology, household goods and textiles, electronics, health and pharmaceuticals, food and beverages, leisure, chemicals, retail, construction, mining, platinum, gold, banks, life assurance, short-term insurance, support services, property, steel and other metals, automobiles and parts, and petroleum.

1.5.2.3 Sample method

A non-probability, judgment sample of the 100 top South African companies ranked according to turnover, as published by the Financial Mail (2009), was taken in April 2011. The study was conducted without replacement sampling. The telephone directory was used to obtain the telephone numbers of these companies so that the secretaries could be contacted. This was done in order to obtain the particulars of the marketing managers or marketing directors of the said companies as well as to obtain permission to forward the questionnaire to the respective individuals. A structured self-administered questionnaire was then e-mailed to those respondents from whom telephonic permission had been obtained.

1.5.2.4 Sample Size

According to Bevan-Dye and Venter (2008:545), a non-probability judgment sample of South Africa's top 100 companies, as selected in this study, is deemed sufficiently large considering that it represents 30 of the 39 industry sectors in South Africa; that is, 77 percent.

1.5.2.5 Measuring instrument and data collection method

The measuring scale developed by Morris *et al.* (1997) was used in this study. The scale comprises three dimensions, with items constructed to measure the marketers' perceptions of the impact of the Internet on the conceptualisation of marketing activities, market definition, and value creation.

These perceptions were measured by requesting the respondents to indicate on a five-point Likert scale, ranging from 'To a very little extent' (1) through to 'To a very great extent' (5), their agreement or disagreement with a series of 31 statements. These statements characterise the degree to which the Internet influences a company's conceptualisation of its marketing activities, its market definition and its ability to create customer value. Use was made of drop-down menus. In addition, the questionnaire included a section designed to gather demographic data.

The questionnaire was accompanied by a cover letter explaining the purpose of the study and requesting participation. After three weeks, a second letter was sent via e-mail to the companies who have not yet responded to the first letter and questionnaire. An additional three weeks was given until the close-off date for responding companies. Responses received after the close-off date were ignored.

The questionnaire was piloted on a convenience sample of 30 South African companies that did not form part of the sampling frame in order to ascertain its reliability. Results of this pilot test were duly coded and tabulated.

1.5.3 Statistical analysis

The captured data was analysed using the Statistical Package for Social Sciences (SPSS), Version 17.0 for Windows. The following statistical methods were used on the empirical data sets:

- Reliability and validity analysis
- Descriptive analysis
- Significance tests

1.6 ETHICAL CONSIDERATIONS

The research study complied with the ethical standards of academic research, which, among other things, included protecting the identities and interests of respondents, and guaranteeing the confidentiality of the information provided by the respondents. Participation in the survey was voluntary and no one was forced to partake in it.

1.7 GLOSSARY OF INTERNET TERMINOLOGY

Hyperlink. A link on a Web page that takes the user to another location or resource.

Protocol. A standard for the exchange of information. As a result of the adoption of protocols, different computers, operating systems and software are able to communicate with each other on the Internet.

E-commerce. Involves the execution of business processes electronically using technologies such as the World Wide Web, Internet and e-mail.

Adoption. Is the process where organisations recognise the capabilities and opportunities of e-marketing technology, and it is accepted, embraced and incorporated into organisations for business use.

Barriers. Any adverse factor, quandary, or condition that may inhibit an organisation from integrating e-marketing within its systems.

1.8 CHAPTER CLASSIFICATION

In Chapter 2, a detailed discussion on the various developments, and potential problems and opportunities in and of the Internet and Web over the past 20 years, together with marketing as a business activity is given. Issues regarding changing conceptualisation of the marketing activities, as well as changes in value creation and market definition are addressed. The World Wide Web marketing model (Morris *et al.,* 1997) is also discussed. In addition, the chapter takes a closer look at the history of the Internet, as well as the growth in Internet usage both internationally and in South Africa.

The population, sample frame, sampling method and data collection method are discussed in Chapter 3. Data analysis, statistical techniques and the problems experienced are outlined and the data analysis and statistical procedures used in the study discussed.

In Chapter 4, the research findings are analysed, interpreted and evaluated. The statistical methods used to analyse the research data are presented and the results for the different hypotheses tests explained.

Chapter 5 comprises a review of the entire study and provides conclusions drawn from the study. Recommendations emanating from the study are made and suggestions for further research given.

1.9 LIMITATIONS TO THE RESEARCH STUDY

Several limitations to this study should be noted when interpreting the findings. A cross-sectional design was used in the study and, as such, the findings reported here are a mere snapshot in time of South African marketers' perceptions of the influence of the Internet on marketing. As the Internet is constantly evolving and growing, a longitudinal approach would be more informative. Furthermore, despite the study achieving a respectable response rate, the sample size is relatively small when compared to the size of the South African business environment.

There is also the question concerning the degree to which the particular conceptualisations of marketing used may not be sufficiently inclusive.

1.10 GENERAL

- Annexures are placed at the back of the thesis.
- Tables and figures are placed on the relevant pages in the thesis.
- Where no source reference appears for figures and tables, it refers to own research.
- Referencing is based on the Scientific Skills Series, Quoting Sources, Potchefstroom University for Higher Christian Education.

1.11 SYNOPSIS

Today, the Internet is a widespread infrastructure, which has revolutionised the communications and computer world like nothing has done before. The Internet is the most extensive form of networking and it has the greatest business potential with endless opportunities for all who use it.

Although there has been research conducted in recent years concerning the influence of the Internet on the marketing practices of companies around the world, there has been a lack of research on this particular topic in South Africa since the late 1990s. Given the advances in IT and the increase in Internet usage, there is a need to reinvestigate South African marketers' perceptions of the changes in marketing practices brought about by the Internet.

For this purpose, this chapter provided an overview of this study's problem statement, study objectives, research design and methodology, and chapter classification. In the following chapter, Chapter 2, a review of the literature pertaining to the influence of the Internet on marketing is provided.

CHAPTER 2

INFLUENCE OF THE INTERNET ON MARKETING

2.1 INTRODUCTION

The Internet introduces new dimensions to both traditional marketing functions as well as a different dimension altogether (Schiffman *et al*., 2010:32). Morris *et al*. (1997) argue that the Web is an alternative to the real-world environment and not merely a simulation of it. Hamill (1997) defines the Internet as a network of interconnected computers around the world operating under a standard protocol, where data can be processed and transferred between machines that would otherwise be incompatible.

The Internet offers companies inexpensive and sophisticated tools for advertising, taking and placing orders, promoting their philosophies, communicating with their customers all over the world, as well as creating both a direct sales channel and an interactive communications tool (Avlonitis & Karayanni, 2002). Leong *et al*. (2003) state that the Internet also provides companies with the necessary means to reach their target audiences, and achieve internal efficiencies and cost reductions, which will allow companies to charge a lower price for their products and services. As such, use of the Internet is diffusing at an exponential rate amongst business-to-consumer and business-to-business organisations.

The 20-year period of the commercialisation of the Internet began with the Defence Advanced Research Projects Agency (DARPA) funded researchers working on the first form of the Internet known as the Advanced Research Projects Agency Network (ARPANET). It has since progressed to a point where many users are now able to do almost anything on the Internet (Weis, 2010). Mutula (2010) suggests that the Internet revolution has been one of the greatest changes experienced since the Industrial revolution two centuries ago and is, as such, one of the fastest growing consumer services the world has so far seen.

The Internet is one of the most advanced technologies of modern times and has a powerful and pervasive effect on every part of people's lives, including business, education, health, transport, communication and industry. The Internet's structural technologies have evolved through solving real problems and its success lies in the fact that it has the ability to satisfy the needs of those who use it (Weis, 2010). The Internet and the Web have had a significant influence on the world. It has helped save people's lives, it has led to a better understanding of humanitarian challenges and it has made many innovations possible (Philp, 2010b:9).

According to Darby, Jones and Al Madani (2003), companies are able to deal more interactively with customers at any given time and place, and give their customers this same opportunity by making use of the Internet. Martin and Matlay (2003) add that marketers may use the Internet and the Web to consider individual customers, establish two-way communication with them and customise their product or service offering to meet the individual customer needs best. In addition, the Internet provides companies with mass-customisation capabilities that may be used to bundle product/service features, which may then be priced accordingly. Space on the Internet is infinite and, as such, is unlike conventional media. Companies are able to publish information on the Internet with no limitations to number of pages and any extra printing and publishing costs.

As stated in Chapter 1, the purpose of this study is to determine the impact of the Internet on the marketing practices of South African companies. Section 2.2 provides an overview of the Internet. Section 2.3 outlines the evolution of the Internet and the Web. In Section 2.4, the focus is on the information revolution. Section 2.5 is concerned with traditional marketing versus Internet marketing and Section 2.6 uses the framework of the World Wide Web Marketing Model to describe the influence of the Internet and the Web on marketing. Section 2.7 discusses the influence of the Internet on the marketing activities across three countries and time periods.

2.2. OVERVIEW OF THE INTERNET

In order to understand the influence of the Internet and the Web on the marketing activities of companies, this section provides an overview of the Internet and the Web. This overview

will include a historical background of the Internet (Section 2.2.1) and the infrastructure of the Internet (Section 2.2.2). In addition, Sections 2.2.3 and 2.2.4 highlight the International and the South African Internet sizes and growth rates respectively.

2.2.1 History of the Internet

Howe (2010) defines the Internet as the product of visionary thinking by certain people in the 1960s who saw great potential value in allowing computers to share information on research and development in the scientific and military fields. Leiner, Cerf, Clark, Kahn, Kleinrock, Lynch, Postel, Roberts and Wolff (2011) describe the Internet as a system with worldwide broadcasting capabilities, a distribution system of information and a tool for collaboration and interaction between individuals and their personal computers, without the concern of geographical locations.

The Internet began as a United States of American (USA) Department of Defence network to link scientists and university professors around the world (Hamill & Gregory, 1997). The Internet, known in the 1960s as ARPANET, was introduced online in 1969 under a contract led by the renamed Advanced Research Projects Agency (ARPA), which connected four major computers at the University of California Los Angeles (UCLA), Stanford Research Institute, University of California Santa Barbara (UCSB) and the University of Utah. The use of the ARPANET was constricted to the DARPA, which funded computer-science researchers doing related research. Network control protocols (NCP) were used by the ARPANET and through this the three most popular applications of today, namely remote computing, file transfer and electronic mail were pioneered. Electronic mail, today referred to as e-mail, was adapted for ARPANET by Ray Thomlinson of Bible Broadcasting Network (BBN) in 1972 and he picked the symbol @ to link the username and address. The term ‘Internet’ first came into use in 1974 (Howe, 2010; Weis, 2010).

The Internet embodies open architecture networking, introduced by Kahn in 1972. In open architecture networking, there are very few limitations regarding the types and geographical scopes of the networks that may be included. By the mid-1970s, a new protocol version was then called for which would meet the needs of an open-architecture network environment,

called the Transmission Control Protocol/ Internet Protocol (TCP/IP). While the NCP served as a device driver, the TCP/IP would be more of a communications protocol. Resource sharing for both the ARPANET and the Internet was a major stimulant, as connecting the two was far more economical than it would be for them to be duplicated (Leiner *et al.*, 2011). By the late 1980s, the USA federal government, research laboratories and universities were responsible for the funding of the Internet. These funds were employed to support the needs of the research community and were directly related to the use and the progress of the network (Weis, 2010).

Computer experts, scientists, librarians and engineers were the ones who used the Internet in the 1960s and 1970s. There were no home or office personal computers in those days and any individual who utilised the Internet had to learn to use very complex systems (Howe, 2010). By 1985, the Internet was already well established as a technology supporting a broad community of researchers and developers, and was beginning to be used by other communities for daily computer communications. Electronic mail was viewed as the most important application of this era, with file transfer and remote login not far behind (Leiner *et al.*, 2011). The Internet became available for full commercial use in 1991(Hamill & Gregory, 1997). Feher and Towell (1997) compared the Internet's rapid adoption to that of the telephone and the personal computer. The Internet began to thrive due to the development of the local area networks (LANS), personal computers, and workstations. As the Internet developed and grew at a significant rate, hosts were assigned names so that it was easier for people to use the network.

Weis (2010) explains that the Internet is a global resource and it is important that all the components work in a synchronised manner in order to avoid the creation of "island networks". According to Leiner *et al.* (2011), the Internet has stopped changing but in order to remain relevant it needs to change and evolve at the pace experienced within the computer industry.

2.2.2 Infrastructure of the Internet

In line with the research conducted by Weis (2010), the Internet continues to be defined as a phenomenal success story. Watkins (2011a:25) states that the Internet is a large machine and the most reliable machine that has been built to date.

Weis (2010) suggests that more than 5000 separate computer networks situated in over 70 different countries provide the components to produce what is known as the Internet. The Internet's suit of protocols binds these various networks together, interconnected by a variety of speeds and ways. Tyson (2001) highlights that all networks differ in terms of their size, resources, goals, financial structures, as well as the services they provide, and that these differences affect how the Internet is used and its current operations.

Leiner *et al.* (1997) define the infrastructure of the Internet as more than just a base for one application but rather a base from which many existing applications as well as brand new applications can be launched and used. According to Leiner *et al.* (2011), the Internet consists of communities as well as technologies. The Internet's success is determined by how well it satisfies basic community needs and how it uses the community to push forward the development of its infrastructure. Mutula (2010) argues that good telecommunication networks form a critical component of the infrastructure required for Internet growth and development, and that building a natural information infrastructure is critical to enhancing economic development. The Internet and other wireless technologies form an important component of a country's national infrastructure, one that delivers content to homes, commercial organisations and other private and public institutions. Along with the Internet, computers and telephones also form part of this national infrastructure.

The Internet was designed as a general infrastructure on which new applications could be built. TCP/IP provides the service that makes this possible. Implemented into host computers at both ends, the TCP makes use of the IP to send data grams, recover lost, adapted or out of order data grams and provide a reliable stream of information to applications (Weis, 2010). As a vast hardware and software infrastructure that enables computer interconnectivity, the Internet serves as a global data communication system that links millions of private, public, academic and business organisation networks via an

international telecommunications backbone, which is constructed with numerous electronic and optical networking technologies (Hamill & Gregory, 1997). The Web is a massive database, an infinite collection of documents and other resources, interconnected by hyperlinks.

Avlonitis and Karayanni (2002) characterise the Internet as the ultimate interactive medium. The Internet facilitates the exchange of information between companies regarding issues such as the discovery of new customer needs, trends in local and global markets, competitive moves, joint developments of products and joint selling activities. The Internet is a bundle of communication tools and services with distinct characteristics and communication capabilities, which allow a company to use them independently or jointly in order to achieve multiple communication goals. Scott (2000) indicates that these networks offer services that people use to communicate with one another and to find and retrieve information from all around the world. These services include e-mail, mailing lists, newsgroups, the Web and online shopping. Watkins (2011a:25) suggests that there are many different devices that have been created over the years which can now be used to search the Web and connect to the Internet. These devices include television sets, refrigerators, personal computers, cellular phones, notebooks, net books and tablets.

Kleinrock (2008) concludes that the Internet has significantly changed individuals' behaviours and attitudes and will be the leading force in the twenty-first information society, as more than one billion people throughout the world use the Internet. Philp (2010b:9) points out that there are now over 1.8 billion people who use the Internet all over the globe. Watkins (2011a:25) indicates that currently the Internet stores 5 million terabytes of data and every month this figure grows by approximately 100 terabytes.

2.2.3 International Internet size and growth rates

In the late 1990s, Feher and Towell (1997) suggested that the use of the Internet in commercial organisations was immature, which indicated that there was room for evolution in the use of the Internet and the Web. Leong *et al.* (2003) suggest that countries all over the world have experienced large percentages of growth in the use of the Internet in recent years.

Leiner *et al.* (1997 & 2011) argue that the key to rapid growth of the Internet has been the free and open access to the basic documents, especially the specifications of the protocol. Research indicates that every year the number of worldwide networks double and that the Internet has outperformed the suppliers of worldwide networks expectations, becoming the incubator for new technologies (Weis, 2010).

Darby *et al.* (2003) report that in late 2000 Emirate Bank Group did a study of the top 100 companies in the United Arab Emirates (UAE) and found that 42 percent planned to start using e-commerce and its applications and that 14 percent had already implemented e-commerce in their organisations. The authors add that a later survey, conducted by Intel, found that 85 percent of the major companies in the UAE were already involved in e-commerce, 88 percent had Internet access and 60 percent had their own Web sites. Workman (2008) indicates that the money spent on Internet advertising is increasing globally every year and now accounts for approximately 9.5 percent of advertising budgets worldwide that will increase to more than 25 percent by 2013, taking into account the fact that consumers spend 15 percent of their time on the Web. In 2008, there were 1.4 billion Internet users and, as a result of the usage reaching a peak of 70 percent, the global target audience is expected to triple to over 4 billion users.

Malik (2008) predicts that traffic on the world's networks will increase annually by 46 percent between 2007 and 2012, nearly doubling every two years. In December 2000, there were 4 514 400 Internet users in Africa, which increased by 2 357.3 percent between 2000 and 2010 to reach 110 931 700 by June 2010. Asia has seen an increase of 621.8 percent in Internet users from 114 304 000 in December 2000 to 825 094 396 in June 2010. The number of Internet users in Europe increased from 105 096 093 to 475 069 448, 352.0 percent over the past ten years and the Middle East experienced a 1 825.3 percent increase from 3 284 800 to 63 240 946. North America experienced 146.3 percent from 108 096 800 to 266 224 500, Latin America/Caribbean 1 032.8 percent from 18 068 919 to 204 689 836 and Oceania 179 percent from 7 620 480 to 21 263 990. In total, the world experienced a 444.8 percent increase in the number of Internet users form 360 985 492 in 2000 to 1 966 514 816 in 2010 (Internetworldstats.com, 2010b).

2.2.4 South African Internet size and growth rates

Swart (2010:9) suggests that in comparison to their international counterparts, South Africans are similar when it comes to surfing the Web, although the Internet population is much smaller (Watkins, 2011c:25). The local technology ecosystem is small but dynamic and it has experienced exponential growth due to the substantial transformation in the telecommunications industry, especially the decrease in broadband costs (Mashego, 2011:3).

South Africa is the biggest Internet market in sub-Sahara Africa. The individuals who use the Internet in South Africa are relatively well-paid, white-collar workers and are comparatively well educated. Approximately 1.4 million individuals have dial-up Internet access from the workplace and over 800 000 individuals have dial-up Internet connections in small businesses and households. In June 2001, it was estimated that the global rate of visiting Web sites was 15 Web sites per session where as the South African rate was 20 Web sites per session. South Africa is home to four of the top ten properties of the Web, namely the M-Web portal, ABSA Bank, Johnnic e-Ventures and iAfrica.com. Research has shown that on average the monthly usage rate of the Internet by South African individuals is approximately four hours and 32 minutes, compared to the global rate of nine hours. Each surfing session is about 26 minutes and the Internet is used approximately ten times a month (epnet-design.co.za, 2001). The number of South African Web page 'views' increased from 91 million to 207 million between 2005 and 2007 (SouthAfrica.info, 2007) and by the end of 2010 the five most favoured Web sites in South Africa were Google South Africa, Facebook, Google.com, YouTube and Yahoo (Swart, 2010:9).

South Africa's Internet start-up scene is mostly based in Cape Town and the wine lands. It is suggested that the most successful project to have been developed from this area is that of the instant messaging service of MXit, which allows individuals to communicate with other individuals, shop and play, and explore a large social network (Mashego, 2011:3).

In 2010, the number of Internet users in South Africa passed the 5 million mark. Between 2002 and 2007, the Internet growth rate was relatively stagnant but there was a substantial increase from 2007 until 2011. Internet growth in South Africa was a direct result of the granting of Electronic Communication Network Service licenses to more than 400

organisations, the adoption of broadband connectivity by small and medium organisations, and the new undersea cables on the South African coastline (AllAfrica.com, 2010). This, according to Watkins (2011c:25), reduced many of the entry barriers into the market. Seacom and EASSy are the undersea cable systems used and they have led to the adoption of many Internet applications, such as online banking and the use of cloud computing services. At present, there are approximately 1 058 000 million broadband users in South Africa. In recent years, there has been a significant increase in Internet and Web usage due to large companies such as Telkom, iBurst and Sentech offering ADSL and broadband, along with cellular phone companies such as Vodacom, MTN and Cell C offering 3G and HSDPA access, which led to an increase in the demand for cellular phones and applications. Statistics indicate that there are more cellular connections than the amount of people who live in South Africa and in the last quarter of 2010 the data usage on the Vodacom network surged by 54 percent (SouthAfrica.info, 2010; Watkins, 2011a:25).

Statistics indicate that in 2000, there were 2 400 000 Internet users in South Africa, which increased to 2 750 000 in 2001. In 2002, there were 3 100 000 Internet users, which increased to 3 283 000 in 2003, followed by 3 523 000 in 2004, 3 600 000 in 2005, 4 590 000 in 2008 and 5 300 000 in 2009 (Internetworldstats.com, 2010a). The most dominant age group of Internet users in South Africa are 25-35 year olds, with the 35-49 year olds in a close second. Of the total number of Internet users in South Africa, 54 percent are males and 45 percent are females. The majority of South African online content is in English. There are 2 100 000 English speaking online users, which represent 52 percent and there are 1 110 000 Afrikaans speaking online users, which represent 28 percent of the South African Internet users (SouthAfrica.info, 2007).

2.3 EVOLUTION OF THE INTERNET AND THE WEB

This section highlights the evolution of the Internet and the Web.

2.3.1 Developments in the Internet and the Web

The evolution of the Internet has taken place over the past 20 years (Weis, 2010). Initially, the public Internet was not designed to handle massive quantities of data flowing through

millions of networks. The Internet2 community is currently in the process of developing and testing new network technologies that are critical to the future progress of the Internet. The Internet2 is a private network, which provides an environment with cutting-edge technologies that are able to develop and, from there, migrate to the public Internet (Investintech.com, 2011).

Bateman, Pike and Butler (2010) and Seery (2011: 15) state that all the developments and breakthroughs in the Internet and the Web have led to the development, implementation and increased use in social networking sites such as Facebook, which have become an integral part of people's lives and cultures. Although many companies have implemented Facebook into their businesses to assist with their advertising campaigns and marketing activities, it is still unclear if it will be a success or failure and whether or not it will become a renowned communication channel for companies in the future.

Mutula (2010) indicates that the latest developments in Internet technology are the convergence of the Internet with cellular communications, through wireless application protocol (WAP) technology. The WAP allows access to the Internet through cellular phones but this access is independent of cellular networks. Swart (2010:9) believes that because individuals have greater access to cellular phones than they do to computers, the future of the Internet lies in cellular phone technology. This is likely to result in significant innovations and developments in the way that services are accessed and in the way in which content is delivered through the mobile Web. Eddy (2011) predicts that within the next decade, every individual is likely to have access to the Internet via increasingly cheaper but more sophisticated hand-held devices. In the last year, the usage rates of cellular phones and wireless laptop Internet have significantly increased, with approximately half of all adults going online with laptops using broadband cards or wi-fi connections. Watkins (2011b:25) suggests that, as a result, network operators will be forced into dropping data access costs and this will lead to a significant shift of data to the Internet. Through this shift, the Internet will become the venue for most commercial transactions, with poorer individuals now beginning to use the Internet to conduct activities such as banking online.

Proenca and Rodrigues (2011) indicate that the biggest shift experienced since the introduction of the Internet and the Web has been in the ability to do banking online. Swart (2010:9) adds that it has made people's lives so much easier by allowing them to make payments at anytime and anywhere, check account balances without having to physically go into a bank and, in so doing, avoid long queues characteristic of traditional banking. Absa, First National Bank and Standard Bank are listed among the top 20 banks providing online banking services, clearly indicating that more and more South Africans are now banking online.

2.3.2 Opportunities brought about by the Internet and the Web

The Internet and the Web connect a large number of individuals all around the globe. These technologies enable 24/7 communication on a global scale and provide a medium for the sending and receiving of voice, data and image content (Kleinrock, 2008). Wilson and Abel (2002) suggest that the Internet and the Web offer attractive opportunities for organisational growth. In looking at developing economies, Banerjee (2010) indicates that the main reason for the growth in Internet opportunities in Pakistan is the low costs of broadband in the country, which are substantially cheaper in comparison to the rest of the world. This may have implications for the South African economy.

Internet2 research groups are implementing and developing new technologies, which include Ivp6, multicasting and quality service (QoS) that will lead to revolutionary Internet applications, which include a faster Web, and new advanced applications for distributed computation, digital libraries, virtual laboratories, distance learning and tele-immersion (Ivestintech.com, 2011).

Howe (2010) indicates that the Internet has become ubiquitous, faster and increasingly accessible to non-technical communities and social networking, and collaborative services have grown rapidly, giving individuals the ability to communicate and share interests in many more ways. The social networking sites such as Facebook, Twitter and the like allow individuals of all ages to share information and their interests of the moment with others all around the globe (Bateman *et al.* 2010).

According to Kleinrock (2008), the more that wireless networks are made available to individuals around the globe and the more improvements that are done to the bandwidth and wireless infrastructure reach, the greater the possibilities are of creating capable smart spaces. Smart spaces are a technological advancement, which will set the world alive and provide a source of intelligence in the environment. Researchers and developers are looking at creating a "semantic web" that would allow the Internet to provide users with information to answer specific questions, which will reduce the problem of information overload. In the future, users may be able to use the Internet to interpret the data they require and then issue the selection of information that is required for their search.

As the number of Web users and extent of Internet access increases, so does the amount of potential creativity. Through tapping into the creativity created by linked Web users from all over the world, the Internet may significantly contribute to dealing with both local and global challenges, such as counteracting global warming, alleviating poverty and conflict, and enhancing education and healthcare (Philp, 2010b:9). Watkins (2011b:25) proposes that through improved connectivity and the use of communication tools, intelligence workers will be able to integrate and work together. This will have a positive effect on the way business is conducted and in the way that people communicate with each other, which will in turn create a change in the social as well as technical capabilities of nations.

Companies that are in the early stages of Internet adoption will only be able to use the Internet for informational purposes and, therefore, will only be able to experience a small percentage of its potential for value creation. In contrast, those that are in the later stages of adoption or that have evolved with the Internet are more able to employ the interactive potential of the Internet to increase value creation (Ghazisaeedi *et al*., 2007).

With faster Internet access capabilities, companies will be able to access a variety of business applications, which will improve their business operations. These applications include electronic commerce, video conferencing, rich collaboration platforms, and community-based initiatives with suppliers, customers and the public, and cloud computing. The Internet opens up many marketing strategy opportunities for companies due to its interactivity. These

opportunities include advertising on the Web, building a strong brand image, improving customer loyalty through a closer relationship with customers and increased personalised marketing, supplying information, providing customer service, market research, and selling and public relations (Darby *et al.,* 2003). The Internet provides companies the opportunity to lengthen their working hours all around the globe and this removes the hurdle of conducting business internationally and across different time zones, and in so doing increase their coverage to more and more customers. The reduction in cost of sales, costs associated with customer service, time of routine service jobs, the travel time of salespeople and the number of salespeople employed, which will result in sales efficiency, will also be possible (Kiani, 1998; Avlonitis & Karayanni, 2002). According to Mutula (2010), the costs associated with routine office purchases will be only a tenth per order using e-procurement compared to physical procurement.

2.3.3 Problems of the Internet and the Web

In the 1960s and 1970s, when the number of Internet sites was limited, it was relatively easy to keep track of the resources of interest that were available. Nonetheless, as more organisations, universities and their libraries connected to the Internet it became very difficult to track these resources and, as such, there was an increased need for a variety of tools to index the resources that were available (Howe, 2010). The Internet has also made it more difficult for organisations, as well as governments to regulate and govern their markets (Ghazisaeedi *et al.*, 2007).

Watkins (2011b:25) asserts that better data services will be created with the implementation of new wireless technology and fibre infrastructure. This will reduce the difficulty of conducting business, empower Web users by giving them access to many useful services and contribute to developing economies all around the globe. These fibre networks will also play an influential role in accommodating the rapid increases in smart-end devices like tablets and smart phones. This growth in smaller devices used to connect to the Internet, such as small tablets, pocket PCs, smart phones, e-books, game machines and GPS, now enable people to tap into the Web while on the go. This will have a significant effect on Web designers and

are likely to cause the downfall of those Web pages that are not designed to work on that scale (Howe, 2010).

According to Kravets (2009), the Internet is filled with numerous threats, both real and imagined from ill-disposed hackers to government censors. Weis (2010) suggests that one of the major threats facing the Internet of today is the funding situation that shaped the Internet. This funding situation may challenge the intelligence of education, research and commercial networks to interconnect, which could create "island networks" rather than a strong cohesive Internet.

Kleinrock (2008) argues that one of the major setbacks of the Internet is the variation in connectivity capabilities from one location to the next. These variations include the available communication bandwidth, the quantity of displays and printers, as well as the types of communication devices used. Another setback would be that of information overload. The large amounts of information available on the Internet, makes it difficult to sift through and come up with meaningful information, which may lead to an abundance of misinformation and rumours (Wilson & Abel, 2002).

Feher and Towell (1997) indicate that the majority of the top listed companies in the USA in 1997 felt that the Internet was not secure enough for handling communication in their companies or for electronic commerce. From these top listed companies, 73 percent indicated that the Internet was important to their companies. According to Wang *et al.* (2000), many consumers are wary of using the Internet to purchase goods and services as they feel that the Internet will invade their privacy and that once they are on the Web they will have no control over how their personal information is used. Rasmussen (2010) suggests that owing to the speed at which the Internet has developed and been adopted by the companies around the world, without an online presence, companies will lose customers, as customers view a lack of Web presence as being unprofessional.

Philp (2010b:9) concludes that there are many individuals who do not have access to computers or the Internet around the world. Currently, only 10 percent of the people living in

Africa have access to the Web but 40 percent of African people have access to cellular phones. Therefore, the challenge facing developers is to provide these people with Web access through their cellular phones. Furthermore, Swart (2010:9) states that the future of the Internet is in mobile phone technology and that most individuals will require further education to enable them to use the services in an appropriate manner.

2.4 INFORMATION REVOLUTION

Watkins (2011a:25) writes that the most purest and fundamental form of power is created from the possession of knowledge and control over information, and the Internet has made this possible. The information revolution came about as a direct result of the accelerated advance of information technology since the 1950s. The information revolution has resulted in the marketing activities of companies all over the globe becoming a centrally important activity, compared to the past where it was viewed as just another business function (Morris *et al.,* 1997). The revolution is characterised by a significant change in the way individuals acquire information and knowledge, how they distribute ideas, including visions of the future, how they make valuable contributions and develop new business models, and how they coordinate themselves (Watkins, 2011a:25).

Wang *et al.* (2000) suggest that the Internet enables information to be exchanged between organisational partners with ease and convenience. The Web facilitates information access, which empowers customers to have more control in transactions and learn more about the company, the product and the brand (Darby *et al.,* 2003). The reach and range of information has expanded due to the presence of the Internet and the Web. The Web, as a combined communication medium and distribution channel, facilitates many types of interaction and since these interactions may be recorded in digital form, data collection is facilitated.

Leiner *et al.* (1997) indicate that the Internet has become a ‘commodity’ service in this regard and provides customers with an easy medium to obtain more detailed, personalised and timely information from all around the world. In addition, the Internet and Web foster greater access to market research and analysis tools, making them a vital element for conducting worldwide market research (Hamill, 1997). The range of communication

possibilities is a key reason why the Internet is considered to have strengths in the field of information broadcasting, accessibility and comprehensibility. Importantly, companies need to take keep in mind that the information they communicate via on their Web sites should to be displayed in a way that can be easily understood and decoded by the recipients of that information (Herzig & Goodman, 2010). In addition, Philp (2010b:9) suggests that in order for rural people to become part of the Information Age they need access to low bandwidth options and Web sites that are small and have reliable and valuable information.

2.5 TRADITIONAL MARKETING VERSUS INTERNET MARKETING

Darby *et al.* (2003) argue that the traditional concept of marketing is no longer adequate to meet the increased demands of customers and the ever-changing competitive business environment. Poirier and Bauer (2001) point out that all main areas of marketing are being significantly influenced by the Internet. Therefore, Internet marketing is a business imperative, as the Internet is an irrevocable and unstoppable trend. Research has shown that even if you have a traditional 'bricks and mortar' business you will lose valuable customers without an online presence. As such, companies must make a concerted effort to collaborate the technologies available to them to avoid failure in the new digital business environment.

According to Wang, Zhang, Choi and D'Eredita (2002), the Internet and the Web are able to do things that traditional mass media advertising is not able to do. Eid and Trueman (2002), argue that the Internet provides a fundamentally different environment for International marketing and it requires a different approach, as conducting marketing activities on the Internet is a very different process compared to that of traditional marketing.

Wilson and Abel (2002) contend that in traditional marketing, the target market is bombarded with an advertising message via various forms of media, which may include television, billboards, radio and publications. On the Internet, nonetheless, it is not a very effective promotional method. Hamill (1997) states that "an Internet connection can substantially improve communications with actual and potential customers, suppliers and partners abroad; generate a wealth of information on market trends and developments worldwide; provide an 'ear to the ground' on latest technology and R&D; and be a very powerful international

promotion and sales tool". Darby *et al.* (2003) propose that Internet marketing assists companies in reaching a maximum number of customers and provides those customers with abundant information about these companies and their products. In addition, the Web makes it possible for customers to have immediate access to information 24 hours a day, 7 days a week with a click of a mouse, these all contribute to the creation of greater customer value (Leong *et al.,* 2002).

Darby *et al.* (2003) describe Internet marketing as "spatial" as all marketing stages take place at the same time, and traditional marketing as "linear" as marketing occurs in stages, including market research, product development, customer feedback and so on. In the Web market, organisational partners are closely connected. Relationships may include not only business-to-customer but also business–to-business and customer-to-customer (Wang *et al.*, 2000).

Constantinides (2002) highlights that with traditional marketing the emphasis is on the physical environment where individual customers experience the effects of the 4Ps individually at different times, in different locations and in different scenarios, even when companies try to integrate their marketing activities fully internally. In the virtual Internet environment, the 4Ps of the marketing mix are no longer separated from each other, they are heavily interrelated and the customer using the Web site experiences all of the elements at the same time.

Ghazisaeedi *et al.* (2007) state that in order to take full advantage of Internet marketing, marketing managers must alter their marketing activities and market definitions. Section 2.6 describes a useful framework created by Morris *et al.* (1997), known as the World Wide Web Marketing Model, which will be used to explain the influence of the Internet on marketing.

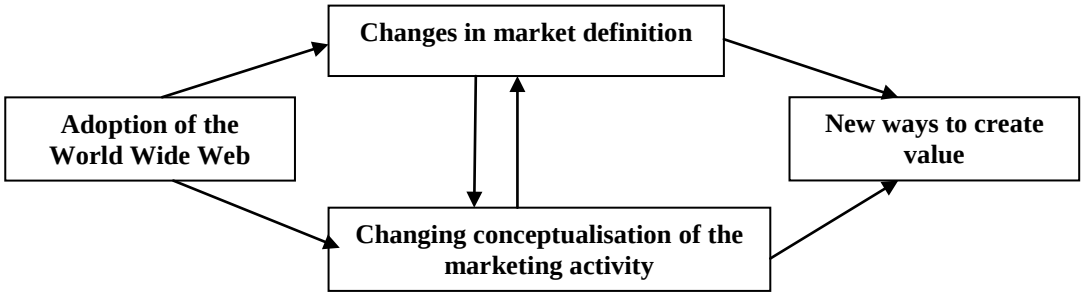
2.6 WORLD WIDE WEB MARKETING MODEL

Morris *et al.* (1997) developed the World Wide Web Marketing Model. This model was based on the premise that the ways in which companies define their markets and the way in

which they conceptualise their marketing activities influences whether or not they will adopt the Web as a marketing tool. The way in which companies may change their marketing activities is referred to as changing the conceptualisation of the marketing activity and through targeting new markets, both locally and internationally, improving segmentation and eliminating less profitable customers or segments, a change in market definition will be made possible. Moreover, the Internet's connectivity enables customer data from different contact points with the company to be integrated into a customer database that may be utilised to develop a more precise understanding of customer segments, even down to segments of one – the individual customer (Mohammed *et al.,* 2004: 96). Such Internet-facilitated databases may also be utilised to rank customers into tiers according to their long-term profit potential to the company (Schiffman *et al*., 2010: 31).

In the World Wide Web Marketing Model, illustrated in Figure 2.1, the adoption of the Web is the link between the marketing function and the creation of value. The arrows are used to illustrate the gaps between these two interrelated aspects. As these gaps are filled and they become smaller, so the link between the marketing function and the value created becomes stronger (Ghazisaeedi *et al.*, 2007).

Figure 2.1: World Wide Web Marketing Model



Source: Morris *et al.* (1997)

While Morris *et al.* (1997) view the relationships in the model as convincing, Ghazisaeedi *et al*. (2007) argue that the relationships are positive but not very strong, and that the model is more appropriate for countries that have evolved with the Internet compared to those which are still in the early to late stages of the adoption process. The reason for this is that countries

that are still in the process of adopting the Web may still be experiencing economical, geopolitical, technological and socio-cultural gaps.

The following sections discuss each of the dimensions in this model in more detail.

2.6.1 Internet and changes in the conceptualisation of marketing activities

The development of the Internet led to Internet marketing, which is the process of building and maintaining customer relationships through online activities that encourage the transferring of products, ideas and services that conform to the goals of both parties concerned (Mohammed, Fisher, Jaworski & Paddison, 2003:4). Leong *et al.* (2002) indicate that for a short time after the so called 'dot.com crash' many companies had a negative view of the Internet's capabilities and impact on marketing activities but that this view began to change between 2001 and 2003. Owyoung (2011) suggests that since the Internet began to gain popularity around 1995 it has led to a significant increase in electronic commerce and has become one of the most effective marketing tools ever created. Boateng, Heeks, Molla and Hinson (2008) propose that the use of the Internet and other related information and communication technologies to conduct business activities and transactions is growing in the private, public, and non-profit sectors in both developed and developing countries.

Martin and Matlay (2003) assert that the Internet is useful for companies' marketing activities all around the world given its marketing efficiency and convenience from both a marketer and customer's point of view. Morris *et al.* (1997) and Leong *et al.* (2002) contend that many companies have seen how the Internet affects their marketing activities and they choose to use it on a larger scale because it results in their customers being completely involved in the process while interacting on the Web.

According to Morris *et al.* (1997), the Internet and a well-developed company Web site will continue to influence the conceptualisation of the marketing activities of companies. They point out that the Internet enhances corporate visibility, helps develop brand recognition, effectively communicates product and/or service information, aids in establishing two-way

interactive relationships with customers, improves the job of selling and enhances the capabilities of companies to bring new products to market. Leong *et al.* (2003) add that the Internet has a significant influence on promotional strategies and the way in which products are marketed. Ghazisaeedi *et al.* (2007) further suggest that in addition to permitting of online payments in the future, the Internet will provide a medium to combine online activities such as games, competitions and news bytes to assist with the building and maintaining of customer relationships.

When a company develops a Web site, that site becomes a price list for the company's product and service offerings. Even though online shopping is cheaper, customers still compare the costs of using and searching a particular company's Web site to that of another company. These cost determinants may include connectivity, transaction capabilities, and time and opportunity costs. Hamill (1997) and Eid and Trueman (2002) indicate that companies are able to use the interactive and timely capabilities of the Internet to update price lists in real time and to alter prices in response to changes in demand and supply, resulting in the standardising or at least the narrowing of prices across borders and country markets. As a result, the 4Ps are no longer seen as separate processes and elements of the marketing process but rather as a part of the Web site experience. As such, the Internet provides a new medium through which the marketing mix dimensions may be facilitated by providing an additional marketing channel (Eid & Trueman, 2002; Florenthal & Shoham, 2010).

2.6.2 Internet and changes in market definition

According to Landberg (2003), the marketplace is concerned with the physical value chain whereas the marketspace is the realm of the virtual value chain and when companies adopt the marketspace it is said to have an impact on the definition of their markets.

Unlike Leong *et al.* (2003), who indicated that the Internet would not, at least for the time being, be used aggressively for expanding target markets, Morris *et al.* (1997) highlight that the Internet's influence on companies' market definitions is prominent with regard to expanding the size of target markets, targeting customers globally and adding new segments

to already targeted markets. Ghazisaeedi *et al.* (2007) add that the Internet assists companies in targeting new customers in completely new market segments. For this reason, marketers must engage in marketing research to determine if and how currently served markets are accessing the Internet. If usage rates deem this a viable means of targeting customers, marketers must determine appropriate ways of adapting content to typically used devices amongst target markets – PCs/laptops/cellular phones/tablets.

2.6.3 Internet and value creation

Morris *et al.* (1997) assert that both a change in market definition and a change in the conceptualisation of marketing activities are linked to the ability of companies to create value in new ways. Along with Ghazisaeedi *et al.* (2007), they propose that the use of the Internet allows companies to obtain vital information concerning their customers' wants and expectations, which will allows them to develop new products faster and keep their customers more informed and that this enables customers to make better-informed buying decisions. Morris *et al.* (1997) and Leong *et al.* (2003) add that the Internet provides companies with a means to serve their customers more quickly and Morris *et al.* (1997) further suggest that it makes it easier for customers to buy. Companies may also use the Internet to obtain information on the activities of their competitors so that they may be able to anticipate any competitive moves in order to stay ahead of their competitors (Avlonitis & Karayanni, 2000:445; Wang *et al.*, 2000; Wilson & Abel, 2002).

Owing to the fact that the use of the Internet in companies affects so many facets of marketing in these dimensions, there is a need to understand these dimensions across countries and different time periods.

2.7 INFLUENCE OF THE INTERNET ON THE MARKETING ACTIVITIES ACROSS THREE COUNTRIES AND TIME PERIODS

In order to be able to determine whether the impact of the Internet on marketing differs between countries and time periods, the results of previous studies are reviewed in this section.

Morris *et al*. (1997) developed a scale based on the World Wide Web Marketing Model that comprises the three constructs of changes in the conceptualisation of marketing activities (11 items), changes in market definition (8 items) and value creation (12 items). This scale was then used to measure Internet's impact on marketing in South Africa in 1997. The study was then replicated in 1999 and again in 2001 in Australia (Leong *et al*., 2003), as well as in Iran in 2005 (Ghazisaeedi *et al.,* 2007).

Table 2.1 reports on the means and subsequent ranking of each of the items across the three studies, as well as the overall mean and ranking of each construct.

Table 2.1: Internet's impact on marketing across three countries

		South Africa (1997)		Australia (2001)		Iran (2005)	
		Mean	**Rank**	**Mean**	**Rank**	**Mean**	**Rank**
Construct 1: Changes in conceptualisation of marketing activities							
1	Provide an effective channel for communicating product/ service information	4.07	**1**	4.18	**1**	3.51	**1**
2	Change the way in which products/ services are marketed	3.54	**8**	3.84	**2**	2.8	**10**
3	Enables two-way interactive relationships with customers	3.96	**2**	3.67	**3**	3.14	**2**
4	Influence promotional strategies	3.66	**5**	3.54	**4**	3.05	**5**
5	Enhance company capabilities to bring new products to the market	3.69	**4**	3.15	**5**	3.1	**4**
6	Provide an effective vehicle for improving market segmentation	3.57	**7**	3.13	**6**	2.93	**9**
7	Permit online payments	3.08	**10**	3.08	**7**	3.11	**3**
8	Permit involvement with customers earlier in the buying process	3.63	**6**	2.98	**8**	3.00	**7**
9	Do a better job of selling	3.70	**3**	2.97	**9**	3.01	**6**
10	Permit a reduced need for middlemen	3.09	**9**	2.55	**10**	2.96	**8**
11	Influence the way in which products are priced	2.47	**11**	2.16	**11**	2.09	**11**
Construct 1: Overall		3.50	**1**	3.21	**1**	2.97	**3**
Construct 2: Changes in market definition							
1	Expand the size of a targeted market	3.86	**1**	3.19	**1**	3.04	**5**
2	Target new customers in currently served markets	3.52	**4**	3.17	**2**	3.15	**4**
3	Target new customers in totally new market segments	3.42	**6**	3.11	**3**	3.19	**2**
4	Target new customers globally	3.77	**2**	2.91	**4**	3.24	**1**
5	Add new segments to targeted markets	3.55	**3**	2.85	**5**	3.18	**3**

Table 2.1: Internet's impact on marketing across three countries (continued…)

		South Africa (1997)		Australia (2001)		Iran (2005)	
		Mean	**Rank**	**Mean**	**Rank**	**Mean**	**Rank**
Construct 2: Changes in market definition (continued…)							
6	Define markets more precisely	3.3	**7**	2.65	**6**	2.84	**7**
7	Provide a podium to compete more effectively globally	3.44	**5**	2.64	**7**	2.92	**6**
8	Eliminate less profitable customers or market segments	2.61	**8**	2.29	**8**	2.26	**8**
Construct 2: Overall		3.43	**2**	2.85	**3**	2.98	**2**
Construct 3: Value creation							
1	Improve companies' abilities to keep customers informed	4.24	**1**	4.11	**1**	3.7	**1**
2	Enable companies to serve customers more quickly	3.74	**3**	3.61	**2**	3.28	**4**
3	Enable customers to make more informed buying decisions	4.06	**2**	3.61	**2**	3.54	**2**
4	Do a better job of researching customer needs	3.52	**5**	3.31	**3**	3.2	**5**
5	Make it easier for customers to buy	3.72	**4**	3.23	**4**	3.04	**7**
6	Provide a better way to identify unmet customer needs	3.21	**8**	2.88	**5**	2.91	**9**
7	Promote better customisation of products and services	3.35	**6**	2.84	**6**	2.84	**10**
8	Provide better understanding of the customer's buying process	2.99	**9**	2.77	**7**	2.81	**11**
9	Lower marketing costs	3.23	**7**	2.72	**8**	2.93	**8**
10	Provide a way in which we can price more accurately	2.8	**12**	2.5	**9**	2.35	**12**
11	Improve new product development	2.88	**10**	2.48	**10**	3.17	**6**
12	Assist in developing new products faster	2.82	**11**	2.47	**11**	3.33	**3**
Construct 3: Overall		3.38	**3**	3.04	**2**	3.09	**1**

As illustrated in Table 2.1, the mean scores for Constructs 1 and 2 in the 1997 South African study were all above 3.0, with the exception of Item 11 in Construct 1 (mean= 2.470) and Item 8 in Construct 2 (mean= 2.610). From this, it is evident that in 1997 the marketing practitioners believed that the Internet would change their marketing activities and the definition of their markets in the future. With regard to Construct 3, eight of the 12 items produced mean scores above 3.0, indicating that the marketing practitioners believed that the Internet would significantly influence the creation of greater value for customers.

In the 2001 Australian study, the items that scored the highest means included the communication of product and service information (mean = 4.180), the way in which products or services are marketed (mean = 3.580), two-way interactive relationships with customers (m = 3.883) and promotional strategies (mean = 3.530). This is a clear indication that the Australian marketing practitioners felt that the Internet would dramatically change the conceptualisation of marketing activities related to these items. Concerning the influence of the Internet on the definition of markets, the mean scores for five of the eight items were well below 3.0, indicating that the Australian marketing practitioners were under the impression that the Internet would not have much impact on the changing of market definitions, especially not in the near future. With five of the 12 items of Construct 3 exceeding the 3.0 mean score, the market practitioners are seen to have had a modest perception regarding the ability of the Internet to create greater value for customers.

It is evident that Iranian companies who had adopted the Internet believed that it would influence the most important aspects of their current marketing functions. From Table 2.1, it is evident that the study conducted in Iran in 2005 had ten items that were significantly lower than those of the 2001 Australian study, with significance difference values of $p < 0.001$. These items included:

- Changing the way in which products or services are marketed
- Enabling two-way interactive relationships with customers
- An effective channel for communicating product or service information
- Permitting a reduced need for middlemen

- Influence on promotional strategies
- Adding new market segments
- Developing new products faster
- Serving customers more quickly
- Improving new product development
- Improving the ability to keep customers more informed.

In comparing the 1997 South African study to the 2005 Iranian study it can be seen that all items, except for two in the marketing activity construct, were significantly different, whereas with the 2001 Australian study and the 2005 Iranian study, there were few significant differences between the items.

Even though these studies were conducted in different countries and at different times, the trends evident in the responses are similar. It is evident that significant relationships exist between changes in the conceptualisation of the marketing activities and new ways to create value, and changes in the definition of markets and new ways to create value.

In all three studies, the following items were scored high by the responding marketing practitioners:

- The Internet provides an effective channel for communicating product or service information
- The Internet enables customers to make more informed buying decisions
- The Internet improves the companies' abilities to keep customers informed

In all three studies, the following items were scored low by the respondents:

- The Internet influences the way in which products are priced
- The Internet eliminates less profitable customers or market segments
- The Internet provides a way to price products more accurately

2.8 SYNOPSIS

The Internet introduces new options to traditional marketing functions and a different dimension all together. This chapter gave an overview of the Internet, looking at its history, infrastructure and both the sizes and growth rates of its usage and coverage in South Africa and internationally. Section 2.3 reviewed the evolution, including all the developments, problems and opportunities of the Internet and the Web. In Section 2.4, the information revolution was discussed and the battle between traditional marketing and Internet marketing was addressed in Section 2.5. Highlighted in Section 2.6, is the World Wide Web Marketing Model and the influence of the Internet on the conceptualisation of marketing activities, market definition and value creation. The chapter concludes with Section 2.7, which addresses the influence of the Internet on the marketing activities across three countries over three different periods in time.

An empirical study was undertaken to determine the Internet's influence on the marketing activities of South African companies in 2011. The research methodology used in this study to conduct this empirical investigation is discussed in the following chapter, Chapter 3.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

According to Cronje, du Toit, Marais and Motlatla (2004:287), marketing research is the logical collection, analysis and interpretation of information on all types of marketing queries and makes use of distinguished scientific methods for the collection of information in order to facilitate the decision making of marketing management. The primary objective of this study was to investigate marketing practitioners' perceptions of the Internet's influence on the marketing practices of companies in South Africa. The following aspects were investigated from the literature:

- history of the Internet
- various developments, potential problems and opportunities brought about by the Internet and the Web over the past 20 years
- Internet's influence on marketing according to the framework of the World Wide Web marketing model proposed by Morris *et al.* (1997)
- growth of Internet usage internationally, as well as in South Africa.

Following the theoretical framework that was provided in the previous chapter, it was decided to conduct a cross-industrial field study of the top 100 listed companies in South Africa, taken from a sampling frame of 200 companies, with the aim of testing the influence of the Internet on the marketing practices of these companies.

This chapter illustrates the research methods used in the study and justifies the selection of the chosen methods. In addition, the research design and approaches chosen, together with the sampling procedure and the data collection process, including the techniques used to analyse the data, are discussed in this chapter. The issues of reliability and validity are also discussed. The following sections describe the design of the research, which was used to ensure that the study made use of sound procedures and methods of enquiry.

3.2 RESEARCH DESIGN

Marketing research may be classified in one of three categories, namely exploratory research, descriptive research and casual research. The research objective guides the selection of the appropriate design. While research may fall into one of the three categories, it is possible that different phases of the research process fall into different categories. These three research designs are discussed as follows:

- Exploratory research may be performed with the use of literature searches and surveys, which elicit individual responses regarding experiences, focus groups and case studies. The objective of exploratory research is to define problems more precisely, clarify concepts, gather explanations, gain insights, form hypotheses and eliminate impractical ideas.
- Descriptive research may be performed through longitudinal studies, which are time series analyses that make repeated measurements of the same individuals or cross-sectional studies, which study the target population to obtain measurements at a specific point in time. Descriptive research is used, for example, to enable marketers and researchers to identify and describe product users, determine the percentage of the population that uses the product or predict the future demand for the product.
- Casual research uses field and laboratory experiments, and it is used to find cause-and-effect relationships between variables (Cherry, 2011).

As this study is concerned with obtaining information regarding the status of the different aspects used to describe a particular situation in reality, with respect to variables or conditions in that particular situation, descriptive research has been implemented (Key, 1997). A single cross-sectional design was used, where one sample was drawn from the target population and information was obtained from that sample only once (Malhotra, 2010:108). Whilst this study is cross-sectional in design, it does have a quasi-longitudinal element in that the results emanating from this study are compared to previous studies conducted. The research approach used in this study is discussed next.

3.3 RESEARCH APPROACH

In any research study, there are two basic research approaches that may be used, namely quantitative and qualitative research. Quantitative research collects data that may be analysed using statistical analysis. The data collected usually comes from samples that are large enough to provide researchers with appropriate and realistic inferences from the sample to the population from which the subjects in the sample are drawn. When conducting quantitative research, questionnaires are used, which allow researchers to measure the responses of the individuals taking part in the study on quantitative scales. These scales provide numbers and statistics, which form the domain of quantitative research (Mullins, 2006:261). In contrast, qualitative research usually entails small samples of subjects and provides researchers with information that is not easily quantifiable. Qualitative research is used to obtain information concerning individuals' attitudes, behaviours, value systems, interests, motivations, culture or lifestyles (Van Eunen, 1995:35). For the purpose of this study, a quantitative study was chosen. The study is based on and compared to previous studies done in South Africa in 1997, in Australia in 2001 and in Iran in 2007, which all used the same scale.

3.4 SAMPLING STRATEGY

The following sampling procedure was utilised in this study:

3.4.1 Target population

A population is defined as the complete group of fundamentals from which one would like to gain information. A sample refers to the group that is being researched or sampled from the target population and is known as the sub-set of a population. The sample should be representative of the target population so that the results obtained may be generalised to the findings to the population (Swanepoel, Swanepoel, van Graan, Allison, Weideman & Santana, 2006:13). Sampling is necessary as it may be impossible to make direct observations of every individual in the target population being studied (Herek, 2009).

The target population for this study comprised senior marketing personnel employed at South African companies. These individuals are defined as the heads of marketing or the marketing managers of South African companies who work in the marketing departments and whose tasks are mainly marketing related.

3.4.2 Sampling frame

Malhotra (2010:373) describes the sampling frame as a delineation of the elements of the target population and indicates that it consists of a list or set of instructions on how to identify the target population.

For this study, one group of respondents was selected, namely South African marketing practitioners. The sampling frame consisted of the top 200 South African companies of 2009, ranked according to turnover, listed on the Johannesburg Stock Exchange (JSE), as published by the Financial Mail (2009). The industry sectors covered by this sample include telecommunications, media, transport, information technology, household goods and textiles, electronics, health and pharmaceuticals, food and beverages, leisure, chemicals, retail, construction, mining, platinum, gold, banks, life assurance, short-term insurance, support services, property, steel and other metals, automobiles and parts, and petroleum.

3.4.3 Method of sampling

There are two types of sampling methods, namely probability sampling and non-probability sampling. When using probability sampling, all the elements in the population being studied have a known, non-zero chance of being chosen for the sample and the mathematical probability that any one of them will be selected may be calculated using a specific mechanical procedure, which is the same procedure used to select the elements for the sample. Conversely, non-probability sampling uses population elements that are selected based on their availability or on the researcher's personal judgement. With probability sampling, researchers are able to evaluate the precision of a sample result and the amount of sampling error present, whereas with non-probability sampling, this is not possible and, as a result, probability sampling is viewed as the superior method (Herek, 2009; Churchill, 1998:398). Even though probability sampling is deemed superior to non-probability sampling, non-probability sampling in certain situations may be more practical (Luck & Rubin, 1987: 215) and may provide effective estimates of a population’s attributes (Malhotra, 2010: 376).

Probability sampling is divided into stratified, cluster or simple random sampling. Non-probability is divided into judgement sampling, which includes snowball sampling, quota sampling and convenience sampling. Convenience sampling is a sampling technique where subjects are selected based on their convenient accessibility and proximity to the researcher conducting the study. This form of sampling is preferred by researchers because it is fast, easy, inexpensive and because the subjects that are being studied are readily available (Castillo, 2009). Judgement sampling or purposive sampling is a form of non-probability sampling whereby a researcher handpicks the respondents because they are expected to serve the research purpose (Churchill, 1998:399).

The sampling frame and the sampling method go hand-in-hand, and the selection of the sampling method will depend upon a number of factors, which include the objectives of the study, the availability of financial resources, the nature of the problem under investigation and the time restrictions (McDaniel & Gates, 1999:411). Taken from the sampling frame of 200 companies (Section 3.4.2), this study made use of a non-probability, judgement sample of 100 companies which was taken in April 2011. The study was conducted without replacement sampling. A list of the top 100 companies used in the study is presented in Table 3.1.

Table 3.1 Top South African listed companies, according to turnover

Ranking by turnover	Company	Sector	Financial year end
5	Sanlam	Financials- Life assurance	Dec 2007
6	The Bidvest Group	Cyclical Services- Support Services	Jun 2008
7	Standard Bank Group	Financials- Banks	Dec 2007
12	Absa Group	Financial- Banks	Dec 2007
16	Shoprite Holdings	Non- Cyclical Services- Food & Drug Retailers	Jun 2008
17	Sappi	Basic Industries- Forestry & Paper	Sep 2008
25	Dimension Data Hold	Information Technology- Software & Computer services	Sep 2008
26	Datatec	Information Technology- Software & Computer services	Feb 2008
27	Aveng	Basic Industries- Construction & Building Materials	Jun 2008
29	Murray & Roberts Holdings	Basic Industries- Construction & Building Materials	Jun 2008
31	AngloGold Ashanti	Resources- Mining- Platinum	Dec 2007

Table 3.1 Top South African listed companies, according to turnover (continued…)

Ranking by turnover	Company	Sector	Financial year end
32	Liberty Holdings	Financials-Life assurance	Dec 2007
35	Tiger Brands	Non-Cyclical Consumer Goods- Food Producers & Processors	Sep 2008
37	Allied Electronics Corp	General Industries- Electronics & Electrical Equipment	Feb 2008
38	Woolworths Holdings	Cyclical Services- General Retailers	Jun 2008
39	Nampak	Cyclical Services- Support Services	Sep 2008
40	Grinrod	Cyclical Services- Freight and Shipping logistics	Dec 2007
41	Pioneer Food Group	Non- Cyclical Consumer Goods- Food Producers & Processors	Sep 2008
42	Santam	Financials-Insurance	Dec 2007
43	Lonmin Plc	Resources- Mining- Platinum	Sep 2007
44	JD Group	Cyclical Services- General Retailers	Aug 2008
46	Blue Label Telecoms	Commercial services and supplies	May 2008
47	Super Group	Cyclical Services- Transport	Jun 2008
48	Kumba Iron Ore	Resources- Mining- Other Mineral Extractors and Mines	Dec 2007
50	New Clicks Holdings	Cyclical Services- General Retailers	Aug 2008
51	AECI	Basic Industries- Chemicals	Dec 2007
53	Wilson Bayly Holmes-Ovcon	Basic Industries- Construction and Building Materials	Jun 2008
55	Exxaro Resources	Resources- Mining- Other Mineral Extractors and Mines	Dec 2007
56	Mondi	Basic Industries- Paper and Packaging	Dec 2007
58	Remgro	Financials- Investment Companies	Mar 2008
59	Distell Group	Non-Cyclical Consumer Goods- Beverages	Jun 2008
60	Mutual & Federal	Financials- Insurance	Dec 2007
63	Group Five	Basic Industries- Construction and Building Materials	Jun 2008
64	Combined Motor Holdings	Cyclical Consumer Goods- Automobiles and Parts	Feb 2008
65	Metropolitan Holdings	Financials- Life assurance	Dec 2007
66	Allied Technologies	General Industrials- Electronic & Electrical Equipment	Feb 2008
67	Astral Foods	Non- Cyclical Consumer Goods- Food Producers and Processors	Sep 2008
70	Foschini	Cyclical Services- General Retailers	Mar 2008
71	Sun International	Cyclical Services- Leisure and Hotels	Jun 2008
74	Omnia Holdings	Basic Industries- Chemicals	Mar 2008
75	Highveld Steel and Vanadium	Basic Industries- Steel and Other metals	Dec 2007
76	AVI	Non-Cyclical Consumer Goods- Food Producers & Processors	Jun 2008
78	Illovo Sugar	Non-Cyclical Consumer Goods- Food producers and Processors	Mar 2008
81	Pretoria Portland Cement	Basic Industries- Construction & Building Materials	Sep 2008
82	African Bank Investments	Financials- Diversified Financial Services	Sep 2008
85	Truworths International	Cyclical Services- General Retailers	Jun 2008

Table 3.1 Top South African listed companies, according to turnover (continued…)

Ranking by turnover	Company	Sector	Financial year end
87	Palabora Mining Company	Resources- Mining- Other Mineral Extractors & Mines	Dec 2007
89	Bell Equipment	General Industries- Engineering & Machinery	Dec 2007
92	Zurich Insurance Co SA	Financials- Life Insurance	Dec 2007
93	Caxton CTP	Cyclical Services- Media & Entertainment	Jun 2008
95	Business Connexion Group	Information Technology- Software & Computer Services	May 2008
97	Distr & Warehousing Network	Basic Industries- Construction including Supplies & Fixtures	Jun 2008
98	Northam Platinum	Basic Industries- Precious Metals & Minerals	Jun 2008
100	Adcorp Holdings	Professional Services	Feb 2008
102	Mustek	Information Technology- Information Technology Hardware	Jun 2008
103	Invicta Holdings	General Industrials- Diversified Industrials	Mar 2008
104	Tiger Wheels	Cyclical Consumer Goods- Automobiles & Parts	Jun 2006
105	Oceana Group	Non- Cyclical Consumer Goods- Automobiles and Parts	Sep 2008
107	Growthpoint Properties	Financials- Real Estate	Jun 2008
108	Astrapak	Cyclical Services- Containers & Packaging	Feb 2008
109	Lewis Group	Cyclical Consumer Goods- Household Goods & Textiles	Mar 2008
111	Freeworld Coatings	Basic Industries- Chemicals	Sep 2008
112	Comair	Cyclical Services- Airlines	Jun 2008
114	Phumelela Gaming & Leisure	Cyclical Services- Leisure & Hotels	Jul 2008
115	Stefanutti Stocks Holdings	Basic Industries- Construction and Engineering	Feb 2008
116	Gijimaast Group	Information Technology- Communication Services	Jun 2008
117	Pinnacle Technology Holdings	Information Technology- Information Technology Hardware & Software	Jun 2008
119	Kelly Group	Cyclical Services- Employment Services	Sep 2008
129	Gold Reef Resorts	Cyclical Services- Gaming, Leisure & Hotels	Dec 2007
130	Eqstra Holdings	General Industries- Diversified Industries	Jun 2008
133	Amalgamated Appliance	Cyclical Consumer Goods- Household Goods & Textiles	Jun 2008
134	Argent Industrial	Basic Industries- Steel & Concrete	Mar 2008
136	Italtile	Cyclical Services- Speciality Retailers	Jun 2008
137	Capitec Bank Holdings	Financials- Banks	Feb 2008
138	Ceramic Industries	Cyclical Consumer Goods- Ceramic Tiles	Jul 2008
139	Conduit Capital	Financials- Insurance & Credit Recovery Services	Aug 2008
140	BSI Steel	Basic Industries- Steel & Other Metals	Mar 2008
142	ARB Holdings	General Industries- Electronics & Electrical Equipment	Jun 2008

Table 3.1 Top South African listed companies, according to turnover (continued…)

Ranking by turnover	Company	Sector	Financial year end
144	PSG Group	Non-Cyclical Consumer Goods- Pharmaceuticals	Feb 2008
145	UCS Group	Information Technology- Software & Computer Services	Sep 2008
147	Famous Brands	Cyclical Services- Hotels, Restaurants & Leisure	Feb 2008
148	Value Group	Cyclical Services- Transport	Feb 2008
152	Esor	Basic Industries- Civil Engineering & Construction	Feb 2008
154	The York Timber Organisation	Basic Industries- Forestry	Jun 2008
162	Cipla Medpro SA	Non-Cyclical Consumer Goods- Health	Dec 2007
163	Trans Hex Group	Resources- Mining- Diamonds	Mar 2008
166	Winhold	Financials- Investments	Sep 2007
170	JSE	Financials- Stocks	Dec 2007
173	Kagiso Media	Cyclical Services- Media & Entertainment	Jun 2008
175	Coronation Fund Managers	Financials- Stocks & Investments	Sep 2008
177	Transpaco	Basic Industries- Plastic & Paper	Jun 2008
179	Mercantile Bank Holdings	Financials- Banks	Dec 2007
182	Howden Africa Holdings	General Industries- Engineering	Dec 2007
187	Digicore Holdings	Cyclical Services- Commercial Services and Supplies	Jun 2008
188	Sea Kay Holdings	Basic Industries- Construction & Building Materials	Jun 2008
190	Afrimat	General Industries- Diversified Industrials	Feb 2008
192	Ellies Holdings	Cyclical Services- Communications & Communication Equipment	Apr 2008
193	City Lodge hotels	Cyclical Services- Leisure and Hotels	Jun 2008
197	Sovereign Food Investments	Non- Cyclical Consumer Goods- Food producers & Processors	Feb 2008
198	Chemical Specialities	Basic Industries- Chemicals	Mar 2008

Source: Financial Mail (2009)

3.4.4 Sample size

Kent (2001:201) defines sample size as the number of usable respondents that may be entered into a data matrix, which will form the foundation for any research study or analysis.

According to Bevan-Dye and Venter (2008:545), a non-probability, judgement sample of South Africa's top 100 companies, as selected in this study, is deemed sufficiently large considering that it represents 30 of the 39 industry sectors in South Africa; that is, 77 percent. As such, this study has a sample size of 100 top South African companies, ranked according

to turnover, as published by the Financial Mail (2009), which represents 30 of the 39 industry sectors in South Africa.

3.5 DATA COLLECTION METHOD

According to Chisnall (1992:27), data collection forms the central point of all research activities undertaken in any research study. Hair, Wolfinbarger, Ortinau and Bush (2008:34) indicate that two methods may be used to gather quantitative data – the survey method and the observation method. The survey method includes the use of self-completion questionnaires or interviewers asking respondents direct questions about a variety of variables in order to elicit responses, while the observation method involves observing market phenomena or individuals. The survey questionnaire approach is often preferred to the observation approach in the collection of quantitative research given that it enables researchers to obtain more information from respondents.

In this study, the survey approach was used to collect the necessary data. Malhotra (2010:145) defines a survey as a method of interviewing a large number of individuals with the use of a pre-designed questionnaire. This approach is often favoured as it is less expensive than other research techniques, it is less time consuming and it can be created and administered efficiently and fast (Cherry, 2011).

The survey was conducted by means of a self-administered questionnaire, which was sent via e-mail to the respondents from whom telephonic permission had been obtained. The instrument in this research study, namely the questionnaire, will be discussed in the next section.

3.5.1 Questionnaire design

A questionnaire is a set of formalised questions created to obtain the data from respondents in accordance to the specific objectives of a research study. As questionnaires are the backbone of the majority of surveys, they require careful planning and execution (McDaniel & Gates, 1999; 356; Malhotra, 2010: 335 & Chisnall, 1992: 39).

In order to ensure a good questionnaire design, the study has to have well-defined goals. The goals of the questionnaire need to be clear and concise so that the questionnaire may be designed to address the goals of the study correctly. For a questionnaire to be successful, it needs to be designed to attain the highest possible response rate. This may be done by making the questionnaire as short as possible, giving the questionnaire a meaningful title, which will make it more credible, and using simple and direct language that is easy for the respondents to interpret and understand (Williams, 2003).

When using questionnaires in a research study, a well-written cover letter needs to be included. The cover letter is used to introduce the study and it plays an important role in getting the respondents to participate. The questionnaire should include clear and concise instructions on how to complete the questionnaire. Furthermore, the questionnaire should be made as convenient as possible for the respondents to complete, as the easier it is for respondents to reply, the higher the likely response rate, which will improve the quality of the research study (Churchill, 1995: 433).

In order to ensure the appropriateness of the questionnaire design, the following aspects were taken into account. The goals of the questionnaire were clear and concise, the questionnaire was as short and precise as possible, and simple and direct language was used to ensure that the respondents were able to interpret and answer the questionnaire correctly. The questionnaire was accompanied by a cover letter, which explained the purpose of the study and requested the participation of the respondents. The questionnaire was sent via e-mail, which allowed the respondents to answer it in their own time and helped to ensure convenience for the respondents.

3.5.2 Questioning format

The scale used to collect data in this study was designed by Morris *et al.* (1997) who employed it to conduct research on South African marketers' perceptions as to the impact of the Internet on marketing in the late1990s. This study was then replicated in Australia in 2001 by Leong *et a*l. (2003) and in Iran in 2005 by Ghazisaeedi *et al*. (2007). The scale comprises three constructs pertaining to the Internet's impact on marketing, namely changes

in the conceptualisation of marketing activities (11 items), changes in market definition (8 items) and value creation (12 items), measured using a Likert scale.

The decision was made to use an odd number of categories in the Likert scale, as there was a chance that some of the respondents may have a neutral or indifferent response (Malhotra, 2010:313). The rating scale measures used were 1= to a very little extent, 2= to a little extent, 3= to neither a great nor a little extent; 4= to a great extent, 5= to a very great extent.

As indicated by Chisnall (1992: 170), the Likert scale is uncomplicated to construct, it has good reliability and allows for in-depth information about the respondents' feelings to be gathered adequately, which makes it popular in research studies. The five-point Likert scale was used consistently on all the items in the scale.

3.5.3 Questionnaire layout

The questionnaire used for this research study (refer to Annexure B) comprises two sections, namely Section A and Section B. Section A focuses on gathering demographic data and includes questions on the names of the companies, industry sector to which they belong, job titles of the respondents and their number of years of marketing experience. Section B consists of the scale developed by Morris *et al.* (1997).

The different items in the scale address the different research objectives, as set out at the beginning of the study and presented in Section 1.3.3. Table 3.2 indicates which items were used to address each of the objectives set out in the study.

Table 3.2 Items answering the empirical research objectives

EMPIRICAL RESEARCH OBJECTIVES	ITEMS
Investigate marketers' perceptions of the degree to which the Internet and the Web have changed their marketing activities	B1-11
Determine markers' perceptions of the degree to which the Internet and the Web have redefined their company's market(s)	B12-19
Investigate marketers' perceptions of the degree to which the Internet and the Web have changed the way they create value for their customers	B 20-31

Table 3.2 Items answering the empirical research objectives (continued…)

EMPIRICAL RESEARCH OBJECTIVES	ITEMS
Determine the extent to which marketers' perceptions of the impact of the Internet and the Web have changed from the late 1900's to 2011	Taking the findings emanating from this study and comparing them to the findings of the study done by Morris *et al.* (1997) and replicated in Australia by Leong *et al*.(2003) and in Iran by Ghazisaeedi *et al*. (2007)

3.6 PILOT TESTING OF THE QUESTIONNAIRE

A pre-test is the application of a questionnaire on a trial basis in a small study, referred to as the pilot study, which is used to determine how efficiently and effectively a questionnaire works (Churchill, 1992:356). Hair *et al.* (2008:180) indicate that a pre-test assists researchers with obtaining the necessary feedback on a questionnaire that is required in order to make any necessary changes necessary before the questionnaire is used in the main study. These changes may involve changing or revising the instructions of the questionnaire, adapting the cover letter and/or providing additions in the time limit set to answer the questionnaire. Therefore, the pre-test highlights any problems or matters that may exist and that need to be modified before the main study is conducted.

Once the questionnaire was designed for this study, two experienced researchers initially answered the questionnaire in order to determine any possible design mistakes. Given the e-mail survey method selected for the study, the questionnaire was then reviewed by an experienced information technology practitioner to check for any technological abnormalities. The initial questionnaire (refer to Annexure A) was pre-tested on a group of five individuals who did not form part of the pilot test or main sample in order to make sure that all questions were clearly stated and easy to understand, and to establish the face and content validity of the questionnaire.

As suggested by van Eunen (1995:71), the pre-test tested the questionnaire to make sure it was:

- unambiguous
- expressed in simple language
- brief and to the point
- only asking one question at a time
- not using leading questions.

After the necessary changes were made, the questionnaire was then piloted on a convenience sample of 30 South African companies that did not form part of the main sample in order to determine the reliability of the scale. Once this was completed, the revised questionnaire was then prepared for the final survey of the study. The same questionnaire that was used in the pilot test combined with a cover letter (refer to Annexure B) was then sent via e-mail to the potential respondents from whom permission had been sought and granted via telephonic means.

3.7 ADMINISTRATION OF THE QUESTIONNAIRE

The formal survey for this research study was conducted between June 2011 and August 2011 on a sample of 100 companies. One standardised questionnaire was used to ensure that all the data obtained for the study from the respondents was provided in the same format.

The telephone directory was used to obtain the telephone numbers of the companies that formed part of the sample so that the secretaries could be contacted. This was done in order to obtain the particulars of the marketing managers or marketing directors of the companies involved in the study and to gain permission to forward the questionnaire to the respective individuals.

A structured self-administered questionnaire was then e-mailed to those respondents from whom telephonic permission had been obtained. The questionnaire was accompanied by a

cover letter explaining the purpose of the study and requesting participation. After three weeks, a second letter was sent via e-mail to the companies who had not yet responded to the first letter and questionnaire. An additional three weeks was then given until the close-off date for responding.

3.8 DATA PREPARATION

As soon as the first batch of questionnaires is received from the survey conducted, data preparation should be conducted while the fieldwork is still under way. This will allow researchers to make the necessary changes to the fieldwork when problems are detected (Malhotra, 2010452). By preparing the data, researchers will be able to identify undesirable gaps in the research and it should highlight aspects that are viewed as interesting but that do not directly correlate with the problem under investigation. Data preparation is therefore necessary in a study to obtain meaning from the data collected (Churchill, 1995:736). The following are the steps that should be followed when preparing data:

3.8.1 Step 1: Editing

When researchers review the questionnaires of a study it is referred to as editing. The objective of the editing process in a study is to increase the accuracy and precision of the questionnaires (Malhotra, 2010:453). Editing involves checking for mistakes from both a respondent and interviewer's point of view. Questionnaires are normally edited at least twice before they are submitted for data entry (McDaniel & Gates, 1999:472). When editing the questionnaires, researchers screen the questionnaires to identify incomplete, ambiguous, inconsistent or illegible responses.

3.8.2 Step 2: Coding

Coding is the technical procedure of assigning a code, which is normally a number, to each possible response to each question that will categorise the data of a study. Coding is not an automatic process but rather a manual process, which requires the judgement of the coder. By coding each possible response, the raw data is transformed into symbols that allow for tabulation and summation (Churchill, 1995:740; Malhotra, 2010:454). In the questionnaire, questions were classified into two sections: Section A - demographical data and Section B - data on perceptions of Internet's influence on marketing in South African companies. In this

study, the questionnaire was pre-coded with the assistance of a statistician and with the supervision of the research supervisor.

Table 3.3 Coding information

TYPE OF DATA	VARIABLE	QUESTION NUMBER
Demographic Data	A1 to A4	Section A, Questions A1 to A4
The impact of the Internet and Internet technologies on the conceptualisation of South African companies' marketing activities	B1 to B11	Section B, Questions B1 to B11
The impact of the Internet and Internet technologies on how South African companies' define their markets	B12 to B19	Section B, Questions B12 to B19
The extent to which the Internet and Internet technologies have contributed to creating value in South African companies	B20 to B31	Section B, Questions B20 to B31

3.9 STATISTICAL ANALYSIS

The Statistical Package for Social Sciences (SPSS), Version 17.0 for Windows, was used to analyse the captured data. The following section describes the statistical methods applied on the empirical data sets.

3.9.1 Descriptive statistics

Descriptive statistics are methods are used to summarise and order the characteristics of large sets of data (McDaniel & Gates, 1999:495; Swanepoel *et al.,* 2006:6). Descriptive statistics describe basic features of the data such as what the data is or what the data shows in a study and forms the basis of almost any quantitative analysis of data (Trochim, 2006). For this study, a combination of the three most common descriptive statistics, namely measures of location (means), measures of variability (standard deviations) and measures of shape (skewness and kurtosis) were used.

3.9.2 Measures of location

Measures of location are used to describe the centre of the distribution and are often referred to as measures of central tendency. These include the mean, median and mode (Malhotra, 2010:486). This study makes use of one measure of location, the mean. The mean is the most commonly used measurement of location and is the average value within the distribution (Hair *et al.,* 2008:246). It is calculated by taking the total sum of the observations and dividing that by the number of observations (Swanepoel *et al.,* 2006:57).

3.9.3 Measures of variability

Measures of variability, which include the range, variance and standard deviation, measure the scatter of data points in a data set. These are typically calculated on interval or ratio data (Malhotra, 2010:487). This study makes use of the standard deviation measure of variability. The standard deviation is used to measure the average separation of the values in a set of responses about their mean, thereby providing an indication of how similar or dissimilar the numbers are in the set of responses (Hair *et al.,* 2008:237).

3.9.4 Measures of shape

Along with measures of variability and location, there are measures of shape that are also used to understand the nature of distribution. There are two different methods used to measure shape, namely skewness and kurtosis (Malhotra, 2010:488).

3.9.4.1 Skewness

Skewness is defined as a characteristic of the distribution of a data set that assesses its symmetry about the mean. When a distribution is skewed, the deviations, whether they are positive or negative from the mean, are unequal. Values on one side of the distribution tend to be further from the 'middle' than values on the other side. It is the tendency of the deviations from the mean to be of a larger value in one direction than in the other (Malhotra, 2010:488; Easton & McColl, 2011).

3.9.4.2 Kurtosis

Kurtosis is a measure used to determine the relative peakedness or flatness of the curve defined by the frequency distribution. Kurtosis is therefore used to measure the relationship

between the data, and the **height and sharpness of the peak.** The higher the values, the higher and sharper the peak will be and vice versa, the lower the values the lower and less distinct the peak will be. When there are a number of extreme differences from the mean rather than a small amount of differences the data will experience more and more variability, which will result in a higher kurtosis value (Malhotra, 2010: 488; Brown, 2011).

3.10 RELIABILITY

Reliability is defined as the degree to which a scale produces consistent results if repeated measurements are made on the aspects. It is the degree of consistency of a measurement and may be measured by determining the affiliation between scores obtained from different administrators of the scale, which enables researchers to measure the proportion of systematic variation in a scale. Reliability is therefore the repeatability of a measurement (Malhotra, 2010: 318, 320; Colosi, 1997).

When using multi-item summated rating scales, the internal reliability may be measured using Cronbach's alpha. With Cronbach's alpha the average correlation among items in a scale are taken and adjusted for the number of items. Scales with a relatively large number of items and a high average correlation are reliable scales. The larger the number of scale items, the more the value of the coefficient alpha increases. The coefficient varies from 0, which indicates no reliability to 1, which is referred to as unity and represents maximum reliability. Unsatisfactory internal consistency reliability is represented with a value of 0.6 or less (Kent, 2001:221; Malhotra, 2010:319). The recommended level is 0.70 or above (Nunnally, 1978:245).

As indicated earlier in the chapter, the scale employed in this study has been used in previous studies. In each of these previous studies, a Cronbach alpha above the recommended 0.70 was computed on all three constructs of the scale and in all three studies, indicating that the scale is a reliable measuring instrument (Morris *et al.,* 1997; Leong *et al.,* 2002; Ghazisaeedi *et al.,* 2007).

3.11 VALIDITY

The extent to which differences in observed scale scores reflect true differences among articles or objects on the characteristic being measured, rather than systematic or random error is referred to as validity. Therefore, validity is the strength of the conclusions, deductions, proposals and approaches (Colosi, 1997; Malhotra, 2010:318,320). McDaniel and Gates (1999:308) indicate that a prerequisite for testing the validity of a study is that the measuring instrument being used is reliable because if the instrument is not reliable, the results conducted on tests over a period of time will not produce consistent results. Validity may be examined from a number of different perspectives, including face validity, content validity and construct validity.

3.11.1 Face validity

Face validity is the weakest form of validity. McDaniel and Gates (1999: 309) define face validity as the judgement of researchers with regard to the degree to which the measuring instrument of the study appears to measure what it is required to measure.

3.11.2 Content validity

Content validity is closely linked to face validity and it evaluates the degree to which the items that form the measuring instrument represent the entire concept that is being studied (Malhotra, 2010:320). The procedures used to develop the instrument for a study are the key to content validity. The key procedures may include defining the domain of the characteristic that will determine exactly what needs to be measured by the scale used. The next step would be to examine the literature concerning the study to decipher how the variable has been defined and used, and to classify all the possible items that may be included in the scale. Once these steps have been taken, experts should be asked regarding which items in their opinion should or should not be included in the scale. The last step would then be to re-test the questionnaire and ask an open-ended question to determine what other elements might be necessary to add to the scale (McDaniel & Gates, 1999:310).

3.11.3 Construct validity

Construct validity is directly concerned with what the instrument is truly measuring. Construct validity is vital to scientific progress and it is the most difficult form of validity to authenticate (Churchill, 1995:535). The instrument used must be internally consistent and

must measure what it is intended to measure; that is, each item in the scale must match the construct and show a correlation with the other items in the instrument (Churchill, 1992:387). Malhotra (2010:321) indicates that both convergent validity and discriminant validity should be present for construct validity to exist. These aspects are explained below as follows:

3.11.3.1 Convergent Validity

Construct validity is the degree to which the scale has a positive correlation with other measures of the same construct.

3.11.3.2 Discriminant Validity

Discriminant validity is the degree to which a measure does not equate with other constructs from which it is meant to differ. It is involved with demonstrating a lack of significant correlation among different constructs.

3.12 TESTS OF SIGNIFICANCE

Significance testing is the process used to test the hypotheses formulated for a study. The procedure followed typically involves formulating the null and alternative hypotheses, selecting the level of significance, selecting the appropriate statistical method, collecting and analysing the data and determining whether to reject the null hypothesis based on the evidence in the sample. Hypothesis testing is broadly classified into tests of association and tests of differences (Malhotra, 2010:489, 493). This study involves hypothesis testing of differences of means between independent samples.

3.12.1 Statistical significance testing of differences of means between independent samples

Z-tests and t-tests are tests used in research studies dealing with parametric data to determine whether there is a statistical significant difference between the mean scores of samples drawn from two different populations; that is, two independent samples. The null hypothesis is formulated as there is no difference between the population means (denoted as H_o: $\mu_1 = \mu_2$) and the alternative hypothesis as there is a difference (denoted as H_a: $\mu_1 \neq \mu_2$). The decision rule is to reject the null hypothesis if the probability (denoted as p) associated with the test statistic is less than the specified level of significance (denoted as *a*) (Luck & Rubin, 1987: 448; Malhotra, 2010:505). The t-test is used when the sample size (denoted as n) is small and

the standard deviation of the population in question is unknown. Where a population standard deviation is known or in the case of larger sample sizes ($n > 30$), the z-test is appropriate (Luck & Rubin, 1987: 449). Even though the statistical package used in this study (SPSS) does not differentiate between the t-test and z-test and refers to both as t-tests, Chapter 4 of this study refers to the z-test given that the study's sample size exceeds 30.

3.12.2 Practical significance testing of differences of means between independent samples: Cohen's D-statistic

According to Pallant (2007: 207-208), where a statistically significant difference between the means of two independent samples is determined, Cohen's D-statistic is calculated in order to estimate the effect size. This effect size is evaluated as follows:

- $0.20 \leq d < 0.50$: there is a small effect that is practically non-significant,
- $0.50 \leq d < 0.80$: there is a medium effect that is moving toward practical significance
- $0.80 \leq d$: there is a large effect that is practically significant

3.13 SYNOPSIS

This chapter discussed the research methodology used in the design of the research study. For this study, a quantitative approach was chosen and a non-probability judgement sample was selected for the study.

In order to conduct this research study a survey method was selected and the methods used to collect the data, as well as the procedure used to administer the questionnaire, were discussed in this chapter. The different statistical procedures, which were applied in this study, were also discussed.

In the chapter to follow, the data that was obtained during the research study is analysed and interpreted.

CHAPTER 4
ANALYSIS AND INTERPRETATION OF EMPIRICAL FINDINGS

4.1 INTRODUCTION

This chapter reports on and interprets the empirical findings of this study. The chapter includes an overview of the results of the pilot test in Section 4.2 and a description of the preliminary data analysis in Section 4.3. In Section 4.4, the descriptive analysis of the data sets, including the reliability and validity of the main survey, is discussed. Thereafter, in Section 4.5, the various hypotheses for this study are formulated and tested.

In order to evaluate and perform the data analysis, SPSS Version 17.0 for Windows was used. The data analysis was conducted in two stages. The first stage involved analysing the results of the pilot testing of the questionnaire and the second stage involved analysing the main survey's findings. The next section will discuss the data analysis procedures involved in the pilot phase.

4.2 RESULTS OF THE PILOT TEST

Following an initial pre-testing of the questionnaire conducted to ascertain face and content validity, the questionnaire was piloted on a convenience sample of 30 marketers working for South African companies that did not form part of the sampling frame of the main study in order to establish the reliability of the scale within the questionnaire.

The results obtained in the pilot study, as presented in Table 4.1, provide a satisfactory indication of reliability. The five-point scale returned a Cronbach alpha of 0.971, which exceeds the recommended level of 0.70 (Nunnaly, 1978:245). In conjunction with the Cronbach alpha, the standardised alpha was calculated at 0.972, which also exceeds the recommended level of 0.70.

Table 4.1 Summary of pilot test results

Items	Number of variables	Mean	Standard deviation	N	Cronbach alpha	Average inter-item correlation
B1 - B11	11	3.727	0.841	26	0.928	0.545
B12 - B19	8	3.337	1.084	26	0.931	0.628
B20 - B31	12	3.507	0.966	26	0.933	0.543
B1 - B31	31	3.540	0.902	26	0.971	0.524

Even though the inter-item correlation means fell slightly outside of the recommended range of 0.15 and 0.50 (Clark & Watson, 1995: 316), it was decided to proceed with the study given that this scale has proven to be a robust measuring instrument in the previous studies of Morris *et al.* (1997), Leong *et al.* (2001) and Ghazisaeedi *et al.* (2007).

4.3 PRELIMINARY DATA ANALYSIS

Before analysing a data set, it is recommended that a preliminary data analysis be conducted on the data set, which is done by using coding and tabulation.

4.3.1 Coding

Coding is the technical process whereby data is taken and divided into categories. It involves designating the selection categories into which the respondents should place their responses, and then code numbers are assigned to the different category answers so that the responses may be computer analysed (Churchill, 1992: 51).

In the questionnaire for this study, the questions are classified into two sections, namely Section A - demographical data and Section B - perceptions of Internet's impact on marketing. The same questionnaire was administered to all the respondents in the sample.

Table 4.2 presents the variable codes and assigned values.

Table 4.2 Coding

Section A: Demographical data			
Question	**Code**	**Variable**	**Value assigned to responses**
Question	A1	Company name	Construction and Building Materials (1); Media & Entertainment (2); Mining-Platinum (3); Mining-Gold (4); Mining-Other mineral Extractors and Mines (5); Investments (6); Insurance (7); Electronic and Electrical Equipment (8); Household goods and textiles (9); Chemicals (10); Transport (11); General Retailers (12); Food producers and processors (13); Health (14); Life Assurance (15); Beverages (16); Real Estate (17); Leisure and Hotels (18); Steel and other metals (19); Software and Computer Services (20); Automobiles and parts (21); Information Technology Hardware (22); Engineering and machinery (23); Other (24)
Question 2	A2	Industry sector	
Question 3	A3	Job title	-
Question 4	A4	Years of marketing experience	-

Section B: Impact of the Internet and Internet technologies on the marketing of companies			
Question	**Code**	**Construct measured**	**Value assigned to responses**
Question 1	B1	Extent to which the Internet has changed the way that companies conceptualise their marketing activities	To a very little extent (1) To a little extent (2) To neither a great extent or a little extent (3) To a great extent (4) To a very great extent (5)
Question 2	B2		
Question 3	B3		
Question 4	B4		
Question 5	B5		
Question 6	B6		
Question 7	B7		
Question 8	B8		
Question 9	B9		
Question 10	B10		
Question 11	B11		
Question 12	B12	Extent to which the Internet has changed the way that companies define their markets	To a very little extent (1) To a little extent (2) To neither a great extent or a little extent (3) To a great extent (4) To a very great extent (5)
Question 13	B13		
Question 14	B14		
Question 15	B15		
Question 16	B16		
Question 17	B17		
Question 18	B18		
Question 19	B19		

Table 4.2 Coding (continued…)

Question	Code	Construct measured	Value assigned to responses
Question 20	B20	Extent to which the Internet has enabled companies to create greater customer value	To a very little extent (1)
Question 21	B21		To a little extent (2)
Question 22	B22		To neither a great extent or a little extent (3)
Question 23	B23		To a great extent (4)
Question 24	B24		To a very great extent (5)
Question 25	B25		
Question 26	B26		
Question 27	B27		
Question 28	B28		
Question 29	B29		
Question 30	B30		
Question 31	B31		
Question 31	B31		

4.3.2 Tabulation

Once the data is coded, the next step is to tabulate the data. This involves calculating the number of responses in each of the predetermined categories in order to ensure that the data is easily understandable (Chisnall, 1992:356; Hair *et al.*, 2008:233). Table 4.3 presents the frequency table for marketing practitioners' perceptions of the impact of the Internet on marketing in South African companies (B1-B31).

Table 4.3 Frequency table of responses

Scale item	Too a very little extent	To a little extent	To neither a little of great extent	To a great extent	To a very great extent
	1	**2**	**3**	**4**	**5**
B1	1	4	3	38	28
B2	8	4	4	39	19
B3	7	6	8	31	22
B4	6	7	13	33	15
B5	10	7	3	35	18
B6	7	7	14	35	10
B7	10	2	5	20	37
B8	6	8	12	33	14
B9	14	10	28	19	2
B10	12	10	23	21	8
B11	17	17	19	15	5

Table 4.3 Frequency table of responses (continued…)

Scale item	Too a very little extent	To a little extent	To neither a little of great extent	To a great extent	To a very great extent
	1	2	3	4	5
B12	14	7	17	30	6
B13	9	13	20	25	7
B14	9	13	14	26	12
B15	11	6	14	24	19
B16	14	12	16	27	5
B17	10	12	16	30	6
B18	8	5	12	29	20
B19	19	14	28	10	2
B20	0	4	7	28	34
B21	3	4	13	30	23
B22	2	4	13	32	20
B23	3	12	17	32	8
B24	8	8	14	30	12
B25	6	13	24	26	3
B26	10	11	21	24	6
B27	9	16	19	23	4
B28	9	13	16	25	9
B29	12	17	25	12	6
B30	7	15	21	24	5
B31	7	13	22	23	7

4.3.3 Data gathering process

As indicated in Chapter 3, the final questionnaire consisted of 35 items, grouped into two sections. The first section consisted of four items, which measured demographic data of the respondents and the second section consisted of 31 items, which were divided into three sub-sections designed to measure the three constructs of the study. In addition to the questionnaire, a cover letter was emailed to all the respondents in order to explain the purpose of the study and to encourage them to participate in the study.

In order to obtain the required sample size of 100 South African companies from the sampling frame of 2009's top 200 listed South African companies ranked according to turnover (Financial Mail, 2009) each individual company was contacted telephonically to obtain permission to forward the questionnaire, as well as the relevant e-mail addresses.

Of the 100 e-mailed questionnaires that were sent out, only 74 completed ones were returned. This gave the study a 74 percent response rate. The 74 responses consisted of 69 companies that sent back one response each, two companies that sent back two responses each and one company that sent back three responses. From the non-responses, one response was received after the cut-off date, two respondents indicated that due to company policy they were not allowed to partake in the study, one respondent indicated that he/she no longer worked at the company in question and another respondent indicated that the questionnaire was not applicable to their company. The remainder of the non-respondents simply did not send back any form of response.

Section 4.4 provides an overview of the descriptive statistics computed in this study.

4.4 DESCRIPTIVE ANALYSIS

Descriptive statistics provide researchers with a tool to summarise and describe the basic characteristics of large sets of data received from a sample of respondents, more efficiently (McDaniel & Gates, 1999:495; Hair *et al.*, 2008:235). The descriptive statistics of the sample of marketing practitioners for this study are set out below. This section concludes with a discussion on the reliability and validity of the research instrument used in the final study.

4.4.1 Sample description

The responses were received from companies that comprised 21 of the 39 industry sectors in South Africa. Table 4.4 presents the percentage of the respondents falling into each industry sector. Note that the percentages have been rounded off.

Table 4.4 Industry sectors represented by respondents

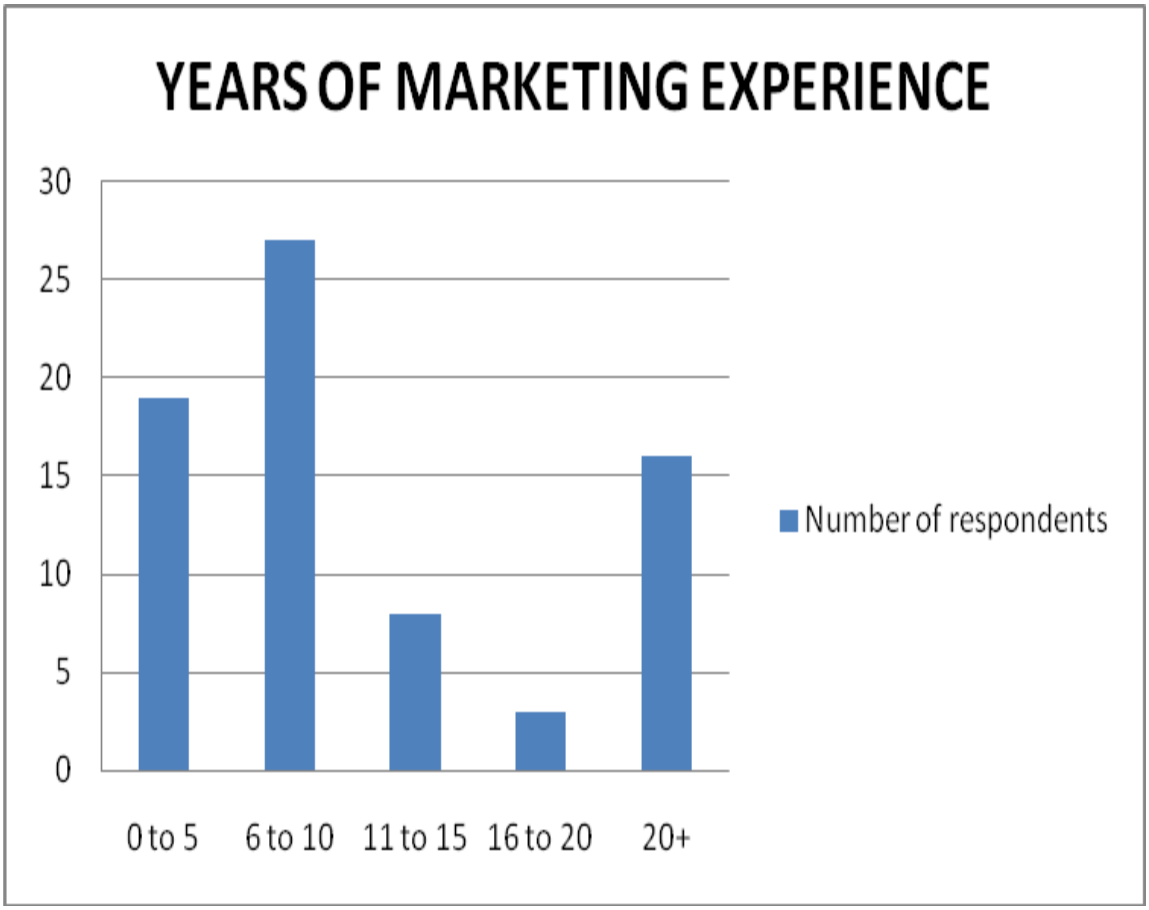
	Sector	Percentage of respondents (%)
1	Construction and Building Materials	11
2	Media and Entertainment	3
3	Mining: Platinum	3
4	Mining: Gold	1

Table 4.4 Industry sectors represented by (continued…)

	Sector	Percentage of respondents (%)
5	Mining: Other Mineral Extractors and Mines	7
6	Investments	3
7	Insurance	5
8	Electronic and Electrical Equipment	3
9	Household goods and textiles	1
10	Chemicals	1
11	Transport	5
12	General Retailers	3
13	Food Producers and Processors	7
14	Health	1
15	Life Assurance	1
16	Beverages	0
17	Real Estate	0
18	Leisure and Hotels	0
19	Steel and other metals	1
20	Software and Computer Services	3
21	Automobiles and Parts	4.5
22	Information Technology: Hardware	4.5
23	Engineering and Machinery	5
24	Other	27

With regard to the question on the years of marketing experience, 26 percent of the sample (19 respondents) indicated having between 0 and 5 years of marketing experience, 36 percent (27 respondents) between 6 and 10 years, and 11 percent (8 respondents) indicated having between 11 and 15 years of marketing experience. Marketing practitioners with between 16 and 20 years of marketing experience represented 4 percent (3 respondents) of the sample and the remaining 22 percent (16 respondents) indicated having over 20 years of marketing experience. This is graphically presented in Figure 4.1.

Figure 4.1 Respondents' marketing experience



4.4.2 Descriptive statistics

In order to provide summary measures, the measures of central tendency, dispersion and shape of this study were calculated. Each item's overall importance ranking, as well as the item's importance ranking within the construct was computed based on the computed mean values. Given the five-point Likert scale used ranged from 1 = to a very little extent to 5 = to a very great extent, higher mean values are associated with perceptions of the Internet having a greater impact on marketing.

These descriptive statistics are presented in Table 4.5.

Table 4.5 Descriptive statistics

Item	Valid N	Mean	Overall rank	Rank within construct	Standard deviation	Skewness	Kurtosis
B1	74	4.19	2	1	0.855	-1.46	2.817
B2	74	3.77	5	3	1.211	-1.001	0.083
B3	74	3.74	6	4	1.239	-0.836	0.004
B4	74	3.59	9	6	1.158	-0.83	-0.04
B5	73	3.60	8	5	1.331	-0.936	-0.36
B6	73	3.47	11	8	1.144	-0.801	-0.127
B7	74	3.97	3	2	1.385	-1.254	0.711
B8	73	3.56	10	7	1.167	-1.287	0.341
B9	73	2.79	23	10	1.118	-0.259	-0.836
B10	74	3.04	21	9	1.232	-0.317	-0.838
B11	73	2.64	25	11	1.24	0.177	-1.009
B12	74	3.09	19	6	1.262	-0.464	-0.832
B13	74	3.11	17	5	1.177	-0.307	-1.116
B14	74	3.26	14	3	1.272	-0.378	-0.942
B15	74	3.46	12	2	1.357	-0.319	-0.781
B16	74	2.96	22	7	1.254	-0.882	-0.124
B17	74	3.14	16	4	1.197	-0.622	-0.76
B18	74	3.65	7	1	1.254	-0.518	-0.909
B19	73	2.48	26	8	1.107	0.085	-0.836
B20	73	4.26	1	1	0.85	-1.09	0.694
B21	73	3.9	4	2	1.043	-1.012	0.797
B22	71	3.9	4	3	0.973	-0.946	0.886
B23	72	3.42	13	4	1.031	-0.523	-0.35
B24	72	3.42	13	5	1.219	-0.665	-0.463
B25	71	3.10	18	8	1.023	-0.213	-0.894
B26	72	3.07	20	9	1.179	-0.327	-0.904
B27	72	2.96	22	10	1.139	-0.269	-0.708
B28	72	3.17	15	6	1.233	-0.443	-0.452
B29	72	2.76	24	11	1.169	-0.281	-0.637
B30	72	3.07	20	9	1.105	0.151	-0.666
B31	72	3.14	16	7	1.13	-0.35	-0.756
Construct 1	70	3.522	1	-	1.168	-0.966	1.117
Construct 2	70	3.161	3	-	1.227	-0.645	-0.231
Construct 3	70	3.352	2	-	1.176	-0.745	0.376

As is evident from Table 4.5, the data for this scale may be classified as normally distributed data since none of the skewness scores fall outside the -2 or +2 range. In terms of the peakedness of the data distribution, the kurtosis values computed indicate a relatively flat distribution.

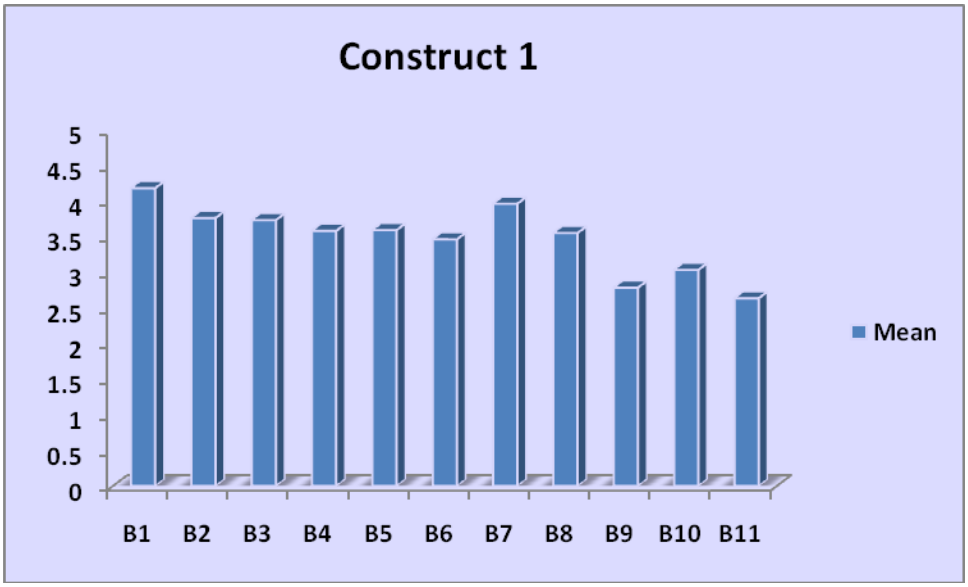
Means above 3 were computed for 25 of the 31 items, indicating that South African marketers deem the Internet to have had an impact on most aspects of marketing within their companies. Within the overall scale, B20 (improve companies' ability to keep customers informed) was ranked the highest (mean = 4.26), followed by B1 (provide an effective channel for communicating product/service information) (mean = 4.19) and B7 (permit online payments) (mean = 3.97). Items B21 (enable companies to serve customers more quickly) and B22 (enable customers to make more informed buying decision) were ranked jointly in fourth position, each with a mean of 3.9. The lowest ranked item was B19 (eliminate less profitable customers (mean = 2.48), followed by B11 (influence the way in which products are priced (mean = 2.64), B29 (provide a way in which we can price more accurately) (mean = 2.76) and B9 (do a better job selling) (mean = 2.79). Items B16 (add new segments to targeted markets) and B27 (provide better understanding of the customers' buying process) were ranked jointly in the 22nd position, with each having a mean of 2.96.

The lowest standard deviations were recorded on B1 (Std. Dev. = 0.855) and B20 (Std. Dev. = 0.850), indicating there was strong agreement amongst respondents regarding the Internet's impact on provide an effective channel for communicating product/service information and its impact on improving companies' ability to keep customers informed. Higher standard deviations were recorded on B7 (Std. Dev. = 1.385), B15 (Std. Dev. = 1.357) and B5 (Std. Dev. = 1.331). This indicates less agreement amongst respondents regarding the Internet's impact on permitting online payment, targeting new customers globally and enhancing company abilities to bring new products to the market.

Construct 1, which pertains to the Internet's impact on the conceptualisation of marketing activities, was ranked the highest with a mean of 3.522, followed by Construct 3, which pertains to the Internet's impact on changes in market definition, with a mean of 3.352. Construct 2, which involves the Internets impact on value creation, was ranked last, with a mean of 3.161. Construct 2 also experienced the largest standard deviation of the three constructs.

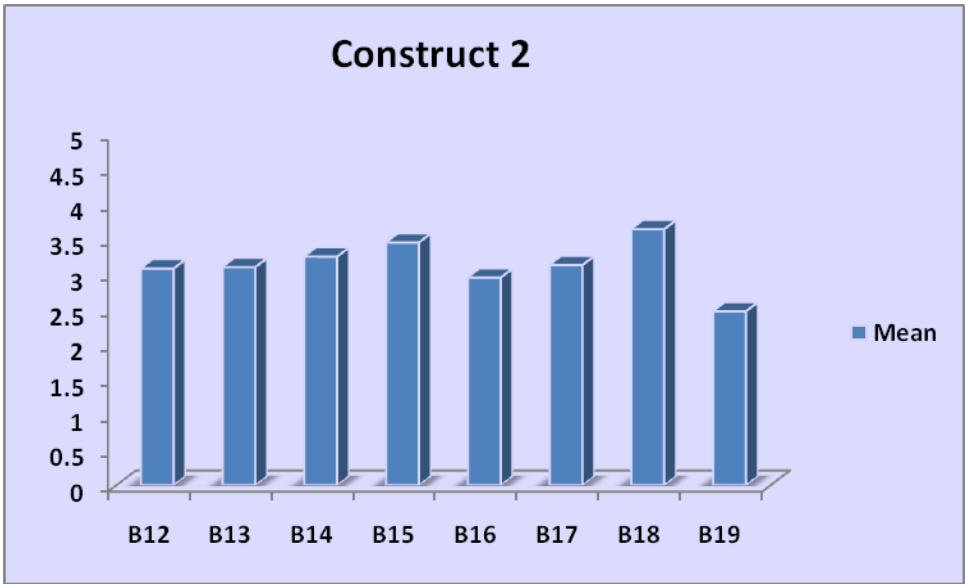
Within Construct 1, B1 (provide an effective channel for communicating product/service information) is ranked the highest with a mean of 4.19, while B11 (influence the way in which products are priced) is ranked the lowest with a mean of 2.64.

Figure 4.2 Ranking of the 11 items in Construct 1 of the 2011 South African study



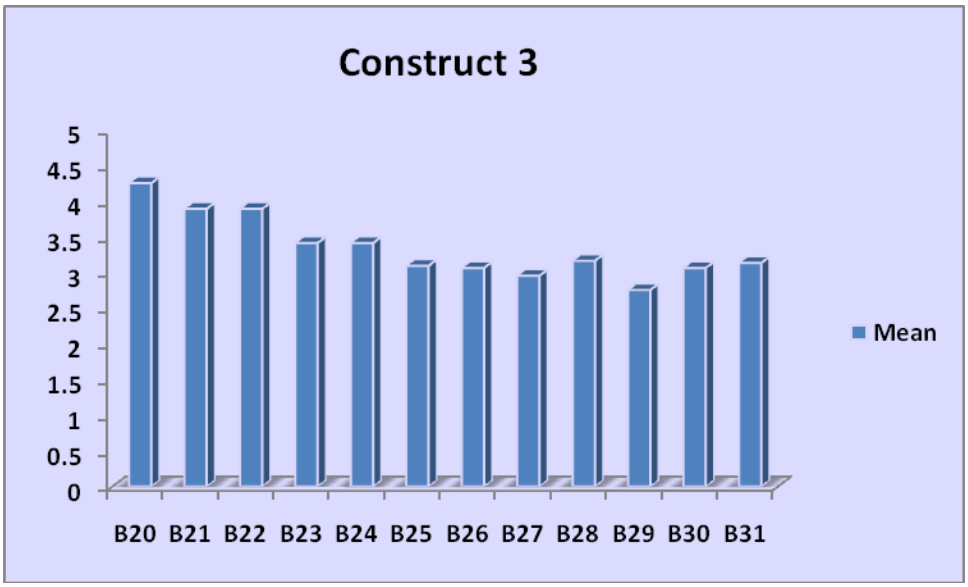
Within Construct 2, B18 (provide a podium to compete more effectively globally) is ranked the highest with a mean of 3.65, while B19 (eliminate less profitable customers) is ranked the lowest with a mean of 2.48.

Figure 4.3 Ranking of the eight items in Construct 2 of the 2011 South African study



In Construct 3, B20 (improve companies' ability to keep customers informed) is ranked the highest with a mean of 4.26 and B29 (provide a way in which we can price more accurately) is ranked the lowest with the mean computed as 2.76.

Figure 4.4 Ranking of the 12 items in Construct 3 of the 2011 South African study



4.4.3 Reliability and validity analysis of main survey

A Cronbach alpha value of 0.949 was computed for the overall study, which is well over the recommended value of 0.7 (Nunnaly, 1978:245). The standardised alpha computed for the overall scale was 0.950. The Cronbach alpha was then computed for the three constructs separately. The Cronbach alpha, calculated for the 12 items of Construct 3, was 0.902. The second construct's Cronbach alpha for the eight items was calculated as 0.869 and the Cronbach alpha for the first construct, which was constructed with 11 items, was computed at 0.851. The standardised alpha computed for the overall study was also high at 0.950.

In order to test the construct validity, the average inter-item correlation was computed, which, according to Spiliotopoulou (2011), needs to be between 0.15 and 0.50. An inter-item correlation value of 0.382 was computed for the overall study. This value indicates that the items in the scale are both sufficiently correlated to suggest convergent validity, yet not so

highly correlated from measures from which they are intended to differ, which indicates the presence of discriminant validity (Churchill & Iacobucci, 2002:413). This implies that the research instrument used in the study does measure the Internet's influence on the marketing activities of South African companies. The average inter-item correlation was then computed for each of the three constructs. For Construct 1 it was computed as 0.354, Construct 2 0.455 and 0.436 for Construct 3. The presence of a high Cronbach alpha value, computed on the overall scale further suggests convergent validity. Table 4.6 provides a summary of the reliability and validity measures of the research instrument that was employed in this study.

Table 4.6 Summary of the reliability and validity measures of the overall scale

	Number of items	Mean	Standard deviation	Standardised alpha	Cronbach alpha	Average inter-item Correlation
Overall scale	31	3.363	1.162	0.950	0.949	0.382
Construct 1	11	3.522	1.168	0.858	0.851	0.354
Construct 2	8	3.160	1.227	0.870	0.869	0.455
Construct 3	12	3.352	1.176	0.903	0.902	0.436

In order to test reliability, the Cronbach coefficient alpha was calculated for each of the three constructs individually in each of the four studies. For the study conducted in South Africa in 1997, by Morris *et al*. (1997), reliability was tested via the calculation of Cronbach's coefficient alpha. The Cronbach alpha for Construct 1, consisting of 11 items, measuring changes in the conceptualisation of the marketing activity was 0.904. For the Construct 2, consisting of eight items measuring the changes in market definition, a Cronbach alpha value of 0.881 was calculated, and for Construct 3, which consists of 12 items measuring greater customer value creation, a Cronbach alpha value of 0.917 was recorded.

The study done in Australia in 2001 by Leong *et al.* (2001) produced Cronbach alpha values exceeding 0.87 for all three constructs in the study. The study done in Iran in 2005, by Ghazisaeedi *et al.* (2007), produced Cronbach alpha values of 0.85 for Construct 1 and Construct 2. For Construct 3, the 2005 Iranian study resulted in a Cronbach alpha value exceeding 0.87.

For this study conducted in South Africa in 2011, the reliability was also tested via the calculation of the Cronbach alpha coefficient. Table 4.6 highlights that for Construct 1 a Cronbach alpha value of 0.851 was recorded. When compared to the other studies conducted it is lower than that recorded for Construct 1 in the 1997 South African study and the 2001 Australian study but the same as the 2005 Iranian study. Construct 2 produced a Cronbach alpha value of 0.869. Although this lower than the Cronbach alpha computed for Construct 2 in the 1997 South African study, it is similar to that recorded for Construct 2 in both the 2001 Australian and the 2005 Iranian study. For Construct 3, the Cronbach alpha for the 2011 South African study was calculated to be 0.902, which is slightly lower than that of the 1997 South African study but higher than that computed in the 2001 Australian and 2005 Iranian studies.

The following section discusses the hypotheses testing conducted in this study.

4.5 HYPOTHESES TESTING

Churchill (1992:109) defines a hypothesis as a statement that stipulates how two or more variables, that are measurable, are related. When hypotheses are stated, the characteristics of the population involved are then explored. The information obtained is then compared against the supposition in the hypotheses, which will in turn be accepted or rejected according to the probability that it is true. Tests of significance are used in order to accept or reject statistical hypotheses. The results are used to determine the relationships that may exist between two or more variables in a sample, which may then be generalised to a population (Marshall, 1998).

Z-tests are used here to compare the South African 2011 findings from this study with those from previous studies, as outlined below. The studies were compared as follows:

- the 2011 South African study was compared against the results of the original 1997 South African study (Morris *et al.*, 1997)
- the 2011 South African study was compared against the results of the 2001 Australian study (Leong *et al.*, 2003)

- the 2011 South African study was compared against the results of the 2005 Iranian study (Ghazisaeedi *et al.*, 2007)

For the significance tests, the significance level is set at the conventional 5 percent, that is $\alpha = 0.05$ and the decision rules applied are as follows:

- If P-value $\geq \alpha$, conclude H_o
- If P-value $< \alpha$, conclude H_a

Where statistical significance tests are concerned with whether or not a research result is due to chance or sample variability, practical significance is concerned with whether the results obtained are useful in the real world (Kirk, 1996).

4.5.1 Comparison between the 1997 South African study and the 2011 South African study

In order to determine whether there is a significant statistical difference between the marketers' perceptions of the Internet's impact on marketing in South Africa in 1997 and 2011, a z-test for independent samples was conducted. Where a statistically significant difference existed, the Cohen's D-statistic was computed in order to determine whether the difference was practically significant.

4.5.1.1 Mean difference between the 1997 and 2011 South African study: Construct 1

This section analyses whether there is a significant statistical and practical difference between the 1997 and 2011 South African study on the items in Construct 1, which deals with the Internet's impact on the conceptualisation of marketing activities. The hypotheses are formulated as follows:

H_o1: There is no difference in marketers' perceptions of the impact of the Internet on the conceptualisation of marketing activities in South Africa between 1997 and 2011.

H_a1: There is a difference in marketers' perceptions of the impact of the Internet on the conceptualisation of marketing activities in South Africa between 1997 and 2011.

Table 4.7 reports on the findings regarding the statistical and practical differences between the 1997 and 2011 South African study on the items in Construct 1.

Table 4.7: Mean difference between the 1997 and 2011 South African study: Construct 1

Item	Mean 1997	Mean 2011	N 1997	N 2011	z-value	p-value	Cohen's D
B1	4.07	4.186	71	70	-0.736	0.304	*****
B2	3.54	3.814	71	70	-1.299	0.172	*****
B3	3.96	4.186	71	70	-1.358	0.159	*****
B4	3.66	3.586	71	70	0.384	0.371	*****
B5	3.69	3.586	71	70	0.481	0.355	*****
B6	3.57	3.429	71	70	0.734	0.305	*****
B7	3.08	3.957	71	70	-3.555	0.001*	0.581***
B8	3.63	3.557	71	70	0.386	0.37	*****
B9	3.7	2.771	71	70	5.251	0.000*	0.821****
B10	3.09	3.029	71	70	0.277	0.384	*****
B11	2.47	2.643	71	70	-0.801	0.29	*****

* Statistically significant at $p < 0.05$

** Small effect, practically non-significant

*** Medium effect and moving toward practical significance

**** Large effect, practically significant

***** Cohen's d-statistic not calculated as the variable was not statistically significant

Table 4.7 reflects that for items B7 and B9 in the first construct there is a statistically significant difference at $p < 0.05$. Concerning item B7, the Internet's impact on the permitting of online payments, a statistically significant difference exists between the two studies, with $p = 0.001 < 0.05$. For item B9, the Internet's ability to do a better job of selling, there is a statistically significant difference between the two studies, $p = 0.000 < 0.05$. Therefore, for items B7 and B9, the null hypothesis H_o1 is rejected and the alternative H_a1 is concluded. With the exception B7 and B9, there is no statistical difference between the 1997 and 2011 South African studies on the items in Construct 1, and the null hypothesis H_o1

cannot be rejected. These results indicate that the respondents from the two studies conducted in South Africa in 1997 and more recently in 2011 did not vary significantly in their perceptions towards items B1, B2, B3, B4, B5, B6, B8, B10 and B11.

In order to assess whether there was a practical significant difference in the item means between the two studies, Cohen's D-statistic was used. There is a medium effect, moving toward practical significance on B7 (D = 0.581). For B9 there is large effect that is practically significant (D = 0.821).

For the remaining items in the first construct of the scale, the differences between the mean scores of the two studies are both statistically and practically non-significant and the null hypothesis cannot be rejected for these items.

4.5.1.2 Mean difference between the 1997 and 2011 South African study: Construct 2

This section analyses whether there is a significant statistical and practical difference between the 1997 and 2011 South African study on the items in Construct 2, which deals with the Internet's impact on changes in market definition. The hypotheses are formulated as follows:

H_o2: There is no difference in marketers' perceptions of the impact of the Internet on market definition in South Africa between 1997 and 2011.

H_a2: There is a difference in marketers' perceptions of the impact of the Internet on market definition in South Africa between 1997 and 2011.

Table 4.8 reports on the findings regarding the statistical and practical differences between the 1997 and 2011 South African study on the items in Construct 2.

Table 4.8: Mean difference between the 1997 and 2011 South African studies: Construct 2

	Mean 1997	Mean 2011	N 1997	N 2011	z value	P value	Cohen's D
B12	3.86	3.114	71	70	3.761	0.000*	0.593***
B13	3.52	3.129	71	70	2.102	0.044*	0.336**
B14	3.42	3.286	71	70	0.654	0.322	*****
B15	3.77	3.471	71	70	1.383	0.153	*****
B16	3.55	3	71	70	2.763	0.009*	0.444**
B17	3.3	3.171	71	70	0.603	0.333	*****
B18	3.44	3.643	71	70	-0.94	0.263	*****
B19	2.61	2.471	71	70	0.696	0.313	*****

* Statistically significant at $p < 0.05$

** Small effect, practically non-significant

*** Medium effect and moving toward practical significance

**** Large effect, practically significant

***** Cohen's d-statistic not calculated as the variable was not statistically significant

Table 4.8 reflects that on items B12, B13, and B16 in the second construct there is a statistically significant difference at $p < 0.05$. Concerning item B12, the Internet's ability to expand the size of a targeted market, a statistically significant difference exists between the two studies, with $p = 0.000 < 0.05$. For item B13, the Internet's ability to target new customers in currently served markets, a statistically significant difference exists between the two studies, with $p = 0.044 < 0.05$. Item B16, the Internet's ability to add new segments to targeted markets, also indicates a statistically significant difference between the two studies, with $p = 0.009 < 0.05$. Therefore, for items B12, B13 and B16, the null hypothesis H_o2 is rejected and the alternative H_a2 is concluded. With the exception B12, B13 and B16, there is no statistical difference between the 1997 and 2011 South African 1997 studies on the items in Construct 2, and the null hypothesis H_o2 cannot be rejected. These results indicate that the respondents from the two studies conducted in South Africa in 1997 and more recently in 2011 did not vary significantly in their perceptions towards items B14, B15, B17, B18 and B19.

In order to assess whether there was a practical significant difference in the item means between the two studies, Cohen's D-statistic was used. There is a medium effect, moving toward practical significance on B12 (D = 0.593). For B13 and B16 there is large effect that is practically significant (D = 0.336 and D = 0.444).

For the remaining items in the second construct of the scale, the differences between the mean scores of the two studies are both statistically and practically non-significant and the null hypothesis cannot be rejected for these items.

4.5.1.3 Mean difference between the 1997 and 2011 South African study: Construct 3

This section analyses whether there is a significant statistical and practical difference between the 1997 and 2011 South African study on the items in Construct 3, which deals with the Internet's impact on value creation. The hypotheses are formulated as follows:

H_o3: There is no difference in marketers' perceptions of the impact of the Internet on value creation in South Africa between 1997 and 2011.

H_a3: There is a difference in marketers' perceptions of the impact of the Internet on value creation in South Africa between 1997 and 2011.

Table 4.9 reports on the findings regarding the statistical and practical differences between the 1997 and 2011 South African study on the items in Construct 3.

Table 4.9: Mean difference between the 1997 and 2011 South African study: Construct 3

Item	Mean 1997	Mean 2011	N 1997	N 2011	z-value	p-value	Cohen's D
B20	4.24	4.271	71	70	-0.221	0.389	*****
B21	3.74	3.886	71	70	-0.748	0.302	*****
B22	4.06	3.886	71	70	1.042	0.232	*****
B23	3.52	3.429	71	70	0.515	0.349	*****
B24	3.72	3.414	71	70	1.474	0.135	*****
B25	3.21	3.086	71	70	0.647	0.324	*****
B26	3.35	3.071	71	70	1.359	0.158	*****
B27	2.99	2.986	71	70	0.021	0.399	*****
B28	3.23	3.171	71	70	0.275	0.384	*****
B29	2.8	2.786	71	70	0.068	0.398	*****
B30	2.88	3.086	71	70	-1.001	0.242	*****
B31	2.82	3.157	71	70	-1.57	0.116	*****

* Statistically significant at $p < 0.05$

** Small effect, practically non-significant

*** Medium effect and moving toward practical significance

**** Large effect, practically significant

***** Cohen's d-statistic not calculated as the variable was not statistically significant

Table 4.9 reflects that for all 12 items in the third construct the differences between the means of the two studies are statistically non-significant. With regards to the 12 items of Construct 3, there is no statistical difference between the 1997 and 2011 South African studies and the null hypothesis H_o3 cannot be rejected. These results indicate that the respondents from the two studies conducted in South Africa in 1997 and more recently in 2011 did not vary significantly in their perceptions towards items B20, B21, B22, B23, B24, B25, B26, B27, B28, B29, B30 and B31.

Given that there was no statistically significant difference between the two studies on this construct, there was no purpose in calculating Cohen's D-statistic.

For the 12 items in the third construct of the scale, the differences between the mean scores of the two studies are both statistically and practically non-significant and the null hypothesis cannot be rejected for these items.

4.5.1.4 Mean difference between the 1997 and 2011 South African study: Construct 1, Construct 2, Construct 3 and overall scale

This section analyses whether there is a significant statistical and practical difference between the 1997 and the 2011 South African study on Construct 1, Construct 2 and Construct 3 as a whole, as well as on the overall scale measuring the Internet's impact on marketing. The hypotheses are formulated as follows:

H_o4: There is no difference in marketers' perceptions of the impact of the Internet on marketing in South Africa between 1997 and 2011.

H_a4: There is a difference in marketers' perceptions of the impact of the Internet on marketing in South Africa between 1997 and 2011.

Table 4.10 reports on the findings regarding the statistical and practical significant difference between the 1997 and the 2011 South African studies on the Internet's influence on marketing.

Table 4.10: Mean difference between the 1997 and 2011 South African study: Construct 1, Construct 2, Construct 3 and overall scale

Item	Mean 1997	Mean 2011	N 1997	N 2011	z-value	p-value	Cohen's D
Construct 1	3.496	3.522	71	70	-0.130	0.396	*****
Construct 2	3.434	3.161	71	70	1.335	0.164	*****
Construct 3	3.380	3.352	71	70	0.140	0.395	*****
Overall scale	3.435	3.363	71	70	0.363	0.374	*****

* Statistically significant at $p < 0.05$

** Small effect, practically non-significant

*** Medium effect and moving toward practical significance

**** Large effect, practically significant

***** Cohen's d-statistic not calculated as the variable was not statistically significant

Table 4.10 reflects that for all three constructs and the overall scale of the study, the differences between the means of the 1997 and 2011 South African studies are statistically non-significant and for this reason, H_o4 cannot be rejected. These results indicate that the

respondents from the two studies did not vary significantly in their perceptions towards the items in each of the three constructs and the overall scale.

Given that there was no statistically significant difference between the two studies on this construct, there was no purpose in calculating Cohen's D-statistic.

For the three constructs and the overall scale, the differences between the mean scores of the two studies are both statistically and practically non-significant and the null hypothesis cannot be rejected.

4.5.2 Comparison between the 2001 Australian study and the 2011 South African study

In order to determine whether there is a significant statistical difference between the marketers' perceptions of the Internet's impact on marketing in the study conducted by Leong *et al*. (2003) in 2001 in Australia and the one conducted in South Africa in 2011, a z-test for independent samples was conducted. Where a statistically significant difference existed, the Cohen's D-statistic was computed in order to determine whether the difference was practically significant.

4.5.2.1 Mean difference between the 2001 Australian and 2011 South African studies: Construct 1

This section analyses whether there is a significant statistical and practical difference between the 2001 Australian study and 2011 South African study on the items in Construct 1, which deals with the Internet's impact on the conceptualisation of marketing activities. The hypotheses are formulated as follows:

H_o5: There is no difference in marketers' perceptions of the impact of the Internet on the conceptualisation of marketing activities in Australia in 2001 and South Africa in 2011.

H_a5: There is a difference in marketers' perceptions of the impact of the Internet on the conceptualisation of marketing activities in Australia in 2001 and South Africa in 2011.

Table 4.11 reports on the findings regarding the statistical and practical differences between the 2001 Australian study and the 2011 South African study on the items in Construct 1.

Table 4.11: Mean difference between the 2001 Australian and 2011 South African studies: Construct 1

Item	Australia Mean 2001	South Africa Mean 2011	N 2001	N 2011	z-value	p-value	Cohen's D
B1	4.180	4.186	181	70	0.047	0.399	*****
B2	3.840	3.814	181	70	-0.096	0.397	*****
B3	3.670	4.186	181	70	3.890	0.000*	0.496***
B4	3.540	3.586	181	70	0.282	0.383	*****
B5	3.150	3.586	181	70	2.322	0.027*	0.321***
B6	3.130	3.429	181	70	1.796	0.080	*****
B7	3.080	3.957	181	70	4.418	0.000*	0.618***
B8	2.980	3.557	181	70	3.386	0.001*	0.454***
B9	2.970	2.771	181	70	-1.232	0.187	*****
B10	2.550	3.029	181	70	2.743	0.009*	0.368**
B11	2.160	2.643	181	70	2.789	0.008*	0.382**

* Statistically significant at $p < 0.05$

** Small effect, practically non-significant

*** Medium effect and moving toward practical significance

**** Large effect, practically significant

***** Cohen's d-statistic not calculated as the variable was not statistically significant

Table 4.11 reflects that on items B3, B5, B7, B8, B10 and B11 in the first construct there is a statistically significant difference at $p < 0.05$. Concerning item B3, the Internet's ability to enable two-way interactive relationships with customers, a statistically significant difference exists between the two studies, with $p = 0.000 < 0.05$. For item B5, the Internet's ability to enhance the abilities of companies to bring new products to the market, there is a statistically significant difference between the two studies, with $p = 0.027 < 0.05$. Item B7, the Internet's impact on the permitting of online payments and item B8, the Internet's impact on permitting involvement with customers earlier in the buying process, indicate statistically significant

differences between the two studies, with $p = 0.000 < 0.05$ and $p = 0.001 < 0.05$ respectively. Concerning item B10, the Internet's impact on the reduced need for middlemen and item B11, the Internet's influence on the way in which products are priced, statistically significance differences exist between the two studies, with $p = 0.009 < 0.05$ and $p = 0.008 < 0.05$, respectively. Thus, for items B3, B5, B7, B8, B10 and B11, the null hypothesis H_o5 is rejected and the alternative H_a5 is concluded. With the exception B3, B5, B7, B8, B10 and B11, there is no statistically significant difference between the 2001 Australian study and the 2011 South African studies on the items in Construct 1 and the null hypothesis H_o5 cannot be rejected. These results indicate that the respondents from the two studies conducted in Australia in 2001 and more recently in South Africa in 2011 did not vary significantly in their perceptions towards items B1, B2, B4, B6 and B9.

In order to assess whether there was a practical significant difference in the item means between the two studies, Cohen's D-statistic was used. There is a medium effect, moving toward practical significance on B3 (D = 0.469), B5 (D = 0.321) and N7 (D = 0.618). For items B8, B10 and B11, there is large effect that is practically significant (D = 0.454, D = 0.368 and D = 0.382).

For the remaining items in the first construct of the scale, the differences between the mean scores of the two studies are both statistically and practically non-significant and the null hypothesis cannot be rejected for these items.

4.5.2.2 Mean difference between the 2001 Australian and 2011 South African studies: Construct 2

This section analyses whether there is a significant statistical and practical difference between the 2001 Australian study and the 2011 South African study on the items in Construct 2, which deals with the Internet's impact on market definition. The hypotheses are formulated as follows:

H_o6: There is no difference in marketers' perceptions of the impact of the Internet on market definition in Australia in 2001 and South Africa in 2011.

H_a6: There is a difference in marketers' perceptions of the impact of the Internet on market definition in Australia in 2001 and South Africa in 2011.

Table 4.12 reports on the findings regarding the statistical and practical differences between the 2001 Australian study and the 2011 South African study on the items in Construct 2.

Table 4.12: Mean difference between the 2001 Australian and 2011 South African studies: Construct 2

	Australia Mean 2001	South Africa Mean 2011	N 2001	N 2011	z value	p value	Cohen's D
B12	3.19	3.114	181	70	-0.423	0.365	*****
B13	3.17	3.129	181	70	-0.252	0.386	*****
B14	3.11	3.286	181	70	0.997	0.243	*****
B15	2.91	3.471	181	70	2.896	0.006*	0.387**
B16	2.85	3	181	70	0.871	0.273	*****
B17	2.65	3.171	181	70	3.165	0.003*	0.442***
B18	2.64	3.643	181	70	5.596	0.000*	0.787****
B19	2.29	2.471	181	70	1.109	0.216	*****

* Statistically significant at $p < 0.05$

** Small effect, practically non-significant

*** Medium effect and moving toward practical significance

**** Large effect, practically significant

***** Cohen's d-statistic not calculated as the variable was not statistically significant

Table 4.12 reflects that on items B15, B17 and B18 of the second construct there is a statistically significant difference at $p < 0.05$. Concerning item B15, the Internet's ability to target new customers globally, a statistically significant difference exists between the two studies, with $p = 0.006 < 0.05$. Item B17, the Internet's ability to define markets more precisely and item B18, the Internet's ability to provide a podium to compete more effectively globally both indicate a statistically significant difference between the two studies, with $p = 0.003 < 0.05$ and $p = 0.000 < 0.05$. Thus, for items B15, B17 and B18, the null hypothesis H_o6 is rejected and the alternative H_a6 is concluded. With the exception of B15, B17 and B18, there is no statistically significant difference between the 2001 Australian and the 2011 South African studies on the items in Construct 2, and the null hypothesis H_o6 cannot be rejected. These results indicate that the respondents from the two studies

conducted in Australia in 2001 and more recently in South Africa in 2011 did not vary significantly in their perceptions towards items B12, B13, B14, B16 and B19.

In order to assess whether there was a practical significant difference in the item means between the two studies, Cohen's D-statistic was used. There is a small effect, moving toward practical significance on B15 (D = 0.387). For B17 there is medium effect that is practically significant (D = 0.442) and there is a large effect, moving toward practical significance on B18 (D = 0.787).

For the remaining items in the second construct of the scale, the differences between the mean scores of the two studies are both statistically and practically non-significant and the null hypothesis cannot be rejected for these items.

4.5.2.3 Mean difference between the 2001 Australian and 2011 South African studies: Construct 3

This section analyses whether there is a significant statistical and practical difference between the 2001 Australian study and 2011 South African study on the items in Construct 3, which deals with the Internet's impact on value creation. The hypotheses are formulated as follows:

H_o7: There is no difference in marketers' perceptions of the impact of the Internet on value creation in Australia in 2001 and South Africa in 2011.

H_a7: There is a difference in marketers' perceptions of the impact of the Internet on value creation in Australia in 2001 and South Africa in 2011.

Table 4.13 reports on the findings regarding the statistical and practical differences between the 2001 Australian study and the 2011 South African study on the items in Construct 3.

Table 4.13: Mean difference between the 2001 Australian and 2011 South African studies: Construct 3

Item	Australia Mean 2001	South Africa Mean 2011	N 2001	N 2011	z-value	p-value	Cohen's D
B20	4.110	4.271	181	70	1.314	0.168	*****
B21	3.610	3.886	181	70	1.724	0.090	*****
B22	3.610	3.886	181	70	1.911	0.064	*****
B23	3.310	3.429	181	70	0.751	0.301	*****
B24	3.230	3.414	181	70	1.050	0.230	*****
B25	2.880	3.086	181	70	1.367	0.157	*****
B26	2.840	3.071	181	70	1.374	0.155	*****
B27	2.770	2.986	181	70	1.267	0.179	*****
B28	2.720	3.171	181	70	2.547	0.016*	0.345**
B29	2.500	2.786	181	70	1.731	0.089	*****
B30	2.480	3.086	181	70	3.772	0.000*	0.501***
B31	2.470	3.157	181	70	4.226	0.000*	0.573***

* Statistically significant at $p < 0.05$

** Small effect, practically non-significant

*** Medium effect and moving toward practical significance

**** Large effect, practically significant

***** Cohen's d-statistic not calculated as the variable was not statistically significant

Table 4.13 reflects that on items B28, B30 and B31 in Construct 3 there is a significant statistical difference at $p < 0.05$. Concerning item B28, the Internet's ability to lower marketing costs, a statistically significant difference exists between the two studies, with $p = 0.016 < 0.05$. Furthermore, item B30, the Internet's ability to improve new product development and item B31, the Internet's ability to assist in developing new products faster, indicate statistically significant differences between the two studies conducted, with $p = 0.000 < 0.05$ respectively. Thus, for items B28, B30 and B31, the null hypothesis H_o7 is rejected and the alternative H_a7 is concluded. With the exception of B29, B30 and B31, there is no statistical difference between the 2001 Australian and the 2011 South African studies on the items in Construct 3, and the null hypothesis H_o7 cannot be rejected. These results indicate that the respondents from the two studies conducted in Australia in 2001 and more recently in South Africa in 2011 did not vary significantly in their perceptions towards items B20, B21, B22, B23, B24, B25, B26, B27 and B29.

In order to assess whether there was a significant practical difference in the item means between the two studies, Cohen's D-statistic was used. There is a small effect, moving toward practical significance on B28 (D = 0.345). For B30 and B31 there is medium effect that is practically significant (D = 0.501 and D = 0.573).

For the remaining items in the third construct of the scale, the differences between the mean scores of the two studies are both statistically and practically non-significant and the null hypothesis cannot be rejected for these items.

4.5.2.4 Mean difference between the 2001 Australian study and 2011 South African study: Construct 1, Construct 2, Construct 3 and overall scale

This section analyses whether there is a significant statistical and practical difference between the 1997 and the 2011 South African studies on Construct 1, Construct 2 and Construct 3 as a whole, as well as on the overall scale measuring the Internet's impact on marketing. The hypotheses are formulated as follows:

H_o8: There is no difference in marketers' perceptions of the impact of the Internet on marketing in Australia in 2001 and South Africa in 2011.

H_a8: There is a difference in marketers' perceptions of the impact of the Internet on marketing in Australia in 2001 and South Africa in 2011.

Table 4.14 reports on the findings regarding the statistical and practical differences between the 2001 Australian study and the 2011 South African study on the Internet's influence on marketing.

Table 4.14: Mean difference between the 2001 Australian study and 2011 South African study: Construct 1, Construct 2, Construct 3 and overall scale

Item	Australia Mean 2001	South Africa Mean 2011	N 2001	N 2011	z-value	p-value	Cohen's D
Construct 1	3.205	3.522	181	70	1.847	0.072	*****
Construct 2	2.851	3.161	181	70	1.777	0.082	*****
Construct 3	3.044	3.352	181	70	1.845	0.073	*****
Overall scale	3.051	3.363	181	70	1.874	0.069	*****

* Statistically significant at $p < 0.05$

** Small effect, practically non-significant

*** Medium effect and moving toward practical significance

**** Large effect, practically significant

***** Cohen's d-statistic not calculated as the variable was not statistically significant

Table 4.14 reflects that for all three constructs and the overall scale of the study, the differences between the means of the 2001 Australian and the 2011 South African studies are statistically non-significant and, for this reason, H_o8 cannot be rejected. These results indicate that the respondents from the two studies did not vary significantly in their perceptions towards the items in each of the three constructs and the overall scale.

Given that there was no statistically significant difference between the two studies on this construct, there was no purpose in calculating Cohen's D-statistic.

For the three constructs and the overall scale, the differences between the mean scores of the two studies are both statistically and practically non-significant and the null hypothesis cannot be rejected.

4.5.3 Comparison between the 2005 Iranian study and the 2011 South African study

In order to determine whether there is a significant statistical difference between the marketers' perceptions of the Internet's impact on marketing in the study conducted by Ghazisaeedi *et al.* (2007) in 2005 in Iran and the one conducted in South Africa in 2011, a z-test for independent samples was conducted. Where a statistically significant difference

existed, the Cohen's D-statistic was computed in order to determine whether the difference was practically significant.

4.5.3.1 Mean difference between the 2005 Iranian and 2011 South African studies: Construct 1

This section analyses whether there is a significant statistical and practical difference between the 2005 Iranian study and the 2011 South African study on the items in Construct 1, which deals with the Internet's impact on the conceptualisation of marketing activities. The hypotheses are formulated as follows:

H_o9: There is no difference in marketers' perceptions of the impact of the Internet on the conceptualisation of marketing activities in Iran in 2005 and South Africa in 2011.

H_a9: There is a difference in marketers' perceptions of the impact of the Internet on the conceptualisation of marketing activities in Iran in 2005 and South Africa in 2011.

Table 4.15 reports on the findings regarding the statistical and practical differences between the 2005 Iranian study and the 2011 South African study on the items in Construct 1.

Table 4.15: Mean difference between the 2005 Iranian and the 2011 South African studies: Construct 1

Item	Iran Mean 2005	South Africa Mean 2011	N 2005	N 2011	z-value	p-value	Cohen's D
B1	3.510	4.186	204	70	4.880	0.000*	0.520***
B2	2.800	3.814	204	70	6.146	0.000*	0.849****
B3	3.140	4.186	204	70	7.207	0.000*	0.726****
B4	3.050	3.586	204	70	3.217	0.002*	0.429**
B5	3.100	3.586	204	70	2.641	0.012*	0.358**
B6	2.930	3.429	204	70	3.082	0.003*	0.409**
B7	3.110	3.957	204	70	4.279	0.000*	0.580***
B8	3.000	3.557	204	70	3.282	0.002*	0.419**
B9	3.010	2.771	204	70	-1.484	0.133	*****
B10	2.960	3.029	204	70	0.390	0.370	*****
B11	2.090	2.643	204	70	3.168	0.003*	0.438**

* Statistically significant at $p < 0.05$

** Small effect, practically non-significant

*** Medium effect and moving toward practical significance

**** Large effect, practically significant

***** Cohen's d-statistic not calculated as the variable was not statistically significant

Table 4.15 reflects that on items B1, B2, B3, B4, B5, B6, B7, B8 and B11 in the first construct there is a statistically significant difference at $p < 0.05$. Concerning items B1, B2 and B3, a statistically significant difference exists between the two studies for all three items was $p = 0.000 < 0.05$. For item B4, the Internet's influence on promotional strategies, a statistically significant difference exists between the two studies with $p = 0.002 < 0.05$. Item B5, the Internet's ability to enhance company capabilities to bring new products to the market, and item B6, the Internet's ability to provide an effective vehicle for improving market segmentation, indicate statistically significant differences between the two studies, with $p = 0.012 < 0.05$, and $p = 0.003 < 0.05$, respectively. Furthermore, item B7, the Internet's impact on the permitting of online payments and item B8, the Internet's impact on permitting involvement with customers earlier in the buying process, indicate statistically significant differences between the two studies, with $p = 0.000 < 0.05$ and $p = 0.002 < 0.05$. In addition, item B11, the Internet's influence on the way in which products are priced, indicates a statistically significant difference between the two studies with $p = 0.003 < 0.05$.

Therefore, for items B1, B2, B3, B4, B5, B6, B7, B8 and B11, the null hypothesis H_o9 is rejected and the alternative H_a9 is concluded. With the exception B1, B2, B3, B4, B5, B6,

B7, B8 and B11, there is no significant statistical difference between the 2005 Iranian study and the 2011 South African studies on the items in Construct 1, and the null hypothesis H_o9 cannot be rejected. These results indicate that the respondents from the two studies conducted in Iran in 2005 and more recently in South Africa in 2011 did not vary significantly in their perceptions towards items B1, B2, B3, B4, B5, B6, B7, B8 and B11.

In order to assess whether there was a significant practical difference in the item means between the two studies, Cohen's D-statistic was used. There is a medium effect, moving towards a practical significance on B1 (D = 0.520) and B7 (D = 0.580). There is large effect that is practically significant on B2 (D = 0.849) and B3 (D = 0.726) and small effect, moving toward practical significance on B4 (D = 0.429), B5 (D = 0.358), B6 (D = 0.409), B8 (D = 0.419) and B11 (D = 0.438).

For the remaining items in the first construct of the scale, the differences between the mean scores of the two studies are both statistically and practically non-significant and the null hypothesis cannot be rejected for these items.

4.5.3.2 Mean difference between the 2005 Iranian and the 2011 South African studies: Construct 2

This section analyses whether there is a significant statistical and practical difference between the 2005 Iranian study and the 2011 South African study on the items in Construct 2, which deals with Internet's impact on market definition. The hypotheses are formulated as follows:

H_o10: There is no difference in marketers' perceptions of the impact of the Internet on market definition in Iran in 2005 and South Africa in 2011.

H_a10: There is a difference in marketers' perceptions of the impact of the Internet on market definition in Iran in 2005 and South Africa in 2011.

Table 4.16 reports on the findings regarding the statistical and practical differences between the 2005 Iranian study and the 2011 South African study on the items in Construct 2.

Table 4.16: Mean difference between the 2005 Iranian and the 2011 South African studies: Construct 2

	Iran Mean 2005	South Africa Mean 2011	N 2005	N 2011	z value	P value	Cohen's D
B12	3.040	3.114	204	70	0.438	0.362	*****
B13	3.150	3.129	204	70	-0.130	0.396	*****
B14	3.190	3.286	204	70	0.548	0.343	*****
B15	3.240	3.471	204	70	1.198	0.195	*****
B16	3.180	3.000	204	70	-1.055	0.229	*****
B17	2.840	3.171	204	70	2.054	0.048*	0.284**
B18	2.920	3.643	204	70	3.999	0.000*	0.520***
B19	2.260	2.471	204	70	1.375	0.155	0.185

* Statistically significant at $p < 0.05$
** Small effect, practically non-significant
*** Medium effect and moving toward practical significance
**** Large effect, practically significant
***** Cohen's d-statistic not calculated as the variable was not statistically significant

Table 4.16 reflects that on items B17 and B18 in the second construct there is a statistically significant difference at $p < 0.05$. For item B17, the Internet's ability to define markets more precisely, a statistically significant difference exists between the two studies, with $p = 0.003 < 0.05$. Concerning item B18, the Internet's ability to provide a podium to compete more effectively globally a statistically significant different exists between the two studies, with $p = 0.000 < 0.05$. Therefore, for items B17 and B18, the null hypothesis H_o10 is rejected and the alternative H_a10 is concluded. With the exception of B17 and B18, there is no statistical difference between the 2005 Iranian and the 2011 South African studies on the items in Construct 2, and the null hypothesis H_o10 cannot be rejected. These results indicate that the respondents from the two studies conducted in Iran in 2005 and more recently in South Africa in 2011 did not vary significantly in their perceptions towards items B12, B13, B14, B15, B16 and B19.

In order to assess whether there was a significant practical difference in the item means between the two studies, Cohen's D-statistic was used. There is a small effect, moving toward practical significance on B17 (D = 0.284). There is a medium effect that is practically significant on B18 (D = 0.580).

For the remaining items in Construct 2, the differences between the mean scores of the two studies are both statistically and practically non-significant and the null hypothesis cannot be rejected for these items.

4.5.3.3 Mean difference between the 2001 Iranian and the 2011 South African studies: Construct 3

This section analyses whether there is a significant statistical and practical difference between the 2005 Iranian study and the 2011 South African study on the items in Construct 3, which deals with the Internet's impact on value creation. The hypotheses are formulated as follows:

H_o11: There is no difference in marketers' perceptions of the impact of the Internet on value creation in Iran in 2005 and South Africa in 2011.

H_a11: There is a difference in marketers' perceptions of the impact of the Internet on value creation in Iran in 2005 and South Africa in 2011.

Table 4.17 reports on the findings regarding the statistical and practical differences between the 2005 Iranian study and the 2011 South African study on the items in Construct 3.

Table 4.17: Mean difference between the 2001 Iranian and 2011 South African studies: Construct 3

Item	Iran Mean 2005	South Africa Mean 2011	N 2005	N 2011	z-value	p-value	Cohen's D
B20	3.700	4.271	204	70	4.335	0.000*	0.476**
B21	3.280	3.886	204	70	3.808	0.000*	0.439**
B22	3.540	3.886	204	70	2.375	0.024*	0.283**
B23	3.200	3.429	204	70	1.501	0.129	*****
B24	3.040	3.414	204	70	2.128	0.041*	0.273**
B25	2.910	3.086	204	70	1.162	0.203	*****
B26	2.840	3.071	204	70	1.367	0.157	*****
B27	2.810	2.986	204	70	1.084	0.222	*****
B28	2.930	3.171	204	70	1.438	0.142	*****
B29	2.350	2.786	204	70	2.719	0.010*	0.374**
B30	3.170	3.086	204	70	-0.527	0.347	*****
B31	3.330-	3.157	204	70	-1.064	0.226	*****

* Statistically significant at $p < 0.05$

** Small effect, practically non-significant

*** Medium effect and moving toward practical significance

**** Large effect, practically significant

***** Cohen's d-statistic not calculated as the variable was not statistically significant

Table 4.17 above reflects that on items B20, B21, B22, B24 and B29 in the third construct there is a statistically significant difference at $p < 0.05$. With regards to item B20, the Internet's ability to keep customers informed and item B21, the Internet's ability to assist companies to serve their customers more quickly, significant statistical differences exist between the studies, with $p = 0.000 < 0.05$ for both items. Furthermore, item B22, the Internet's ability to enable customers to make informed buying decisions, has a significant statistical difference between the two studies, with $p = 0.024 < 0.05$. Item B24, the Internet's ability to make it easier for customers to buy and item B29, the Internet's ability to provide a way for companies to price more accurately both indicate a significant statistical difference between the two studies, with $p = 0.041 < 0.05$ and $p = 0.10 < 0.05$, respectively. Thus, for items B20, B21, B22, B24 and B29, the null hypothesis H_o11 is rejected and the alternative H_a11 is concluded. With the exception of B20, B21, B22, B24 and B29, there is no statistical difference between the 2005 Iranian and the 2011 South African studies on the items in Construct 3, and the null hypothesis H_o11 cannot be rejected. These results indicate that the respondents from the two studies conducted in Iran in 2005 and more recently in South

Africa in 2011 did not vary significantly in their perceptions towards items B23, B24, B26, B27, B28, B30 and B31.

In order to assess whether there was a significant practical difference in the item means between the two studies, Cohen's D-statistic was used. There is a small effect, moving toward practical significance on B20 (D = 0.476), B21 (D = 0.439), B22 (D = 0.283), B24 (D = 0.273) and B29 (D = 0.374).

For the remaining items in the third construct of the scale, the differences between the mean scores of the two studies are both statistically and practically non-significant and the null hypothesis cannot be rejected for these items.

4.5.3.4 Mean difference between the 2005 Iranian study and 2011 South African study: Construct 1, Construct 2, Construct 3 and overall scale

This section analyses whether there is a statistical and practical significant difference between the 2005 Iranian study and 2011 South African study on Construct 1, Construct 2 and Construct 3 as a whole, as well as on the overall scale measuring the Internet's impact on marketing. The hypotheses are formulated as follows:

H_o12: There is no difference in marketers' perceptions of the impact of the Internet on marketing in Iran in 2005 and South Africa in 2011.

H_a12: There is a difference in marketers' perceptions of the impact of the Internet on marketing in Iran in 2005 and South Africa in 2011.

Table 4.18 reports on the findings regarding the statistical and practical differences between the 2005 Iranian study and the 2011 South African study on the Internet's influence on marketing.

Table 4.18: Mean difference between the 2005 Iranian study and the 2011 South African study: Construct 1, Construct 2, Construct 3 and overall scale

Item	Iran Mean 2005	South Africa Mean 2011	N 2005	N 2011	z-value	p-value	Cohen's D
Construct 1	2.973	3.522	204	70	3.295	0.002*	0.422**
Construct 2	2.978	3.161	204	70	1.071	0.225	*****
Construct 3	3.029	3.352	204	70	1.568	0.117	*****
Overall scale	3.020	3.363	204	70	2.075	0.046*	0.268**

* Statistically significant at $p < 0.05$

** Small effect, practically non-significant

*** Medium effect and moving toward practical significance

**** Large effect, practically significant

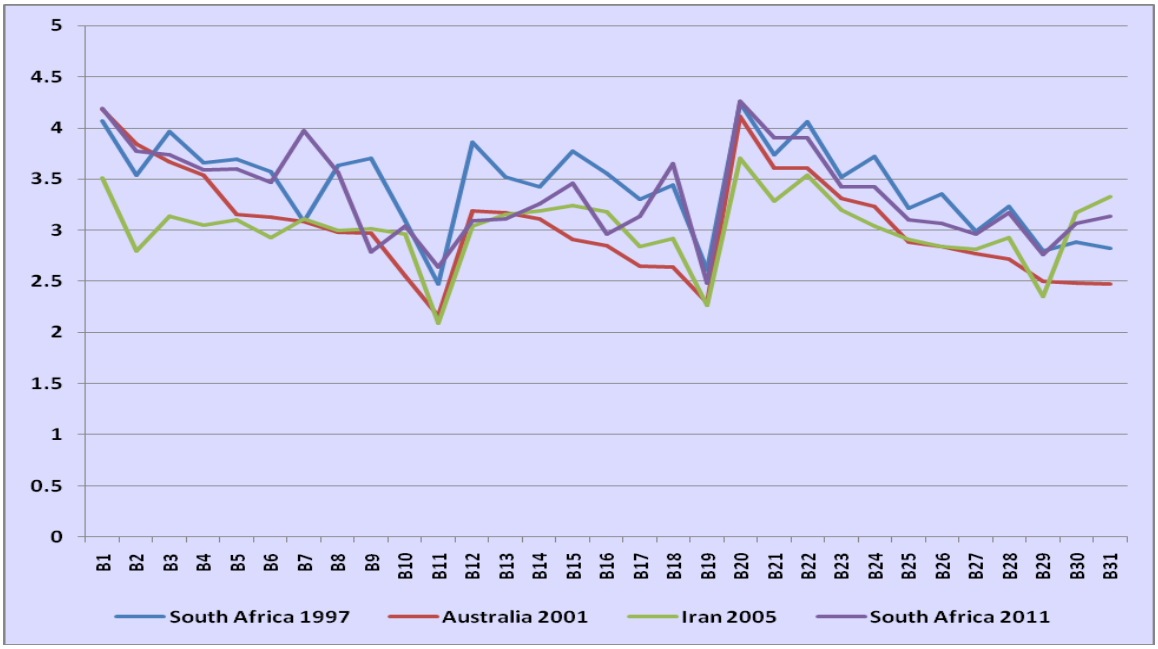
***** Cohen's d-statistic not calculated as the variable was not statistically significant

Table 4.18 illustrates that for both the first construct and the overall scale there is a significant statistical difference at $p < 0.05$. Concerning to Construct 1, the extent to which the Internet has changed the way that companies conceptualise their marketing activities, a significant statistical difference exists between the two studies, with $p = 0.002 < 0.05$. Furthermore, with regard to the overall scale, the Internet's influence on the marketing activities of companies, a significant statistical difference exists between the two studies, with $p = 0.046 < 0.05$. Thus, for Construct 1 and the overall scale, the null hypothesis H_o12 is rejected and the alternative H_a12 is concluded. With the exception of Construct 1 and the overall scale, there is no significant statistical difference between the 2005 Iranian and the 2011 South African studies on Construct 2 and Construct 3, and the null hypothesis H_o12 cannot be rejected. These results indicate that the respondents from the two studies conducted in Iran in 2005 and more recently in South Africa in 2011 did not vary significantly in their perceptions towards items in the second construct and the third construct.

In order to assess whether there was a significant practical difference in the item means between the two studies, Cohen's D-statistic was used. There is a small effect, moving toward practical significance on Construct 1 ($D = 0.422$) and the overall scale ($D = 0.268$).

For the remaining, Construct 2 and Construct 3, the differences between the mean scores of the two studies are both statistically and practically non-significant. These differences are graphically represented in Figure 4.5 below.

Figure 4.5 Differences between the four studies across all 31 items



4.6 SYNOPSIS

This chapter set out to report on and interpret the empirical findings of the study. This chapter aimed at reporting on and interpreting the empirical findings of the study. In Section 4.2, a discussion regarding the outcomes of the pilot study was provided. The chapter then proceeded to describe the preliminary data analysis process, which included a discussion on the coding and tabulation of the data, in Section 4.3.

Section 4.4 presented the descriptive analysis of the data sets where the results of the main survey were then tabulated. In addition, the data was tested for validity and reliability and this was then further discussed. Descriptive statistics, including the mean, standard deviation, and frequency distributions, were calculated to summarise the sample data distribution. This was done for the individual items, the constructs and the overall scale relating to the Internet's influence on the marketing activities of companies.

In Section 4.5, hypothesis testing was discussed and a comparative analysis amongst the four related studies was employed. Z-tests were used to test whether there were any statistical differences between the four studies. Cohen's D tests were used to investigate whether significant practical differences existed between the four sample groups of the four independent studies, regarding their perceptions of the influence of the Internet and Internet technologies on the conceptualisation of their companies marketing activities, the way companies define their markets and the way in which they create greater customer value. These tests were then used to provide evidence to support the hypotheses of the study.

The next chapter, Chapter 5 presents recommendations and concluding remarks of the study.

CHAPTER 5

RECOMMENDATIONS AND CONCLUSION

5.1 INTRODUCTION

The Internet is one of the most advanced technologies of modern times and it is diffusing at an exponential rate amongst business-to-consumer and business-to-business organisations. This has resulted in it becoming an irrevocable and an unstoppable trend, thereby making it vital for companies to incorporate it into their businesses (Chapter 2).

The Internet, Internet technologies and Internet services, particularly the Web, are widely acknowledged to have had and to continue to have a considerable impact on the practice of marketing (Section 1.1). The adoption of the Internet and the Web is an independent variable influencing two interrelated aspects of the marketing function, namely the company's conceptualisation of its marketing activities and the definition of its markets, which together directly influence the creation of greater customer value. Although research studies regarding the Internet's impact on marketing conducted in the past in different countries and at different times produced quite similar trends in responses, advances in IT and the increased Internet usage since the late 1990s necessitated reinvestigating marketers' perceptions as to the changes in market practices brought about by the Internet (Section 1.2). This study sought to determine the changes arising from the Internet in the conceptualisation of marketing activities, the definition of markets and the creation of greater customer value, based on a literature review and on empirical evidence founded on the opinions of South African marketing practitioners.

The recommended uses of the Internet in terms of the marketing practices of companies are presented in Section 5.4. In Section 5.5, an outline of future research opportunities is given. Included in this chapter is an overview of the study (Section 5.2) and the contributions made by the study (Section 5.3).

5.2 OVERVIEW OF THE STUDY

The recommended uses of the Internet for the marketing practices of companies, as presented in Section 5.4, are based on the inputs of all previous chapters in this study. In order to provide evidence to the reasoning behind the recommended uses, an overview of these inputs is given in this section.

The purpose of this study was to determine the South African marketing practitioners' perceptions of the Internet's influence on the practice of marketing. These influences of the Internet on marketing were derived from the literature and then empirically tested to determine South African marketing practitioners' opinions in this regard.

The objectives of this study were stated as follows (refer to Section 1.3):

5.2.1 Primary objective

Investigate South African marketing practitioners' perceptions of the Internet's influence on the practice of marketing in 2011.

5.2.2 Theoretical objectives

- Outline the history of the Internet, as given in the literature.
- Identify the various developments, potential problems and opportunities brought about by the Internet and Web over the past 20 years.
- Review the literature on the growth in Internet usage internationally, as well as in South Africa.
- Conduct a review of the literature regarding the Internet's influence on marketing according to the framework of the World Wide Web marketing model proposed by Morris *et al.* (1997).

Investigating and answering the following research questions addressed these objectives:

4 How has the Internet changed the way that companies conceptualise their marketing activities?

5 How has the Internet changed the way that companies define their markets?

6 How has the Internet changed the way that companies create value for their customers?

7 To what extent have South African marketers' perceptions of the influence of the Internet on marketing changed from the late 1990s to 2011?

8 To what extent do South African marketers' perceptions of the influence of the Internet on marketing differ to those in studies conducted in Australia in 2001(Leong *et al*., 2003) and in Iran in 2007(Ghazisaeedi *et al.,* 2007)?

In accordance with the specified objectives of the study, Chapter 2 investigated the influence of the Internet on marketing. The World Wide Web Marketing Model and the influence of the Internet on the conceptualisation of marketing activities, market definition and value creation were highlighted in Section 2.6. Section 2.7 summarised the influences of the Internet on the marketing activities across three countries over three different periods in time.

Chapter 3 outlined the research methodology of the study. Included in this chapter was an overview of the research design (Section 3.2) and the research approach (Section 3.3), the sampling strategy (Section 3.4) and the data collection method (Section 3.5). Furthermore, Section 3.6 highlighted the pilot testing of the questionnaire, with Section 3.7 addressing the administration of the questionnaire. The data preparation was discussed in Section 3.8 and the statistical analysis applied in this study was discussed in Section 3.9.

In Chapter 4, the findings of the empirical portion of the study were reported. These findings indicate that the Internet has changed the way companies conceptualise their marketing activities, define their markets and create value for their customers. In addition, even though the studies were conducted in different countries and at completely different times, the trends evident in the responses were found to be similar.

5.3 CONTRIBUTIONS OF THE STUDY

The Internet introduces new options to traditional marketing functions and brings about a different dimension all together. The traditional concept of marketing is no longer adequate to meet the increasing demands of customers and the ever-changing competitive business environment. Owing to this, all main areas of marketing are being significantly influenced by the Internet. Therefore, Internet marketing is a business imperative, as the Internet is an irrevocable and unstoppable trend. Research has shown that even traditional 'bricks and mortar' companies risk losing valuable customers if they fail to have an online presence. As such, companies must make a concerted effort to apply the technologies available to them in order to avoid failure in the new digital business environment.

In order to take full advantage of Internet as a marketing tool, marketing managers need to alter their marketing activities and market definitions as the Internet provides a new medium through which the marketing strategy may be facilitated. Even companies that have not adopted the Internet as a marketing tool are likely to be affected by the Internet's pervasive influence on today's business environment.

To this end, this study contributes to the practice of marketing by outlining the potential uses of the Internet in marketing and indicating trends across countries and time periods. For marketing practitioners, seeing how others are implementing the Internet to enhance the execution of their marketing strategies may serve to identify gaps in their own marketing strategy execution as well as potential ways of overcoming those gaps, thereby aiding their ability to compete successfully in the new digital business world. This is especially true given that the respondents that participated in this study were from South Africa's 100 top South African companies, ranked according to turnover. These companies may be considered as market leaders in their respective industries and, as such, suitable trendsetters to follow.

5.4 RECOMMENDATIONS

The following recommendations are based on the literature review, together with a statistical analysis of the feedback received from South African marketing practitioners as to how the

Internet may serve to enhance the practice of marketing. These recommendations encompass the Internet's use in redefining a company's market, improving the execution of marketing activities and creating greater value for customers.

5.4.1 Construct 1: Impact of the Internet on the conceptualisation of South African companies' marketing activities

The first construct dealt with the extent to which the Internet and Internet technologies have changed the way companies conceptualise their marketing activities and comprised 11 items. This construct was ranked the highest in terms of the extent to which respondents in this study considered the Internet to have influenced the practice of marketing. This ranking coincides with the findings of the 1997 South African study. In contrast, it was ranked second in the 2005 Iranian study and only third in the 2001 Australian study (refer to Tables 2.1 & 4.5). It is recommended that marketing practitioners study these 11 potential ways in which the Internet may be applied to enhance the execution of marketing activities and seek ways of integrating these practices into their own marketing strategies, with due consideration to their particular company's circumstances, situation and objectives.

5.4.1.1 Provide an effective channel for communicating product and service information

The extent to which the Internet is able to provide companies with an effective channel for communicating product and service information received the highest ranking from respondents in this study. In utilising the Internet as a channel for communicating product and service information, it is recommended that marketing practitioners:

- Integrate the Internet's communication tools, services and capabilities with existing communication channels to achieve multiple communication goals (Section 2.2.2).
- Ensure that the information communicated via Web sites is displayed in a way that can be easily understood and decoded by the recipients of that information (Section 2.4).
- Utilise the Internet to improve communication with actual and potential customers, suppliers and partners both locally and abroad and to generate information on market

trends and developments worldwide in order to provide customers with rich information about the company and its products (Section 2.5).

5.4.1.2 Permit online payments

The extent to which the Internet may permit online payments was ranked second within Construct 1 by the respondents in the study. In order to use the Internet to permit online payments, it is recommended that marketing practitioners:

- Incorporate an easy to use and secure online payment system onto their Web site (Section 2.3.1).

5.4.1.3 Change the way products and services are marketed

The extent to which the Internet may change the way in which products and services are marketed was ranked third within Construct 1 by the respondents in the study. In order to use the Internet to change the way products and services are marketed, it is recommended that marketing practitioners:

- Ensure that their company Web sites are well developed and have a professional appearance as well as the necessary functionality in order to enable it to be used as an additional marketing channel (Section 2.6.1).

5.4.1.4 Enable two-way interactive relationships with customers

The extent to which the Internet enables two-way interactive relationships with customers was ranked fourth within Construct 1 by the respondents in the study. In order to exploit the ability of the Internet to enable two-way interactive relationships with customers, it is recommended that marketing practitioners:

- Use the Internet's inexpensive way of reaching customers and providing richly informative and entertaining marketing communications to communicate interactively with customers (Section 2.1).
- Combine online activities such as games, competitions and news bytes to assist with the building and maintaining of customer relationships (Section 2.6.1).

- Create positive customer relationships by collecting and analysing customer information and presenting customers with the best solution at the most appropriate time to increase the switching costs of customers, thereby encouraging customers to remain long-term customers of the company (Section 2.6.1).

5.4.1.5 Enhance the capabilities of companies to bring new products to the market

The extent to which the Internet enhances the capabilities of companies to bring new products to the market was ranked fifth within Construct 1 by the respondents in the study. In order to take advantage of the Internets' ability to enhance the capabilities of companies to bring new products to the market, it is recommended that marketing practitioners:

- Use the Internet to obtain vital information concerning the wants and expectations of customers in order to develop new products faster providing companies and to aid in launching these products onto the market (Section 2.6.3).

5.4.1.6 Influence promotional strategies

The extent to which the Internet influences the promotional strategies of companies was ranked sixth within Construct 1 by the respondents in the study. In order to utilise the Internet to influence promotional strategies, it is recommended that marketing practitioners:

- Use the company's Web site as an advertising and public relations tool, and as a tool to build a stronger brand image using personalised marketing (Section 2.3.2).

5.4.1.7 Permit involvement with customers earlier in the buying process

The extent to which the Internet permits involvement with customers earlier in the buying process was ranked seventh within Construct 1 by the respondents in the study. In order to take advantage of the Internet's ability to permit involvement with customers earlier in the buying process, it is recommended that marketing practitioners:

- Use the Internet's access to abundant sources and amounts of information to empower customers, allowing them to have more control in transactions and in so doing learn more about the organisation, the product and the brand (Section 2.4).

5.4.1.8 Provide an effective vehicle for improving market segmentation

The extent to which the Internet provides an effective vehicle for improving market segmentation was ranked eighth within Construct 1 by the respondents in the study. In order to use the Internet to improve market segmentation, it is recommended that marketing practitioners:

- Use the Internet's ability to integrate customer data from various contact points to build a customer database that will enable finer degrees of segmentation (Section 2.6).

5.4.1.9 Permit a reduced need for middlemen

The extent to which the Internet permits a reduced need for middlemen was ranked ninth within Construct 1 by the respondents in the study. In order to take advantage of the Internet's ability to reduce the need for middlemen, it is recommended that marketing practitioners:

- Utilise the sophisticated tools offered by the Internet to create both a direct sales channel and an interactive communications tool (Section 2.1).

5.4.1.10 Do a better job of selling

The extent to which the Internet provides companies with a tool to do a better job of selling was ranked second last within Construct 1 by the respondents in the study. In order to take advantage of the Internet's ability to do a better job of selling, it is recommended that marketing practitioners:

- Incorporate the interactivity of the Internet and its ability to lengthen the working hours of companies all around the globe to remove the hurdle of conducting business internationally and across different time zones, which will increase coverage to more

and more customers, thereby improving the selling capabilities of companies (Section 1.2).

- Use the Internet and the interactive tools it provides to reduce the cost of sales, costs associated with customer service, time of routine service jobs, travel time of salespeople and the number of salespeople employed, to improve sales efficiency, allowing companies to do a better job of selling (Section 1.2).

5.4.1.11 Influence the way in which products are priced

The extent to which the Internet influences the way in which products are priced was ranked last within this construct by the respondents in the study. In order to use the Internet to influence the way in which products are priced, it is recommended that marketing practitioners:

- Investigate ways in which the Internet may be used to reduce costs, thereby allowing a lower price to be charged (Section 2.1).
- Investigate creative ways in which Internet's mass customisation capabilities may be used to bundle product/service features, which may then be priced accordingly (Section 2.1).

5.4.2 Construct 2: Extent to which the Internet has changed the way that companies define their markets

The second construct deals with the extent to which the Internet and Internet technologies have changed the way that companies define their markets. This construct comprises of eight items. This construct was ranked third by participants in this study indicating that they did not perceive the Internet's influence on changes in market definition to be as high as that of its influence on re-conceptualising marketing activities and creating greater customer value (refer to Table 4.5). This ranking coincides with the 2001 Australian study but differs from the 1997 South African study and the 2005 Iranian study, which both ranked this construct second (refer to Table 2.1). In considering ways in which to utilise the Internet to change market definition, it is recommended that marketing practitioners pay heed to the following:

5.4.2.1 Provide a podium to compete more effectively globally

The extent to which the Internet is able to provide companies with a podium to compete more effectively globally was ranked in first place within this construct by respondents in the study. Indeed, the Internet if often acknowledged in the literature as an important and efficient platform for competing more effectively in global markets (Section 2.6.2). In using the Internet as a podium to compete more effectively globally, it is recommended that marketing practitioners:

- Use the Internet and the Web's connectivity abilities to connect to a large number of individuals all around the globe and to provide a medium for the sending and receiving of voice, data and image content, which may lead to attractive opportunities for organisational growth (Section 2.3.2).
- Acknowledge the Internet as the ultimate interactive medium and make use of its global data communication system, which will assist in facilitating the exchange of information between companies regarding issues such as the discovery of new customer needs, trends in local and global markets, competitive moves, joint developments of products and joint selling activities (Section 2.2.2).
- Utilise the Internet to overcome geographic boundaries and the problem of different time zones in order to liaise with stakeholders globally (Section 2.3.2).

5.4.2.2 Target new customers globally

The extent to which the Internet is able to provide companies with the means to target new customers globally was ranked second within this construct by the marketing practitioners who participated in this study and this is closely linked to the Internet providing a podium to compete more effectively globally. In order to use the Internet to target new customers globally, it is recommended that marketing practitioners:

- Use the Internet to prompt the targeting of global customers with its ability to eradicate the hurdles typically associated with international marketing, such as distance and different time zones (Section 1.2).

5.4.2.3 Target new customers in new market segments

The extent to which the Internet is able to provide companies with the means to target new customers in new market segments was ranked third within this construct by respondents in this study. In order to use the Internet as an effective tool for targeting new customers in new market segments, it is recommended that marketing practitioners:

- Identify the Internet's ability to assist companies in targeting new customers in new market segments (Section 2.6.2).

5.4.2.4 Define markets more precisely

The extent to which the Internet is able to define markets more precisely was ranked fourth within Construct 2 by the study's respondents. In order to use the Internet as an effective tool for defining markets more precisely, it is recommended that marketing practitioners:

- Utilise the Internet's ability to integrate customer information from various contact points into a customer database that will enable the company to define markets more precisely (Section 2.3.2).

5.4.2.5 Target new customers in currently served markets

The extent to which the Internet is able to target new customers in currently served markets was ranked fifth out of the eight items in this construct by respondents in the study. In order to use the Internet as an effective tool for targeting new customers in currently served markets, it is recommended that marketing practitioners:

- Engage in marketing research to determine if and how currently served markets are accessing the Internet. If usage rates deem this a viable means of targeting customers determine appropriate ways of adapting content to typically used devices amongst target markets – PCs/laptops/mobile phones/tablets (Section 2.6.2).

5.4.2.6 Expand the size of a targeted market

The extent to which the Internet is able to expand the size of a targeted market was ranked sixth within this construct by respondents in the study. In order to use the Internet as an

effective tool for expanding the size of targeted markets, it is recommended that marketing practitioners:

- Investigate creative ways in which the Internet may be utilised to expand the size of their company's size of target markets (Section 2.6.2).

5.4.2.7 Add new segments to targeted markets

The extent to which the Internet is able to add new segments to targeted markets was ranked second last within this construct by the study's respondents. In order to use the Internet as an effective tool for adding new segments to targeted markets, it is recommended that marketing practitioners:

- Investigate potential new segments that would be best targeted using the Internet (Section 1.2).

5.4.2.8 Eliminate less profitable customers or market segments

The extent to which the Internet is able to eliminate less profitable customers or market segments was ranked last within this construct by the marketing practitioners that participated in the study. In order to use the Internet as an effective tool for eliminating less profitable customers or market segments, it is recommended that marketing practitioners:

- Use the Internet's connectivity to integrate customer information from various contact points in order to identify less profitable customers or customer segments to ensure future success and profits by focusing on upper- and middle-tier customers (Section 2.6).

5.4.3 Construct 3: Extent to which the Internet has enabled companies to create greater customer value

The third construct dealt with the extent to which the Internet and Internet technologies have enabled companies to create greater customer value. This construct comprises of twelve items. This construct was ranked third by the respondents that participated in this study. This ranking coincides with that of the 1997 South African study but is completely opposite

to the 2005 Iranian study where it was ranked first. In the 2001 Australian study, this construct was ranked second. In considering ways in which to utilise the Internet to create greater customer value, it is recommended that marketing practitioners take cognisance of the following:

5.4.3.1 Improve the companies' abilities to keep customers informed

The extent to which the Internet is able to improve the abilities of companies to keep customers informed was ranked first within this construct by the marketing practitioners that participated in this study. In order to use the Internet as a tool for improving the company's ability to keep customers informed, it is recommended that marketing practitioners:

- Utilise the Internet as an inexpensive and a timely communication channel to keep customer updated with rich and meaningful company, product and service information (Section 1.1).
- Keep abreast with the developments of the 'semantic web' that is aimed at allowing the Internet to provide users with information to answer specific questions that may arise or exist, which, in turn, will contribute to keeping customers more informed (Section 2.3.2).
- Make sure that the information communicated on company Web sites is displayed in a way that can be easily understood and decoded by the intended recipients of that information (Section 2.4).
- Take advantage of the Internet's immediate 24/7 access to information to keep customers informed (Section 2.5).

5.4.3.2 Enable companies to serve customers more quickly

The extent to which the Internet enables companies to serve their customers more quickly was ranked second within this construct by participants in this study. In order to use the Internet as an effective tool for serving customers more quickly, it is recommended that marketing practitioners:

- Utilise the Internet's interactivity, 24/7 access, automated responses and global platform to handle queries and service customer more quickly, regardless of their geographic location (Section 2.5).
- Provide customers with the option of purchasing and paying for marketing offerings online, which will assist in serving them more quickly (Section 2.3).

5.4.3.3 Enable customers to make more informed buying decisions

The extent to which the Internet enables customers to make more informed buying decisions was ranked third within this construct by respondents in the study. In order to use the Internet as an effective tool for enabling customers to make more informed buying decisions, it is recommended that marketing practitioners:

- Utilise the Internet to obtain marketing research data in order to build a better understanding of customers' wants, needs, expectations and buying processes (Section 2.6.3).
- Utilise the Internet to provide in-depth information about the company, its products and services to facilitate customers' ability to make more informed purchasing decisions (Section 1.1).

5.4.3.4 Do a better job of researching customer needs

The extent to which the Internet enables companies to do a better job of researching customer needs was ranked fourth within this construct by the study's respondents. In order to use the Internet as an effective tool in doing a better job of researching customer needs, it is recommended that marketing practitioners:

- Utilise the Internet to obtain access to market research and analysis tools, which are vital elements for conducting worldwide market research (Section 2.4).
- Use the information that is exchanged between companies regarding issues such as trends in local and global markets, competitive moves, joint developments of products and joint selling activities, to conduct better research on the needs of customers (Section 2.2.2).

- Use the Internet to access non-technical communities and social networking and collaborative services such as Facebook and Twitter, which allow individuals of all ages to share information and their interests of the moment, including their needs, with others all around the globe, making it easier to research the needs of customers (Section 2.3.2).

5.4.3.5 Make it easier for customers to buy

The extent to which the Internet makes it easier for customers to buy was ranked fifth within this construct by respondents in this study. In order to use the Internet as an effective tool for making it easier for customers to buy, it is recommended that marketing practitioners:

- Use the Internet to exchange information between organisational partners with ease and convenience, empowering customers to have more control in transactions and learn more about the company, the product and the brand (Section 2.4).
- Provide customers with the opportunity to purchase and pay for products or services online (Section 2.3.2).
- Use the inexpensive and sophisticated tools offered by the Internet for advertising, taking and placing orders, promoting the philosophies of companies and communicating with customers all over the world to make it easier for customers to buy (Section 1.1).

5.4.3.6 Lower marketing costs

The extent to which the Internet may lower marketing costs was ranked sixth within this construct by respondents in the study. In order to use the Internet as an effective tool for lower marketing costs, it is recommended that marketing practitioners:

- Utilise the Internet to publish all company information, taking advantage of the unlimited number of pages used as well as the costs saved in terms of printing and publishing (Section 2.1).
- Make use of the Internet's interactivity to open up marketing strategy opportunities, which may include advertising on the Web, building a strong brand image, improving

customer loyalty through a closer relationship with customers and increased personalised marketing, supplying information, providing customer service, market research, and selling and public relations (Section 2.3.2).

- Implement the Internet to reduce the cost of sales, the costs associated with customer service, the cost and time of routine service jobs, the travel time of salespeople and, possibly, the number of salespeople employed. The Internet makes sales efficiency possible as the costs associated with routine office purchases will be only a tenth per order using e-procurement compared to physical procurement (Section 2.3.2).

5.4.3.7 Assist in developing new products faster

The extent to which the Internet assists companies in developing new products faster was ranked seventh within this construct by respondents in the study. In order to use the Internet to develop new products faster, it is recommended that marketing practitioners:

- Make use of the Internet to conduct Internet marketing, which is the process of building and maintaining customer relationships with the use of online activities, to encourage the transferring of products, ideas and services that conform to the goals of both parties concerned resulting in faster new product development (Section 2.6.1).

5.4.3.8 Provide a better way to identify unmet customer needs

The extent to which the Internet assists companies in providing a better way to identify unmet customer needs was ranked eighth within this construct by respondents in the study. In order to use the Internet as a means to better identify unmet customer needs, it is recommended that marketing practitioners:

- Implement the Internet to provide an effective way to identify customer needs (Section 1.1).
- Implement the advanced technologies of the Internet, which have evolved through solving real problems, to assist in identifying customer needs and then addressing these unmet needs (Section 2.1).

5.4.3.9 Promote better customisation of products and services

The extent to which the Internet promotes better customisation of products and services was ranked ninth within this construct by respondents in the study. In order to use the Internet to promote better customisation of products and services, it is recommended that marketing practitioners:

- Apply the Internet and the Web to consider individual customers and better understand their needs, which will assist in customising the product or service offering to meet the individual customer need best (Section 2.1).

5.4.3.10 Improve new product development

The extent to which the Internet may be used to improve new product development was ranked a joint ninth along with the Internet's influence on promoting better customisation within this construct by respondents in the study. In order to use the Internet to improve new product development, it is recommended that marketing practitioners:

- Use the Internet as a source of potential creativity to allow marketers an opportunity to identify both local and global challenges and needs, which will assist in developing new products, which could address these challenges and needs that will in turn satisfy the customers and ensure business success (Section 2.3.2).
- Utilise the improved connectivity and communication tools of the Internet, so that intelligence workers will be able to integrate and work together to create a positive effect on the way business is conducted and the way people communicate with each other. This will in turn create a change in the social as well as technical capabilities of nations enabling new product development (Section 2.3.2).
- Utilise the Internet's abilities to identify customer needs, customise products in accordance with the customer's needs and encourage faster product testing, thereby leading to shorter product life cycles to improve new product development (Section 1.1).

5.4.3.11 Provide better understanding of the customers' buying process

The extent to which the Internet provides better understanding of the customer's buying process was ranked tenth within Construct 1 by respondents in the study. In order to use the Internet to provide better understanding of the customers' buying process, it is recommended that marketing practitioners:

- Make use of the Internet's ability to provide companies with a tool to communicate interactively with their customers to understand the buying processes of customers better (Section 1.1).

5.4.3.12 Provide a way for companies to price more accurately

The extent to which the Internet provides a way for companies to price more accurately was ranked last within this construct by respondents in the study. It was also ranked last in the 1997 South African study and in the 2005 Iranian study. Despite the scepticism regarding the Internet's influence on this area, an open mind should be kept as technological advances may change the Internet's use as a tool to price more accurately. In order to use the Internet to price more accurately, it is recommended that marketing practitioners:

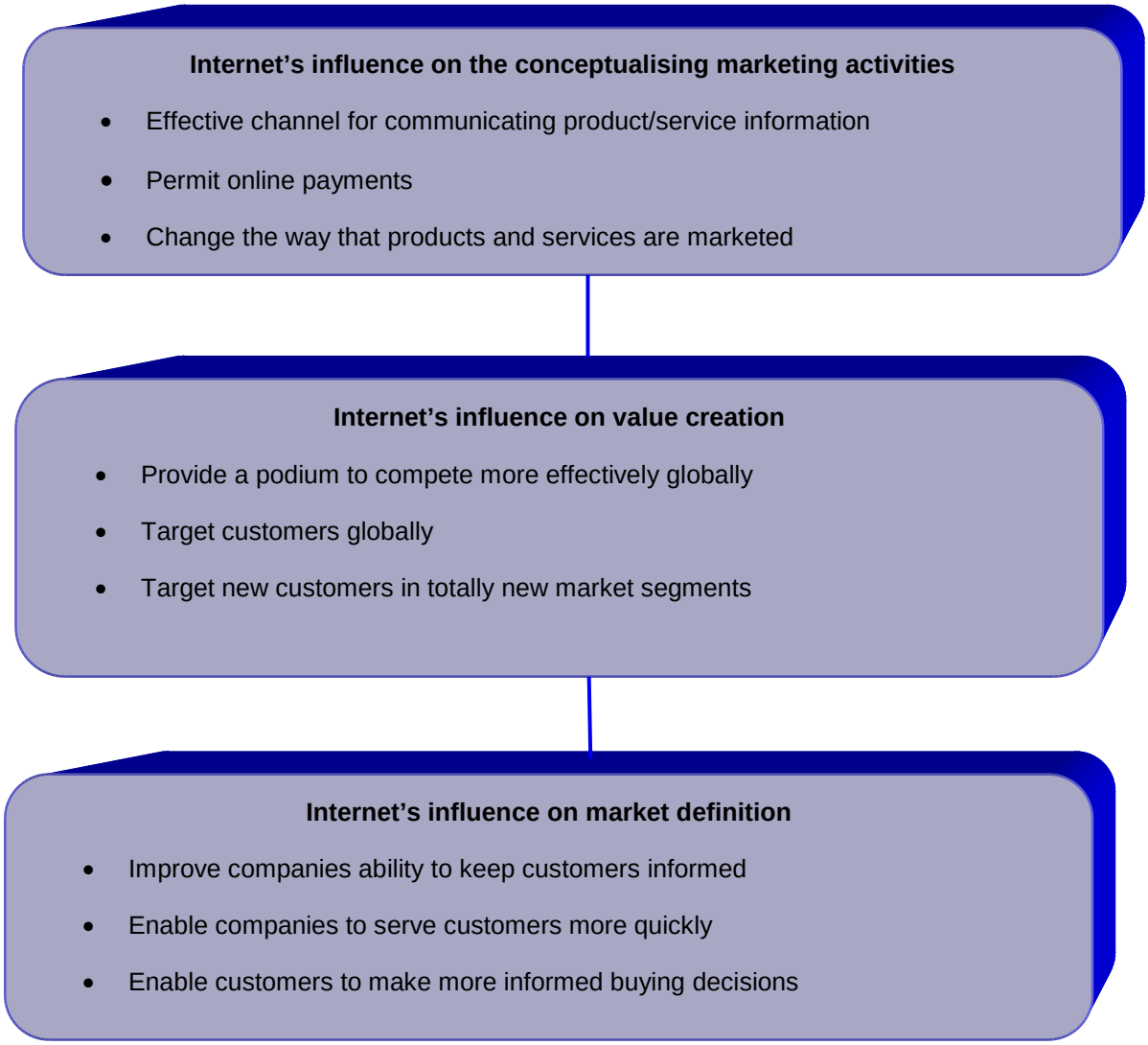
- Use the interactive and timely capabilities of the Internet to update price lists in real time and to alter prices in response to changes in demand and supply (Section 2.6.1).

The Internet and Internet technologies have a considerable influence of the marketing practices of companies, including the conceptualisation of marketing activities, the defining of markets and the creation of greater customer value.

Given the dynamic nature of the marketing environment and the evolving nature of the Internet and Internet technologies, Internet's influence on certain marketing practices that were ranked low in the current study may in the near future take on a more significant role. Marketing practitioners are recommended to monitor the developments of the Internet and the uses of it in marketing in order to be able to implement the new uses that may develop, when the need arises, for the purpose of remaining competitive in the ever changing new digital business environment.

Figure 5.1 illustrates the ranking of the three constructs pertaining to the Internet's perceived influence on marketing practice, together with the top three ranked uses of the Internet within each construct, in accordance with the perceptions of the South African marketers that participated in this study.

Figure 5.1 South African marketers' perceptions of the Internet's main influence on marketing



5.5 FUTURE RESEARCH OPPORTUNITIES

This research may be extended in several ways. For example, owing to the rapid evolution and growth of the Internet, regular tracking in the form of a longitudinal research design

should be implemented. Comparative studies may be conducted between developed and developing countries to investigate the different levels of Internet adoption and the extent to which the marketing practices of these countries have changed as a direct result of this Internet adoption. Future research may also be conducted into the opinions held by the marketing practitioners of small, medium and other large South African companies, which are not listed on the Johannesburg Stock Exchange (JSE) regarding their perceptions of the changes in marketing practices brought about by the Internet.

While this study provided a comprehensive list of Internet and Internet technology uses for the marketing practices of companies, further research needs to be conducted regarding how to implement the Internet and Internet technologies in companies to take advantage of these uses and the impact they will have on marketing practices.

5.6 CONCLUDING REMARKS

The Internet has introduced new dimensions to both traditional marketing functions as well as a different dimension altogether and has become an alternative to the real-world environment and not merely a simulation of it. The Internet provides a fundamentally different environment for marketing and it requires a different approach, as conducting marketing activities on the Internet is a very different process compared to that of traditional marketing.

The Internet offers companies inexpensive and sophisticated tools for advertising, taking and placing orders, promoting their philosophies, communicating with their customers all over the world, and creating a direct sales channel. In addition, it acts as an interactive communications tool, which provides companies with the necessary means to reach their target audiences, and achieve internal efficiencies and cost reductions. With the use of the Internet, companies are able to deal more interactively with customers at any given time and place, and give their customers this same opportunity. Furthermore, the Internet and the Web may be used to target individual customers, establish two-way communication with them and customise their product and/or service offering to best meet the individual customer’s need.

As such, use of the Internet is diffusing at an exponential rate amongst business-to-consumer and business-to-business organisations. From this, it is evident that all main areas of

marketing are being significantly influenced by the Internet. Therefore, Internet marketing has become a business imperative owing to it being an irrevocable and an unstoppable trend and, as a result, companies must make a concerted effort to collaborate the technologies available to them to avoid failure in the new digital business environment.

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ANNEXURE A

Cover letters

COVER LETTER FOR THE PILOT QUESTIONNAIRE IN THE INITIAL PRE-TESTING STAGE

NORTH-WEST UNIVERSITY
YUNIBESITI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT
VAAL TRIANGLE CAMPUS

PO Box 1174, Vanderbijlpark

Tel: (016) 910-3111
Fax: (016) 910-3116
Web: http://www.nwu.ac.za

Marketer

I am currently completing my Master's degree at the North-West University (Vaal Triangle Campus) under the supervision of Prof. Ayesha Bevan-Dye. The purpose of this dissertation is to determine the Internet's influence on the marketing activities of South African companies.

Although there has been research conducted in recent years concerning the influence of the Internet on the marketing activities of companies around the world, there has been a lack of research on this particular topic in South Africa since the late 1990s. Given the advances in IT and the increase in Internet usage, there is a need to reinvestigate South African marketers' perceptions of the changes in marketing practices brought about by the Internet.

The value of your input as a **marketing practitioner** is paramount here. The questionnaire will take approximately 10 minutes to complete. All survey responses will be held in strict confidence and only disclosed in the form of aggregate statistical summaries. To insure the confidentiality of this information please return the completed questionnaire as an e-mail attachment directly to the North-West University statistician, Aldine Oosthuyzen: **aldine.oosthuyzen@nwu.ac.za**

Please do not hesitate to contact me on 074 284 6422 or **klsharp21@live.com** should you have any queries.

Please note that this questionnaire consists of Section A and B.

Yours sincerely,

Kirsty-Lee Sharp

COVER LETTER FOR THE MAIN STUDY

NORTH-WEST UNIVERSITY
YUNIBESITI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT
VAAL TRIANGLE CAMPUS

PO Box 1174, Vanderbijlpark

Tel: (016) 910-3111
Fax: (016) 910-3116
Web: http://www.nwu.ac.za

Dear Marketer

I am currently completing my Master's degree at the North-West University (Vaal Triangle Campus) under the supervision of Prof. Ayesha Bevan-Dye. The purpose of this dissertation is to determine the Internet's influence on the marketing activities of South African companies.

Although there has been research conducted in recent years concerning the influence of the Internet on the marketing activities of companies around the world, there has been a lack of research on this particular topic in South Africa since the late 1990s. Given the advances in IT and the increase in Internet usage, there is a need to reinvestigate South African marketers' perceptions of the changes in marketing practices brought about by the Internet.

The value of your input as a **marketing practitioner** is paramount here, especially considering that your company is ranked as one of the top 200 companies in South Africa. The questionnaire will take approximately 10 minutes to complete. All survey responses will be held in strict confidence and only disclosed in the form of aggregate statistical summaries. To insure the confidentiality of this information please return the completed questionnaire as an e-mail attachment directly to the North-West University statistician, Aldine Oosthuyzen: **aldine.oosthuyzen@nwu.ac.za**

Please do not hesitate to contact me on 074 284 6422 or **klsharp21@live.com** should you have any queries.

Please note that this questionnaire consists of Section A and B.

Yours sincerely,

Kirsty-Lee Sharp

ANNEXURE B

Survey questionnaire

Section A: Demographic Information

1.	Company name	
2.	Industry Sector	Select
3.	Your job title	
4.	Years of marketing experience	

Section B

Section B focuses on determining your perceptions of the degree to which the Internet and Internet technologies are influencing your company's conceptualisation of its marketing activities, its market definition, and its ability to create customer value. Please use **to a very great extent** to indicate a high degree of influence; **to a great extent** to indicate a moderate degree of influence; to **neither a great extent or a little extent** to indicate a neutral degree of influence; **to a little extent** to indicate a small degree of influence and **to a very little extent** to indicate a very small degree of influence.

Please indicate by choosing from the drop-down menu, the extent to which the Internet and Internet technologies have changed the way that your company conceptualises its marketing activities.

1.	The Internet and Internet technologies provide an effective channel for communicating product/ service information	Select
2.	The Internet and Internet technologies change the way in which products/ services are marketed	Select
3.	The Internet and Internet technologies enables two-way interactive relationships with customers	Select
4.	The Internet and Internet technologies influence promotional strategies	Select
5.	The Internet and Internet technologies enhance our capabilities to bring new products to the market	Select
6.	The Internet and Internet technologies provide an effective vehicle for improving market segmentation	Select

7.	The Internet and Internet technologies permit online payments	Select
8.	The Internet and Internet technologies permit involvement with customers earlier in the buying process	Select
9.	The Internet and Internet technologies do a better job of selling	Select
10.	The Internet and Internet technologies permit a reduced need for middlemen	Select
11.	The Internet and Internet technologies influence the way in which products are priced	Select

Please indicate by choosing from the drop-down menu, the extent to which the Internet and Internet technologies have changed the way that your company defines its markets

12.	The Internet and Internet technologies expand the size of a targeted market	Select
13.	The Internet and Internet technologies target new customers in currently served markets	Select
14.	The Internet and Internet technologies target new customers in totally new market segments	Select
15.	The Internet and Internet technologies target new customers globally	Select
16.	The Internet and Internet technologies add new segments to targeted markets	Select
17.	The Internet and Internet technologies define markets more precisely	Select
18.	The Internet and Internet technologies provide a podium to compete more effectively globally	Select
19.	The Internet and Internet technologies eliminate less profitable customers or market segments	Select

Please indicate by choosing from the drop-down menu, the extent to which the Internet and Internet technologies have enabled your company to create greater customer value

20.	The Internet and Internet technologies improve our ability to keep customers informed	Select
21.	The Internet and Internet technologies enable us to serve customers more quickly	Select
22.	The Internet and Internet technologies enable customers to make more informed buying decisions	Select
23.	The Internet and Internet technologies do a better job of researching customer needs	Select
24.	The Internet and Internet technologies make it easier for customers to buy	Select
25.	The Internet and Internet technologies provide a better way to identify unmet customer needs	Select
26.	The Internet and Internet technologies promote better customisation of products and services	Select
27.	The Internet and Internet technologies provide better understanding of the customer's buying process	Select
28.	The Internet and Internet technologies lower marketing costs	Select
29.	The Internet and Internet technologies provide a way in which we can price more accurately	Select
30.	The Internet and Internet technologies improve new product development	Select
31.	The Internet and Internet technologies assist in developing new products faster	Select

Thank you for your cooperation