



University of Venda

**CONSUMER ACCEPTANCE OF MOBILE MARKETING THROUGH MOBILE PHONES: A
CASE STUDY OF SOUTH AFRICAN UNIVERSITY STUDENTS.**

By

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ABSTRACT

Consumer mobile phone adoption is on the rise exponentially, and offers marketers with many new opportunities to reach and serve customers. The South African mobile phone market has increased rapidly and a significant proportion of mobile services usage in South Africa is the youth. South African youths are following international trends as well as becoming the fastest-growing group in terms of technology adoption in the country. The prevalence of mobile technology as well as its capability to enable laser precision marketing on an individual basis has directed marketers to consider the adoption of mobile marketing. However, the question remains whether consumers are ready for uptake of mobile phone marketing. The purpose of this study was to bring light and create an understanding of the factors affecting university students' willingness to participate in mobile phone marketing in South Africa. This study used a positivist paradigm that ensures that there is a gap between the researcher's subjective bias and the objective reality being studied. The study was descriptive in nature with survey method being used to complete the study. The quantitative research technique was applied with data being collected from respondents by a self-administered questionnaire targeted at youth students from selected South African Universities. The questionnaire was pre-tested in a pilot study involving the research participants to identify errors in the research questionnaire and to ensure that the data collected would be relevant and as precise as possible. Findings from this study revealed how consumers want to participate in mobile marketing as well as the contributory factors influencing the acceptance of mobile marketing. Furthermore, this study supplements to the increasing body of evidence on mobile marketing acceptance. The study can also assist managers to utilise the potential of this marketing medium amongst university students in South Africa. More essentially, this study also provided information that can be used to monitor decision making towards mobile advertisements and marketing planning.

Key words: Mobile marketing, Mobile technology, Consumer acceptance, technology adoption, university students

DECLARATION

I Gift Taruwandira Donga hereby declare that this proposal submitted to the Department of Business Management, University of Venda, has not been previously submitted for a degree at this or any other higher institution of learning and that it is my own work in design and execution and that all reference materials contained therein have been fully acknowledged.

Student:

Signature.....

Date.....

Gift Taruwandira Donga

DEDICATION

I dedicate this work to my family: Mom Elizabeth, Sir Onias and my lovely sisters Rudo and Chengetai your precious support, guidance and continuous encouragement throughout my academic life has kept me going. Above all I dedicate this work to the Almighty God for all the guidance and protection throughout the whole year.

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LIST OF ABBREVIATIONS

ANOVA: Analysis of Variance
BOP: base of pyramid
CIFAS: Credit Industry Fraud Avoidance System
CTA: Calls-to-Action
GPS: Geographic Positioning System
HESA: Higher Education South Africa
IM: Instant Messaging
IT: Information Technology
LBM: Location-based marketing
MITM: man-in-the-middle
MMA: Mobile Marketing Association
MMS: multi-media services
MNOs: Mobile network operators
QR: Quick response
SAFPS: Southern African Fraud Prevention Services
SMS: Short message services
SPSS: Scientific Package for Social Sciences
TAM: Technology Acceptance Model
TRA: Theory of reasoned Action
UCE: Unsolicited Commercial Email
UFH: University of Fort Hare
UJ: Johannesburg
UK: United Kingdom
UNIVEN: University of Venda
US: United States
WAM: Wireless Advertising Messages
WASPs: Wireless application service providers
WISPs: Wireless internet service providers
WLANs: Wireless local area networks

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CHAPTER ONE

INTRODUCTION TO THE RESEARCH PROBLEM

1.1 INTRODUCTION

Mobile marketing has now been adopted into practice in South Africa (Beneke, 2011). As defined by Andreas (2012: 129), mobile marketing is “any marketing activity conducted through an established network to which consumers are constantly connected using a personal mobile device”. The South African mobile phone market has witnessed a rapid uptake from the time competition started existing within the sector in the 1990s. According to Statistics South Africa (2010), 45 million users of mobile phone devices were recorded out of the estimated population size of 49.99 million people. The prevalence of this technology as well as the capability to target marketing on an individual base has directed marketers to consider the adoption of mobile marketing strategy. Increasingly as suggested by Barnes and Scornavacca (2010), marketing managers view mobile phone devices as a highly effective source to communicate with the market.

1.1.1 Acceptance of Mobile Phones

The mobile phone is considered as one of a few consumer products that has recently obtained international acceptance in a comparatively short period of time (Sultan, Rohm and Gao, 2010). Currently, ultimate consumers amongst them the young teens consider the mobile phone as a significant tool to their lives (Persuad and Azhar, 2012). It has been concluded that the youth is faster than older people in the acceptance of new technology (Leek and Christodoulides, 2009). Subsequently, highest mobile phone usage globally is the 18- 29 years old age group who are energetic on the mobile platform (Persuad and Azhar, 2012). However, it remains not clear to what degree consumers will be willing to adopt and have their involvement in mobile marketing efforts (Sultan, Rohn and Gao, 2010). The mobile phone has proved to be a device that many consumers view as a necessity; they constantly carry it and check it nearly every place they visit. The mobile phone for consumers does not only amounts to an individual private device adapted to stay linked with associates as well as members of the family, but an extension of their character as well as individuality (Grant and O’Donohoe, 2007; Sultan and Rohm, 2005).

1.1.2 Mobile Phone as a Marketing Channel

Whereas consumers adopt mobile phones to improve their social and private lives, marketers on the other hand see mobile phones as a marketing channel (Azhar and Persuad, 2012). These two very different perceptions imply that, marketers should ensure that their mobile phone marketing policies are not intrusive thereby influencing positive acceptance on consumers. Merely the fact that mobile marketing is a fairly easier and cheaper way to target consumers does not imply that consumers are willing to receive marketing notifications and offers on their phones. Hence, a comprehensive understanding of why as well as how

consumers are willing to participate in mobile marketing could offer help in establishing successful mobile marketing campaigns. Research by Persuad and Azhar (2012), suggests that the ever-rising capabilities of mobile phones have provided marketers with an extensively enlarged set of prospects to influence and serve the market not just using multimedia (video, text and audio) but similarly through a selection of mobile applications such as OLX, Twittwer, Amazon, Smaato and Ebay which attracts consumers. This study was only restricted to mobile phones.

1.2 STUDY BACKGROUND

Research by Campell (2011), indicates that some history of media industry and associated marketing is long adequate for marketers to be acquainted with the technicalities of the mobile marketing field. Whereas marketing has evolved radically over the years because of new techniques and technologies (Vataparast, 2010), improvements in mobile technology have considerably changed the commercial environment. The mobile phone has lately materialised into a favourable marketing channel (Persuad and Azhar, 2012). Wireless communication permits consumers and companies to transcend time and space, and it has as a result increased ease of access and extended both social and business networks (Vatanparast, 2010). The concept of mobile phone services has been demarcated as something for which the service provider can charge the mobile phone users for taking part in (Boyle, 2013). The original idea of mobile service was based on voice communications with mobility. Nevertheless, the idea has radically changed and is not only limited to voice but also to multimedia communications besides entertainment. Surely, advancements in new technologies associated with mobile phones provided a platform for these innovative services. However, these services are not in all the cases successful. An understanding of the market needs and consumer acceptance is critical in influencing the success of a new service. Based on the survey report of GSM Association, international mobile telecommunication consumers were projected to be more than 5 billion in 2015, and this number is three times the total number of mobile phone users in 2007 (Boyle, 2013). According to Mobile Marketing Association (2016), mobile phone technologies are adopted in nearly all the countries with a high growth rate of usage by the youth. In contrast, some studies showed that although mobile phone services have not yet been broadly adopted in some nations, they will gain significance as technology advances and infrastructure is ready (Persuad and Azhar, 2012).

1.2.1 Consumer's Intention to Use Mobile Marketing

If mobile application designers and service providers want to get more benefits as well as more market share they should make an understanding of some reasons behind the consumer's intentions in using and adopting new services. Mobile service providers should

realise the needs and desires of users and try to give them satisfaction through delivering optimized in addition to customized services. For extensive adoption of mobile services, a set of provisions including business strategic, technological and behavioural are to be put into consideration (Persuad and Azhar, 2012). Many specialists consider mobile marketing as a boosting branch because of mobile devices having high penetration rates with multimedia capabilities as well as interactivity. On the other hand, there are also some stern challenges in the mobile marketing area, such as spam, restricted user interface, concerns for privacy, service delivery channels and the expense of mobile data communication (Boyle, 2013).

The accomplishment of mobile services as well as marketing depends essentially on consumer acceptance. Potential consumers in some cases do not have the chance to voice their attitudes concerning marketing activities through mobile services. This can put marketers at a high risk (Vatanparast, 2010) as they are not sure whether their marketing activities have some positive or negative influences on customers. If marketers want to utilise the mobile media communication channels in a more efficient way, they need to understand the consumers' perceptions and valuing and evaluating mobile services as a source of marketing (Vatanparast, 2010). There is need for extensive research to assess some factors influencing consumer usage and adoption of mobile services as well as effective channels to deliver mobile marketing and also factors influencing mobile marketing itself.

1.3 PROBLEM STATEMENT

In South Africa, marketing through mobile phone devices is becoming a more dominant means of marketing as it offers a more direct means of communication to the targeted consumers (Mesquita, 2010). New mobile services and applications such as multi-media services (MMS), mobile games, digital photography and music have developed and are already being utilised by some marketers (Wei, 2010). In order to utilise the benefits of mobile devices to develop marketing efficiency, it is crucial to understand the factors influencing consumers' acceptance of mobile marketing (Haghirian, Madlberger and Inoue, 2008). Great potential of innovative and creative mobile marketing shows that it is extremely significant to understand and gain advanced knowledge of consumer behaviour in mobile marketing medium (Haghirian et al., 2008). As a result of innovation, consumer's reactions towards mobile marketing acceptance become important for the realisation of mobile commerce (Persuad and Azhar, 2012).

Despite the fast growth of mobile phone technology as an important marketing tool, only a handful of research has focused on mobile marketing and its acceptance (Persuad and Azhar, 2012). Roach (2009:67) indicated that, "The fast pace of development within the mobile commerce industry has brought about a new field of academic research, in which studies have examined the variety of factors influencing the acceptance of mobile phone marketing from

both consumer and organization perspectives. The current literature remains largely inconsistent and fragmented.” Research aimed towards consumer mobile marketing acceptance is also in its infant stages, but the literature is still developing (Persuad and Azhar, 2012). Some studies that were done before have focused on themes which include mobile phone consumption (Andrews, Drennan and Rusel-Bennet, 2011), consumer mobile marketing perceptions and attitudes (Roach, 2009; Grant and O’Donohoe, 2007), responsiveness of consumers to mobile marketing (Heinonen and Strandvik, 2012), permission’s role on mobile marketing (Barnes and Scornavacca, 2011), and adopter segments as well as the influence of culture on mobile adoption (Muk, 2010). Furthermore, much of the available literature until now is based on mobile marketing practices making use of the traditional mobile phone, with its very restricted capability, when compared to today’s smartphones, which have almost unlimited potential.

This study focused on South Africa and it complements the empirical evidence being collected globally since most previous studies focusing on mobile marketing were based on consumers in Europe and Asia (Persuad and Azhar, 2012). Moreover, from available literature, no study has focused on consumers’ acceptance of mobile marketing amongst university students in South Africa, although South African consumers are more active on the mobile platform than most African countries (Mesquita, 2010). Hence, this study is designed to bring light and create an understanding of the factors affecting consumers’ willingness to participate in mobile phone marketing amongst university students in South Africa.

1.4 RESEARCH FRAMEWORK

The following approach is the basis for the research. First, the researcher carried out a review of the literature already existing on mobile marketing as a means of identifying the theoretical models which were utilised in other studies. The researcher also aimed to ascertain the underlying factors found to be major indicators of mobile marketing acceptance. The extensive variety of theoretical frameworks used in other research has produced several variables that seem to have some effects on mobile marketing acceptance. Rather than analysing all the variables, with the aid of the Technology Acceptance Model (TAM) the researcher adapted the method that was used by Baumgartner and Steenkamp (1996), of integrating some other new variables into an already existing model. In order to successfully implement this approach, the researcher established a list of the crucial variables emanating from the literature and through personal consultations with other researchers in the field of marketing. The researcher obtained their view as to which variables they felt were significant in consumer acceptance of mobile marketing. The main goal was to lessen the large number of variables to a stringent list of factors as well as establishing if other important factors were not listed. Based on the

feedback received, several factors were eliminated in this study, and the researcher adapted the following variables; Trust (Persuad and Azhar, 2012), risk (Campell, 2011), relevance (Rohm, 2012), shopping style (Persuad and Azhar, 2012), privacy (Sultan *et al*, 2009) and location based (Beneke, 2011). The research framework is shown in Figure 1.1 and the research variables are explained in detail on section 2.2 of literature review.

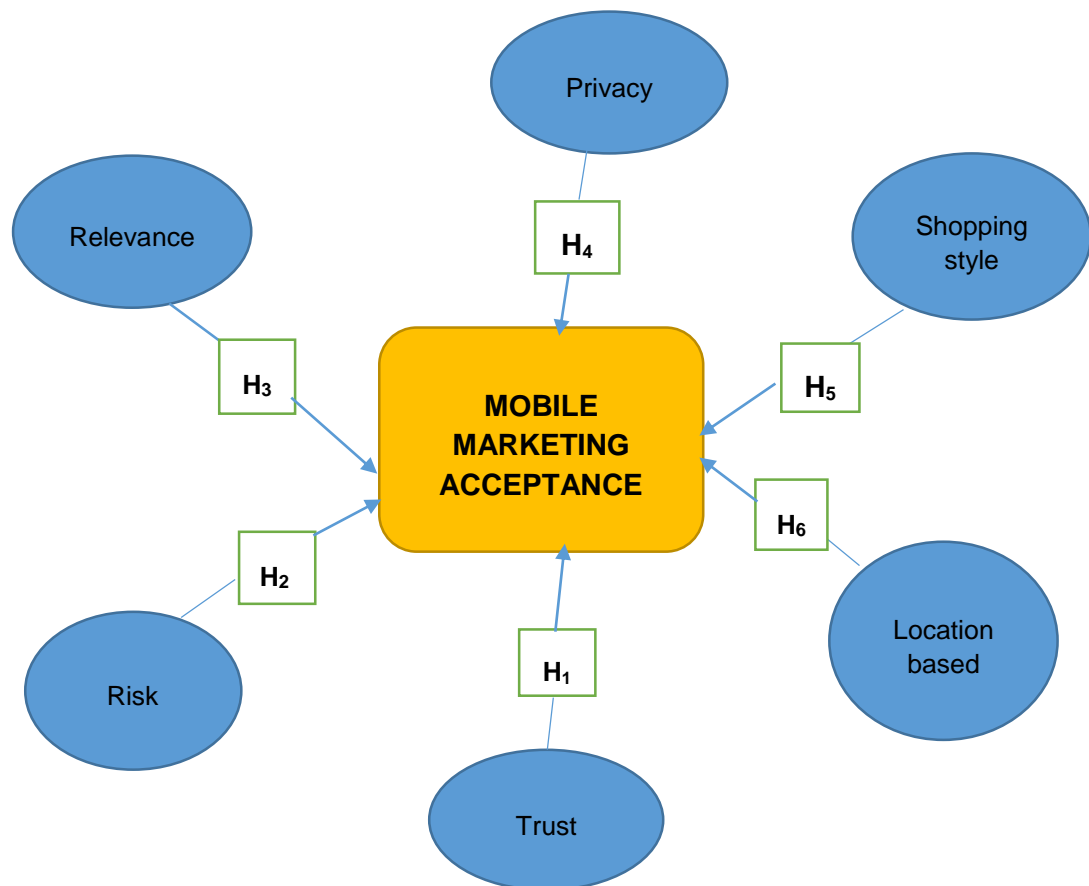


Figure 1.1: Research Framework

1.5 RESEARCH AIM AND OBJECTIVES

The aim and objectives of the study were as follows:

1.5.1 Research Aim

The study was aimed at the consumer acceptance of mobile marketing on the youthful university students in South Africa. The aim of the study was fulfilled with the support of research objectives outlined below.

1.5.2 Research Objectives

The objectives of this study are derived from the research framework shown in Figure 1.1. The objectives include establishing the influence of factors affecting mobile marketing (privacy,

relevance, risk, trust, shopping style and location based) on consumer mobile marketing acceptance. Further the study went on to examine the relationship between some of these variables leading to the following research objectives:

- To ascertain the influence of trust on the acceptance of mobile marketing.
- To establish the impact of risk on the acceptance of mobile marketing.
- To determine the influence of relevance on the acceptance of mobile marketing.
- To determine the influence of privacy on the acceptance of mobile marketing.
- To ascertain the impact of shopping style on the acceptance of mobile marketing.
- To establish the influence of location based on the acceptance of mobile marketing.

1.6 RESEARCH HYPOTHESES

From the research framework and objectives shown above, the researcher formulated the following hypotheses:

H1₀: There is no positive relationship between the degree of trust and mobile marketing acceptance.

H2₀: The degree of risk has no positive impact on mobile marketing acceptance.

H3₀: There is no positive relationship between the degree of relevance and mobile marketing acceptance.

H4₀: The extent of privacy has no positive impact on mobile marketing acceptance.

H5₀: Consumers whose shopping styles are adapted to mobile marketing are not more likely to participate in mobile marketing.

H6₀: Location based will have no effect on consumer's acceptance of mobile marketing acceptance.

1.7 SIGNIFICANCE OF STUDY

This study sought to make an understanding on the factors that influence consumers' acceptance of mobile marketing amongst university students in South Africa. Mobile marketing is important in that it contributes significantly to the South African economic growth through its capabilities of reaching out to consumers anywhere at any time. According to Mobile Marketing Association (2016), mobile marketing is an economic engine that will continue to stimulate nationwide growth as a vibrant and lucrative platform creation. Mobile marketing stimulates demand to consumers who previously had been unreachable such as the rural population which is mostly disadvantaged in terms of media coverage. This leads in additional

procurements of goods and services which result in economic growth. Due to the increased economic growth, the general living standard of people can be improved.

From a marketers' perspective, the study results will provide an understanding of the distinctive characteristics of the mobile phone medium. More precisely, this study will make some contribution towards understanding perceptions of consumers toward mobile marketing and the factors contributing to successful mobile marketing. Information relating to these factors will benefit marketers in exploiting the prospects of this marketing communication medium in South Africa. More significantly, this study will provide information that can be utilised to guide decision making aimed at mobile advertisements and marketing planning. The current study add in developing literature on mobile marketing by scrutinizing on the intentions and willingness of South African youth consumers in adopting marketing services using their mobile phones. The subject of mobile marketing is also very significant to both managers as well as marketing researchers. Lastly the research findings of this study will be analysed and used for future studies as well.

1.8 UNDERPINNING THEORY

The underlying theory for this study is based on an assessment of the current literature on mobile marketing which identified some models that were part of previous studies as well as the elements found to be solid pointers of mobile marketing adoption. The wide-ranging variety of frameworks that were used in previous studies has formed a number of variables that seem to affect consumer mobile marketing acceptance. This study made use of the Technology Acceptance Model (TAM) that was postulated by Davis in 1986.

1.8.1 Technology Acceptance Model (TAM)

Technology Acceptance Model (TAM) was built on the Theory of Reasoned Action (TRA), Davis (1986) as cited in Mesquita (2010), TAM, focuses more precisely on the forecast of the acceptance of a particular information system (Persuad and Azhar, 2012). The main purpose of this model is mainly to envisage the acceptance of a tool, and in this case the mobile phone as a marketing tool. Furthermore, the TAM is used to identify the different means of modification which need to be brought to the system with the aim of making it acceptable to users. This model as shown in Figure 1.2 indicates that the adequacy of an information system is influenced by two major aspects: the perceived usefulness as well as perceived ease of use.

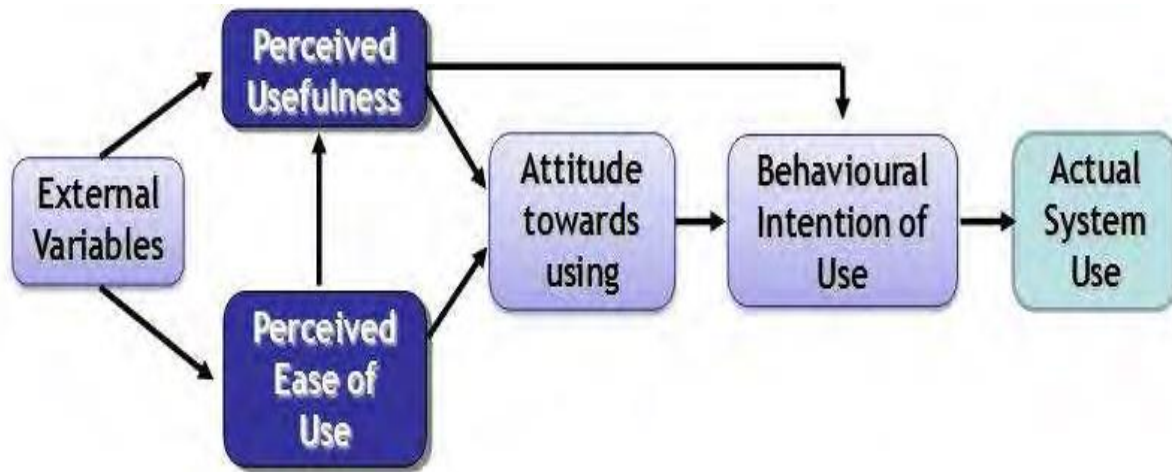


Figure1.2: Technology Acceptance Model. Adapted from Mesquita, (2010).

However, basing on this model instead of using variables like the perceived usefulness and perceived ease of use the researcher integrated into the model variables such as privacy, relevance, risk, trust, shopping style and location based. The TAM proposes that the usage of an information system is influenced by the behavioural intent. However, on the other side, the behavioural intent is also influenced by the individual's attitude towards the acceptance of the system and also by the person's perception of its utility. Davis as cited in Mesquita (2010: 43), states that "the person's attitude is not the only determinant of a particular system, but is also well centred on the influence which it may have on the person's performance".

1.9 DELIMITATIONS AND LIMITATIONS OF THE STUDY

This study was only limited to the students falling under the youth category between the ages of 18-35 years. The study was also restricted only to university students using mobile phones and conclusions on this study may not be applicable to the general population. It was also anticipated that some elements of the described sample would not be able or willing to respond and this would compromise the quality of the data collected. Lastly, the study was not conducted throughout all the universities across South Africa due to time and budget constrain.

1.10 ORGANIZATION OF THE STUDY

The study comprises five chapters arranged as follows:

CHAPTER ONE

An introduction to the study is covered in the chapter. The research problem is discussed and the research underpinning theory as well. Research objectives and the significance of the study are also reflected in the chapter. Lastly, some perceived delimitations and a brief methodology are also highlighted in this chapter.

CHAPTER TWO

Chapter Two is a thorough review of the concept of mobile marketing acceptance and a conceptualization of mobile marketing acceptance in relation to this study. This chapter went on to examine the intentions of South African youth consumers in accepting marketing services using their mobile phones. An assessment of literature on mobile marketing acceptance studies conducted in the youth consumer market is outlined in this chapter. Lastly this chapter focused on the variables influencing the acceptance of mobile marketing acceptance and the significance of these variables in explaining mobile marketing acceptance.

CHAPTER THREE

This chapter reflected on the research design, research instrument, research technique, population and sample size, sampling procedure, data collection procedure and also data analysis procedure. A detailed explanation of the above is given in this chapter.

CHAPTER FOUR

The main focus of this chapter was on data analysis. Firstly, the research findings are presented in graphical and tabular form. Analysis of the findings was done using the laid down procedure in the preceding chapter. Lastly a discussion on the research findings is highlighted in chapter four.

CHAPTER FIVE

This chapter concludes, give recommendations and highlight limitations of the study as well as areas for further research.

CHAPTER TWO

LITERATURE REVIEW

2. INTRODUCTION

The chapter critically reviews the literature that relates to the developments in both the global and South African mobile marketing environment and a discussion on various mobile marketing concepts, relevant to the study. The mobile commerce framework and mobile phone marketing distribution channels are reviewed. Chapter two also highlights the importance of the consumer as well as the advantages of mobile marketing to the consumers. The significant benefits of mobile marketing over traditional marketing are also pointed out in the literature review. Finally, the literature review further outlines the mobile marketing channels, the mobile marketing framework, consumer privacy threats and other threats affecting the mobile marketing environment.

2.1 THE IMPORTANCE OF THE CONSUMER

Irrespective of the developments in technology, brand new content or some changes in marketer attitudes, the crucial success of mobile marketing depends on the consumer (Persuad and Azhar, 2012). Consumers are the powerful force of any industry; in their absence businesses are unable to yield some profits or function. The consumer can influence the success of a new product or method, such as mobile phone marketing, which is why attaining consumer acceptance is of great importance. Consumer acceptance lies upon three main previous key drivers of mobile marketing, in the following approaches (Beneke, 2011):

Technology

Marketing campaigns need to be developed in line with latest technology that is readily accessible to the consumer. In case a marketing campaign utilises modern technology, another campaign needs to be established to target the demographics lacking some access to such technology.

Marketer Attitudes

Marketing campaigns need to be developed giving priority to the consumers. In case a campaign utilises principles inapplicable to the targeted mobile consumer, it will become unsuccessful. As a result, marketing agencies must establish a balance between ideals developed by traditional media, along with an understanding of the modern mobile market.

Content

According to Beneke (2011), if a marketing campaign is to make use of content, it needs to provide the consumers with a sense of value. This incentive-driven marketing strategy allows marketers to target consumers, without a negative feedback. According to Deloitte (2013), even with such collaboration from other interested parties, building effective mobile marketing still largely relies upon the issues of trust as well as privacy. "Since the mobile phone is a very

personal device that allows an individual to be accessed virtually any time and anywhere, mobile advertising must be more personalized and may take different forms” (Persuad and Azhar, 2012: 33).

Mobile marketing players need to consider these three key drivers of mobile marketing because if carefully implemented they stimulate consumer mobile marketing acceptance. The key drivers of mobile marketing also influence the research main variables hence they are significant in achieving the research objectives. The research variables are explained in detail in section 2.2.

2.2 RESEARCH VARIABLES

The following section provides with some literature based on the research variables that the researcher used in conducting the study:

2.2.1 Trust

Shankar and Malthouse (2010), state that trust narrates to respondents' receptiveness as well as some intentions to take on activities such as reception of products or information linked to marketing as well as promotional offers on their mobile phone devices. An understanding to what drives consumer adoption of mobile marketing is a key solution to acceptance of this medium as a mainstream marketing foundation (Sharma, Herzog and Melfi, 2008). However, a large barrier facing the acceptance of mobile marketing is consumers' fear of trust contraventions (Campbell, 2011). In the mobile marketing context, consumers who become suspicious of or uncertain about the motivations of marketers for appealing them may try to circumvent their offers, while those who have much trust are more likely to accept their offers (Andreas, 2012). As stated by Williams (2010), marketers globally are trying to grab the attention of the university customer base but however the process is not easy. That is because marketing to university students are often transient, sceptical and poses some lack of trust on mobile notifications sent to them.

According to Morrison (2016), even though marketers are prioritizing mobile marketing as well as increasing their budgets, they are fading in establishing good connections with the consumers. Besides that, could be a serious flaw, because unless marketers can establish some trust and communicate value to the ultimate consumers, marketers will fail to succeed in mobile marketing. Usually, consumers' behaviour towards mobile marketing reflects the consumers' overall assessments of the marketers' reliability in addition to integrity and of consumers' enthusiasm in trusting marketers (Tan and Sutherland, 2009).

2.2.2 Relevance

The amount of personal data available regarding mobile users allows marketers to send highly customized mobile advertisements based on location. Personalized advertisements aimed at an individual's interests and behaviours as opposed to a broader target audience are considered highly relevant to the consumer (Kazienko and Adamski, 2007). Relevance is key to consumer adoption of mobile marketing not only because consumers expect mobile advertisements to be personally relevant but also because there is the potential for negative consumer reactions towards marketing that is not relevant (Barwise and Strong, 2008). An empirical study of consumer acceptance of mobile marketing found that acceptance was high when marketing messages were "relevant, highly targeted, personalised and of value-added content" (Maneesoonthorn and Fortin, 2006: 71). Similar research that examined acceptance of mobile marketing also measured effectiveness and found that campaign relevance was strongly correlated with levels of acceptance and that consumers were significantly more likely to act because of high campaign relevance (Rettie, Grandcolas and Deakins, 2005).

2.2.3 Shopping Style

At present, an escalating number of customers of all demographics are involved in multi-channel marketing through carrying out searches for information and purchasing decisions using online as well as offline means (Persuad and Azhar, 2012). Consumers might seek online for brand information as well as evaluations, or by visiting a shop physically to inspect the product. In the end, consumers can make a purchase of the product at either the physical store or even the online store, whichever presents with better significance in regards to cost and convenience. Once mobile marketing happens to be more common in availability and the advantages become more notable, additional consumers are most likely to adopt it (Zhang and Mao, 2008).

2.2.4 Risk

Risk plays a critical role in the behaviour of consumers, and it makes a great contribution towards explaining the contributory factors affecting the acceptance of mobile marketing by consumers. Empirical studies reveal that risk reduces the enthusiasm of consumers to participate in mobile marketing (Persuad and Azhar, 2012), and it became one of the significant variables that was adopted by the researcher for this study. Risk results in consumers worrying about buying goods and services from unknown retailers. This hence reduces the willingness of consumers giving out private as well as financial information on the mobile platform and buying products they cannot inspect physically before a purchase. In a

mobile marketing environment, in contrast to a physical purchase, greater risk and less trust are anticipated due to the difficulties in assessing a product or service (Beneke, 2011). As a result, there will be higher asymmetric information with regard to products and firms in a mobile marketing context than in a physical context, which in turn will result in higher perceived risk by the less informed consumers. According to Boyle (2013), when consumers find it difficult to differentiate between suppliers without the same levels of quality in their products, they are faced with the problem of adverse selection. Even though satisfaction as well as trust in mobile marketing is vital to attract and maintain consumers, it can become problematic to build satisfaction and trust when the consumer has some negative attitudes towards accepting mobile marketing. Information about the risk that the consumer perceives may help marketers in crafting suitable strategies to achieve consumer satisfaction and reduce risk factor associated with mobile marketing.

2.2.5 Privacy

In most countries globally, youth consumers' acceptance of mobile phone marketing is adversely affected by participants' need for privacy along with avoiding risk. Privacy refers to the extent to which personal information is not known to others (Pousttchi and Wiedemann, 2010). Most consumers are very sensitive about receiving messages from unknown persons or organizations. In most cases consumers are still quite uncomfortable and doubtful about mobile businesses and whether the businesses are feasible as well as secure (Pousttchi and Wiedermann, 2010). From the consumer's perspective, privacy invasion and general concerns for security relating to the mobile marketing medium have been recognized as some of the main barriers affecting consumer acceptance of mobile marketing (Mesquita, 2010). Consumers who turn to new media services tend to be concerned about unauthorized data access, data manipulation and undesired tracking of usage patterns. Companies carrying out mobile phone marketing promotions need to consider customers' privacy concerns; for instance, regarding the kind of individual information involved or payment options for mobile phones (Sultan and Rohm, 2005). Managers should consider that mobile marketing campaigns expressing trust and the protection of individual data may facilitate in addressing the issue of privacy for consumers in addition to invasion concerns (Rohm, Gao, Sultan and Pagani, 2012).

2.2.6 Location Based Marketing

Location based marketing is an important concept that mobile marketing players need to prioritise and integrate in their mobile marketing strategy. The integration of location based into a mobile marketing campaign can positively influence mobile marketing acceptance. Location-based marketing (LBM) according to Horwitz (2014), is a direct marketing approach

that make use of a mobile device's location to notify the owner of the device about an offering from a nearby business. Typically, location based notifications are conveyed to mobile phones by means of SMS text messages. Location based notifications may include some information related to a local business' deal of a particular day or may include a purchasing based incentive, such as a discount coupon code.

Location based marketing involves the end user giving consent through an opt-in option. The opt-in procedure frequently takes place when the end user makes some downloads on a mobile application and reacts positively to the application's request to make use of the device's current location (Resch, 2012). Location based marketing takes advantage of geofencing, a software feature that makes use of triggers to send notifications when a mobile device crosses a pre-defined geographical boundary. The objective of Location based marketing, as with any mobile marketing initiative, is to attract the end user's attention and as a result turning him into a customer.

According to Horwitz (2014), followers applaud LBM as a means of bridging the gap between online and physical customer experiences as well as promoting some impulse purchases. Horwitz (2014), states that if the data that is gathered through LBM is not used, shared, protected and stored properly it will violate consumers' privacy. Some businesses which are engaged in LBM should however take necessary measures to safeguard customer privacy through strict opt-in policies in addition to security safeguards.

2.3 MOBILE MARKETING CONCEPTS

Mobile marketing is a complex system which integrates a number of components for its success. Some of the major concepts that form part of the mobile marketing process are outlined below.

2.3.1 Mobile Marketing

The Mobile Marketing Association (MMA), a global spearhead in stimulating mobile marketing through mobile devices labels mobile marketing as, "the usage of wireless media as an integrated content delivery and direct response vehicle within a cross media marketing communication program" (Vatanparast, 2010:1). In this study, basing on the shared features of mobile media, mobile marketing is defined as, "any marketing activity steered through a recognised network to which consumers are frequently connected via a personal mobile device" (Andreas, 2012: 74).

According to Boyle (2013), although in its infancy, mobile marketing involves the use of devices such as smartphones and tablet computers to display banner advertisements, rich media, video games, email, text messaging, in-store messaging, Quick response (QR) codes

and couponing. Over 90% of retail marketing professionals have plans for mobile marketing campaigns, and mobile is now a required part of the standard marketing budget (eMarketer Inc., 2014). Mobile smartphones represent a radical departure from previous marketing technologies simply because the devices integrate so many human and consumer activities from telephoning or texting friends, to listening to music, watching videos, and using the web to purchase goods. The more phones can do; the more people rely on them in their daily lives. More than 246 million Americans are now using mobile devices, with 140 million using smartphones (eMarketer Inc., 2014). One report found that people look at their mobile devices at least 40 times a day. Most mobile phone users keep the devices within arm's length 24 hours a day.

2.3.2 Mobile Phone Marketing Acceptance

Mobile marketing acceptance, has been described as “the power of one's intention to carry out a specified behaviour” (Persuad and Azhar, 2012, 23). Shankar and Malhotra (2010), state that this construct narrates to respondents' receptiveness as well as some intentions to take on activities such as reception of products or information linked to marketing as well as promotional offers on their mobile phone devices. The universal characteristics of mobile phone devices make them an ideal marketing vehicle (Amato, Hollenbeck and Peters, 2007). According to Campbell (2011), the size as well as portability of the mobile phone has influenced its global acceptance because it is perfect for sending the right kind of information to the consumer at the right time. An investigation towards consumer's acceptance of mobile marketing found out that traditional channels of marketing, including newspaper, magazine as well as television, fail to meet up to the standards of Wireless Advertising Messages (WAM) (Amato, Hollenbeck and Peters, 2007). Since mobile communication is readily available from any place and at any time, it creates some value through its convenience (Mohammed, 2010). This offers some businesses with the special ability to market at any time and location.

2.3.3 Mobile Technology

For many individuals, mobile technology has ceased to be a luxury but an essential part of life. As stated by Pedersen, (2005) mobile technology relates to any device that people can use and take with them anywhere at any time. Typical mobile technology comprises of mobile phones, laptop computers and tablet computers (Vatanparast, 2010). Development in mobile technology has greatly transformed the business perspective significantly (Stewart and Pavlou, 2013). Consequently, technologies associated with mobile devices have the capability of generating new emerging markets, transforming the economic environment of businesses, establishing new opportunities, and changing social and market structures already existing (Stewart and Pavlou, 2013; Ktoridou, Epaminonda and Kaufmann, 2008).

According to Vatanparast (2010), recent developments in information technology assist businesses in keeping track of consumers. The developments also offer latest communication venues for targeting smaller consumer sections more economically and with increased messages that are personalised. Consequently, this led to two main changes of target marketing as well as permission marketing in the mobile marketing communications landscape (Kotler, Wong, Saunders and Armstrong, 2005). Technological advancements are stimulating the move towards permission based mobile marketing (Vatanparast, 2010), and marketers are also shifting to more targeted marketing at the same time. Accordingly, present marketers are increasingly depending on various approaches of interactive technology for marketing and the promotion of their services and products (Stewart and Pavlou, 2013). Progressively, several businesses are shifting their marketing spending towards interactive marketing, which can be focused more efficiently on specific individual consumer as well as trade sectors.

2.3.4 Mobile Services

As mentioned already, there has been a huge development on mobile technology users. This fashion of an increase in usage of wireless technology has stretched to many more nations lately, which can be proven by the escalating mobile phone subscriber figures (Vatanparast, 2010). Liljander and Nordman, (2011: 46) termed the mobile services as, “something that content providers can charge the mobile users for taking part in”. Although applications maybe invisible to users as well as not appearing on users’ bill, but when a consumer executes an order for a particular product using his/her mobile phone, a number of mobile applications are required to make it materialise such as security as well as authorisations (Vatanparast, 2010).

Comparing to wired network, mobile services contains certain benefits such as the capability of reaching anywhere at any time and availability of location-based service (Vatanparast, 2010). These advantages of mobile services, have their origins in the fact that mobile phone devices can be easily carried around. Mobile phones in most cases are not relatively heavier and they are portable, and therefore it becomes convenient for the owner to have it at any point in time.

Personalisation is more particularly appropriate in the case of mobile phones since mobile phones are solely personal. Mobile services also make it probable for consumers to make some purchases of products and services using mobile phones, as it is likely to access some information at any time and place. According to Liljander and Nordman (2011), despite the fact that mobile services have not yet been adopted widely in South Africa, they will gain significance as technology progresses. Still, the rapid growth in mobile technology, as pointed above, has recently led to some increased service rendered on mobile phones. There are

several mobile services being offered on mobile phones recently. The types of services, price as well as quality vary among the service providers (Vatanparast, 2010).

2.4 BASIC MOBILE DEVICES FEATURES

Most mobile device users are aware of the capabilities of mobile phone devices. According to (eMarketer Inc., 2014), smartphones today play a much more central role in the personal life of consumers than desktops and laptops in large part because mobile devices are portable and easy to carry around. Table 2.1 describes some of the basic features of mobile devices.

FEATURE	DESCRIPTION
Personal communicator and organizer	Telephone plus calendars and clocks to coordinate life on a personal scale.
Screen size and resolution	Resolution of both tablets and phones is high enough to support vibrant graphics and video.
GPS location	Self-locating GPS capability.
Web browser	Standard browsers will operate all web sites and applications.
Apps	Over a million specialized applications running in native code and extending the functionality of mobile devices.
Ultraportable and personal	Fits into a pocket, or a briefcase for tablets, able to be used anywhere and on the go.
Multimedia capable: video, audio, text	Fully capable of displaying all common media from video to text and sound.

Table 2.1: Features of mobile devices. Adapted from Boyle, (2013).

2.5 THE MOBILE COMMERCE FRAMEWORK

Mobile phone marketing is a complex procedure as well as involving a variety of participating bodies that make up the mobile-commerce value chain (Giaglis, 2007). Even though analysing the strategic objectives, the main benefits and the standards which these bodies share is not included in the scope of this study; the researcher partly addressed them to have an inclusive

view of the framework in which the mobile phone marketing operates. The value chain of mobile commerce consists of the following (Khosrow-Pour, 2010):

- **Mobile network operators (MNOs):** The central role of mobile network operators is to operate as well as implementing the nationwide various mobile networks. The MNOs as well act as providers of mobile services by owning some portals, manipulating the already recognized billing relationship with the customer.
- **Network equipment providers:** These comprise of businesses that are involved in production of the equipment and infrastructure required in the operations of a mobile network.
- **Device manufactures:** They are the manufactures of all varieties of mobile devices.
- **Technology platform vendors:** They are involved in the distribution of the operating systems as well as micro browsers for portable mobile devices.
- **Wireless internet service providers (WISPs):** They provide either access to the Internet network through mobile networks available or operating public access wireless local area networks (WLANs) efficient enough to offer some internet access through WLAN hotspots.
- **Wireless application service providers (WASPs):** Their part is to develop as well as hosting various wireless applications for organizations that wish to carry out mobile-commerce activities but lacking in the necessary resources.
- **Application developers:** They develop apps that are used either off-line or online.
- **Content providers:** They initiate and provide content that is sent to the end-user. The content provider who collects content from several content providers and distributes the aggregated content in a most appropriate package is known as the content aggregator. For example, a provider of this kind obtains present stock price content from a stock exchange, financial analysis content from a consulting firm as well as financial news content from a news agency and bundles them into a new package.
- **Mobile portal providers:** The mobile portals act as entry points to a wide spectrum of content and services. They can be considered as horizontal if they contain content and services regarding to an extensive spectrum of markets or vertical if they target to a specific market. they are called information or content-oriented when their primary concern is the distribution of information; communication-oriented when they offer communication mechanisms such as electronic-mail, instant messaging as well as calendars, and commerce-oriented when they provide transaction services such as shopping, banking, auctions and so forth.
- **Trading companies:** They are firms that carry out the mobile-commerce activities.

- **Consumers:** The target audience of the mobile-commerce is the consumers, which comprise of individuals, companies or business customers. The above mentioned m-commerce participating entities utilize the available technology that underpins the mobile commerce and leads it to growth and spreading (Khosrow-Pour, 2010).

2.6 MOBILE PHONE MARKETING DISTRIBUTION CHANNELS

Keegan and Schlegelmich, (2001) explained that marketing distribution channels can be regarded as the method which is used for enterprises placing products into the market for consumers to use. As mobile phone devices become the new primary means for consumers to interact with their favourite offerings, the trend in which established brands are interacting with their consumers as well prospects is still undergoing some rapid changes. Brands are catching on the growing significance of mobile phones. Marketers need to develop some clear as well as defined tactics aimed at driving some awareness to attract the interest of their customer base and prospects. Figure 2.1 shows some of the channels that marketers can consider using in distributing their products to consumers using the mobile platform.

SMS/MMS	Mobile Web	Apps	Mobile Ads	Other
<ul style="list-style-type: none"> • Opt-in, direct digital marketing • Greatest reach, most ubiquitous 	<ul style="list-style-type: none"> • Mobile browser friendly sites and pages • Information & interaction • M-commerce 	<ul style="list-style-type: none"> • iPhone, Blackberry, Palm, etc. • Silo'd audience • Rich experience 	<ul style="list-style-type: none"> • Mobile search • Mobile banners • SMS subscriptions • Apps 	<ul style="list-style-type: none"> • Video • Games • Music • Ringtones & wallpaper • Downloads

Figure 2.1: Mobile Marketing Channels. Adapted from Khosrow-Pour (2010).

2.6.1 Short Message Services or Multi-media Services (SMS/ MMS)

Short Message Service (SMS) is a reliable way of sending personalised messages to consumers. Text messaging is also an effective way to building more personal relationships when comparing to other channels (Boyle, 2013). SMS text messaging is instantaneous, can be easily reported on and can be used to communicate in a much more intimate way. On the other hand, MMS mobile marketing contains a timed slideshow of images, text, audio and video. This mobile content is conveyed through Multimedia Message Service (MMS). Approximately all mobile phones produced with colour screens have capabilities of sending and receiving ordinary MMS messages (Barutcu, 2007).

2.6.2 Mobile Web

With mobile phone devices becoming increasingly sophisticated, mobile websites are following suit as well (Khosrow-Pour, 2010). The recent generation of mobile phone devices can support most of the same technologies supported by desktop computers with minimal constrain.

Mobile phone websites are developed on the same basis as 'traditional' websites and as their browser based can be developed once to run on any mobile phone based browser (Khosrow-Pour, 2010). Mobile websites have the capabilities of creating rich user experiences with several functions available from m-commerce to watching video rooted in the content.

2.6.3 Mobile Applications (mobile apps)

Mobile applications are pieces of software that run on the mobile phone which they have been downloaded to (Khosrow-Pour, 2010). This implies that they can keep consumers connected to businesses even when they are offline. The capabilities of mobile applications are also only limited by the consumers' imagination. Mobile application offers rich user experiences and functionality ranging from games to viewing some videos as well as maps.

2.6.4 Mobile Ads

Mobile Ads help businesses to reach customers on-the-go. Mobile Ads appear on mobile phone devices in Google search results, on content websites, in apps and video. Marketers need them to put their businesses in front of consumers as they use their smartphones throughout the day.

2.6.5 Mobile Tagging or Quick Response (QR) Codes

Quick Response (QR) Codes are tiny graphics that can be used to stimulate consumers to respond to marketing campaigns. When QR Codes are integrated into a marketing campaign they can be used as ways to track user behaviours and offering additional content or opportunities to customers. QR Codes can also be utilised in other digital channels such as augmented reality to create more interactive customer experiences from the start of a customer's connection to the marketing campaign (Khosrow-Pour, 2010).

2.7 MOBILE MARKETING VS TRADITIONAL MARKETING

According to JVtimes (2016), online marketing and mobile marketing campaigns are significantly outperforming traditional marketing in many local businesses. Historically, most local business owners have relied on one or more of the traditional methods of local marketing to attract new customers and prospects. While the cost of these traditional marketing methods

has steadily risen in recent years, the effectiveness has dropped rather dramatically for many businesses. As the traditional markets continue to raise their marketing rates, sharp business owners are checking out some of the lower cost online and mobile marketing methods and finding them more effective at attracting new customers and a much better return on investment (JVtimes, 2016).

A survey that was carried by the Digital Marketing Association (2015), amongst 204 global renowned marketers showed that interactive marketing tactics (including mobile marketing) are proving to be so dominant and on the rise as compared to traditional marketing tactics. The marketers were requested to show their perceptions of interactive marketing when comparing to the traditional marketing techniques. They were also asked to indicate if they thought marketing effectiveness in relation to interactive and traditional marketing was going to increase, stay the same or decrease in the future from 2015. The results are indicated in Figure 2.2.

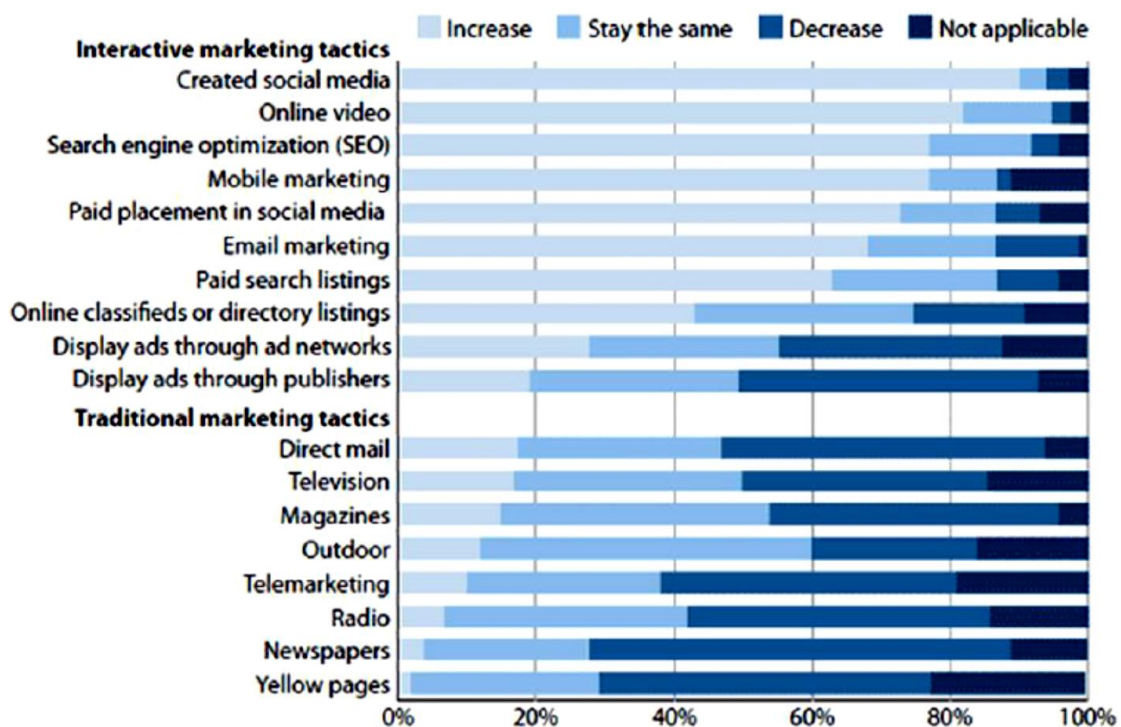


Figure 2.2: Interactive marketing forecast online survey. Adapted from Digital Marketing Association (2015).

Figure shows that marketers indeed see greater potential in interactive marketing as most of the interactive marketing tactics were focused to increase greatly as compared to traditional marketing tactics. The results show that mobile marketing which is the main focus of this study was projected to increase in the future by more than three quarters of the surveyed marketers. This is in sharp contrast to the results of traditional marketing tactics where the only greatest

projected increase by only 18% of the surveyed marketers was related to direct mailing. The results show that traditional marketing tactics are projected to decrease greatly or stay the same in the future as interactive marketing tactics such as mobile marketing are tacking over the marketing platform by storm (Digital Marketing Association, 2015)

Below According to Digital Marketing Association (2015), is a summary of mobile marketing advantages over traditional marketing;

- Done correctly, mobile marketing campaigns deliver highly targeted prospects right to the doorstep of the business with very little waste compared to the traditional marketing approach.
- Unlike most traditional marketing methods, mobile marketing results are measurable and traceable.
- Mobile marketing campaigns can be substantially less expensive to implement than many traditional advertising methods.
- The positive effects of mobile marketing campaigns are much more persistent and long lasting than traditional advertising campaigns. It is not unusual for the business owner to capitalize on a single online or mobile campaign for months or even years after the initial investment.
- Response rates from mobile campaigns can be 5 to 40 times higher than traditional advertising campaigns.
- The majority of business" potential customers already have a cell phone capable of receiving marketing messages.
- Traditional marketers and advertising methods are on the decline. Newspapers are losing subscribers and marketers at an alarming rate and business owners are cutting back or dropping yellow page advertising budgets.

However, despite these advantages which are offered by mobile marketing, the central question associated with mobile marketing as highlighted by Persuad and Azhar (2012) is whether consumers are prepared to accept this marketing medium. Most studies conducted previously gave much attention to the traditional methods of marketing to attract customers. These included yellow pages, newspaper advertisements, Radio, television and flyers. This study tries to narrow this gap by focusing on some of the major factors affecting consumer acceptance of mobile marketing.

2.8 GLOBAL DEVELOPMENTS IN MOBILE PHONE ADOPTION

The development of mobile technology has been a long expedition of innovation which is continuously changing and updating because of customers' changing needs (Bamba and Barnes, 2007). It was estimated that the number of mobile phones worldwide hit the 4 billion mark in 2008, with year-on-year penetration growth estimated to reach 61% in 2008 (Beneke, 2011). According to the International Telecommunications Union (2011), mobile phone subscriptions were reaching 6 billion, with international penetration reaching 87% in the first world countries, and 79% in the third world countries. By year end in 2012, almost one out of two people was in possession of a mobile phone (Magrath and McCormick, 2013). For Europe, penetration had exceeded the 100% mark (Business and Information Systems Engineering, 2011). A high level of competition and a decrease in prices have been able to reduce the digital divide in mobile phone, substantially (Beneke, 2011). The advent of the mobile channel has led to an excess of some new marketing apps and offerings, giving an escalation of the "brand in- the-hand" era which is categorised by the potential for branding and marketing communication to customers anywhere, at any time (Beneke, 2011).

Ahonen (2008), regarded the mobile phone as the seventh mass media following, in chronological order, print, recordings, cinema, radio, television and the Internet. Mobile phone devices have become global, with penetration rates covering that of most other communication channels. According to Gartner (2012), the information technology research and advisory company, reports the global mobile phones sales to end users reached 419 million units in the second quarter of 2012, 37% of which were smart phones. Apart from mobile phones, tablet computers, for example Apple's iPad, are also pushing the frontier of mobile marketing for consumers as well as marketers alike (Resch, 2012).

Today, mobile penetration rates have reached staggering levels. According to Gartner (2016), the number of mobile phone in use globally has reached 6, 880, 000 000+ and out of these, South Africa alone has recorded 59, 474, 500 mobile phones in use and being ranked on the 28th position globally. There has also been a significant shift from the traditional feature phones to the use of smartphones globally. According to new figures from eMarketer (2016), the number of smartphone users worldwide will surpass 2 billion in 2016, after nearly getting there in 2015. In 2015 there were over 1.91 billion smartphone users across the globe, a figure that will likely to increase by 12.6% to nearly 2.16 billion in 2016. Figure 2.3 shows the global trend in the usage of smartphones and some projection for 2017 and 2018 as well.

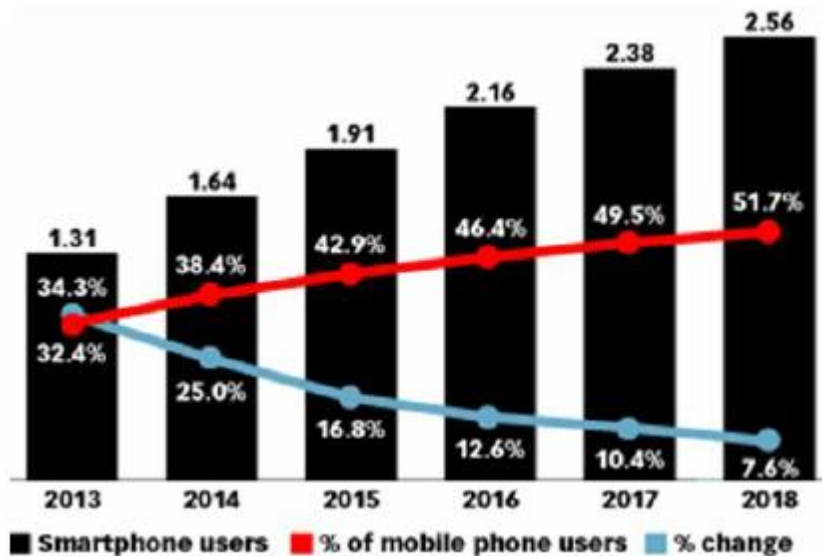


Figure 2.3: Global trends in the use of smartphone. Adapted from eMarketer (2016).

For the first time, more than one-quarter of the global population used smartphones in 2015, and by 2018, eMarketer (2016), estimates, over one-third of consumers worldwide, or more than 2.56 billion people, will do so. The 2018 projected figure also represents over half (51.7%) of all mobile phone users, meaning that feature phones will have finally become a minority in the telecommunications world.

Inexpensive smartphones are also opening new opportunities for marketing and commerce in emerging markets where many consumers previously had no access to the internet. Meanwhile, in mature, established markets, smartphones are quickly shifting the paradigm for consumer media usage and impressing the need for marketers to become more mobile-centric. Marketers need to find ways to integrate latest innovative technology into their mobile marketing campaigns by utilising the vast capabilities that smartphones offer.

2.8.1 Mobile phone adoption in South Africa

It is a fact that South Africa is one of the biggest telecommunications markets in Africa (Beneke, 2011). Mobile phones have emerged a more popular and prevalent form of voice alongside data communications among many sectors of the population in the country, especially for use within the informal sector (Donner, Gitau and Marsden, 2011). Due to its universal nature, the mobile phone has one of the most extensive reaches in South Africa as a communication tool, compared to any other medium. The South African mobile phone market has increased rapidly (Beneke, 2011). By the end of 2008, the total mobile phone market had reached 44 Million users (World Wide Worx, 2010). According to Statistics South Africa (2010), over 90% of the total population were mobile phone users. In South Africa, little differences exist for gender in terms of mobile phone ownership, with only a 5% difference in

favour of the males (Burton, Esselaar, Gillwald and Stavrou, 2011). Regarding age, ownership is greater amongst those between the ages of 30 and 34, this is followed by those between the 25 and 29 age group and 35 and 39 years, with ownership falling sharply after the 45 to 49 age group (Beneke, 2011; eMarketer, 2014).

According to Deloitte (2013), although half the population in South Africa live further down the poverty line, more than three quarters among those in low-income groups who are 15 years and above own a mobile phone device. Mobile ownership at the base of pyramid (BoP) (households with some earnings of lower than R432 monthly per household member) is comparatively higher compared to other African states. This leads to the clear conclusion that; “Social media is a key driver of mobile internet adoption, particularly in developing countries such as South Africa” (Deloitte, 2013:1). Based on the analysis of financial reports MTN, Vodacom and Telkom as well as certain major press releases by Cell C, Deloitte Digital has outlined key performance indicators for the South African telecommunications industry shown in Table 2.2 (Deloitte, 2013):

Population of South Africa	51.8 m
Total mobile connections (active sim cards)	66.1 m
Total unique subscribers (people)	40.7 m
Mobile penetration (active connections to population)	128 percent
Estimated active smartphones in South Africa	11 m
Estimated mobile data penetration (data mobile connections)	39 percent
Weighted blended Average Revenue Per User per month	R119
Prepaid subscriber base	83 percent
Post-paid (contract) subscriber base	17 percent

Table 2.2: Mobile phone performance indicator. Adapted from Deloitte Report, (2013).

Reports based on evidence of an increase in mobile usage has made companies like Deloitte to state that mobile marketing holds big things in South Africa, as mobile phone adoption is likely to increase, and with it, data consumption is set to increase intensely. Mobile marketers looking to communicate with students might want to take a look at the results in Table 2.2 which show a higher rate of mobile penetration in South Africa. On the other hand, a report by eMarketer (2014) shows that the youth (university students included) are still lagging behind in terms of mobile marketing adoption due to different reasons. This study addressed some of the factors affecting the acceptance of mobile marketing amongst consumers with specific reference to the youthful university students in South Africa.

2.9 YOUTH MARKET ACCEPTANCE OF MOBILE MARKETING

The results described in the study of Heinonen and Strandvik (2012) established that age variances really have an impact on customers' experience during mobile media usage as compared to other media sources. The results indicated that age is a significant means of differentiating in the sense that the youth market is more receptive to digital media. Grant and O'Donohoe (2007) on the other hand noted that the youth consumers' opposition to mobile marketing is affected by the absence of distress of intrusion as well as annoyance.

In a related manner, Barnes *et al* (2004) established that trust of brand, permission type, as well control implemented by wireless application service benefactors are the three main constructs that manipulate mobile phone marketing. Jayawardhena, Kuckertz, Karjaluoto and Kautonen (2009), established organizational trust as the most outstanding factor in mobile marketing, although individual trust and control were found to be more significant for men than women. According to Nielsen Research (2010), the young and more accomplished are the most energetic when it comes to internet usage as evidenced by their possession of a much higher usage rate and a propensity to attempt advanced mobile phones.

2.9.1 South Africa's Youth Market

A substantial proportion of usage for mobile services in South Africa is the youth (Deloitte, 2013). In terms of spending amongst the youth, a study by iTouch based on a study that consisted of university students in South Africa showed that 53% not more than R100 monthly on mobile charges (Gilham and Belle, 2013). Moreover, as many as 86% of the students at universities are prepaid subscribers. Besides spending on mobile charges, the South African youth are following international trends and are becoming the fastest-growing users of mobile phones. The study by iTouch further showed that the youth were changing their ring tones as much as 10 times annually and that personalisation of mobile phones is one of the more common activities (Gilham and Belle, 2013). Short Message Service is also a common form of communication amongst university students who form an important proportion of the youth in South Africa. According to Vodacom (2010), the number of SMSs being sent is approximately equal to the amount of voice calls being made.

Due to the rising mobile phone as well as internet usage amongst South African university students the researcher saw the importance of tapping into this population and assess the factors affecting the youthful students' acceptance of mobile marketing. In South Africa, providers of mobile services are strongly cognisant of the potential in this youthful market and they enthusiastically attempt to provide education to students on campuses across the country (Vodacom, 2010). This is done using several ways such as flyers, campus radio, social media as well as magazines.

2.9.2 Use of Mobile Phones by University Students Globally

Mobile phones are known to be very popular among university students, increasing their social inclusion and connectedness as well as providing a sense of security as they can contact others in times of distress or emergency (Balakrishnan and Raj, 2012). A report by University World News (2014) shows that students have signs of cognitive salience, whereby students think about their phones when they are not using them, as well as behavioral salience, whereby the students constantly check their mobile phones for missed calls or messages.

Many studies have looked at mobile phone use amongst university students in Europe and Asia and a few in African countries including South Africa (Balakrishnan and Raj, 2012; Baron and Campbell, 2010; Hong, 2012; Ling and Horst, 2011; Lobo and Joshma, 2013; Hyrynsalmi, and Knuutila, 2014). Within South Africa research done by the SA High-tech Student (2013), shows that South Africa's university students are addicted to their mobile phone devices, but are almost unanimous that mobile phones enhances their academic and social lives. Well over half (59%) of the students indicated they were addicted to their mobile phones. However, respondents felt that this addiction was not necessarily a bad thing as social networking through their mobile phones improved their studies as well as enhancing their social lives. Asked what impact technology like smartphones and the internet had on their lives in general, 81% said it enhanced their quality of life. According to SA Info (2013), university students in South Africa are a relevant population because they are presumed to be frequent users of the Internet, and supposedly the population most proficient in using new technology. However, no definitive literature on how South African University students use and perceive mobile phones has been found. The literature review therefore focuses on the use of mobile phones by university students from different parts of the world and how mobile phone usage is perceived by university students. It is acknowledged that it is difficult to draw conclusive arguments of mobile phone use as culture, values, and belief systems differ around the world and play a part in the perception and use of technology (North, Johnston and Ophoff, 2014).

The most commonly found reason for owning a mobile phone by university students in Australia and Malaysia was the convenience of being able to contact others and be contacted regardless of time and location through calls and messaging (North, Johnston and Ophoff, 2014). Malaysian students' most common use of mobile phones was for privacy purposes, allowing freedom of communication without filtering or interference by parents or siblings (Balakrishnan and Raj, 2012). The three main reasons university students' need to communicate is for inclusion (the need to belong), control (the need to give instructions to others or be given instructions) and affection (the need to love or be loved) (North, Johnston and Ophoff, 2014). While being readily contactable was found to be an advantage, it was also

noted that it can be a disadvantage, as contact could occur at inappropriate times (Walsh, White, and Young, 2010). Apart from being a communication device, the mobile phone is used by university students in the United Kingdom (UK) and Australia for many other functions, such as alarm clock, camera, music player, diary and phonebook (University World News, 2014). According to (Balakrishnan and Raj, 2012) university students in the United States of America (USA) said that owning a mobile phone is essential for keeping in contact with their parents, to ask for advice or get emotional support.

Some parents in the USA insist that their children at the university carry their phones always for safety purposes (Campbell, and Purcell, 2010). Whilst Ogunyemi (2010) found that African teenagers' mobile phone usage was greatly affected by their parents in other ways too, an increased bill from excessive use would lead to scrutiny by their parents therefore forcing the students to use their phones less than they intended. University students in the USA and Malaysia were found to consider their mobile phone as their primary phone, as opposed to using their home landline (Balakrishnan and Raj, 2012). Portability also provided students with more privacy by allowing conversations to take place away from authority figures (North, Johnston and Ophoff, 2014). The privacy that mobile phones provide give university students more freedom in their day to day lives (Balakrishnan and Raj, 2012). Previous research from the USA, Netherlands and Malaysia found that mobile phones have surpassed their initial purpose as a communication device, have become a status symbol of social progress to users, and is somewhat of a fashion item (Balakrishnan and Raj, 2012; Bouwman, Carlsson, Cotten, Anderson, and Tufekci, 2009). On the other hand, research from New Zealand and the USA disagrees, finding that mobile phones are no longer considered a status symbol but a 'necessity' (North, Johnston and Ophoff, 2014). Even so, social differentiation is still likely to occur through personalisation such as ringtones, covers and brand (Petruzzellis, 2010). Mobile phones are not entirely accepted as part of school and university culture in Canada (Walsh and Kelly, 2012) although, they are a powerful tool for learning. In countries, such as China, Germany and Japan, students are using their mobile phones to learn English (Roberson and Hagevik, 2008). There is a positive correlation, in South Africa, between owning a mobile phone and academic performance (North, Johnston and Ophoff, 2014), therefore students' enthusiasm towards mobile phones can be used to enhance learning.

It is interesting to note that from the above literature pertaining to the pattern of mobile usage amongst university students globally, most students did not indicate anything in relation to mobile marketing although being aware of its existence. The most common reasons for university students using mobile phones shown in the literature are social networking, impulse internet browsing and learning among others. According to a recent article by eMarketer (2016), more university students globally reported seeing mobile ads in 2015 than they did in

the previous year. However, their reaction to mobile ads was negative. Over 40% of the surveyed students found mobile marketing annoying while just less than 10% were happy to receive marketing ads. In fact, nearly 30% were less likely to purchase a product after having received a marketing ad via mobile phones. The students' reactions to mobile marketing show just how "personal" students perceive their mobile phones to be and how much more innovative marketers need to be to engage this demographic (eMarketer, 2016). It was therefore substantial for this study to focus on the factors affecting mobile marketing acceptance among South African university students to address this negative attitude of the students towards mobile marketing.

2.10 BASIC MOBILE MARKETING FEATURES

As millions of consumers adopt mobile devices, mobile marketing expenditures have rapidly grown and in the next five years will equal marketing on desktop PCs (Boyle, 2013). In 2013, mobile marketing was about 20% of all online marketing, which is extraordinary given that smartphones appeared only eight years ago, in 2007, and tablets not until 2010 (Boyle, 2013). Analysts believe if current mobile marketing growth rates continue, by 2017 mobile marketing will be 84% of all online marketing (eMarketer Inc., 2014).

Mobile marketing is dominated by Google, 3.9 billion (45%) of all mobile advertisements (ad) revenues generated by its search engines and YouTube (eMarketer Inc., 2014). On the mobile platform, Google is the king of search, garnering around 85% of all mobile searches. Google is also the largest video distributor on the mobile platform because of YouTube, earning about 75% of video play on mobile devices. Facebook is very distant second with (15%) of mobile ad revenues. Facebook is the leading display ad site on mobile devices, accounting for more than 80% of all mobile display ads. Unfortunately for Facebook, these ads sell a fraction of what display ads sell for on desktop devices. In part this is because Facebook users do not respond well to advertising and marketing, and therefore do not have a high click rate (eMarketer Inc., 2014). The problem is compounded by mobile Facebook users who have even less tolerance (and less screen space) for ads than is true of desktop Facebook users. Despite these difficulties, Facebook mobile ads have begun to gain traction, and generated significant revenues in the second quarter of 2013 (eMarketer Inc., 2014).

Other players in the mobile marketing market place are YP (4%) (previously known as Yellow Pages, a telephone directory and online marketing business), the music service Pandora (5%), and Twitter, Apple and Millennial with less than 4%, this is shown in Figure 2.4.

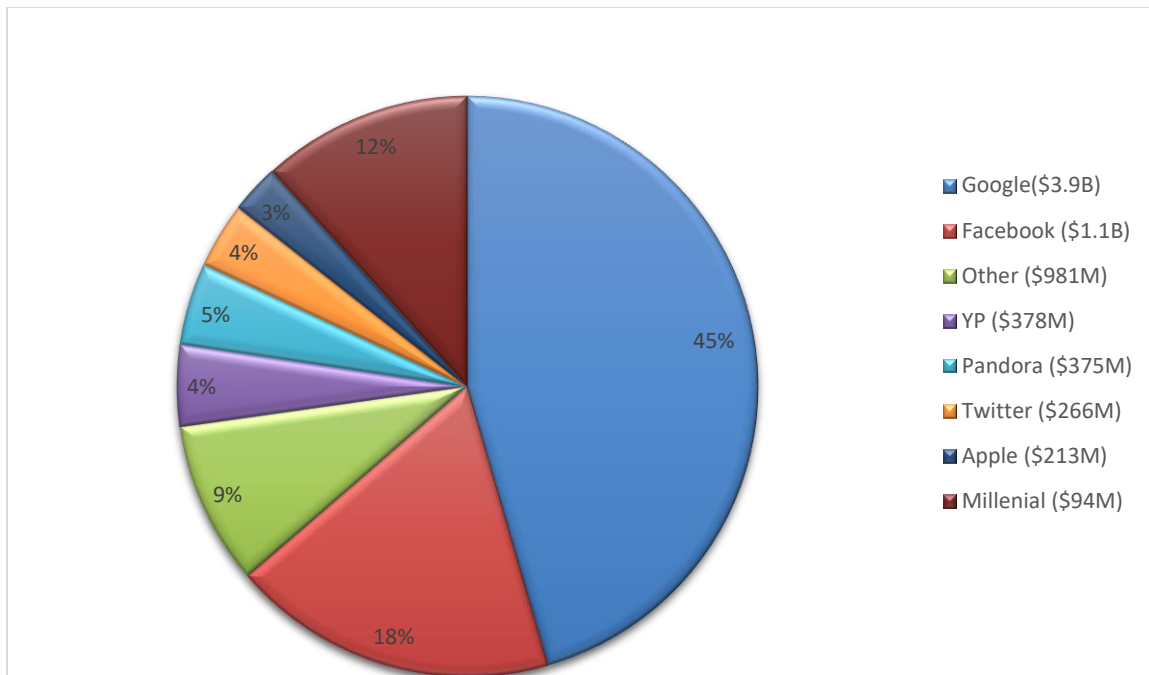


Figure 2.4: Top mobile marketing firms. Adapted from eMarketing Inc., (2014)

South African university students are not excluded from the mobile marketing services which are offered by the firms shown in Figure 2.4. South African High-Tech (2013) survey results showed that, Facebook was the universal social destination for South African university students, with 96% of respondents using it, with Twitter used by 70% of respondents. Google+ slotted into third place, at 47%, this might have been achieved by the pervasive use of Google Apps for student accounts across universities (SA High-Tech, 2013).

LinkedIn, the professional network, claimed a 29% share, largely students who are nearing completion of their studies and using it for employment prospects. Instagram and Pinterest, relative newcomers to the social networking environment, attracted 16% and 15% of respondents respectively. When asked, which network the students would use if they could only choose one, two-thirds (64%) still cited Facebook. Twitter was in distant second at 16%, followed by Google+ with 7%, Instagram 5%, Mxit 3% and LinkedIn 3%. Only 1% favoured Pinterest.

Among instant messaging (IM) apps, similar levels of dominance were seen, this time led by WhatsApp, which was used by 79% of students participating in the survey. Facebook Messenger claimed 45%, and Mxit 28%. The SA High-Tech (2013) survey report is significant in validating the use of university students for this study population as it is clear that the students are very active on the mobile platform.

2.11 ADVANTAGES OF MOBILE MARKETING FOR CONSUMERS

There was a time when e-Marketing was very much the thing for all marketers (Deloitte, 2013). E-Marketing offered various benefits to the marketers. It essentially changed the face of conventional marketing and the way companies perceived this aspect of business. Recently, with the ongoing emergence of innovative and advanced mobile devices bringing in a lot more connectivity, mobile marketing gives the consumers far more advantages. Below are some of the major benefits of mobile marketing for consumers.

➤ **Time Relevance**

Mobile phones are advantageous in their ability to be moved around with. Potential mobile customers can move around with their phones, and they keep them turned on. This means that urgent or time-sensitive messages including sales notifications and special events notices, can reach customers urgently with little or no delay. Mobile marketing is an advertising medium that uniquely offers this “always on” advantage. With mobile marketing, marketers can expect consumers to receive a marketing message and read it at their convenience any time of the day (Johnston, 2015).

➤ **Accessibility**

Most of the people using mobile phones keep them within their reach at any time of the day. This implies that potential consumers can be reached wherever they are without having to wait until they log on to the internet with a computer, notice an advertising board or tune in to a broadcast. Mobile advertising follow customers in their present location and does not depend on any single location, hence marketers can reach the consumers at any location and any time of the day (Johnston, 2015).

➤ **Direct marketing**

Mobile marketing platform largely interacts directly with users on their mobile phones. This allows for personalized one on one communication between the marketers and the mobile user to a greater extent. Using this to their advantage, various marketers can even start a direct dialogue with the user, getting instant feedback via SMS. This in turn reduces time taken for communication between the marketers and the mobile phone users.

➤ **Offer Engaging and Interactive Content**

According to Jeremy (2013), mobile marketing is advantageous in offering interactive content which catches the eye of the customer like photos and videos that consumers connect with in a personal and direct way unlike traditional advertising, such as direct mail. This more intimate and engaging method of building an exclusive experience for consumers results in a compelling ground for customers to stay interested in the brand

and allow for continued engagement. Through rich media and interactive content, mobile users feel they are part of the brand rather than simply a distant audience being marketed to (Jeremy, 2013).

➤ **Ease of Action**

The ease of action mobile marketing offers to consumers has made mobile marketing a smart marketing strategy. As stated by Jeremy, (2013) about 90% of texts are opened and read within 15 minutes of receipt. This almost guarantees marketers that their messages will be opened and read quickly. In addition, mobile marketing technology can allow very clear and clickable Calls-to-Action (CTA), where consumers can take an action immediately after receiving the message from the marketers if they wish to do so. Additionally, since almost all (98%) of mobile phones can receive SMS messages it becomes easy and user pleasant chance for the customers to act. This is because there are no downloads necessary, no technology learning curves, and no behaviour modifications required (Jeremy, 2013).

2.12 THREATS IN THE MOBILE MARKETING ENVIRONMENT

In the past few years, the market adoption and utility of mobile devices has expanded dramatically. Yet for every positive development in this market, there is often a risk consequence. For example, while application stores give users unprecedented ease of access to plenty of programs, they are also proving to be a fertile environment for the distribution of malware. Also, the increased power of mobile devices makes them more suitable for a host of business purposes, which can also result in the exposure and compromise of corporate data and systems. Finally, the very portability of mobile devices means that they are highly susceptible to loss and theft. Some of the threats to which mobile devices are currently exposed are explained in detail below.

12.12.1 Privacy

The contemporary consumers are acquainted with using their mobile devices for applications (apps) such as social networks, location-based services, and games on the same device on which they want to do mobile banking and mobile commerce, thereby compromising their security and privacy (Waugh, 2010). Most consumers use their mobile phones for such purposes because they are unaware of these types of threats, and even when they are aware, some of them are reluctant to take actions to protect their security and privacy until it is late. Consumers' privacy is highly intruded by mobile marketing. It poses serious threat on a user's identity, location, information and choices. With the advancement of cellular technologies and of mobile handsets there is huge quantity of technology mergers. In this environment of enhanced technologies, legal system seems far from sufficient. Legal system often fails to

protect ethical issues of marketing and to guard users from threat posed by rampant mobile marketing approaches by merchandisers (Waugh, 2010).

2.12.1.1 Threat to Identity

Using the open directory of consumers, mobile advertisements are sent to customers' mobile numbers. The marketer has free access to other information regarding the customers' identity. If the sender is a person with malicious intentions, then sender can use the identity information of customers and become sufficiently dangerous for the consumers.

An opt-out option plays the tricky role in confirmation of identity of a user. The open directories often carry information on active as well as deactivated phone numbers. The sender sends marketing messages randomly, but an opt-out response is a confirmation for an active number. Moreover, the identity information with respect to the phone number also gets approvals of real existence (Waugh, 2010).

2.12.1.2 Threat to Location

With a Geographic Positioning System (GPS) enabled mobile handset, a user can easily be traced. However, even without GPS enabled hand set, a user can also be traced. Based on signal strength of closest mobile tower using radiolocation and trilateration, a mobile device can also be traced (Waugh, 2010). Therefore, it is very easy for a sender of marketing advertisement to locate the target phone number. Such confirmation of location can only be done in case of active numbers. Thus, it confirms existence of a user.

2.12.1.3 Threat to Information

Mobile marketing poses two different threats to information of users. First kind is obviously information related to the user. Identity and location of the user belong to this category. The other category of threat is sending spyware hidden in content of advertisements. That can pilfer information from users' personal databases. An opt-out request may also thus be confirmation of real existence of a user database (Waugh, 2010).

2.12.1.4 Threat to Choices

The marketers approach mobile users randomly with advertisements. Users may like to be reluctant about some brands. Pushing such brands through mobile phone is a threat to taste and choice of users. Again, opt-out message of user is a confirmation of existence of an active number and user to mobile advertising networks. The network will vivaciously keep sending promotional messages of other brands to the number.

From users' viewpoint, mobile marketing is a disturbance. Leaving few cases of opt-in, all users tend to prefer reluctance on other brands. Today, mobile marketing seems highly intrusive into user privacy (Waugh, 2010).

2.12.2 Malware

Malware is increasing due to the lack of security mechanisms employed, and the increased production and power of mobile devices. This is evidenced by a reported 250% increase of threats between the years 2009 and 2010, there was a reported increase in threats of 250% (White Paper, 2011). Virtually all major platforms are malware targets. Examples include Trojans that send short message service (SMS) messages to premium rate numbers, background calling applications that rack up overpriced long distance bills for victims, key-logging applications that can compromise passwords, self-propagating code that infects devices and spreads to additional devices listed in the address book, and more. Furthermore, these threats continue to grow more sophisticated, with malware that changes characteristics during transmission to avoid detection are now being perpetrated (White Paper, 2011).

2.12.3 Cyber Crime

Mobile-commerce is one of the important part of marketing platforms. Mobile marketing takes place on the websites of public companies. According to Smith, Smith and Smith (2011), the term 'cyberspace' can be defined as the electronic medium of computer links or networks, mainly the Web, in which online communication takes place. One of the disadvantages of e-business or cyber-business is that it is open to the risk of e-crime. This type of crime is called cybercrime. As stated by the New York Times (2012), some organizations are increasingly integrating mobile commerce technologies into their infrastructures without understanding how it can be exploited and used against them. Attackers (cyber-criminals) can be able divert financial assets into other uses, hinder or shut down communications among consumers and businesses, steal intellectual property, destroy an organisation's status, or even bring e-commerce (or an entire business) to a stop (New York Times, 2012). Mobile devices can be used as avenues to commit crimes, as storage devices to harbour evidence of crimes, and they can even be made the objects or victims of crimes.

According to Smith *et al* (2011), a company's marketing activities can be disrupted by cybercrime. This implies that cybercrime costs publicly traded companies a lot of money yearly in stolen assets, lost business, and damaged reputations. This is evidenced by data from the US where cybercrime costs the US economy over \$100 billion per year (Kratchman, Smith and Smith, 2008; Mello, 2007). Cash lost through cybercrimes can be stolen both from businesses and consumers, literally with the click of a button and in a short period of time. If

a company faces cybercrime the website goes down, consumers will take their business to other companies. This is because with the direct losses accompanying cybercrime, a business that are victims to cyber criminals undoubtedly loses the confidence and trust of consumers who especially worry about the safety of their business transactions (Smith *et al*, 2011). Consequently, due to the lack of trust and confidence by the consumers a company can lose future business prospects if it is perceived to be susceptible to cybercrime.

2.12.3.1 Cyber-crime in South Africa

According to Fichardt (2015) the speed of technological change is leaving gaping holes in highly sensitive company information technology (IT) infrastructure in South Africa and this is adversely affecting the mobile marketing environment. These vulnerabilities are being targeted by cybercriminals at an increasing rate and South Africa is starting to feel the heat from attackers across the globe. This has led to a slow growth in mobile marketing adoption in South Africa as consumers are so conscious of the risk associated with this prevalence in cyber-crime.

It was revealed at the 2015 Security Summit, in Johannesburg, that the country had suffered from the most cyber-attacks in Africa between March and April of the same year (Fichardt, 2015). Vernon Fryer, chief technology security officer at Vodacom, presented alarming statistics from the Vodacom Cyber Intelligence Centre revealing a 150% increase in the number of DDOS (distributed denial of service) attacks in the past 2 years in Africa the huge impact being in South Africa (Fichardt, 2015). A typical attack on South African assets averages 9Gbps and lasts 17 minutes and a large attack may last a couple of hours. These attacks are not specific to any sector or organisation as cybercriminals are adaptable and tend to follow the money. It is no wonder then, that cybercrime statistics recently posted by the South African Business Risk Information Centre show that South Africans lose in excess of R2.2bn to internet fraud and phishing attacks annually (Fichardt, 2015). It is really important for marketers in South Africa as well as globally to try to come up with solutions to protect their marketing campaigns from cybercrimes as this will induce consumer trust towards mobile marketing.

2.12.4 Loss and theft

According to White Paper (2011), the portability of mobile devices allows for continuous access to a lot of information including business and personal information, regardless of location. This also leads to the very common and widespread incidence of loss or theft of mobile devices thereby threatening the success of some mobile marketing campaigns as consumer this disturbs consumer privacy protection. According to a survey of consumer users

in South Africa, one out of every three users has lost their mobile device at some point in time (White Paper, 2011). These lost mobile devices might result in an excess of devastating consequences. Consumer's personal information and data can be tampered around with. This includes accounts with passwords saved in the browser, contacts with pictures and addresses tied to the contact, calendar showing events, social media accounts, personal photos and pre-connected email accounts. Further, the loss of a consumer's mobile device can also cause devastating business effects since businesses are using mobile devices for marketing related functions further resulting in the loss of the customer since the customer will not be connected and reachable (White Paper, 2011).

2.12.4.1 Information theft in South Africa

Findings by the Southern African Fraud Prevention Services (SAFPS) have stressed that all individuals in South Africa are at risk of consumer information theft regardless of age or gender and as such everyone should take measures to protect themselves (Compuscan Academy, 2016). According to the 2015 SAFPS Chairman's report, the number of fraud filings increased by 27% year on year with 14 320 new incidents being recorded. In total the SAFPS had 34 720 fraud incidents recorded on the database at the end of 2014. This evidence really shows that loss of consumer private information due to theft is something that needs great attention for effective mobile marketing in South Africa.

These statistics highlight the immense pressure on both South African consumers and businesses to prevent fraud and slow the tide of information and identity theft. Internationally, these pressures are no different with (Credit Industry Fraud Avoidance System) CIFAS, a highly acclaimed fraud prevention company in the United Kingdom, revealing that identity theft cases represent 48% of all their fraud records and that account take over fraud has rocketed by 300% in just 5 years (Compuscan Academy, 2016). Although many consumers in South Africa and globally feel that fraud is inevitable and unpreventable, the solution to the rising problem is two-fold. Firstly, consumers need to become more vigilant in their financial dealings and the protection of their personal information. Secondly, businesses, in particular credit providers, need to implement appropriate systems to prevent impersonation fraud.

2.12.5 Communication Interception

Communication interception is the interruption of any communication process. This is a danger to any device that connects to a network either mobile or not. Smartphones have an advantage that their communications mostly protected in a way that only the authorized person can read it. This requires the potential hackers to possess some sort of specialized skills to listen to the conversations between the device and cell towers (New York Times, 2012). However, the

hackers seek means to break the encryption and the methodology is being well documented and made available to the public.

As cited by the White Paper (2011), due to the ability of smartphones to connect to Wi-Fi there is a great risk of a marketing communication interception. In 2011 there was about 50% of all smartphones containing Wi-Fi capabilities, and there was an estimated 40% increase by 2014 meaning that about 90% of the devices will be having this function by 2014. This shows that the risk of Wi-Fi sniffing (stealing data off a network) and interception is an increasingly prevalent risk (White Paper, 2011). Once a mobile device switches to a Wi-Fi network, it is more at a risk of what is known as the man-in-the-middle (MITM) attacks whereby attackers enter the communication stream between the customer and the companies. The attacker in this instance becomes the “middle man” in the communication process, monitoring all the communicated information being transmitted among the communicating parties (New York Times, 2012).

2.12.6 Spamming

Spamming is the most negative trend in all mobile phone marketing. Spams can be inform of SMS spams, text spams, m-spams, mobile spanning and spamming (Perez, Evan and Brooks, 2005). In other terms spamming is an Unsolicited Commercial Email (UCE) meaning that it's an email message sent to a person without being requested or permitted (White Paper, 2011). The people who send the spams pay nothing to send the costs are incurred by the recipient (customers) and the carriers (bandwidth used) making it a rather unfair situation. Mobile phone spam is becoming the best-known form of spam. Nowadays spams are blamed for higher costs in technology, higher costs mobile messaging services and higher expenses incurred by law enforcement agencies. Indeed, spams are a threat to mobile marketing. They prompt negative insight on customers' reception of mobile marketing (Perez, Evan and Brooks, 2005).

All the threats mentioned above act as major disadvantages associated with mobile marketing and are also some of the factors which negatively affect the acceptance of mobile marketing amongst consumers.

2.13 LITERATURE REVIEW SUMMARY

This chapter explored on various aspects which are associated with mobile marketing and provided with some literature review from previously conducted studies. The chapter firstly highlighted on the importance of consumers as well as the need for marketers to give value to the consumers by protecting them from unfair marketing practices. The study variables were also explained in detail, furthermore the chapter discussed on the concepts which are involved in the mobile marketing field. Some basic mobile device features were highlighted in chapter

two and the researcher further explained the mobile commerce framework and some mobile phone marketing distribution channels as well. Some basic mobile device features were highlighted in chapter two and the researcher further explained the mobile commerce framework and some mobile phone marketing distribution channels as well. The chapter went on to indicate some global developments in mobile phone adoption and emphasising also on the South African context. Lastly, the chapter discussed the threats which are faced in the mobile marketing environment.

CHAPTER THREE

RESEARCH METHODOLOGY

3. INTRODUCTION

Research methodology describes how data are collected for a research project (Andreas, 2012). It is the outline for the collection, measurement as well as analysis of data with the aim of achieving the objectives of a research project (Christensen, 2008). In this chapter the researcher explicitly defined the target population, the sampling method that was used as well as elaborating the data collection method that was applied. Additionally, the researcher identified the data analysis methods, tests of the statistics, computer programs and other technical information, as well as the validation for using a particular method. This chapter also highlights on the data collection instrument that was employed in the study, the organisation of the research instrument as well as the instrument's reliability and validity. Lastly, the different statistical tests that were conducted in data analysis are further explained in this chapter.

3.1 RESEARCH DESIGN

A research design is the 'blueprint' for fulfilling research objectives and answering questions or hypotheses (Cooper and Schindler, 2006). According to Churchill, Suter and Brown (2010), it is basically an outline or plan for a study used as a guideline in collecting as well as analysing data. Thus, a research design refers to a structure for carrying out a marketing research project which outlines the details of the measures necessary in obtaining the relevant information required to structure as well as solving marketing research problems (Malhotra and Birks, 2000). This study was descriptive in nature and it used a positivist paradigm that ensures that there is a gap between the researcher's subjective bias and the objective reality being studied. The quantitative research method was used in the study, which is a technique that makes use of mathematical representation, theories and hypotheses (Andreas, 2012). The researcher mainly decided to use the quantitative technique because this study covered a broad range of statistical techniques in analysing the data which cannot be interpreted with the qualitative approach. The quantitative research approach is further clarified in section 3.1.1.

3.1.1 Quantitative research

The systematic gathering of numerical data and analysis of that data using statistical techniques, meaning that the data are measured using numbers is how Cooper and Schindler (2006) termed quantitative research. It is used to answer questions about the associations among variables with the objective of explaining, predicting and controlling phenomena (Cant, *et al.*, 2011:88). In the study, some hypotheses centred on the study variables were formulated. The aim was to test the association between the research variables (trust, risk,

relevance, privacy, shopping style and location based) and consumer mobile marketing acceptance.

The major strengths of the quantitative approach in this research are that measurement is reliable, valid, and can be generalised in its perfect prediction of cause and effect. Therefore, quantitative research was appropriate for this study because the matters in this specific research have been done by other researchers, therefore a considerable body of literature exists (Shafeek, 2011). In addition, the researcher benefited from the following advantages by making use of quantitative research:

- It followed the original set of research objectives, resulting in more unbiased conclusion and testing of hypotheses;
- It achieved some acceptable levels of reliability of gathered data and
- Minimised subjectivity of judgement.

3.1.2 Data collection and survey instrument

The data was collected from respondents by a self-administered questionnaire targeted at the university students as they form part of the youth market in South Africa. A brief description of the study was also provided to the respondents and the researcher employed some research assistants in collecting the data. Students were selected as respondents because they are more active on the mobile network platform, in addition they are more familiar with mobile marketing trends (Rohm *et al*, 2012).

3.1.3 Research scope and Sample size.

This study involved a target population of the youth mobile phone service users in South Africa. The population in this study was made up of youthful students from South African universities between the ages of 18-35 years. The total population was made up of students from selected South African universities. It is from this total population that the sample unit was drawn. Due to time and budget constrain as well as the fact that the population was just too large and unbearable to include every individual in the study, the researcher used a sample size of 250 respondents.

3.1.4 Sampling method.

Determining how the sample units are to be selected is an important decision for a quantitative study and such a decision requires the selection of a sampling method. The choice between probability and non-probability sampling methods often involves both statistical and practical considerations. Statistically, probability sampling allows the researcher to demonstrate the representativeness of a sample, an explicit statement as to how much variation is introduced, and identification of possible biases (Kumar, Aaker and Day, 2002).

Therefore, based on the above reasoning, probability sampling was adopted. The researcher used the Stratified random sampling technique, whereby the population was divided into subgroups and then respondents were randomly selected from each of the subgroups. University institutions in South Africa fall under three main categories; traditional universities, which provide theoretically-oriented university degrees; technology universities, which are concerned with vocational oriented diplomas as well degrees; and also comprehensive universities, which provide a mixture of both kinds of qualification (SouthAfrica.Info, 2014). Therefore, each category was used as a stratum and from each stratum, a sample was created to avoid under characterisation of the population of interest. This was done also to improve the validity and reliability of the findings of the research.

From the categories of Universities stated above the researcher conveniently selected University of Fort Hare (UFH), University of Johannesburg (UJ) and University of Venda (Univen) respectively. The main reason for selecting these Universities was that the probability of giving a fair representation of the youth market of tertiary students in South Africa was high since the universities are spread across various province of the country. The researcher considered Univen because of its convenience since the researcher was at the time of the study enrolled at Univen, UFH since the researcher undertook his Honours studies there hence being so familiar with the population at UFH. Lastly UJ was selected because it is strategically located in route to UFH thereby saving transport cost for the researcher. Additionally, the researcher considered the fact that UJ is in Gauteng a province known to attract students from across South Africa.

3.2 MEASURES OF RESEARCH VARIABLES.

Likert scale questions requesting respondents to specify their level of agreement or disagreement with a sequence of statements on a 5-point scale formed most part of the questionnaire. Demographic information was also collected and the survey instrument was established making use of a review of some already available literature and through consulting with prospective respondents and proficient researchers around mobile marketing. To ensure some internal consistency on the questionnaire the Cronbach's alpha was used. For the measurement of variables such as risk, relevance and privacy the researcher adapted questions from Sultan *et al*, (2009), Rohm *et al*, (2012), while questions pertaining to trust were adapted from Campbell, (2011), Zhang and Mao, (2008). Lastly questions for shopping style were adapted from Persuad and Azhar (2012).

3.3 QUESTIONNAIRE PRE-TESTING

Pre-testing involves testing of the research questionnaire on a small sample of participants to detect and remove potential unclear questions. Conducting a pre-test is critical provided the

researcher is satisfied that the questionnaire being established will accomplish its various functions. In addition, the data collected becomes relevant and as precise as possible, the target respondents can partake and co-operate as fully as possible and the data collection and analysis can proceed smoothly (Cooper and Schindler, 2003:320).

The questionnaire was pre-tested at the University of Venda in a pilot study that involved 20 research participants. All the aspects involved in the research questionnaire were tested, including questionnaire layout as well as word sequencing. Pre-testing was crucial as some problems associated with the questionnaire were identified. These problems can happen for both the participants and interviewers concerning question content or even formatting (Andreas, 2012). The problems associated with this study questionnaire content consisted of some confusion among some of the pre-test participants regarding some of the question meaning, as well as misunderstanding of some of the terms or concepts. Through that pilot study which was conducted on an experimental basis the researcher managed to rectify the problems which the pre-test participants faced. Pre-testing was also used in this study in determining the time required by a respondent to finish the questionnaire. Additionally, in the study questionnaire pre-test was aimed at testing its face and content validity, besides identifying and rectifying problem areas.

In summary as pointed out by Churchill, Suter and Brown (2010:251) the researcher pre-tested the research questionnaire because pre-testing:

- Permits a detailed check of the scheduled statistical and analytical procedures, giving the researcher the chance to assess the usefulness of planned statistical and analytical procedures for the data. The researcher was then able to make necessary alterations in the methods of collecting data, and for that reason, analysed data in the main study more proficiently;
- Cost and time effective. The pre-testing almost always offers enough data for the researcher to decide on whether to go ahead with the main study;
- Can decrease the amount of unforeseen problems because the researcher had the chance of redesigning parts of the study to overcome challenges that the pilot study revealed; and;
- Enabled the researcher to establish the time required by the respondents to complete the survey, making it possible to revise instructions, as well as modifying the questions.

3.4 DATA ANALYSIS PROCEDURE

In a quantitative research study approach, data analysis refers to the method of 'breaking down' the data collected into component parts with the aim of answering the research

questions (Terre Blanche and Durrheim, 2002). Data analyses in this study included the editing and coding of data after collection, validity and reliability of the collected data and the statistical analysis of the data. Hence, it involved decreasing the accumulated data into a convenient size, developing summaries, watching for patterns and applying statistical procedures. Cant, Gerber, Nel and Kotze (2005), point out that the objective of analytic methods is to convert data into information required to make decisions. The selected methods of statistical analysis rely upon the type of questions to be answered, the number of variables, and the scale of measurement.

Data analysis process for this study included descriptive statistics, the t-test, Chi-square and Analysis of Variance (ANOVA), but the data had to be edited and coded first before final analysis took place. For the inferential analyses the researcher used the recent programme IBM Statistical Package for Social Sciences (SPSS) Version 23. The steps that the researcher took in analysing the data are explained below.

3.4.1 Data Editing

The various responses from each item of the research questionnaire were edited. According to Cooper and Schindler (2006), editing involves an in-depth and critical assessment of the completed questionnaire, in terms of compliance with the principles for collecting meaningful data, and in order to deal with the questionnaires not properly completed. Data editing detects mistakes and omissions, corrects them where applicable and confirms that the minimum standards of data quality have been attained (Cant, Gerber, Nel and Kotze, 2011). As a result, the main purpose of data editing was to guarantee data accuracy and consistent with the intent of the question. The completed questionnaires were edited and organised to simplify the coding procedure.

3.4.2 Coding

Data coding involves assigning figures or other symbols to answers in order for responses to be grouped into a narrow number of categories (Cooper and Schindler, 2006). The classification of data into restricted categories losses some data but is essential for efficient data analysis. The main purpose of data coding was to convert answers of the respondents to survey questions into codes or symbols which were easily entered and read by SPSS. In preparing for the transformation of answers into a computer-friendly format, it is necessary to first think about the structure of the required result (Cant, *et al.*, 2011).

In this study, two approaches to coding were used. The first was pre-coding which involved assigning codes to response options before field work commenced and hence printing the relevant codes on the questionnaire. Pre-coding was applied to all questions by assigning

numbers to each alternative found in the questions. Secondly, final coding was conducted during which the data was entered into Microsoft Excel so that it would be compatible for data analysis software.

3.4.3 Descriptive Statistics

Descriptive statistics is mainly aimed at providing data description by investigating the distribution of scores for each single variable and by establishing whether the scores on different variables are relating to each other (Terre Blanche and Durrheim, 2002). Descriptive analysis permits the researcher to present data in a way that can be interpreted easily, this study made use of frequency tables, charts and graphs for descriptive statistics.

3.4.4 Inferential data analysis

Inferential data analysis was employed in this study making use of the t-test, Chi-square and Analysis of variance (ANOVA). Inferential data analysis is analysis and hypothesis testing when the study concerns simultaneous investigation of two variables (Cooper and Schindler, 2006). This was done by making use of the tests of differences and measures of association between two variables at a time.

3.4.4.1 Chi-square test

The Chi-square test was used to test association between variables and was performed by cross tabulating two variables. The Chi-square was used in the data analysis process, as a test of association by cross-tabulating two variables that were assessed in the set hypothesis. According to Mesquita (2010) the Chi-squared test is a statistical test commonly used to investigate categorical variables or data observed with expected data according to a specific hypothesis.

There is a specific formula used when the test statistic calculation (Mesquita, 2010);

$$X^2 = \frac{\text{Summation (Observed Frequencies-Expected frequencies)}^2}{\text{Expected frequencies}}$$

Chi-square is the summation of the squared variance between the observed (*o*) and the expected (*e*) data (or the deviation, *d*), divided by the expected data in all possible categories (Sanders, 2006). The Chi-squared test is a non-parametric test and is conducted in two related but distinct circumstances:

- In estimating the relationship between an observed distribution and an expected distribution such as Goodness of fit test; and
- For estimating whether two random variables are independent.

Comparisons are made to this statistic with a chi-square distribution with known degrees of freedom to arrive at the p-value. The p-value was used to make some decisions on whether or not to reject the null hypothesis. If the p-value was less than "alpha" which is typically set at 0.05, then the null hypothesis is rejected (Maholtra, 2007).

3.4.4.2 Analysis of Variance (ANOVA)

Analysis of variance (ANOVA) is a statistical analysis tool that splits the total differences found within a data set into two components: systematic and random factors. The random factors do not pose any statistical influence on the given data set, whereas the systematic factors do. The ANOVA test is used to establish the impact of independent variables on the dependent variable in a regression analysis (Investopedia, 2011).

Analysis of variance tests for significant differences between means. ANOVA is an overall technique that can be used in hypothesis testing that the means among two or more groups are equal, under the postulation that the sampled populations are normally distributed. In this study, the ANOVA test identified factors that were influencing the data set, through establishing the degree of variation or similarity between the means of the data set. The test determined whether a significant relationship existed between the research variables.

3.5 RELIABILITY AND VALIDITY OF MEASURING INSTRUMENT

Reliability refers to the consistence of measures. For an instrument to be reliable it should be able to produce the same results when used repetitively. Reliability was established in this study by creating the questionnaire with an expert in statistics assessing the questionnaire for question sequencing and phrasing. Also, the researcher adopted the research questions from already conducted questionnaires by other authors. Lastly, the researcher improved reliability by pre-testing the questionnaire on a small sample first.

Validity denotes to whether an instrument actually has measured what it is supposed to measure given the situation in which it is applied (Babbie and Mounton, 2002). To guarantee external validity, the researcher used a large sample size and random sampling was also used when selecting the respondents to minimize bias on selection.

3.6 ETHICAL CONSIDERATIONS

Ethics in marketing research ensure that no one is harmed in any way possible (Cant, Gerber, Nel and Kotze 2005). The researcher was provided with an ethical clearance certificate from the research ethics committee at the University of Venda as the first step to ensure that this study was ethical. The researcher made sure that the participants in this study were comfortable with taking part in the data collection process and not be deceived in any way.

The researcher also informed all the participants about the research before they got involved. The researcher was mandated to make sure that all the participants were willing to participate in the research. In this study, the data that was provided by the participants was kept with strict confidentiality.

CHAPTER 4

RESEARCH FINDINGS

4. INTRODUCTION

The previous chapter looked at the study methodology. In the previous chapter, target population was defined as well as the sampling method used in the study. The research methodology was also explained and was the methods used to analyse data. In doing so, various statistical tests and other techniques were explained in the previous chapter.

This chapter presents the results. In this chapter, data is analysed and integrated. Data analysis is the procedure of finding the accurate data to answer a research objective, understanding the procedures underlying the data, ascertaining the significant patterns in the data, and then stating the results having the greatest possible impact (Leek, 2011). This chapter also provides the response rate of the research questionnaire and the reliability and normality of the data.

The findings are based on the empirical analysis of the data obtained from the research participants. Five steps which are validation, coding, data transcribing, data entry and data cleaning were used in analysing data. Several statistical data presentation instruments are used to analyse the data collected using questionnaires. These statistical data presentation tools include cumulative frequency tables, pie charts and bar graphs. The descriptive statistics include the mean, mode, median and standard deviation where appropriate.

4.1 RESPONSE RATE

Of the 250 well contacted students, a total of 232 valid research questionnaires were given back, resulting in a total response rate of 92.8 %. The response rate was deemed acceptable due to its higher percentage. The likely biases in this study were established through comparing the gender of respondents to ascertain if there is a substantial difference in the sample population as well as the non-respondents. As depicted in Table 4.1, 56% of the non-respondents were made up of males and 44% females, when comparing to 60% and 40% of the respondents respectively.

Table 4.1: Gender comparison of non-respondents and respondents

	Non-respondents		Respondents	
	<i>F</i>	%	<i>f</i>	%
Male	10	56%	139	60%
Female	8	44%	93	40%
Total	18	100%	232	100%

The returned questionnaires in total, constituted less than 2% of values missing. The resolution was as a result made by the researcher to employ the “exclude cases pairwise” technique, in which cases (research participants) are not included only if they are omitted data vital for the specific analysis in SPSS. In this study, all the respondents were involved for the analysis for which they had the essential information.

4.2 THE NORMALITY OF THE DATA

Prior to conducting a detailed data analysis, the data was first checked for normality. According to Coakes (2005), the data normality can be established by using the Kolmogorov-Smirnov test (in case the sample size is above 100) and the Shapiro-Wilks test (in case the sample size is below 100). This study used the Kolmogorov-Smirnov test because the sample size was above 100. Given the significance level is greater than 0.05 using either of these two tests, then normality is assumed. For this study, the significance of the Kolmogorov-Smirnov test greater than 0.05, it means that the normality of the data can be presumed.

4.3 RELIABILITY TEST FOR THE QUESTIONNAIRE

The researcher used the Cronbach’s coefficient alpha (α) to assess the measurement reliability in this study. The Cronbach’s coefficient alpha is an index which is used in measuring the internal consistency of all the items that measure the same construct. It also reveals on the method of domain sampling. Thus, the Cronbach’s coefficient alpha is one of the most popular internal consistency methods that decides the mean reliability coefficient for all probable techniques of splitting a set of items in half (Cooper and Schindler, 2006)). Consequently, the Cronbach Alpha coefficient is regarded as one of the most important reliability estimates of a measurement scale with multi-point items. The alpha coefficient varies in value from 0 to 1. The standard threshold of Cronbach alpha is in the range from 0.700 to 0.999 and indicates questionnaire reliability (Cooper and Schindler, 2006). The researcher tested the internal reliability of each construct by means of the acceptable Cronbach’s coefficient alpha, where a greater level of Cronbach’s coefficient alpha signified higher reliability of the measurement scale. The outcomes of scale reliability tests are shown in Table 4.2.

Table 4.2: Reliability test of the questionnaire

Variables	No. of items	Coefficient analysis
Demographic	4	0.724
Mobile marketing usage	8	0.731
Mobile marketing variables	21	0.762
	Average	0.739

As shown in Table 4.2, the average Cronbach's coefficients alpha for all variables is 0.739 and this signifies the reliability of the questionnaire as the figure is within the acceptable threshold. The researcher decided to further measure the Cronbach's alpha for each section of the questionnaire to eliminate any chances of some scales being unreliable. Section A of the questionnaire which constituted of the demographic variables consisting of 4 questionnaire items recorded a Cronbach alpha of 0.724. The mobile usage section had 8 questionnaire items and a Cronbach's alpha of 0.731 and the last section for mobile marketing variables had 21 questionnaire items and a Cronbach's alpha of 0.762 which also reveal that the scales were reliable.

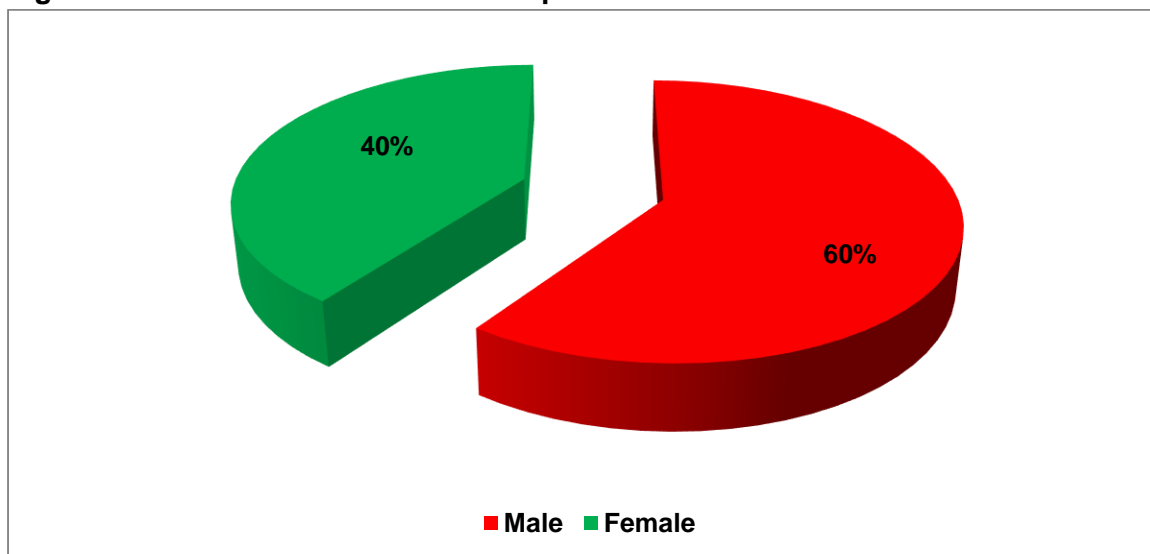
4.4 DEMOGRAPHIC PROFILES OF RESPONDENTS

Section A of the questionnaire was aimed at establishing the distribution of demographic information in terms of gender, age, level of study and the respondents' current institution. The findings are discussed respectively in subsections below.

4.4.1 The gender of respondents

Figure 4.1 describes the findings of the study in respect of the gender of the respondents. This was to find out the gender balance of the respondents.

Figure 4.1: Gender distribution of respondents



The males dominated the gender profile of respondents constituting 60% of the participants while female respondents constituted 40% of participants from the total sample.

4.4.2 Age of the participants

The question provided the researcher with general information in relation to the gender of the respondents. This information is presented in Table 4.3.

Table 4.3: Age distribution of respondents

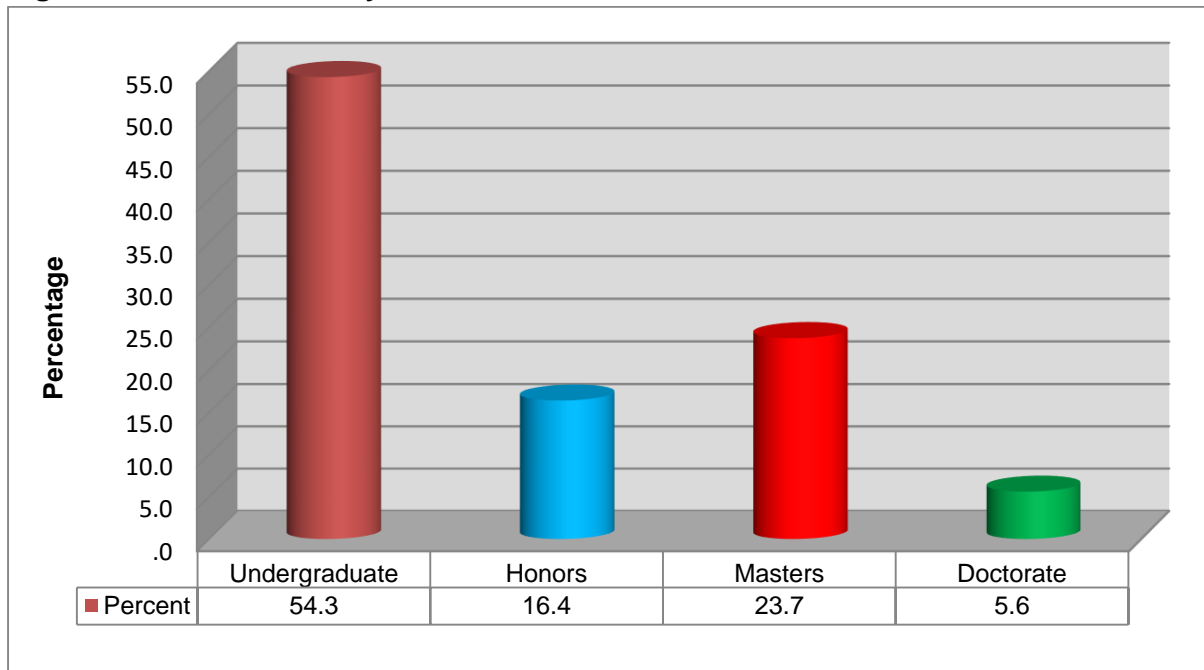
Age group	Frequency	Percent
Below 23 years	96	41.4
23-29 years	113	48.7
30-35 years	23	9.9

Table 4.3 shows that the majority, 48.7% of the respondents were between the 23-29 age group. The least proportion was between 30-35 age group which had only 9.9% of the respondents. This implies that most students enrolled in South African universities fall under the 23-29 age group. This result validates the findings made by the University World News (2014).

4.4.3 Level of Study

The purpose of this question was to establish the variation of participants` responses in terms of their level of study. Figure 4.2 shows the distribution of respondents by level of study.

Figure 4.2: Level of Study

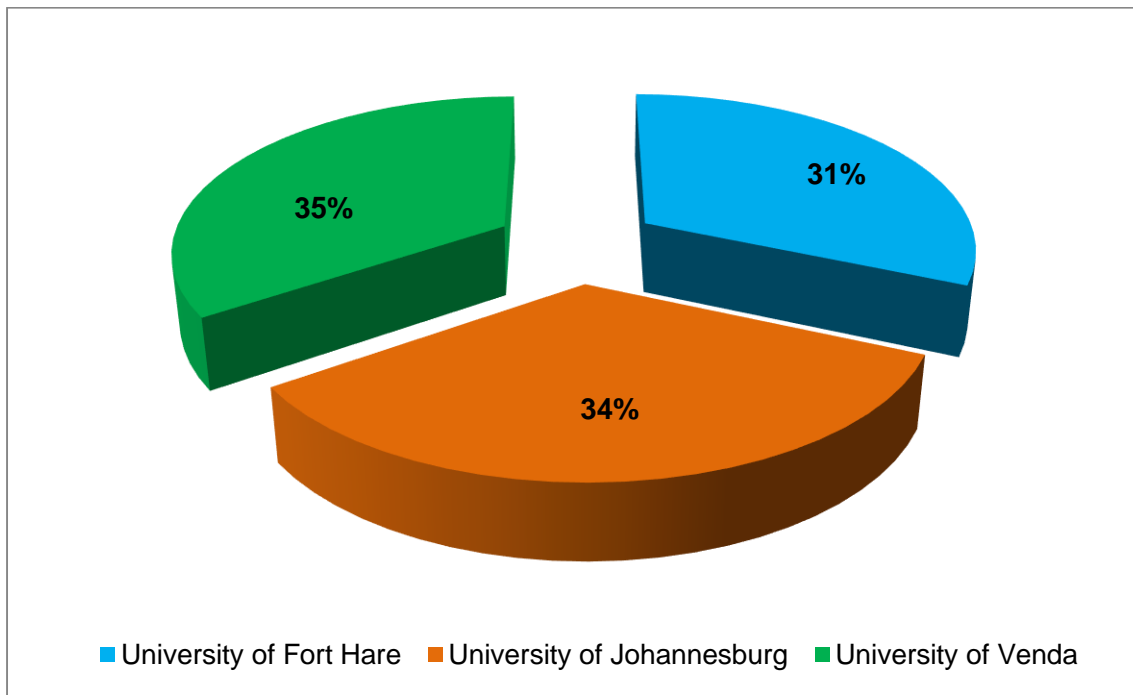


In Figure 4.2, most of the respondents (53.3%) were doing their undergraduate studies and followed by 23.7% of the respondents who were doing Masters studies. For Honours level the respondents constituted 16.4% of all participants, while only 5.6% were doing doctorate and constituted the least group of respondents. These findings imply that most students in South Africa are enrolled for undergraduate studies. This could be attributed to the fact that normally for undergraduate studies most universities across South Africa reserve a wider range of fields of study for those who excel in their matric studies and hence admit a large number of students. This finding is consistent with the report by University World News (2014). However, the statistics differs slightly as those of Universities South Africa (2015), formerly known as Higher Education South Africa (HESA), in their recent report they reported a direct relation between education level and the total population. This study found out that Masters students (23.7%) had a higher proportion of respondents as compared to Honours students (16.4%).

4.4.4 Current institution

The aim of this question was to establish the distribution of participants' responses in terms of their institution. Figure 4.3 shows the distribution of respondents by their institution.

Figure 4.3: Name of Institution



From the distribution of respondents as shown in Figure 4.3, there were no significant differences in the number of students in relation to their institution. The researcher used a proportion of 1:1:1 in distributing the questionnaires however due to non-responses the actual percentage of responses across the three institutions ended up varying. University of Venda had the highest number of respondents (35%), followed by University of Johannesburg (34%) and lastly 31% of the responses came from the University of Fort Hare. For University of Venda to have the highest respondents it can be attributed to the fact that at the time of the research, the researcher was enrolled at the institution and therefore it was easy to collect data.

4.5 MOBILE MARKETING EXPERIENCE

The questions in this section were established with the aim of ascertaining the respondents' experience with mobile marketing. The questions sought to contribute a broader understanding of the behaviour of students when they receive mobile marketing messages on their mobile devices. The researcher also in this section asked the respondents on how they utilise the internet since mobile marketing is strongly linked with the availability of the internet. Before asking some number of questions pertaining to the respondents' experiences as well as the behaviour towards mobile marketing messages, the researcher firstly asked general questions such as the mobile phone brand that was used by the respondents and the frequency in change of mobile phones by the respondents.

4.5.1 Brand of mobile phone

Table 4.4 shows the variation in the distribution of various well known mobile phone brands in South Africa amongst the respondents across the selected universities.

Table 4.4: Brand of mobile phone

Brand	Frequency	Percent
Nokia	31	13.4
Samsung	114	49.1
Blackberry	39	16.8
IPhone	11	4.7
Motorola	2	.9
LG	5	2.2
Huawei	2	.9
HTC	2	.9
Other	22	9.5

According to the results as presented in Table 4.4, the majority of respondents (49.1%) were using Samsung mobile phones. There was a big gap between Samsung and Blackberry which was the second leading mobile phone brand (16.8%) that was used by the respondents. Nokia was on the third place with 13.4% of the respondents using the brand, this was followed by other phone brands (9.5%) which were not on the list provided by the researcher. Other phone brands that were found include Gtel, Mobicel, Hisense, Zte and Econet. Motorola, Huawei and HTC had the same distribution of respondents with each brand being used by 9% of the total respondents. On the least was IPhone and LG with the lowest usage of 4.7% and 2.2% respectively. The findings suggest that Samsung is the most popular mobile phone brand being used by university students in South Africa. A recent survey from market research firm Gartner (2016), supports the results shown in Table 4.4 as it reported that Samsung is now on top as the leading mobile phone maker in the world and in 2015 it sold a total of 81.1 million smartphones in the first quarter, compared to 60.1 million units sold by rival Apple.

4.5.2 Frequency of changing phones

The question provided the researcher with general information relating to the frequency in which the respondents switched from one mobile phone to another. The information is presented in Table 4.5.

Table 4.5: Frequency of changing phones

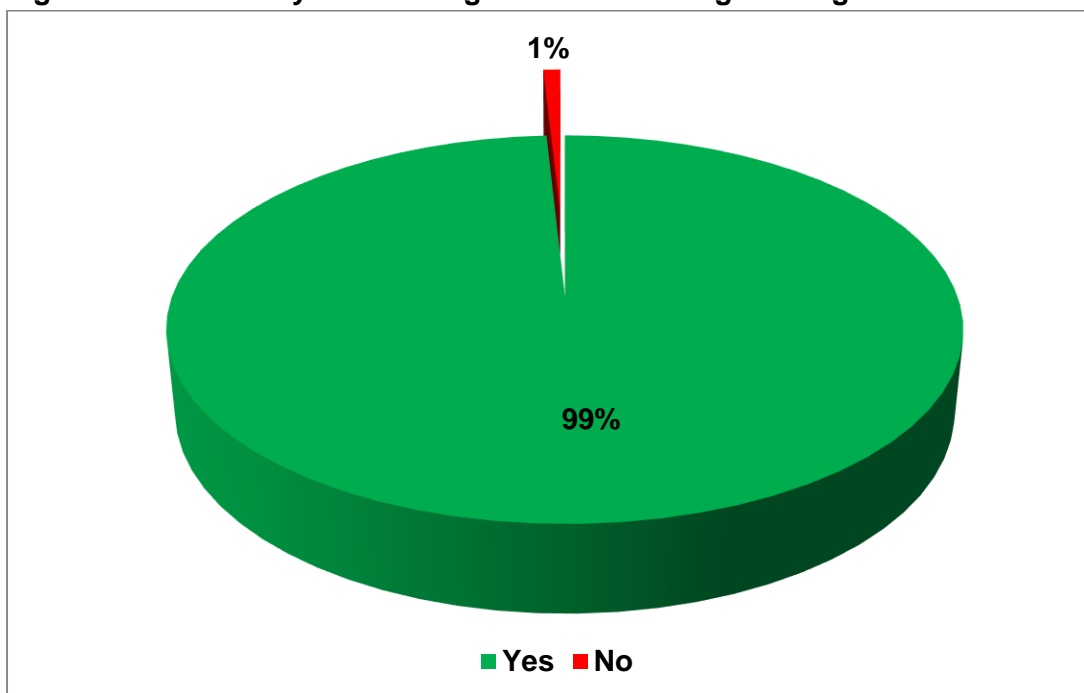
Response	Frequency	Percent
Every year	84	36.2
Every 2 years	54	23.3
Every 3 years	45	19.4
More than 3 years	49	21.1

The findings presented in Table 4.5 indicate that the majority of the respondents (36.2%) change their phones every year. The results also reveal that 21.1% of the respondents who constitute the least percentage of respondents change mobile phones in a period of more than three years. These findings are in consistence with the results of Persuad and Azhar (2012).

4.5.3 History of receiving marketing messages

To determine whether the respondents were receiving mobile marketing messages on their mobile phones, the respondents were asked to indicate whether they had received any mobile marketing messages. The responses are shown in Figure 4.4.

Figure 4.4: History of receiving mobile marketing messages



Results shown in Figure 4.4 reveal that an overwhelming 99% of respondents confirmed receiving marketing messages on their mobile phones, whilst only 1% revealed not receiving any mobile marketing messages. This provides strong evidence that businesses in South Africa are utilising mobile marketing to reach out to their consumers. Research by Mesquita (2010), which investigated mobile phone marketing as an effective medium in reaching out

the South African consumers validates this result as it found out that 92% of respondents confirmed receiving marketing messages through mobile phones. Furthermore, the increase in the percentage as highlighted in Figure 4.4 can be attributed to the fact that there has been a rapid increase in mobile marketing in South Africa from 2011 to 2016. According to Mobile Marketing Association (2016), mobile marketing penetration had increased by more than 35% in the period of 2010 to 2013.

4.5.4 Frequency of receiving mobile marketing messages

In investigating the occurrence of mobile phone marketing, respondents were asked to recall the average number of marketing messages they were receiving each day through their mobile phones. The results are presented in Figure 4.5.

Figure 4.5: Frequency of receiving mobile marketing messages

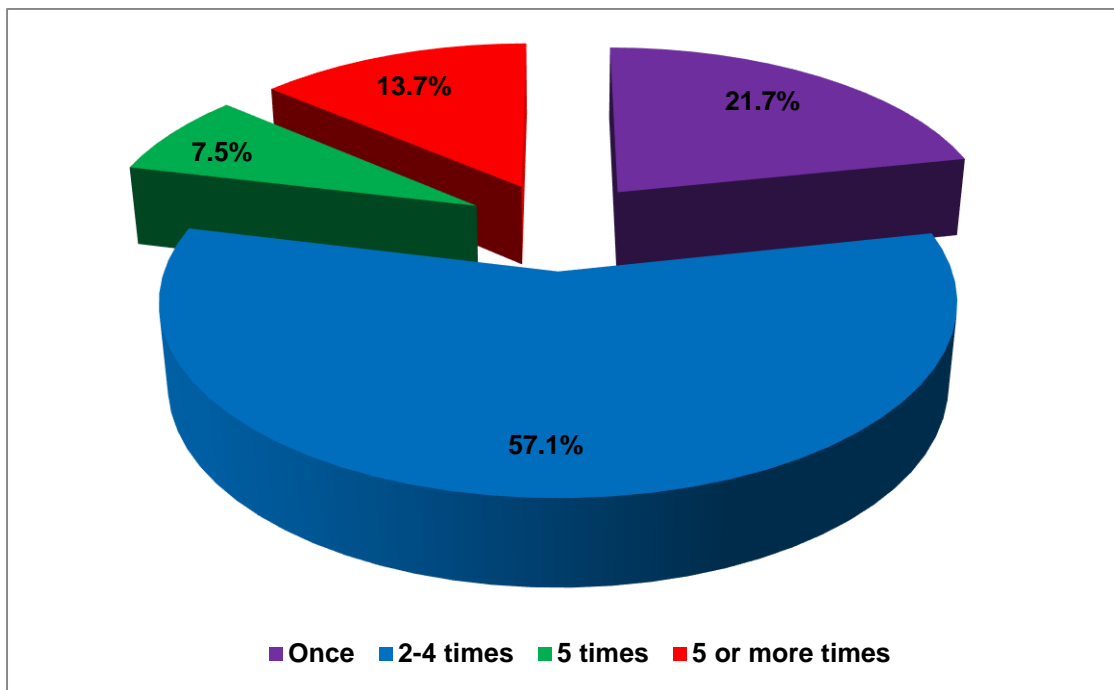


Figure 4.5 shows that more than half of the respondents (57.1%) were receiving mobile marketing messages 2-4 times on a daily basis, the smallest percentage (7.5%) receiving messages 5 times a day. Apart from this 21.7% indicated that they were receiving mobile marketing messages only once a day and slightly more than one sixth (13.7%) of respondents received mobile marketing messages 5 or more time per day. Findings in this study are in consistence with the study conducted on the perception towards mobile marketing by the youth market in South Africa by Beneke (2011), where the majority indicated receiving mobile marketing messages 2-3 times a day. The results imply that there is an active mobile marketing platform in South Africa, whereas the differences in the number of messages received per day can be attributed to the fact that they are quite a number of mobile services

providers in South Africa the leading being MTN, Vodacom and Cell C. These Service providers offers different terms and conditions for mobile marketing players as a result the number of messages distributed by each service provider differs.

4.5.5 Preference for frequency of receipt of mobile marketing messages

After ascertaining the number of messages that respondents were receiving as shown in Figure 4.5, the researcher then tried to establish the number of messages that the respondents actually prefer to receive on a daily basis. Table 4.6 shows the preferred number of times the respondents were willing to receive mobile marketing messages.

Table 4.6: Preference for frequency of receipt of mobile marketing messages

Response	Frequency	Percent
Once per day	99	43.2
2-4 times per day	61	26.3
5 or more times per day	39	17
I don't want Ads.	31	13.5

The results in Table 4.6 show that the majority of the respondents (43.2%) prefer receiving marketing messages on their mobile phones. This is in sharp contrast with the results in section 4.5.4 as the majority, 57.1% of respondents indicated that they were receiving 2-4 mobile marketing messages per day. Interestingly, some of the respondents (13.5%), in fact indicated some unwillingness towards receiving mobile marketing messages. Analysis of the responses to the questions of when participants would like to get mobile phone marketing messages in Table 4.6 clearly show that almost three quarter of the respondents would like to receive mobile marketing messages, with a quarter of respondents electing not to receive at all. Findings from this research contrast with the findings of Beneke (2011), whereby most respondents (South African youth) indicated that they would never like to receive mobile marketing messages. Beneke (2011) concluded that there was a strong negative attitude from South African youth towards mobile marketing.

4.5.5 Desired frequency of receiving incentive based mobile marketing messages

The question was linked to the question in section 4.5.4 above. The researcher further tried to ascertain the outcome of the number of marketing messages the respondents consider receiving after incentives are offered such as free texts, free internet and free airtime.

Table 4.7: Desired frequency of receiving incentive based mobile marketing messages

Response	Frequency	Percent
Once per day	88	37.9
2-4 times per day	81	34.9
5 or more times per day	53	22.8
I don't want Ads or promotions.	9	3.9

According to the results as presented in in Table 4.7, the majority of respondents (37.9%) considered receiving mobile marketing messages once per day. To show the significance impacts of the incentives the results show that the respondents who desired receiving 2-4 marketing messages per day increased to 34.9%, whilst without incentives (see Table 4.6) 26.3% respondents preferred receiving the same number of mobile marketing messages. The results showed consistence in the respondents' behaviour as 22.8% of the respondents were now willing to receive 5 or more messages per day, whilst earlier (see table 4.6) a lower percentage (17%) were willing to receive the same number of messages without any incentives. The number of respondent who were not willing to receive any marketing messages as shown in Table 4.7 dropped to only 3.9% when offered incentives as compared when not offered incentive (13.5%) as shown in Table 4.6. this results implies that South African students are much more willing to react positively to incentive based mobile marketing notification. These results are similar to those that were found based on the same study conducted concurrently in United States and Pakistan by Sultan, Rohm and Gao (2010).

4.5.6 Response after receiving a mobile marketing notification

The question established the variation in the reaction of respondents after receiving a marketing message on their mobile phones. The outcome from the responses after receiving a mobile marketing notification is shown in Figure 4.6.

Figure 4.6: Response after receiving a mobile marketing notification

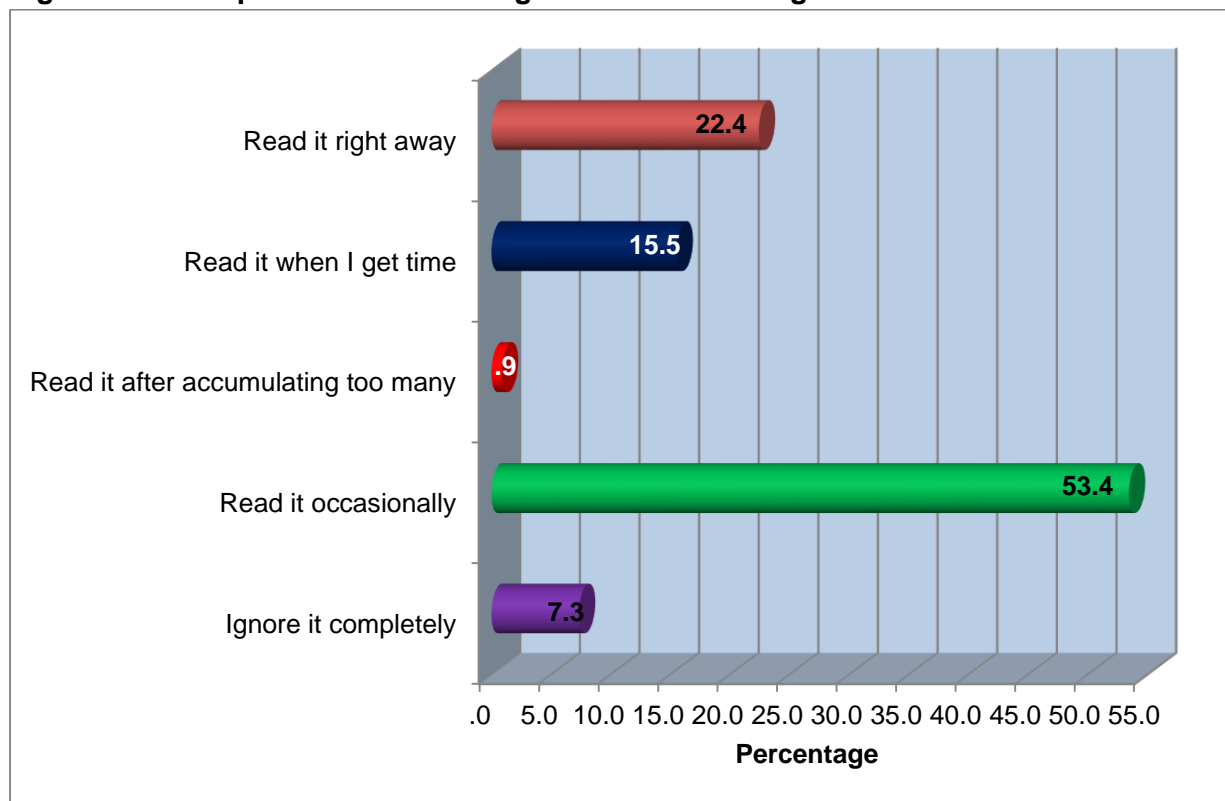


Figure 4.6 shows that most respondents (53.4%) only read the messages occasionally, whilst the second highest proportion of respondents (22.4%) read the messages right away. The results show that about one sixth (15.5%) of the respondents elect to read the messages when they get the time while 0.9% only read the messages after accumulating too many. The least proportion of respondents (7.3%) ignores the marketing messages completely. The results imply that South African university students do not appear to put a great deal of effort into reading and evaluating the various mobile marketing messages.

The findings are supported by Beneke (2011), in his study of the South African youth market he found out that only a quarter of the respondents indicated their willingness to read the marketing messages right away while most the respondents were of the opinion of either ignoring them or reading the messages after accumulating too many. Mobile Marketing Association (2016), however justified this general behaviour of students towards mobile marketing as common. They indicated that unlike individuals in the corporate sector who are so much actively involved in the mobile marketing most students are not so much interested in reading through mobile marketing messages even though they are so much active on the mobile platform. On the other hand, this view is supported by Persuad and Azhar (2012), they

indicated that even though mobile usage is positively related to the adoption of mobile marketing for university students it's not the case. They indicated in their study that students tend to show a weak openness for marketing techniques through their mobile phones even though they like spending much time browsing on the internet. The next section will show the rate at which the respondents connected to the internet on their mobile phones.

4.5.7 Frequency of internet usage

The question provided the researcher with general information relating to the frequency in which the respondents connected to the internet. The information is presented in Figure 4.7.

Figure 4.7: Frequency of internet usage

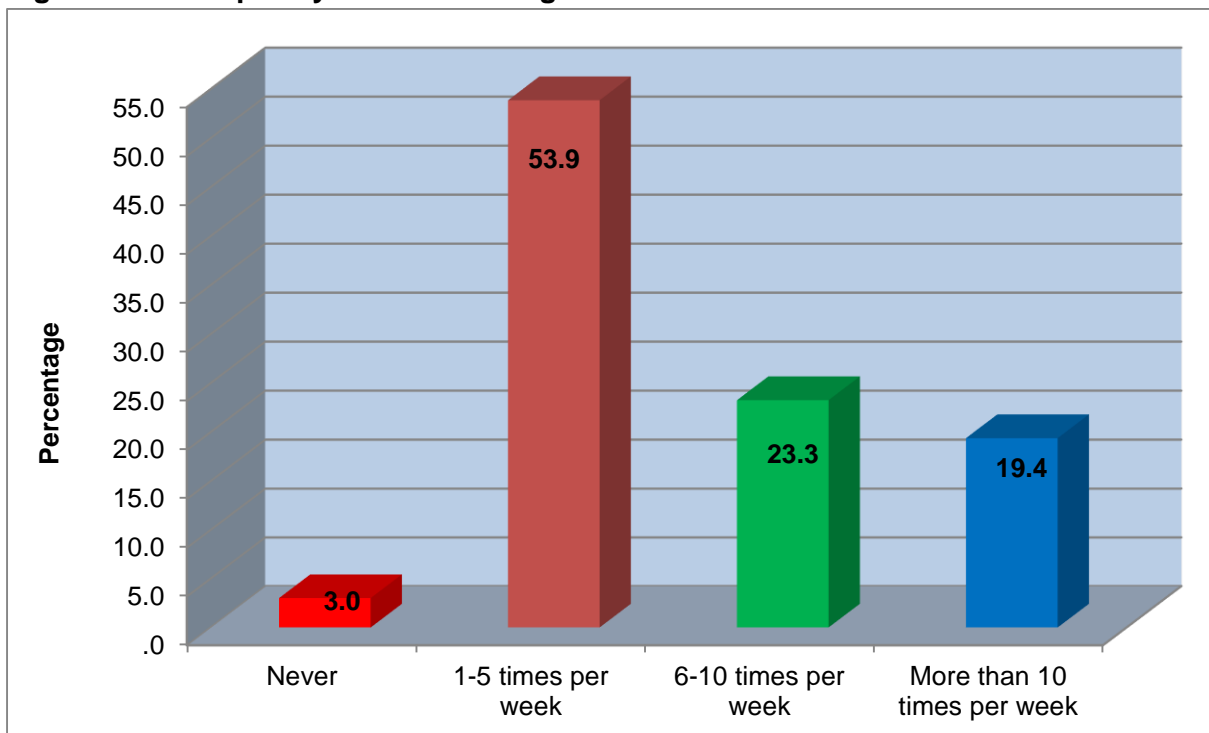
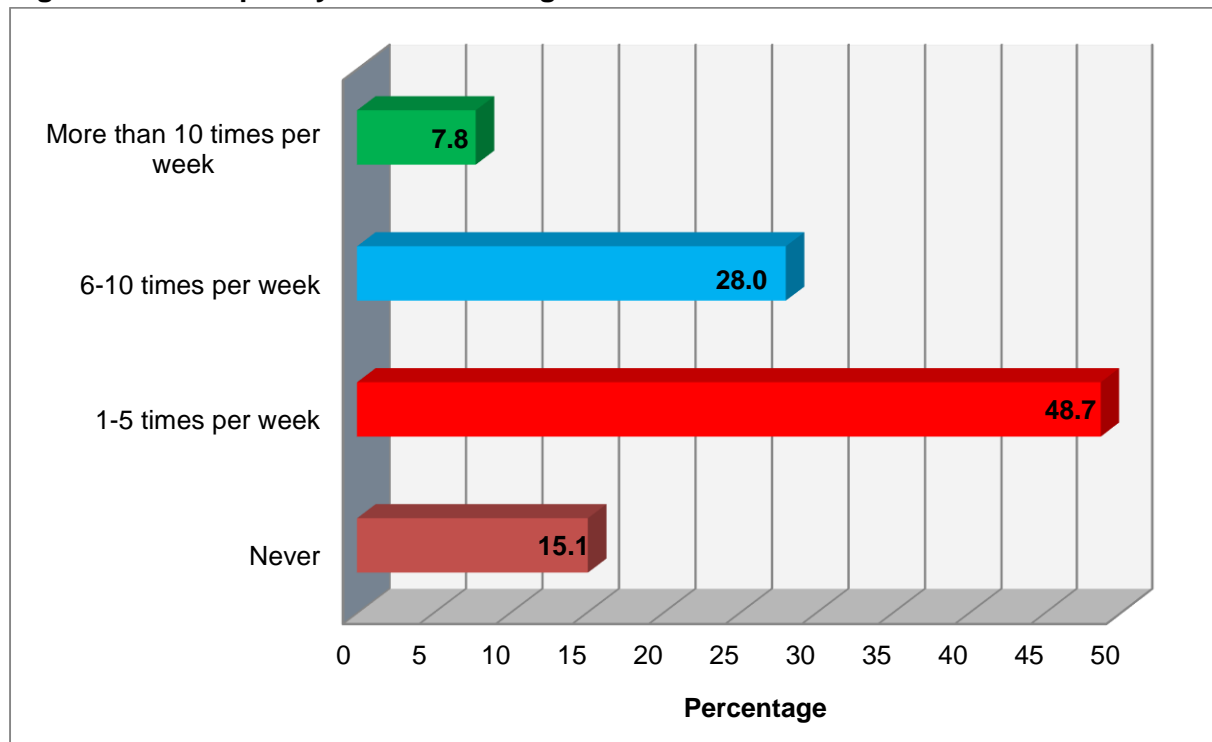


Figure 4.7 shows that slightly more than half of the respondents (53.1%) were connecting to the internet 1-5 times on a weekly basis, the smallest percentage (3%) revealed that they never connected to the internet at all. Apart from this 23.3% indicated that they connected to the internet on average 6-10 times per week and about one fifth (13.7%) of respondents connected to the internet more than 10 times per week. This implies that South African university students follow the global trends as more than three quarters had internet connection on their mobile phone device. The above results as depicted in Figure 4.7 substantiates the previous supporting literature of the findings in section 4.5.7 that internet usage is becoming a more prevalent amongst students with more than half of respondents confirming internet usage of between 1-10 time per week. Furthermore, the results are also in consistence with the findings of Beneke (2011).

4.5.8 Frequency of downloading content from the internet

After ascertaining the frequency at which the respondents connect to the internet on a weekly basis as shown in Figure 4.7, the researcher then tried to establish the frequency at which respondents downloaded content (games, music, videos, e-books, journals etc) from the internet on a weekly basis. Figure 4.8 shows the number of times the respondents downloaded content from the internet per week.

Figure 4.8: Frequency of downloading content from the internet



The results shown in Figure 4.8 shows that a greater proportion of the respondents (48.7%) were downloading content from the internet 1-5 times on a weekly basis, the smallest percentage (7.8%) revealed that they downloaded content more than 10 times per week. Some respondents (28%) indicated that they downloaded content from the internet on average 6-10 times per whilst 15.1% of respondents indicated that they did not download any content at all per week. When comparing to the findings pertaining to the frequency of internet usage on a weekly basis (see Figure 4.7), there is a positive relationship between internet usage and the number of downloads. This implies that the more consumers connect to the internet the more download they do. These results are supported also by the findings of Persuad and Azhar (2012). The results by International Telecommunication Union (2011) found out that a high rate in the frequency of downloads leads to a high mobile marketing adoption since most marketers make use of the download links to advertise their products and services. However, this finding in this study found some conflicting results amongst South African university students who showed some reluctance in reading mobile marketing notifications (see section

4.5.5). Beneke (2011), suggests that most students tend to ignore the marketing notification and only concentrate on the content they want to download.

4.6 FACTORS INFLUENCING MOBILE MARKETING ACCEPTANCE

In this section, the researcher made an analysis of the research variables which formed part of the research objectives. Six important factors were identified as affecting the acceptance of mobile marketing acceptance. This was done through a critical evaluation of several variables from other conducted studies pertaining to mobile marketing adoption. The six significant factors included trust, privacy, risk, location based, shopping style and relevance. The questions that were used to determine the extent of these factors were Likert scale that asked respondents to indicate their level of agreement or disagreement with a series of statements on a scale of 1 to 5. To make an evaluation of these factors Table 4.8 presents the output from the analysis of descriptive statistics for all the variables deemed to influence the mobile marketing experience. The mean was used to rank the variables in order of their importance as perceived by the respondents. The “max” indicates the highest scale and “min” represent the lowest scale selected regarding that particular variable. The results of the effects of these variables on the acceptance of mobile marketing are presented in Table 4.8 in order of importance.

Table 4.8: Factors influencing mobile marketing acceptance

	N	Min	Max	Mean	Standard Deviation
Trust	232	1	5	3.74	0.704
Privacy	232	1	5	3.62	0.655
Risk	232	1	5	3.57	0.729
Location Based marketing	232	1	5	3.38	0.648
Shopping Style	232	1	5	3.33	0.846
Relevance	232	1	5	3.30	0.847

Table 4.8 presents the findings with respect to relative importance of trust, relevance, risk, shopping style, location based and privacy in influencing mobile marketing acceptance amongst university students in South Africa. The relative importance of the factors was measured by the mean value. The higher the mean value the greater are the chances that the respondents agreed that the factor had a higher impact in influencing mobile marketing acceptance. The results indicate that trust had the greatest effect in influencing mobile

marketing acceptance with a mean of 3.74, this was followed by privacy (3.62). Risk was on the third position (3.57) in influencing mobile marketing acceptance whilst ranked fourth (3.33) was location based marketing. On the least of the factors was shopping style and relevance that had mean values of 3.33 and 3.30 respectively.

These results imply that South African university students consider trust, privacy and risk as the main factors influencing their behaviour in adopting mobile marketing. On the other hand, the students regard location based marketing, shopping style and relevance as less likely to influence them when compared to the first three factors. However, all mean scores are above average (2.5) meaning that all the factors need to be considered by mobile marketing players. These results are in consistence with the findings of Persuad and Azhar, (2012), though in their study not all factors were the same as used in this study Trust and privacy were found to be the leading factors affecting consumer acceptance of mobile marketing. Also, Jayawardhena, Kuckertz, Karjaluoto and Kautonen (2009) established that trust is the most outstanding factor in mobile marketing.

4.6.1 Mobile marketing usage

In section 4.5 above the respondents were asked to answer various questions in relation to their experience with mobile marketing use. In this section, the responses (see section 4.5) were further tested to determine their mean values to ascertain whether they were any differences in the views of the respondents. Significant variations in the mean values suggest that they are some significant differences in the respondents' views and if that is the case there is need for further tests to be conducted such as the t-test and ANOVA. The results showing if any significant differences existed in the views of respondents towards their mobile marketing experiences are shown in Table 4.9.

Table 4.9: Mobile marketing usage

Variable	N	Max	Min	Mean	Standard Deviation
Response after receiving a mobile marketing notification	231	1	5	2.92	1.375
Frequency of using mobile phone to connect to the internet	231	1	4	2.59	0.833
Frequency of using mobile phone to download content from the internet	231	1	4	2.29	0.816
Frequency of receiving messages	226	1	4	2.13	0.909
Desired frequency of receiving mobile ads	231	1	4	2.05	0.943

The results as presented in Table 4.9 show that no significant differences existed in the views of respondents towards the use of mobile marketing as all the mean values were greater than the average (2 for four groups scale and 2.5 for five groups scale). The respondents' behaviour after receiving a mobile marketing used a five-point scale with a mean value of 2.92 which is greater than the average mean. For the four groups scale, as show in Table 4.9 all the mean values were greater than 2 showing that no significant different existed in the respondent's view within each group. However, the mean values alone cannot generalise that no significant differences existed as there are some factors which needs to be considered such as the demographic characteristics. In the next section the t-test was conducted to verify whether gender of respondents can have an impact on mobile marketing acceptance, an independent t-test was conducted to test whether the differences between these groups are statistically significant.

4.6.2 T-test: Factors influencing mobile marketing experience

In this section an "independent sample t-test" was done to establish whether there were differences in the mean scores between the factors affecting mobile marketing acceptance (trust, privacy, risk, relevance, shopping style and location based) with regard to the gender of the respondents. Table 4.10 shows the group statistics of the independent sample t-test statistics to establish whether there is a statistical difference between male and female respondents' perception regarding the factors affecting mobile marketing acceptance.

Table 4.10: T-test: perception towards factors affecting mobile marketing acceptance

Variable	Gender	
	T	P value
Trust	1.182	0.500
Privacy	1.028	0.630
Risk	-.596	0.294
Relevance	-1.891	0.054
Shopping Style	-2.066	0.147
Location Based	1.437	0.061

Homogeneity of variances was assumed at Leven`s test for equality of variances ($p > 0.05$). The two-tailed test also revealed that there was no significant difference between the respondents` perception towards the factors influencing consumer acceptance of mobile marketing. Table 4.10 reveal that "Sig. (2-tailed)" was greater than 0.05 on all occasions with the highest being ("Sig. (2-tailed)" = 0.630) and the lowest being ("Sig. (2-tailed)" = 0.054). The results of this analysis reveal that there is no significant difference on the perceptions of male and female South African university students towards the factors affecting consumer mobile marketing acceptance. This can be attributed to the fact that the students share the common goals and hence being a homogenous population who are likely to be of the same sentiments. The findings are in consistence with the study by Heinonen and Strandvik (2012) who found out that gender differences did not affect consumers experience with mobile marketing. However, an earlier study by Jayawardhena *et al.*, (2009) conflicted with this research findings as it found out that even though trust is the most influential variable amongst the youth in mobile marketing, it was more important for men than women.

4.6.3 Analysis of Variance: Age, Name of institution and level of study

The Analysis of variance (ANOVA) was done in order to make comparisons of the differences within groups of demographic variables (age, name of institution and level of study) with regard to their views towards factors affecting mobile marketing acceptance. The Pearson correlation p-value of ($p < 0.05$) is used to test the significance of the differences, when the probability value is less than 0.05, it implies there is significant difference between the demographic variables and factors affecting mobile marketing acceptance. The F statistics states the strength of the effect of the demographic variable have on the factor variables, the study only used the p-values to test the differences. Table 4.11 presents the distribution of the results of the analysis of variance.

Table 4.11: Analysis of Variance: Age, Name of School and Level of Study

Variable	Age		Name of institution		Level of Study	
	F	P-Value	F	P-Value	F	P-Value
Trust	2.855	0.155	1.144	0.497	1.624	0.241
Privacy	5.495	0.504	1.670	0.280	1.445	0.345
Risk	5.183	0.057	1.068	0.394	3.098	0.102
Relevance	3.352	0.105	1.287	0.358	3.390	0.149
Shopping Style	1.784	0.207	1.566	0.286	3.306	0.313
Location Based	1.403	0.254	1.725	0.181	0.614	0.606

From table 4.11, we can observe that the significance level in each group the “sig” is greater than 0.05. The highest are (“age” (P=0.504), “name of institution” (P=0.497) and “level of study” (P=0.606)) and the lowest are (“age” (P=0.057)), “name of institution” (P=0.394) and “level of study” (0.102)). F statistics states the strength of the effect of the demographic variable have on the factor variables. The strength of the effect is indicated by a higher “F value”. Since the p-values in all variables are greater than 0.05 it means that there are no significant differences between Means at 5% level. This implies that the demographic variables (age, name of institution and level of study) of the respondents do not have significant effects on consumers’ mobile marketing acceptance amongst South African university students.

4.7 HYPOTHESES TESTING

Hypotheses testing refers to an inferential technique that uses sample data to establish the credibility of a hypothesis about a population. It is the use of statistics to ascertain the probability that the given hypothesis is true or not (Cant, 2011). The hypotheses formulated for this study were as follows:

H1₀: There is no positive relationship between the degree of trust and mobile marketing acceptance.

H2₀: The degree of risk has no positive impact on mobile marketing acceptance.

H3₀: There is no positive relationship between the degree of relevance and mobile marketing acceptance.

H4₀: The extent of privacy has no positive impact on mobile marketing acceptance.

H5₀: Consumers whose shopping styles are adapted to mobile marketing are not more likely to participate in mobile marketing.

H6₀: Location based will have no effect on consumer's acceptance of mobile marketing acceptance.

4.7.1 Cross tabulation: Chi-square test

The study employed the Pearson's chi-square test for association, in order to determine if there is a relationship between two categorical variables. To determine the association between the perceptions of participants regarding the significant importance of the factors influencing consumer acceptance of mobile marketing, the cross tabulation was done. The cross tabulation included the following variables from the research hypotheses: trust, privacy, risk, relevance, shopping style and location based marketing. The p-value was used to decide whether or not to reject the null hypothesis. If the p-value is less than "alpha" which is typically set at 0.05, then the null hypothesis is rejected (Maholtra, 2007).

4.7.1.1 Relationship between the degree of trust and mobile marketing acceptance

The cross tabulation of the factors trust and mobile marketing acceptance conducted and yielded the results as presented in Table 4.12.

Table 4.12: Chi-Square Tests: Relationship between the degree of trust and mobile marketing acceptance

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	22.609a	9	.007
Likelihood Ratio	22.343	9	.008
Linear-by-Linear Association	1.637	1	.201
N of Valid Cases	231		

According to the reading from Table 4.12, there is statistically significant association between the degree of trust and mobile marketing acceptance. Pearson Chi-square is significant at ($p < 0.05$) where $p = 0.007$. This means that the degree of trust plays an important role in influencing consumer mobile marketing acceptance. These results are consistent with the findings of Persuad and Azhar (2012) who found out that trust is the most influential variable in influencing mobile marketing acceptance.

Therefore, we reject the null hypotheses which states that:

H1₀: There is no positive relationship between the degree of trust and mobile marketing acceptance.

4.7.1.2 Relationship between the degree of risk and mobile marketing acceptance

The cross tabulation of the effect of the degree of risk on mobile marketing acceptance is presented in Table 4.13.

Table 4.13: Relationship between the degree of risk and mobile marketing acceptance

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	25.744 ^a	9	.002
Likelihood Ratio	28.282	9	.001
Linear-by-Linear Association	5.293	1	.021
N of Valid Cases	232		

The results shown in Table 4.13 of the Chi-square test show that in terms of the degree of risk, there is a statistically significant association with mobile marketing acceptance as the probability level obtained from the test of association ($p=0.002$) is less than 0.05. The results are consistent with the findings of Rohm, Gao, Sultan and Pagani (2012) based on a cross-market investigation of consumer acceptance of mobile marketing amongst the youth. Furthermore, it has been revealed by Donner, Gitau, Marsden (2011) that customers try to minimise risk rather than maximize utility. A customer's subjective risk perception can thus strongly determine the consumer's behaviour.

Therefore, we reject the null hypotheses which states that:

H2₀: The degree of risk has no positive impact on mobile marketing acceptance.

4.7.1.3 Relationship between the degree of relevance and mobile marketing acceptance

The cross tabulation of the effect of the degree of relevance on mobile marketing acceptance is presented in Table 4.14.

Table 4.14: Relationship between the degree of relevance and mobile marketing acceptance

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	65.125a	12	.000
Likelihood Ratio	47.624	12	.000
Linear-by-Linear Association	5.122	1	.024
N of Valid Cases	231		

According to the reading from Table 4.14, there is statistically significant association between relevance and mobile marketing acceptance. The results show a p-value (probability level) obtained from the test of association of 0.000 which is less than 0.05 (5%).

The results are supported by the findings of the study conducted by Mesquita (2010), which was aimed at the use of mobile phone marketing as an effective medium to target the South African youth. Therefore, we reject the null hypotheses which states that:

H3₀: There is no positive relationship between the degree of relevance and mobile marketing acceptance.

4.7.1.4 Relationship between privacy and mobile marketing acceptance

The cross tabulation of the effect of privacy on mobile marketing acceptance was conducted and yielded the results as presented in Table 4.15.

Table 4.15: Chi-Square Tests: Relationship between privacy and mobile marketing acceptance

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	50.650 ^a	9	.000
Likelihood Ratio	48.897	9	.000
Linear-by-Linear Association	.105	1	.746
N of Valid Cases	232		

According to the reading from Table 4.15, there is statistically significant association between the privacy and mobile marketing acceptance. The results show a p-value obtained from the test of association of 0.000 which is less than 0.05 (5%).

These results are consistent with the results of the study conducted by Beneke (2011), which was aimed towards an understanding of the youth's perception of, and response to, mobile marketing in South Africa. As a result, we reject the null hypotheses which states that:

H4₀: The extent of privacy has no positive impact on mobile marketing acceptance.

4.7.1.5 Relationship between the degree of shopping style and mobile marketing acceptance

The cross tabulation of the effect to the degree of shopping style and mobile marketing acceptance is presented in Table 4.15.

Table 4.16: Relationship between the shopping style and mobile marketing acceptance

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	18.398 ^a	12	.031
Likelihood Ratio	16.469	12	.058
Linear-by-Linear Association	.115	1	.734
N of Valid Cases	231		

According to the reading from Table 4.16, there is a statistically significant association between shopping style and mobile marketing acceptance. Pearson Chi-Square is significant at ($p < 0.05$) with a p-value of 0.031. This means that shopping style plays an important role in influencing consumer mobile marketing acceptance. These results are consistent with the findings of Persuad and Azhar (2012), who found out that consumers' shopping style has some influence on mobile marketing acceptance.

Therefore, we reject the null hypotheses which states that:

H5₀: Consumers whose shopping styles are adapted to mobile marketing are not more likely to participate in mobile marketing.

4.7.1.6 Relationship between location based and mobile marketing acceptance

The cross tabulation of the effect of location based on mobile marketing acceptance is presented in Table 4.17.

Table 4.17: Relationship between location based and mobile marketing acceptance

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	25.742 ^a	9	.003
Likelihood Ratio	27.282	9	.001
Linear-by-Linear Association	5.293	1	.021
N of Valid Cases	232		

The results shown in Table 4.17 of the Chi-square test show that in terms of location based marketing, there is a statistically significant association with mobile marketing acceptance as the probability level obtained from the test of association ($p=0.003$) is less than 0.05. The results are consistent with the findings of Persuad and Azhar (2012).

Therefore, we reject the null hypotheses which states that:

H_{6o}: Location based marketing will have no effect on consumer's acceptance of mobile marketing acceptance.

Table 5.24 shows the summary of the overall results, as well as the outcome of the research hypotheses.

Table 4.18: Results Summary of Hypotheses

No	Hypotheses	Results	Reason
H0 ₁	There is no positive relationship between the degree of trust and mobile marketing acceptance.	Rejected	Pearson's chi-square test results ($p < 0.05$).
H0 ₂	The degree of risk has no positive impact on mobile marketing acceptance.	Rejected	Pearson's chi-square test results ($p < 0.05$).
H0 ₃	There is no positive relationship between the degree of relevance and mobile marketing acceptance.	Rejected	Pearson's chi-square test results ($p < 0.05$).
H0 ₄	The extent of privacy has no positive impact on mobile marketing acceptance.	Rejected	Pearson's chi-square test results ($p < 0.05$).
H0 ₅	Consumers whose shopping styles are adapted to mobile marketing are not more likely to participate in mobile marketing.	Rejected	Pearson's chi-square test results ($p < 0.05$).
H0 ₆	Location based marketing will have no effect on consumer's acceptance of mobile marketing acceptance.	Rejected	Pearson's chi-square test results ($p < 0.05$).

5.7 SUMMARY

The chapter focused on the analysis and interpretation of the research results. The research findings were presented according to the formats of the questionnaire. The distribution of respondents in terms of gender was skewed to males. The results of the T-test showed that there are no significant differences in the mean scores of males and females (gender) regarding their views towards factors affecting mobile marketing acceptance. The results of the ANOVA also revealed that there are no significant difference in the means scores of age, name of institution and the level of study. The results of the chi square test reveal that trust, risk, privacy, relevance, shopping style and location based significantly impact consumer acceptance of mobile marketing. The next chapter will revisit the research problems and the objectives of the research and discusses the conclusions and recommendations of the

research. In addition, the limitations of the research will be highlighted and the areas for further research suggested.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

5. INTRODUCTION

In the preceding five chapters, the nature and scope of the study, the theoretical principles that form the basis of the factors affecting consumer acceptance of mobile marketing were discussed in detail. This study furthermore tested the research hypotheses. This chapter concludes the research and gives a conclusive statement about the study. It commences by giving a review of the aim of the study before giving a summary of findings of the study. This is followed by the study recommendations and finally, areas of further studies are highlighted in this chapter.

5.1 AIM OF THE STUDY

The purpose of the study was to establish the factors affecting consumer acceptance of mobile marketing through mobile phones amongst South African university students. The research targeted students from some selected universities and the anticipation is that the study will provide practical solutions to marketers in improving the adoption of mobile marketing amongst the youth in South Africa.

In carrying out the research, structured questionnaires, based on the research objectives, were issued out to the targeted population to collect primary data. In addition, all the collected data was analysed using the SPSS Version 23 to turn quantitative data into descriptive data.

5.2 RESEACH MAIN FINDINGS AND CONCLUSION

Mobile phone marketing is an evolving marketing channel with a massive potential which is still far from being appreciated (Persuad and Azhar, 2012). The research supports this view through providing evidence that while the young consumers receive and are aware of mobile phone marketing, it is the nature of influencing factors that are reducing the overall acceptance of mobile phone marketing. The research tested the framework of factors affecting consumer mobile marketing acceptance amongst university students in South Africa that was developed by the researcher with thorough consideration of existing literature. The students were classified as the youth market of the economic pyramid in South Africa. From the findings of the research study, the main conclusion is that all the research constructs (privacy, risk, trust, relevance, shopping style and location based) have a significant influence on mobile marketing acceptance.

Another key finding from the research is that no significant differences between male and female students as well as the age existed in their adoption of mobile marketing, both gender groups showed some negativity towards the receipt of mobile marketing messages. This is evident as only a small proportion of the respondents indicated that they read marketing messages on their mobile phones right away. This negative attitude towards mobile marketing

is further revealed as most respondents preferred to receive only one marketing message per day whilst a sizeable proportion did not want to receive mobile marketing notifications at all as they consider the messages annoying. However, interestingly even though the acceptance of mobile marketing is largely determined by the consumers, in South Africa the prevalence of this technology has reached greater heights as almost all the respondents indicated that they had received a mobile marketing message.

According to the study results, all the respondents had mobile phones with Samsung being the leading brand, this shows that a mobile phone is a necessity for South African youths and the study concluded also that Samsung is currently the leading mobile phone brand in South Africa. The study discovered that Internet usage has become popular amongst students in South Africa as the statistics showed that most of the respondents connected to the internet 1-5 times a week with only 3% revealing that they do not connect to the internet at all. As a result of the increase in the usage of internet, the literature showed that marketers are utilising this platform to market their products and services through a number of application and websites. However, consumers prefer to ignore the mobile ads displayed due to risk, privacy and trust fears. The study concluded that trust is the most significant factor affecting consumer acceptance of mobile marketing.

The research also concluded that the consumers want to be informed of special price and new products as well as receiving incentive based messages. This is shown in the findings as most of the respondents indicated that they were much more willing to receive marketing messages with incentives such as free air time and free data bundles. However, according to the literature, most businesses in South Africa are focussing on marketing around competition and promotion of new offerings (Beneke, 2011). Businesses must not only give focus on price and new products since it is the consumers' preference, but need to guarantee that they have a balanced mix of messages comprising of both short and long term messages displaying speedy benefits as well as building marketers brand equity.

In summary, the research confirmed the prevalence of mobile phone marketing as a medium being used when marketing to the consumers in South Africa. The research further recognised interesting trends across the market in relation to the marketing messages and internet usage. The research also identified the significant factors affecting consumer acceptance of mobile marketing. The following section provides some recommendations that can promote mobile marketing effectiveness and adoption.

5.3 RECOMMENDATIONS

Based on the research main findings, the importance of consumer positive attitudes towards mobile marketing is evident. However, marketers need to realise that despite the many

benefits associated with mobile marketing in reaching the youth, mobile marketing may not be as effective due to the current negative attitudes that exist in the South African youth market. Therefore, mobile marketers should consider implementing the following recommendations:

I. Permission based campaigns

The Mobile Marketing Association (2016), describes permission based marketing as the practice of acquiring consent from the consumers in prior to an ongoing marketing dialogue taking place on mobile phone devices and in return for some kind of value exchange. In case marketers get the codes involved in permission based mobile marketing right it will boost value for consumers at the same time enhancing effectiveness for marketers. Marketers can maintain trust with the customers through permission based marketing by offering consumers an unassuming choice to opt-in. It needs to be communicated to consumers why they are being requested to opt in and what it means. This is significant as consumers will want to know the value behind providing their permission, such as the chance to connect with their best brands, get appropriate information as well as saving some costs. In permission based marketing campaigns, consumers need to be able to remain in full control of their private information as well as easily changing permission and the information which they share.

II. Push strategy

Awareness of mobile marketing services is very important in the early adoption stages. As mobile marketing is still evolving in South Africa, effective presentations utilising all forms of media marketing such as brochures, leaflets and websites will be useful in introducing the services to a wider audience as well as educating likely customers about the advantages of mobile marketing. This also has the advantage of inducing trust from the consumers as trust has been seen in this study to be the major factor affecting consumer acceptance of mobile marketing. To access more potential mobile marketing adopters, information about mobile marketing should be provided by marketers at their respective branches. In the case of university students businesses need to personally hold awareness campaigns on respective campuses. The information should give reference to convenience, time saving, low costs as well as information availability. In addition, businesses should design their websites as effective delivery channels and offer information beyond marketing services. It is essential for marketers to provide well designed and user friendly web site to attract potential adopters' attention.

III. Give value to the consumers

In order for businesses to achieve relevance in terms of marketing campaigns they need to offer consumers value through participating in mobile marketing. To achieve this, marketing

messages need to be personalised. Through sending relevant and targeted marketing messages, marketers can decrease consumer irritation levels as well the fear of SPAM among consumers, thereby preventing consumers from being overwhelmed by unnecessary amounts of messages. Marketers need to tailor their marketing messages to consumers' profiles and if the power lies in consumers' hands they feel some sense of value and would be less afraid of the sale as well as abuse of their personal information. This means consumers will gain businesses' trust thereby reducing privacy fears. This in turn would also decrease the risk fear and protect the reputation of mobile ads as a marketing medium.

IV. Invest in innovative technologies

Following the growing penetration of mobile marketing in South Africa, changes in consumer use of digital media and technology is core to understanding trends in the digital marketing. Marketers need to invest in innovative technologies to gain a competitive advantage in the mobile marketing industry, this as well promote value for consumers. Marketers in South Africa should prioritise coming up with innovative strategies to keep up with the technology trends as the mobile platform is changing on a daily basis (Mobile Marketing Association, 2016). Innovation involves marketing campaigns featuring new or ground breaking techniques or technologies to market a service or product. Marketers need to ensure that their marketing campaigns leverage existing technology with new, unconventional as well as creative execution (Mobile Marketing Association, 2016). A good strategy involving technology that can apply to the youth consumers is location based. This is any marketing campaign that uses location based services as the primary anchor of the campaign to link with customers and delivery of highly relevant, personalised messages at a time and place when consumers are most likely to act on them (Persuad and Azhar, 2012). As a result of the open-ended nature of technology, marketers are posed with no limits in the generation of their ideas.

V. Prioritise protection of consumers' information

Businesses should be private with using consumer's personal information hence gaining more control to the consumers. Marketers should consider the exchange of personal information with consumers as a social contract between consumers and the business (Beneke, 2011). The usage, accessibility as well as distribution of consumers' information need to be protected and respected by all means to prevent violating this implicit social contract. Research showed that only low concern-level individual information such as gender, age, email address, cell phone number and name should be requested by businesses. Information such as banking details and income levels should not be requested to avoid the creation of consumer negative attitudes towards mobile marketing or even raising suspicion from consumers. Additionally, the respect of consumers' privacy would intensify consumers' trust and decrease the risk fear.

VI. Create captivating messages

According to the study findings, the majority of respondents were reluctant in reading marketing messages. Consumers can be captivated to respond to marketing messages instantly when messages are creative and entertaining as well. This can be achieved using graphical content, humour, sound as well as video clips. The content need also to be varied to keep the consumers interested and avoid large defection rates of consumers opting-out of the marketing campaign. Effective content does not only inspire participation in the marketing campaign but also increase the relevance of the marketing message. Communication would be preferred and welcomed by consumers rather than being considered undesired. Furthermore, by using captivating content, mobile marketing has the potential of going viral.

VII. Polite messages

As a result of the strong fear of SPAM built within the majority of consumers it is imperative for marketers to be polite when communicating with the targeted consumers. According to Beneke (2011), the number of marketing messages sent to the consumers need to be limited to an average 1-3 times a week to avoid consumers being overwhelmed with mobile marketing. Otherwise mobile marketing would be regarded by consumers as a SPAM, resulting in negative attitudes towards mobile marketing developing. Most youth prefer that messages are sent in the afternoon and early evening on weekdays only (Persuad and Azhar, 2012).

VIII. Foster socialisation and communication

The development of digital culture recently has radically changed the marketing field, especially for the youth. The youth's relationship with media is no longer restricted to the passive, one sided consumption of TV commercials or print ads. Marketers need to foster socialisation and communication with consumers through interaction with brands. Marketers need to unwittingly invite consumers to connect with them, this can be achieved by carefully tracking the youth on media such as Facebook and twitter, collecting data to develop and record personalised behavioural profiles and more. Today, marketers can develop powerful and intense promotions that can be integrated into the consumer's relationship and minute by minute interactions. The youth are obvious major consumers for digital marketing tactics, given their enthusiastic use of mobile phone devices, media blogs, online video channels, social network sites and other digital media platform (eMarketer, 2016).

IX. Proper Segmentation

Proper market segmentation and targeting need to be undertaken in order to guide mobile marketing strategies as well as ensuring effective use of marketing resources. For a mobile

marketing campaign to be successful segmentation built on some deeper understanding of the consumer is critical. According to Mesquita (2010), South African businesses are still lagging behind in terms of proper segmentation when dealing with mobile marketing campaigns. It is important for marketers to determine how the youth use their mobile phones as this is just as important as age, gender and income. Understanding how the target demographic uses their mobile devices will help the marketers in creating an effective mobile marketing campaign. There are several dimensions of market segmentation that marketers can use for a successful mobile marketing campaign, these include; geographical segmentation based on apportioning the market into a variety of geographical areas such as countries, regions and cities, demographic segmentation based on age, gender and family sizes, psychographic segmentation based on social class, lifestyle as well as personality characteristics, and lastly behavioural segmentation based on occasion segmentation, benefit segmentation, service usage and intention to use (Kotler 2003). Segmentation can improve consumer shopping style as they can receive messages which fit with the idea of their shopping style leading to willingness in adopting mobile marketing.

X. Increase government regulation

The South African government needs to tighten its laws aimed at protecting consumer rights in relation to mobile marketing. Violating of these regulations should lead to stiff financial penalties that far exceed any actual monetary damages that consumers may suffer. The government needs to craft its laws with the goal of preventing businesses from using misleading marketing campaigns to drive sales numbers. The laws should allow customers wronged through deceptive marketing practices to seek punitive damages from the offending business. However, it should be noted that the Government has so far tried to address consumer protection in relation to mobile marketing through the regulation of SPAM in South Africa which was introduced by the Electronic Communication and Transaction Act of 2008 (ECTA) and the recently promulgated Protection of Personal Information Act of 2013 (POPIA). The government needs to prioritise some awareness campaigns as the report by Beneke (2011), showed that most consumers especially the youth are not aware of the laws that protect them from unfair business practices.

5.4 LIMITATIONS OF THE STUDY

The following are the limitations of the study;

- One of the major restrictions of the study is the bias because of the sample (university students). The results can be assumed to be different for the other youthful consumers who are not studying, such as those working or not employed. Therefore, it would be

very enriching to test the research model with a sample of every youth in South Africa irrespective of status

- The study was not conducted throughout all the universities across South Africa as the researcher only collected data from some selected universities due to time and budget constrain.
- Results from the study are restricted to the youth and can therefore not be generalised to the whole population of South Africa
- The study was only limited to mobile phones only but there are some forms of media marketing such as tablet computers.

5.5 AREAS OF FURTHER RESEARCH

Even though this study has reported remarkable results and contributes to our understanding of the influencing factors affecting consumer acceptance of mobile marketing, some cautiousness need to be implemented because the sample size was relatively small. Repeating the study in other settings could certify the findings reported in this study. Furthermore, a study on the success of particular marketing strategies and campaigns used by marketing players to engage consumers into purchase and loyalty could divulge greatly about how customers are willing to be involved in mobile marketing. Lastly, more research is also required on the idea of permission marketing as it seems to be a major requirement for mobile marketing. Research in this perspective should disclose how consumers actually prefer to offer permission and profile information.

5.6 CONCLUSION

This chapter is the conclusion of a study done to determine the factors influencing consumer acceptance of mobile marketing amongst South African university students. The objectives of the study were met and it concluded that trust, privacy, risk, relevance, shopping style and location based play a significant role in influencing consumer acceptance of mobile marketing. The chapter also provided recommendations to marketers as well as policy makers on how to achieve an effective mobile marketing platform. The chapter concludes by highlighting the limitations of the study and suggesting areas for further future research. Lastly, this study confirms the relevance of several factors that were pointed out in previous studies conducted in the field of mobile marketing.

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APPENDICES

APPENDIX A: ESTIMATED BUDGET FOR THE RESEARCH STUDY

ITEM	QUANTITY	RAND/ UNIT	AMOUNT (RAND)
<u>LANGUAGE EDITING</u>			
Proof reading for proposal	40 pages	25	1000
Proof reading for finished research	200pages	25	5000
Total for proof reading			6000
<u>DATA CODING AND ANALYSIS</u>			
Data coding by a statistician	250 questionnaires	9.6	2400
Data analysis by a statistician	250 questionnaires	14.4	3600
Total for data coding and analysis			6000
<u>STATIONERY AND CONSUMABLES</u>			
Stapler	1	100	100
Staple pins	1 box	100	100
Pens	10	10	100
Highlighters	5	20	100
Note pads	5	16	80
Memory stick	1	300	300

Events Diary	1	70	70
External hard drive for data storage	1	1000	1000
File for storage of 250 questionnaires	2	100	200
Puncher	1	100	100
Stationery subtotal			2150
<u>SUBSISTENCE AND TRAVELLING</u>			
Traveling expenses for researcher: Trips to Eastern Cape from Thohoyandou and from Eastern cape to Thohoyandou.	1500 km	4	6000
Traveling expenses for research assistant: Trips to Eastern Cape from Thohoyandou and from Eastern cape to Thohoyandou.	1500km	4	6000
Accommodation: Researcher	20 days	500	10000
Accommodation: Research assistant	10 days	500	5000
Subtotal for subsistence and travelling			26800
<u>BINDING</u>			
Spiral binding	5	100	500
Hardy copy binding	6	250	1500
Binding total			2000
<u>PRINTING</u>			

Printing of questionnaires	250 copies of 3 pages	3	2250
Printing of final research	6 copies of 200 pages each	4	4800
Total of printing			7050
Grand total for the whole research			50000

APPENDIX B: PROPOSED WORK PLAN FOR THE RESEARCH

Activity	Responsible person	Completed by	Evidence of completion
1. Scanning the business environment for research topic and research area	Student	May 2015	Approved research topic
2. Proposal development	Student	July 2015	Approved proposal for seminar presentation
3. Seminar presentation	Student	September 2015	Approved proposal at seminar presentation
4. Proposal presentation to the school of Management Higher Degrees Board	Student	November 2015	Presented and given corrections
5. Submission of research proposal to the University Higher Degrees Committee (UHDC)	Student	November 2015	Approved research proposal
6. Detailed literature review	Student	March 2016	Completed literature review
7. Data collection	Student	May 2016	Collected data
8. Data analysis and presentation	Student	June 2016	Analysed data
9. Submission of first draft dissertation	Student	July 2016	Draft of dissertation
10. Submission of second draft dissertation	Student	July 2016	Draft of dissertation
11. Proof reading	Qualified proof reader	August 2016	Complete dissertation
12. Submission of final draft dissertation	student	September 2016	Complete dissertation

APPENDIX C: CONSENT LETTER



University of Venda

My name is Gift Taruwandira Donga. I am a student doing Masters of Commerce (Mcomm) in the Department of Business Management at the University of Venda. I am conducting a research on **CONSUMER ACCEPTANCE OF MOBILE MARKETING THROUGH MOBILE PHONES: A CASE STUDY OF SOUTH AFRICAN UNIVERSITY STUDENTS**. The research is for academic purposes only. You are asked to complete the survey about this research. Your input to this research will be of great value. To complete the survey it should take not more than 30 minutes of your time. Your participation is voluntary and you can withdraw at any time without penalty. Your responses will be kept confidential. The outcome of this research may be used for academic and general purposes such as research reports, conference papers or books. By completing the survey, you indicate that you voluntarily participate in this research. If you have any concerns, please contact me or my supervisor. Our details are provided below.

Researcher: Gift Taruwandira Donga

Research supervisor:

Prof A Kadyamatimba

Email: geedonga@gmail.com

Email: armstrong.kadyamatimba@univen.ac.za

Phone No: 0730133511

Phone No: 015 9628707/06

The responded consented to participate in the survey

YES

NO

ANNEXTURE D: QUESTIONNAIRE

SECTION A: GENERAL INFORMATION ABOUT THE MOBILE USER

Select an option by using an 'X' in the correct space provided.

1. Indicate your gender

Male		Female	
------	--	--------	--

2. Indicate your age

Below 23 years		23-29 years		30 and above	
----------------	--	-------------	--	--------------	--

3. Indicate your current level of study

Undergraduate		Honors		Masters		Doctorate		Other	
---------------	--	--------	--	---------	--	-----------	--	-------	--

3b. If your answer above is other, please specify

.....

4. Indicate your current university

University of Venda (UNIVEN)		University of Fort Hare (UFH)		University of Johannesburg (UJ)	
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SECTION: MOBILE MARKETING USAGE

4. Which brand of mobile phone do you use?

Don't have a mobile phone		Vodafone	
Nokia		LG	
Samsung		Sony Ericsson	
Blackberry		Huawei	
IPhone		HTC	
Motorola		Other	

4b. If your answer above is other, please specify

.....

5. How often do you change your mobile phone?

Every year		Every 2 years		Every 3 years		More than 3 years	
------------	--	---------------	--	---------------	--	-------------------	--

6. Have you ever received a marketing message on your mobile phone (including SMSs)?

Yes		No	
-----	--	----	--

7. On average how often do you receive marketing messages on your mobile phone per day?

Once		2-4 times		5 times		5 or more times	
------	--	-----------	--	---------	--	-----------------	--

8. How many times per day would you consider receiving mobile Ads or promotions if your service provider offers you some incentives for example; free texts, free internet and free airtime?

Once per day		2-4 times per day		5 or more times per day		I don't want Ads or promotions.	
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9. What do you usually do when you receive a mobile marketing notification?

Ignore it completely		Read it occasionally		Read it after accumulating too many		Read it when I get time		Read it right away	
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10. How often do you use your mobile phone to connect to the internet?

Never		1-5 hours per day		6-10 hours per day		More than 10 hours per day	
-------	--	-------------------	--	--------------------	--	----------------------------	--

11. How often do you use your mobile phone to download content (music, applications, games, videos, etc.) from the internet?

Never		1-5 times per week		6-10 times per week		More than 10 times per week	
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12. Rank how often you perform the following activities on your mobile phone (1-highest usage; 5-lowest usage).

Rank	1	2	3	4	5
Making phone calls					
Text messaging					
Taking pictures					
Playing games					
Internet browsing					

SECTION C: FACTORS AFFECTING MOBILE MARKETING

Please complete the following questionnaire on a scale of 1-5 (1-strongly disagree and 5-strongly agree).

Key: **SD**-Strongly disagree; **D**-Disagree; **NS**-Not sure; **A**-agree; **SA**-strongly agree.

ITEM	CONSTRUCT	SD	D	NS	SA	A
	<u>TRUST</u>					
Q12	I would feel more comfortable with mobile marketing if I knew the marketer.					
Q13	Mobile marketing service providers are open and receptive to customer needs.					
Q14	Mobile marketing service providers are fair in their customer service policies following a transaction.					
Q15	I believe that marketers would use my data only for the purpose that I have approved.					
	<u>PRIVACY</u>	SD	D	NS	SA	A
Q16	I would feel more comfortable with mobile marketing if my permission were obtained before receiving marketing offers.					
Q17	I believe that consumers are protected by laws related to data privacy.					
Q18	I would not feel totally safe providing personal information over mobile marketing.					
Q19	I am worried about using mobile marketing because other people may be able to access my accounts.					
	<u>RISK</u>					
Q20	The biggest problem related to receiving mobile marketing messages is the risk of sharing personal information to online entities.					
Q21	I am much willing to take part in promotions as well as mobile marketing offers.					
Q22	When a financial error occurs, I worry that I cannot get compensation from mobile marketing service providers.					

Q23	When making online payments I am worried that I will lose money due to careless mistakes such as wrong input of account numbers and the amount of money.					
	<u>RELEVANCE</u>					
Q24	Mobile marketing messages received on my phone annoy me.					
Q25	I see a benefit in receiving marketing messages and promotions on my mobile phone.					
Q26	I find mobile marketing messages useful.					
Q27	I would be prepared to spend time providing my personal details to make mobile marketing to better match my needs.					
	<u>SHOPPING STYLE</u>	SD	D	NS	SA	A
Q28	Mobile marketing does not fit with my idea of shopping.					
Q29	Mobile marketing messages received on my mobile phone help me to improve my shopping efficiency especially.					
Q30	Mobile messages received on my mobile phone help to reduce the time it takes to search for products.					
Q31	Marketing received on my mobile phone help me to make better shopping decisions.					
	<u>LOCATION BASED</u>					
Q32	I would like location based marketing (receiving ads/special offers on your location).					

Thank you for completing this questionnaire and assisting me in my research.

APPENDIX E: CONSISTENCY MATRIX

Hypothesis	Literature review	Data collection tools	Data analysis
H₁: There is a positive relationship between the degree of trust and mobile marketing acceptance.	Shankar and Malthouse, (2010); Sharma, Herzog and Melf, (2008), Campbell, (2011);.	Survey questionnaire.	Correlation; ANOVA, Chi-squared and descriptive statistics.
H₂: The degree of risk has a positive impact on mobile marketing acceptance.	Barnes and Scarnovacca, (2004); Grant and O'donohoe, (2007); Lippaniemi and Karjauloto, (2005).	Survey questionnaire.	Correlation and descriptive statistics.
H₃: There is a positive relationship between the degree of relevance and mobile marketing acceptance.	Kazienko and Adamski, (2007); Barwise and Strong, (2008); Maneesoonthorn and Fortin, (2006).	Survey questionnaire.	Correlation; ANOVA, Chi-squared and descriptive statistics.
H₄: The extend of privacy has a positive impact on mobile marketing acceptance.	Sultan and Rohm, (2005); Persuad and Azhar, (2012).	Survey questionnaire.	Correlation; Chi-squared and descriptive statistics.
H₅: Consumers whose shopping styles are adapted to mobile marketing are more likely to participate in mobile marketing.	Persuad and Azhar, (2012); Zhang and Mao, (2008).	Survey questionnaire.	Correlation; Chi-squared; ANOVA and descriptive statistics.
H₆: Location based marketing will have no effect on consumer's acceptance of mobile marketing acceptance.	Persuad and Azhar, (2012); Zhang and Mao, (2008).	Survey questionnaire.	Correlation; Chi-squared; ANOVA and descriptive statistics.