INFLUENCE OF INTERNET ADVERTISING ON PURCHASE OF MOBILE PHONES AMONG UNIVERSITY OF NAIROBI STUDENTS

BY

TIMOTHY T. MBITI

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION, SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI

OCTOBER, 2015
DECLARATION

This research project is my original work and has not been submitted for examination to any other university.

Signed_________________ Date _________________

TIMOTHY THOME MBITI

D61/68050/2013

This research project has been submitted for examination with my approval as the University Supervisor.

Signed_________________ Date _________________

DR. RAYMOND MUSYOKA
ACKNOWLEDGEMENTS

The completion of the study was not any single individual’s effort and to that effect, I would like to extend my gratitude to my supervisor and moderator Dr. Raymond Musyoka and Victor Ndambuki for guiding me through the study. The same goes to all the lecturers whose instructions were invaluable to the completion of the MBA programme. I also recognize the help of my fellow students who shared this journey with me and participated in the study as respondents.
DEDICATION

This study is dedicated to my family, especially my girlfriend Rispa and my parents Mr. and Mrs. Mbiti for their consistent support and encouragement throughout my scholarly journey.
TABLE OF CONTENTS

DECLARATION......................................................................................................................... ii

ACKNOWLEDGEMENTS ....................................................................................................... iii

DEDICATION......................................................................................................................... iv

LIST OF TABLES .................................................................................................................... vii

LIST OF FIGURES ................................................................................................................ viii

ABSTRACT ............................................................................................................................ ix

CHAPTER ONE: INTRODUCTION ......................................................................................... 1

1.1 Background ..................................................................................................................... 1
1.1.1 Types and Benefits of Internet Advertising ................................................................. 4
1.1.2 Consumer Behavior and Purchase Decisions of Consumer Electronics ....................... 5
1.1.3 The Consumer Electronics Sector in Kenya ................................................................. 6
1.2 Research Problem .......................................................................................................... 7
1.3 Research Objective ........................................................................................................ 9
1.4 Value of the study ......................................................................................................... 9

CHAPTER TWO: LITERATURE REVIEW .............................................................................. 11

2.1 Introduction ................................................................................................................... 11
2.2 Theoretical Framework ............................................................................................... 11
2.3 The Role of Advertising in Marketing Communication .............................................. 13
2.4 Impacts of Advertising and Internet Campaigns on the Consumer ............................... 13
2.5 Factors Determining the Effectiveness of Internet Advertising .................................... 14
2.6 Consumer Behavior and Marketing Strategy ............................................................... 15
2.7 Arguments against Internet Advertising ...................................................................... 16
CHAPTER THREE: RESEARCH METHODOLOGY .......................................... 18

3.1 Introduction .................................................................................................................. 18
3.2 Research Design .......................................................................................................... 18
3.3 Population of the Study ............................................................................................. 18
3.4 Sample Design ............................................................................................................ 19
3.5 Data Collection .......................................................................................................... 20
3.6 Data Analysis .............................................................................................................. 20

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION .............. 22

4.1 Introduction .................................................................................................................. 22
4.2 Background Information ............................................................................................ 22
4.3 Respondents Interaction with Mobile Phone Adverts served on the Internet .......... 26
4.4 Respondents’ Attitude towards Mobile Phone Adverts Served on the Internet ........ 29
4.5 Purchase Distribution Determined by Gender, Age, Level of study, Frequency of Internet Access and Intensity of Internet Use ................................................................. 31
4.6 Inferential Statistics ................................................................................................... 34
4.7 Discussion of Findings ............................................................................................... 38

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS ....... 40

5.1 Introduction .................................................................................................................. 40
5.2 Summary of the Study ............................................................................................... 40
5.3 Conclusion .................................................................................................................. 40
5.4 Recommendations ..................................................................................................... 41
5.5 Limitations .................................................................................................................. 41
5.6 Suggestions for Further Studies .................................................................................. 42

REFERENCES .................................................................................................................. 43

APPENDICES ................................................................................................................... 47

Appendix I: Research Questionnaire .............................................................................. 47
Appendix II: Logistic Regression Model ........................................................................... 49
LIST OF TABLES

Table 4.1 Distribution of the Respondents by Gender ................................................................. 22
Table 4.2 Distribution of Respondents by Age ........................................................................... 23
Table 4.3 Distribution of the Respondents According to their Level of Study ......................... 24
Table 4.4 Distribution of the Respondents by their Internet Access Frequency ...................... 25
Table 4.5 Distribution of the Respondents Based on their Intensity of Internet Use ............... 25
Table 4.6 Distribution of Respondents Based on whether they have Encountered Mobile Phone Adverts Served on the Internet ........................................................................... 26
Table 4.7 Distribution of Respondents to establish which of the Mobile Phone Brands they have encountered being advertised on the Internet ........................................................................... 27
Table 4.8 Distribution of Respondents Based on Aspects of the Internet Advert and Level of Interaction ......................................................................................................................... 28
Table 4.9 Purchase by Gender after Encountering Online Mobile Phone Adverts .................. 31
Table 4.10 Purchase Distributed by Age After Encountering Online Mobile Phone Ads .......... 31
Table 4.11 Purchase Distributed by Level of Study After Encountering Online Mobile Phone Ads ................................................................................................................................. 32
Table 4.12 Purchase Distributed by Frequency of Internet Access ........................................... 33
Table 4.13 Purchase Distributed by Respondents’ Internet Intensity ....................................... 33
Table 4.14 Distribution of Respondents who Encountered, Clicked, Purchased and made Purchase Recommendations ................................................................. 34
LIST OF FIGURES
Figure 4.1 Logistic Regression of Mobile Phone Purchase ................................................................. 35
Figure 4.2 Logistic Regression of Mobile Phone Purchase Recommendations ................................. 37
Global technology advancement and the growth of internet subscribers have necessitated a review of internet advertising activities. In business, advertisers are increasingly investing in internet marketing schemes. This is because the internet is not only serving as a channel of communication but also becoming a storefront for most businesses. The internet is today considered the first source of contact between traders and consumers. Marketers and online engines have developed solutions to advertise products and services online. They have successfully implemented a variety of online advertisement types/units which include; banner ads, search engine ads, video playback ads and pop ups among others. However, the influence of such campaigns, especially, with regards to purchase has not been studied to reflect the situation in the developing world. The basis of this study was to take into account the different internet cultures in different geographical regions of the world. In this case, the study was based on internet advertising and its influence on purchase of mobile phones in Kenya, specifically among students of the University of Nairobi. The study employed stratified random sampling to select a study sample of 100 respondents. The data was collected through questionnaires. The data collected was analyzed using descriptive statistics including logistic regression. This was aimed at developing the predictive equation with regards to the relationship between internet advertising and purchase of mobile phones. The study findings showed that although the influence of internet advertising was still low, a high purchase recommendation rate was recorded. The findings also concluded a high level of brand awareness due to the wide reach of internet advertising campaigns by mobile phone advertisers. The study further recommends advertisers to conduct market research and incorporate more consumer variables in order to improve their online campaigns and increase direct purchases.
CHAPTER ONE

INTRODUCTION

1.1 Background

Communication is a two-way process, with a sender and a receiver. The purpose of communication includes; information, suggestion, motivation, changing behavior and establishing relationships (Ashalatha, 2014). Communication is effective when the message being relayed is; clear, simple and the process is conducted competently (Ashalatha, 2014). Communication is deemed successful when the receiver gets the message, when they understand and respond to the message (Ashalatha, 2014). The communication process entails the sender who conveys the message, the receiver who receives and responds to the message, and the message (Ashalatha, 2014).

The process of communication has continued to evolve especially with regards to the medium used in conveying the message, from smoke signals in ancient times to mobile phones and internet enabled devices. In advertising, marketers employ the concept of communication to convey messages of their products and services to their targeted clients (Durmaz, 2011). Advertising is an element of promotion which is an aspect of the 4ps of the marketing mix, Product, Price, Promotion and Place (Durmaz, 2011).

Advertising being an aspect of communication uses the same mediums available to convey messages. Advertising in this case can be categorized into physical and digital advertising, whereby physical advertising involves the use of medium that is moving for example mobile billboards which are mounted on vehicles and the message goes around a specified area.
Digital advertising involves the use of information and communication technologies to convey the advert message and the types include television advertising, radio advertising and internet advertising (Durmaz, 2011). Internet advertising is a form of advertising arising from technological developments in communication, with regards to advertising it uses the internet and the World Wide Web to convey advertising messages. The advertising messages reach consumers through internet enabled devices such as mobile phones, tablets, laptops and personal computers. This occurs when they access applications or websites on these devices because advertisers pay for advertising space on websites and applications in order to display their messages (Durmaz, 2011).

The Theory of Reasoned Action by Martin Fishbein and Icek Ajzen is a communication theory that helped the researcher to understand human behavior and relate this to purchase behavior as a result of internet advertising. The theory states that a person’s behavior is determined by the joint effect of their attitude and subjective norms towards an intention (Fishbein & Ajzen, 1980). If the attitude and subjective norms point to a beneficial outcome then an individual’s intention begin to lean strongly towards participation in a particular behavior.

The Black Box Theory by Sandhusen is a purchase decision theory that outlines a typical purchase decision process and offers insights into how decisions to buy a particular product are arrived at, and this will be studied against the influence of internet advertising on such decisions. The theory states that in order for a consumer to arrive to their purchase decision, they often seek information about the product and its alternatives. They then evaluate the alternatives before making a decision to purchase their choice of product and finally they evaluate performance of the product. The last stage determines whether they would buy again or not or even recommend the product to others (Sandhusen, 2000).
The internet has brought with it major changes in the advertising field especially so with the advent of Web 2.0. Web 2.0 is the internet version that is dynamic rather than its predecessor which was static, users can now interact on social media platforms like Facebook and on blogs. The growth of internet users on both computers and mobile phones has continued to grow exponentially, providing marketers with an alternative opportunity to showcase their products and services.

According to Office for National Statistics UK (2013), 73% of adults in Britain accessed the internet daily in 2013 this figure represented 20 million more people as compared to 2006. 72% of adults made online purchases in the year 2013 as compared to 53% in the year 2008. According to internet society (2014), globally internet access grew from 1 billion to 3 billion users at the end of 2014. In 2012, developing countries registered more than 50% of mobile broadband subscribers globally.

Search engines and email service providers consisting of Google and Yahoo, social media platforms such as Facebook have implemented advertising serving engines within their platforms. These engines are used by marketers to make advertisement placements and get their products and services in front of the millions of users of these platforms. According to internet live stats (2015), Google processes over 40,000 search queries every second and this translates to over 3.5 billion searches daily. According to Statista (2015), Google has 1.17 billion users while Yahoo has a reach of 292 million users, the social media giant Facebook registered 890 million active users as of last quarter 2014.

There are different types of advertisements that are offered by these online platforms, for example search and banner adverts. Search adverts are the ad placements that are seen on top or
on the side of a typical Google search page result, banner adverts appear on individual websites at the top, on the side or contextually within the viewed content (Durmaz, 2011). These online platforms offer marketers the ability to customize their advertisement and target the appropriate audience in real time. Activity with regards to the advert in terms of reach, conversion and sales can also be tracked in real time. This keeps marketers on the pulse of their advertising budgets and objectives.

According to the Communication Authority of Kenya (2014), there was a rise in internet subscriptions from 14.8 million people in the first quarter 2014 to 16.4 million people in the same year. Kenyan companies have taken this opportunity to invest in internet advertisements to reach their targeted audience. This study sought to examine the impact that this form of advertisement has on mobile phone purchases among University of Nairobi students.

1.1.1 Types and Benefits of Internet Advertising

Internet advertising is referred to as advertising of products and services through use of the internet. According to Priyanka (2012), there are a variety of online advertising types and these include: Affiliate marketing where affiliates or publishers earn a commission for every person they refer to a website through special tracking links that identify the affiliate and connects to the product or service page. Display advertising which is a type of advertising that involves placement of banners by advertisers on third party website to drive traffic to their product or service pages. Search engine marketing is another form of internet advertising where search engines such as Google display an advertisement on their search result page as determined by what the user is searching. Email advertising which is a form of advertisement where advertisers send emails with their adverts using email lists compiled by publishers. Social media advertising
is another form of advertising that is similar to display advertising but it’s only used within social media platforms such as Facebook.

The internet serve’s a variety of purposes which include advertising through different formats as mentioned. However this is not the only benefit of the internet to commercial entities because the internet hosts commercial websites which serve as storefronts and offer the first contact between the seller and the consumer, the internet also offers an opportunity to develop point-of-purchase stimuli by communicating offers or superior value and the same platform can be used to conduct research through the collection of online data and offline or real-time analysis of the same (Interactive Advertising Bureau, 2012).

1.1.2 Consumer Behavior and Purchase Decisions of Consumer Electronics

Consumer behavior refers to the decision-making process employed by buyers when making purchases. It involves the process buyers use to select, secure, utilize and dispose products or services. There are several factors that affect consumer behavior and these include; attitude, demographic, personality, belief and perception among others. Consumer behavior is important to organizations because it forms the basis of their marketing strategies. Failure to understand consumer behavior with regards to services and products offered may ultimately lead to failure of the organization (Furaiji, Latuszynska & Wawrzyniak, 2012). Thus it becomes important to study consumer behavior and to tap into the predictive opportunities that are presented by such knowledge.

Consumers normally follow some form of process during the purchase process and according to Sandhusen (2000) the black box theory with regards to consumer behavior outlines the purchase decision process as follows; Problem recognition whereby during this step the consumer
establishes that a problem or a need exists otherwise the consumer responds to a marketing stimulus. Information search where during this step, the consumer determines how much information is required with regards to the problem or need they are required to satisfy. Alternative evaluation is where after obtaining the requisite information the consumer begins to look at the alternatives available that would adequately meet the needs or solve the problem. This is then followed by the Purchase decision where a decision will likely be arrived at pertaining to whether to make a purchase or not. If a sufficient solution to the problem exists then a purchase will be made. After a purchase is made Post-purchase behavior follows, and during this step the consumer evaluates the purchase made and how well it satisfied the need/or not. This theory assumes that the consumer is rational and undertakes the necessary steps during the decision process.

Internet advertising with regards to consumer electronics affects the purchase decision process differently as compared to physical or traditional means of advertising. The potential customer may utilize the internet during the entire process as outlined by the Black Box Theory (Sandhusen, 2000). In this case, they will access an advert online, on clicking the advert they will be directed to information about the consumer electronic device. At this point they may visit and read reviews about the product from review sites and even access cheaper alternatives. The internet and in this case internet advertising of consumer electronics will eventually bring different outcomes relating to the eventual purchase decision.

1.1.3 The Consumer Electronics Sector in Kenya

The ownership and use of consumer electronics in Kenya has continued to grow rapidly. Gadgets such as mobile phones and computers have become part of Kenyan households and are considered necessities rather than luxuries, as was the case a while back (Communication
Authority of Kenya, 2014). Households without internal access have continued to receive ICT services from external sources such as Cyber cafes. Ownership of these gadgets is directly interrelated with the household incomes and although this is a determinant, access to the facilities for all households is still within reach (Communication Authority of Kenya, 2014). The gadgets are connecting different communities with regards to communication, information and facilitating business activities. The Communication Authority of Kenya (2014) established that there is a correlation between access and usage of ICT facilities with aspects which include sex, education and age.

Access to ICT services and facilities has been shown to increase among the ages of 20 to 39 years and reduces with advances in age. According to a report by the Communication authority of Kenya, Radio had the widest reach followed by mobile phones then televisions in third place. In regards to sex, males have been noted to access ICT gadgets by a higher proportion as compared to their female counterparts (Communication Authority of Kenya, 2014).

1.2 Research Problem

Communication serves a very important role in our activities as it allows for people to express themselves and share or convey messages (Ashalatha, 2014). In marketing and especially with regards to promotion, communication is necessary in order to inform and persuade consumers with regards to a product or service offering. Among some of the marketing communication is advertising which communicates products and services that are up for sale (Durraz, 2011). Technological advancements have led to changes in advertising with the introduction of the internet and internet enabled devices. The internet has opened up a new platform for advertising in what is known as internet advertising (Luk, Chan, & Li, 2002). This new platform has seen
considerable use in the developed countries and it is in the process of integration within developing nations like Kenya.

There is a growing need to establish how internet advertising is impacting on consumer behavior and purchase decisions pertaining to consumer electronics. There are theories that would assist and provide a framework for the study and these include the Theory of Reasoned Action and the Black Box Theory. Internet advertising and its effect on consumer behavior and purchase decision will be studied using the Theory of Reasoned Action which offers insights into how attitude, subjective norms and intention determine behavior (Ajzen & Fishbein, 1980). The other theory is the Black Box Theory that shows the typical steps a consumer goes through during a purchase in order to arrive at a decision (Sandhusen, 2000).

In Kenya, growth of internet subscribers has continued on steadily from 14.8 million people in the first quarter 2014 to 16.4 million in the same year (Communication Authority of Kenya, 2014). In an ideal situation phone companies should target the consumer through internet advertising because of the purchase potential presented by the number of people with access. However this was not the case because the use of internet advertising and its associated benefits or lack of thereof was yet to be fully explored especially with regards to the Kenyan market.

Nashombe (2015) studied African cultures in advertisement in Kenya and found out that, the information available and relied on currently is not localized enough and marketing advisors to the mobile phone companies base their internet advertising decisions on external sources, such information does not cater for the inherent differences between the Kenyan market and the markets in other countries or regions. Osewe (2013) studied the effectiveness of internet advertising on consumer behavior among University of Nairobi students and found that internet advertising has significant relationship with purchase decision and thus it is influential to aspects
of consumer behavior. Wanjoga (2002) studied consumer attitudes towards online advertising in Nairobi, and showed that consumers were aware of the online adverts without preferences to the types of internet advertising. It is expected that if marketers continue to rely solely on the external sources pertaining to internet advertising then this will lead to development and application of strategies that do not cater for the differences in our market and the rest of the world increasing the risk of failure and losses both for the consumer and mobile phone companies. Moreover, less research has looked into the influence of online advertising effect on mobile phone purchases among university students. This study therefore sought to address the development of home grown or localized information on internet advertising that can adequately be applied to the Kenyan mobile phone market, and in this case, to provide an answer to the question: What was the influence of internet advertising on mobile phone purchases among University of Nairobi students?

1.3 Research Objective

The objective of the study was to establish the influence of internet advertising on the purchase of mobile phones by University of Nairobi students.

1.4 Value of the study

The study is expected to add value to practice because it offers insights to marketing practitioners with regards to predictive opportunities that exist through understanding the role that internet advertising plays in consumer purchase decisions. This information is geared to enable them develop effective internet advertising campaigns that would meet their goals. In academic theory, the study developed knowledge about internet advertising as it relates to
purchase decisions of consumer electronics among university students. The study also sought to address the knowledge gap that was present with regards to internet advertising in Kenya, as this was an emerging aspect of advertising and not much localized information is available. This study is expected to add value to policymakers and regulators because the study incorporated information about internet advertising and how it is applied in countries that are at an advanced stage of its use. This included issues that they have encountered and how Kenya should develop strong policies that would protect organizations and consumers. A major issue was the growing challenge of protecting personal online privacy with regards to how information was collected by internet advertising companies for purposes of advert targeting.
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter provided basis for discussions with regards to current knowledge about internet advertising. This was done through selective reference to some of the literature. It also included theoretical and methodological contributions as they related to Internet advertising concepts and findings on the effectiveness of internet advertising based on consumer behavior.

2.2 Theoretical Framework

This study employed the use of the different theories which include the theory of reasoned (TRA) action as established by Martin Fishbein and Icek Ajzen and Black Box Theory by Sandhusen to provide models that guided the researcher in answering questions being addressed by this study. TRA includes three constructs behavioral intention (BI), attitude (A) and subjective norms (SN). According to Fishbein and Ajzen (1980) an individual’s behavioral intention is dependent on the individual’s attitude and subjective norms. The model is represented as; BI=A+SN with BI representing behavioral intention, A representing attitude and SN representing subjective norms.

According to TRA and with regards to consumer behavior, a consumer is likely to exhibit a particular behavior as determined by their attitude towards a particular situation or product combined with subjective norms that may be developed through peer pressure or socialization. For example a consumer will develop their personal disposition towards a product as determined by their perceptions or beliefs. This disposition combined with the need to keep up with trends
may lead a consumer into making a choice based on the available alternatives that fit their set of beliefs and personality thus exhibiting a particular set of behavior.

The belief towards an outcome and evaluation of the outcome influence the attitude of the consumer. Attitude impacts on the intention which further affects the behavior exhibited. The belief and evaluation are internal and relative to the individual (Shrum, Liu, Nespoli and Lowrey, 2012). Beliefs of what others and experts think and the motivation to comply with others or the social standards comprise the subjective norms. These norms also impact on the intention which further affects and determines the behavior exhibited (Shrum, Liu, Nespoli and Lowrey, 2012). The beliefs and motivation of others are external influences. The Theory of Reasoned Action was shown to persuade consumers to purchase a particular brand (Shrum, Liu, Nespoli and Lowrey, 2012).

The Black Box Theory outlined the purchase process. According to Sandhusen (2000), consumers go through a chain of steps and processes before they purchase a product or service. The theory reasons that the consumer would first recognize a problem or a need they should satisfy, they would then search and gather information about the brands, the consumer would then evaluate alternative products before arriving to their purchase decision. After purchase, the consumer goes through post purchase evaluation where they assess their satisfaction with regards to the product they purchased and determines if they would recommend or buy again. However, recent research has shown that the internet has changed the way the process and decisions are made. This was because the consumer was exposed to a variety of brands and an overwhelming amount of information pertaining to the different product brands (Furaiji, Latuszynska & Wawrzyniak, 2012).
2.3 The Role of Advertising in Marketing Communication

Marketing communications include sales promotions, direct marketing public relations and advertising. Businesses use a combination of these communications when making offers of their products and services to consumers. According to Gilaninia, Taleghani & Karimi (2013) advertising can be achieved through online or offline channels. Offline channels include TV, radio, and newspaper and print while online channels refer to web advertisements and email advertising among other internet marketing types. The marketing mix comprises of four elements price, place, product and promotion with advertising belonging to the promotion element of the mix and which plays a major role in placing the product and service in front of the customer (Niazi, Siddiqui, Shah and Hunjra, 2012). According to Niazi et al (2012) it has become a necessity for businesses to invest heavily on their promotions in order to earn a share of the market.

2.4 Impacts of Advertising and Internet Campaigns on the Consumer

Advertising is expected to influence customers’ buying behavior leading up to an actual purchase of the product (Niazi et al., 2012). Advertisements are used by marketers to differentiate their products from the competitor and although traditionally it was focused on functionality it is currently gravitating towards brand image. With brand image the marketer seeks a long lasting impression on the customer and so they invest in using advertisements that impact on the customers’ emotions to create a lasting attachment between their offering and the customer (Niazi et al., 2012). Several researchers are in agreement that it is not enough to spend on advertising to get customers but this investment should be done to acquire the “right” customer (Jakstiene, Susniene, & Narbutas, 2008). This is because different advertising strategies will
attract different types of customers. The impact of advertising should be analyzed to ensure the business attracts and retains the “right” customers as determined by their business objectives. According to Priyanka (2012) internet advertising does not only refer to advertising on the internet but on wireless media and email. Internet advertising is widely supported by websites and blogs since it offers an alternative revenue model. The ad serving networks include DoubleClick a product of Google which is the dominant network conducting business globally. According to Priyanka (2012) internet advertising networks have the ability to precisely target a specific user group given they collect and facilitate the collection of online user behavior. According to Gilaninia et al., (2013) internet penetration is forcing researchers to take a deeper look into internet advertising, its impacts on consumer attitudes and the efficacy of online ad campaigns. The reason behind this growing interest is that the internet has reduced advertising costs and provides marketers with a larger audience that can be targeted with a higher level of accuracy as compared to traditional advertising (Gilanina et al., (2013). According to Tsang, Ho and Liang (2004) internet advertising is more informative and trustworthy due to its interactivity as compared to traditional advertising.

2.5 Factors Determining the Effectiveness of Internet Advertising

According to Tsang et al., (2004) the main factors that determined success of internet advertising included information (content of the advert) and entertainment (form of the advert). Apart from the two, irritation and credibility of advertisements also impacted on consumer attitude towards the advert. This statement was supported by Schlosser, Shavitt and Kanfer (1999) who also stated that internet advertising effectiveness was determined by information and enjoyment of the advert. Another factor that determined effectiveness internet advertising was the freshness of the advert. If the same advert is used for an extended period it’s been noted to cause “Wearout”
where the advert stops eliciting interest in the audience thus losing its influence (Mohammed and Alkubise, 2012).

Osewe (2013) established that internet advertising was effective on reach and was able to create awareness because of its diverse usage opportunities. In the study, the researcher further established that there was a positive relationship between internet advertising and purchase decision and thus concluded that internet advertising is currently a key determinant of consumer behavior.

**2.6 Consumer Behavior and Marketing Strategy**

According to Furaiji, Latuszynska & Wawrzyniak (2012), consumer behavior determined consumer buying decisions and it is these decisions that determined how well an organization marketing strategy met the market demand. Consumers went through several psychological processes when making their buying decisions. They recognized the need, then gathered information and came up with alternative solutions. Among the solutions available, they made a choice through their purchase decision and finally they evaluated this decision to find out how well the solution solved the problem in order to guide future purchases (Sandhusen, 2000).

Consumers exhibit different buying behaviors for different products and it is important for a marketing strategy to be developed that understands the behavior-product relationship. A consumer exhibits routine response buying behavior when purchasing low cost items that are needed frequently such as bread or milk. In this case they don’t spend much time gathering information and purchases are made relatively fast (Furaiji, Latuszynska & Wawrzyniak, 2012). Limited decision making is a buying behavior exhibited by consumers when purchasing moderately priced items that are not bought very frequently in this case they need more time to
gather information to make the final purchase decision (Furaiji, Latuszynska & Wawrzyniak, 2012). Extended decision making is exhibited by consumers purchasing high cost items that are not frequently bought such as refrigerators and television sets. In this case they take a while longer to gather information from their family and friends. They will also use a variety of channels to gather the information such as reviews and ratings to ensure they purchase a product that would serve them well for a longer period of time (Furaiji, Latuszynska & Wawrzyniak, 2012).

2.7 Arguments against Internet Advertising

The issue of privacy has become a critical topic among marketers and policy makers across the globe. Advertising networks and marketers have been known to track online users and gather data to tailor communications and target the right customer. Technologies such as Cookies have been used to collect this data from online users’ experience (Sableman, Shoenberger, & Thorson, 2013). These cookies store phrases or keywords used by users during search and access to websites. The cookies are then stored discreetly on computers and get updated when a connection to the internet is established. Advertisers are then able to target specific users based on their online search patterns and history. Although these cookies can be deleted by users the question about safety and privacy of users still remains. Due to the success of cookies, some online tracking companies developed re-spawning cookies these types of cookies cannot be completely deleted because the files regenerate, as a counter measure some countries have instituted policies making these types of cookies illegal as they infringe on user privacy (Sableman, Shoenberger, & Thorson, 2013). There has been growing concerns among internet users who are predominantly against tracking with some taking stringent measures by blocking
cookies and adverts altogether, this as a result of users developing negative attitudes towards online advertising (Sableman, Shoenberger, & Thorson, 2013).
CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter focused on research methodology that was used in the study. It provided a detailed description of the research design, target population, research instruments, data collection and analysis methods that was used.

3.2 Research Design

This study used descriptive survey research design. A descriptive study involved collection of data about occurrences and then arranged this information to allow for analysis. The information was then presented graphically through tables and charts to provide a clear understanding of the information. This type of study was justified in this case because it offered the researcher an opportunity to collect data from respondents in order to determine internet advertising effectiveness and its influence on consumer behavior as it relates to the purchase of mobile phones (Tobin, 2013).

3.3 Population of the Study

University of Nairobi has a population of 79,000 students according to the University of Nairobi Fact File, (2015). Of these, the number of postgraduate students enrolled in 2015 was over 13,000 with those registering in that year totaling to 4,329 students (Board of Postgraduate studies, 2015). The study targeted the university’s student community because of their diversity, access to information and their use of the internet. The university had both computer labs and wireless internet connection providing internet access to the students. This access to the internet
and social media improved their exposure to online advertisements. In justification, previous research also showed that a high number of mobile phones purchases are made by people in the age between 18-30 years who were also “less price sensitive” and considered physical appearance, features and brands as the key factors driving their mobile phone purchases (Singh & Goyal, 2009). It was noted that this was the age group where majority of the university students’ community belonged.

3.4 Sample Design
Stratified random sampling technique was used to select the elements for study. 100 undergraduate (both Module I and II) and postgraduate students of the University of Nairobi were used as a sample to represent the population. This sample was stratified first into two groups of postgraduate and undergraduate students. Out of the 13,000 postgraduate students, 50 students were randomly picked and out of the 66,000 undergraduate students, 50 students were also randomly picked. This sample was further stratified into two groups of males and females. Out of the 50 postgraduate students randomly picked 25 males and 25 females were also randomly picked. The same was done for undergraduates, where out of the 50 undergraduate students randomly picked for the study, 25 males and 25 females were also randomly picked. The stratified sample produced 4 subgroups determined by level of study and gender. This sampling technique was appropriate for this study because it provided the researcher with control of the sample size and provided data that enabled the analysis of the four subgroups.

<table>
<thead>
<tr>
<th>Total: Students population 79,000</th>
<th>Postgraduates 13,000</th>
<th>Undergraduates 66,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample size 100 students</td>
<td>Postgraduates 50</td>
<td>Undergraduates 50</td>
</tr>
<tr>
<td>Postgraduates: Male 25 Female 25</td>
<td>Undergraduates: Male 25 Female 25</td>
<td></td>
</tr>
</tbody>
</table>

Source: Board of Postgraduate Studies 2014 Annual report
3.5 Data Collection

The study used primary data which was collected using semi-structured questionnaires that were distributed to the 100 respondents representing the population. The questionnaires were administered by the researcher to the different gender groups between class hours for postgraduate students and also between class hours for undergraduate students. The filled questionnaires were collected on the same day. The questionnaires contained both open and closed ended questions that guided the respondent in providing the data required for this study. See Appendix I.

3.6 Data Analysis

The study used descriptive statistics to conduct an analysis of the data collected. This included frequency distributions and percentages that were calculated to provide a clear understanding of the data. The process included the compilation and checking of the data for consistency. The data was then coded with regards to the responses offered. Qualitative data was classified in dichotomous order or ranked to provide quantitative data that was suitable for logistic regression analysis.

The logistic regression model for determining mobile phone purchases and purchase recommendations was established as follows;

\[ Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \varepsilon \]

Where;

\( Y = \) Mobile phone direct purchases/ Purchase recommendations

\( X_1 = \) Encountered online mobile phone adverts
Logistic regression analysis was conducted to establish the relationship between internet advertising, purchase of mobile phones and purchase recommendations by respondents. Results from the analysis were to be used in developing a model to predict direct mobile phone purchases and purchase recommendations determined by consumer encounter with mobile phone internet advertisements and interaction through clicking.
CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction
This chapter presented analysis and findings of the study as set out in the research methodology. The results were presented on the influence of internet advertising on purchase of mobile phones among University of Nairobi students. The study objective was to establish the influence of internet advertising on the purchase of mobile phones by University of Nairobi students.

4.2 Background Information
The study targeted 100 respondents of which all the 100 responded representing 100% response rate. The chapter presents the findings according to the established objectives. The findings were presented in charts, tables and graphs with descriptions of the graphical representation in prose. The study instrument sought general information about the respondents in order to develop the framework for interpretation of the study. The general information included the respondent’s age, gender, level of study and frequency of access to the internet and intensity of its use. The background information also pointed to the suitability of the study’s participants.

The respondents were asked to indicate their gender. The study findings are illustrated in Table 4.1.

Table 4.1 Distribution of the Respondents by Gender

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Female</td>
<td>50</td>
<td>50</td>
</tr>
</tbody>
</table>
The findings in Table 4.1 show that, the response rate for the study was equally distributed according to gender with 50% for both the males and females. This complied with the sampling design and provided an opportunity to explain findings with regards to internet advertising and the purchase variable as they related to gender.

The study sought to establish the respondents age. The study findings are illustrated in Table 4.2

**Table 4.2 Distribution of Respondents by Age**

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-20</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>21-25</td>
<td>26</td>
<td>26</td>
</tr>
<tr>
<td>26-30</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td>31 and above</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

According to the findings a majority of the respondents belonged to the 18-20 years range and accounted for 30% of the respondents. The group with the lowest number was the 31 years and above who accounted for 15% of the sample respondents. The second highest range comprises of respondents between the ages of 26-30 while the second lowest being within the 21-25 ages group.
The respondents were asked to indicate their level of study and the findings were illustrated in Table 4.3

**Table 4.3 Distribution of the Respondents According to their Level of Study**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduates</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Postgraduates</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field data

According to Table 4.3 the respondents were equally distributed based on their level of study, with both the undergraduates and postgraduates accounting for 50% of the respondents respectively.

The distribution with regard to the level of study complied with the sampling structure, where 50 of the undergraduates were selected which was equal to the number of postgraduate students.

The distribution was important to ensure that the different characteristics among the student population with regards to the study level were captured in order to adequately provide for the generalization of the findings.

The study sought to establish internet access frequency of individual respondents and the findings are illustrated in Table 4.4
Table 4.4 Distribution of the Respondents by their Internet Access Frequency

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am always online</td>
<td>15</td>
</tr>
<tr>
<td>On a daily basis</td>
<td>75</td>
</tr>
<tr>
<td>On a weekly basis</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field data

Table 4.4 shows that a majority of the respondents accessed the internet on a daily basis which accounted for 75% of the respondents. Respondents accessing the internet on a weekly basis accounted for the minority and accounted for 10% of the respondents. This information supports the data by the communication of Kenya (2014) that showed an increase in internet subscribers nationally.

The study sought to establish the intensity of internet use by the respondents and the findings are represented in Table 4.5.

Table 4.5 Distribution of the Respondents Based on their Intensity of Internet Use

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light User</td>
<td>35</td>
</tr>
<tr>
<td>Heavy user</td>
<td>65</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>
According to Table 4.5 a majority of the respondents attested to being heavy internet users. This showed that they spent a considerable amount of time surfing the web or working online. They represented 65% of the respondents while light users accounted for 35%. Spending a considerable amount of time on the internet increased the likelihood of the respondents viewing the internet adverts and interactions with the same.

4.3 Respondents Interaction with Mobile Phone Adverts served on the Internet
The study sought to establish whether the respondents are aware of mobile phone adverts served on the internet. This information also included the different types of mobile phone brands that they had encountered and the reasons why they interacted with the internet advertisement.

The study sought to establish whether the respondents have encountered mobile phone adverts served on the internet.

Table 4.6 Distribution of Respondents Based on whether they have Encountered Mobile Phone Adverts Served on the Internet

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>95</td>
<td>96.94</td>
</tr>
<tr>
<td>No</td>
<td>3</td>
<td>3.06</td>
</tr>
<tr>
<td>Total</td>
<td>98</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field data
Majority of the respondents affirmed that they had encountered mobile phone internet adverts. This showed that the mobile phone companies had made efforts to advertise their products online. Among all the respondents reached for this study, 96.94% confirmed that they had encountered online mobile phone adverts and this figure represented 95 respondents out of the 98 that offered valid data. The findings attested to the strong reach presented by internet advertising as stated by (Osewe, 2013). This also affirmed the opportunity to reach a significant section of the market through online advertising campaigns.

The study sought to establish mobile phone brands they have encountered being advertised on the internet.

**Table 4.7 Distribution of Respondents to establish which of the Mobile Phone Brands they have encountered being advertised on the Internet**

<table>
<thead>
<tr>
<th>Mobile Phone Brand</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samsung</td>
<td>51</td>
<td>32.48</td>
</tr>
<tr>
<td>Apple</td>
<td>23</td>
<td>14.65</td>
</tr>
<tr>
<td>Nokia</td>
<td>14</td>
<td>8.92</td>
</tr>
<tr>
<td>Tecno</td>
<td>31</td>
<td>19.75</td>
</tr>
<tr>
<td>Infinix</td>
<td>20</td>
<td>12.74</td>
</tr>
<tr>
<td>LG</td>
<td>6</td>
<td>3.82</td>
</tr>
<tr>
<td>Bird</td>
<td>1</td>
<td>0.64</td>
</tr>
</tbody>
</table>
According to Table 4.7, respondents confirmed having encountered different mobile phone brands being advertised online, with a majority of them having encountered Samsung mobile phone online adverts representing 32.48 percent of the total respondents’ viewership. This showed that the respondents were familiar with the different mobile phone brands and they were reached by online communications by the mobile phone companies carrying these brands.

**Table 4.8 Distribution of Respondents Based on Aspects of the Internet Advert and Level of Interaction**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>Source: Field data</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to Table 4.8, information was stated as the major reason most of the respondents chose to interact with online mobile phone adverts. The respondents in this case accounted for 35% of the total respondents. Creativity was stated as the reason for interaction by the least number of respondents representing 14%. This explained and supported the purchase process (Sandhusen, 2000) by attesting to the capability of internet advertising campaigns as a source of information for potential customers during their purchase decision making process as suggested by the Black Box theory.

4.4 Respondents’ Attitude towards Mobile Phone Adverts Served on the Internet
The study sought to establish the attitude of respondents with regards to mobile phone adverts served on the internet. This information also included their attitude towards different elements that determined the impact of online mobile phone adverts.

53.33% agreed that they read mobile phone adverts they encountered on the internet. 25.56% disagreed that they read the online mobile phone adverts they encountered. 11.11% strongly disagreed, 4.44% strongly agreed while those who neither agreed nor disagreed represented
8.89%. This showed a majority of the respondents had a positive attitude towards online mobile phone adverts which also supported earlier claims by Osewe (2013).

53.33% agreed that online mobile phone adverts needed to focus on their unique product features. 4.44% disagreed that the adverts needed to focus on the unique product features. 5.56% strongly disagreed, 34.44% strongly agreed while those who neither agreed nor disagreed represented 4.44%. This showed a majority of the respondents needed the online mobile phone adverts to focus on their unique product features.

44.44% strongly agreed that mobile phone brands need to increase their online advertising frequency to improve their visibility. 3.33% of the respondents disagreed that mobile phone brands need to increase their online advertising frequency to improve their visibility. 12.22% strongly disagreed, 34.44% agreed while those who neither agreed nor disagreed represented 8.89%. This showed a majority of the respondents support an increase in online advertising frequency by mobile phone brands to improve visibility.

47.78% strongly agreed that online mobile phone adverts need to improve on their design and appeal. 4.44% disagreed that online mobile phone adverts need to improve on their design and appeal. 4.44% strongly disagreed, 38.89% agreed while those who neither agreed nor disagreed represented 7.78%. This showed a majority of the respondents supported the need for online mobile phone adverts to improve on their design and appeal.
4.5 Purchase Distribution Determined by Gender, Age, Level of study, Frequency of Internet Access and Intensity of Internet Use

Table 4.9 Purchase by Gender after Encountering Online Mobile Phone Adverts

<table>
<thead>
<tr>
<th></th>
<th>Purchased</th>
<th>No Purchase</th>
<th>Total</th>
<th>Purchased Percentage</th>
<th>No Purchase Percentage</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>17</td>
<td>33</td>
<td>50</td>
<td>34</td>
<td>66</td>
<td>100</td>
</tr>
<tr>
<td>Female</td>
<td>15</td>
<td>35</td>
<td>50</td>
<td>30</td>
<td>70</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field data

According to Figure 4.1, gender was included as a variable towards mobile phone purchases after encountering online mobile phone adverts. It was established that the male gender purchased mobile phones more than their female counterparts after encountering internet ads, with 34% of the male gender making purchases and 30% of the female respondents making purchases.

Generally, direct mobile phone purchases were low among the different genders with 66% of the male gender not purchasing and 70% of the females not purchasing.

Table 4.10 Purchase Distributed by Age After Encountering Online Mobile Phone Ads

<table>
<thead>
<tr>
<th></th>
<th>Purchased</th>
<th>No Purchase</th>
<th>Purchased Percentage</th>
<th>No Purchase Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-20</td>
<td>11</td>
<td>21</td>
<td>32.35294118</td>
<td>31.81818182</td>
</tr>
<tr>
<td>21-25</td>
<td>13</td>
<td>14</td>
<td>38.23529412</td>
<td>21.21212121</td>
</tr>
<tr>
<td>26-30</td>
<td>6</td>
<td>20</td>
<td>17.64705882</td>
<td>30.30303030</td>
</tr>
<tr>
<td>31+</td>
<td>4</td>
<td>11</td>
<td>11.76470588</td>
<td>16.66666667</td>
</tr>
<tr>
<td>Total</td>
<td>34</td>
<td>66</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field data
According to Figure 4.2, age was included as a variable towards mobile phone purchases after encountering online mobile phone adverts. It was established that respondents belonging to the 21-25 age group purchased mobile phones more than all other age groups sampled after encountering internet ads. This was represented by 38.24% of respondents who purchased. Respondents aged 31 and over purchased the least, represented by 11.76 of respondents who made a purchase. Generally, purchases were low among the different age groups, with 34 purchases being made out of 100 respondents.

Table 4.11 Purchase Distributed by Level of Study After Encountering Online Mobile Phone Ads

<table>
<thead>
<tr>
<th></th>
<th>Purchased</th>
<th>No Purchase</th>
<th>Purchased Percentage</th>
<th>No Purchase Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate</td>
<td>21</td>
<td>34</td>
<td>61.76470588</td>
<td>51.51515152</td>
</tr>
<tr>
<td>Postgraduate</td>
<td>13</td>
<td>32</td>
<td>38.23529412</td>
<td>48.48484848</td>
</tr>
<tr>
<td>Total</td>
<td>34</td>
<td>66</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field data

According to Figure 4.3, the level of study was included as a variable towards mobile phone purchases after encountering online mobile phone adverts. It was established that undergraduates purchased mobile phones more than their postgraduate counterparts after encountering internet ads. This was affirmed by the data which showed that, out of all the respondents who purchased 61.76% were undergraduates. Generally, purchases were low among the different levels of study with a total of 66 no purchases out of 100 respondents.
According to Figure 4.4, purchase distributed by frequency of internet access was included as a variable towards mobile phone purchases. It was established that respondents accessing the internet on a daily basis purchased mobile phones more than all other internet user frequency groups sampled after encountering internet ads. They accounted for 78.13% of the respondents who made a mobile phone purchase. Respondents accessing the internet on a weekly basis purchased the least. This accounted for 6.25% of the total purchases made by the respondents. Generally, purchase decisions were low among all the frequency groups, with 68 respondents out of the 100 not making a purchase.

### Table 4.12 Purchase Distributed by Frequency of Internet Access

<table>
<thead>
<tr>
<th></th>
<th>Purchased</th>
<th>No Purchase</th>
<th>Purchased Percentage</th>
<th>No Purchase Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always online</td>
<td>5</td>
<td>11</td>
<td>15.625</td>
<td>16.17647059</td>
</tr>
<tr>
<td>Daily basis</td>
<td>25</td>
<td>51</td>
<td>78.125</td>
<td>75</td>
</tr>
<tr>
<td>Weekly basis</td>
<td>2</td>
<td>6</td>
<td>6.25</td>
<td>8.823529412</td>
</tr>
<tr>
<td>Total</td>
<td>32</td>
<td>68</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field data

### Table 4.13 Purchase Distributed by Respondents’ Internet Intensity

<table>
<thead>
<tr>
<th></th>
<th>Purchased</th>
<th>No Purchase</th>
<th>Purchased Percentage</th>
<th>No Purchase Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light users</td>
<td>10</td>
<td>27</td>
<td>30.3030303</td>
<td>40.29850746</td>
</tr>
<tr>
<td>Heavy users</td>
<td>23</td>
<td>40</td>
<td>69.6969697</td>
<td>59.70149254</td>
</tr>
<tr>
<td>Total</td>
<td>33</td>
<td>67</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field data
According to Figure 4.5, respondent’s internet intensity was included as a variable towards mobile phone purchases. It was established that respondents belonging to the heavy user category purchased mobile phones more than the light user category. Heavy internet users made 69.70% of the total mobile phone purchases. Heavy users spend most of their time online which translated to their frequent viewership of the online adverts which likely converted to sales. Therefore it is imperative that advertisers increase their advert frequency to increase sales among the light users category who spend less time online. According to the data however, direct mobile phone purchase were generally low among all user intensity groups, with 67 respondents out of the total 100 not making a purchase.

4.6 Inferential Statistics
The study used logistic regression to determine the influence of internet advertising on the purchase of mobile phones. This was aimed at determining the relationship between the variables (Purchase of mobile phones, respondents who confirmed encountering online mobile phone adverts, respondents who clicked on the adverts and purchase recommendations by the respondents to other people after encountering the online mobile phone advert) and to provide a model for prediction of purchase or recommendation actions by individuals possessing certain attributes as shown by the variables of the study. To further understand the inferential statistics a distribution table was provided to show general responses with regards to the variables involved in the inferential statistics;

Table 4.14 Distribution of Respondents who Encountered, Clicked, Purchased and made Purchase Recommendations

<table>
<thead>
<tr>
<th></th>
<th>Percentage of Yes responses</th>
<th>Percentage of No responses</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Respondents who encountered internet adverts | 97% | 3% | 100%
Respondents who clicked the ad | 66% | 34% | 100%
Respondents who purchased mobile phones after encountering the online ad | 32% | 68% | 100%
Respondents who made purchase recommendations to other people after encountering the internet advert | 68% | 32% | 100%

See Appendix II for the logistic regression model for determining mobile phone purchases.

Further, the study conducted Solver analysis to determine the best possible fit in order to establish the predictive equation. The results are shown in Table 4.9 below;

**Figure 4.1 Logistic Regression of Mobile Phone Purchase**

Target Cell (Max)

<table>
<thead>
<tr>
<th>Cell</th>
<th>Name</th>
<th>Original Value</th>
<th>Final Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>$I$104</td>
<td>Log Likelihood Prob of indiv action</td>
<td>-57.02736321</td>
<td>-56.39283896</td>
</tr>
</tbody>
</table>

Adjustable Cells

<table>
<thead>
<tr>
<th>Cell</th>
<th>Name</th>
<th>Original</th>
<th>Final Value</th>
</tr>
</thead>
</table>

35
The predictive model for direct mobile phone purchases was represented as follows:

\[ Y = 17.54 + 16.16X_1 + 0.93X_2 + \varepsilon \]

According to the analysis in Table 4.9, the odds of a purchase occurring when all other variables were held constant were 17.54. The odds of a purchase occurring after encountering an advert with all other variables held constant was 16.16 while, the odds of a purchase occurring after clicking an advert with all variables held constant was 0.93.

See Appendix II for the logistic regression model for determining mobile phone purchase recommendations to potential customers by the respondents.

Further, the study conducted Solver analysis to determine the best possible fit in order to establish the predictive equation. The results are shown in Table 5.0 below;
According to the analysis in Table 4.9, the odds of a purchase occurring when all other variables were held constant were 15.68. The odds of a purchase occurring after encountering an advert with all other variables held constant was 16.09 while, the odds of a purchase occurring after clicking an advert with all variables held constant was 0.65. The predictive model for purchase recommendations is as follows;

\[ Y = 15.68 + 16.09X_1 + 0.65X_2 + \varepsilon \]
4.7 Discussion of Findings
The study established that internet adverts have gained traction among the internet users and more people are getting to interact with the adverts. 97% of the respondents confirmed their encounter with online mobile phone adverts. This showed that internet advertising has the capacity to reach a larger population of the target group.

Information was established as the main reason why respondents interacted with online mobile phone adverts. The respondents showed an interest in the adverts’ information possibly with regards to what the product was offering. This clearly showed that advertisers have the opportunity to inform the public about their products, features or entry to the market. This confirmed Baltas (2003) and Osewe (2013) that the internet is considered a prime source of information by the users. Similar findings by Tsang et al., (2004) and Schlosser, Shavitt and Kanfer (1999) also confirmed the significance of internet advertising with regards to the spread of information among consumers and in turn influencing their purchase decision.

The study sought to establish the influence of internet advertising on purchase of mobile phones among University of Nairobi students. The inferential statistics sought to develop models to define the relationship between internet advertising and purchase of mobile phones and to further use the models to predict purchase decisions based on certain user attributes. The study established that there was a relationship between internet advertising and purchase of mobile phones albeit to a small extent. This implied that further independent variables should be included in order to support generalization of the findings. The study also established that although the impact of internet advertising on purchase of mobile phones was still low, the number of user purchase recommendation to others was higher. This confirmed that internet advertising was significant with regards to reach and has the potential to inform and increase
purchases which supported findings by Goldsmith and Lafferty (2002) who stated that internet advertising should be considered a significant marketing tool in influencing purchases. The same also concurred with findings by (Niazi et al., 2012) which confirmed the significance of internet advertisements on creating long lasting impressions on the consumer and in turn boosting the brands’ image. The study findings also supported findings by Gilaninia et al., (2013) which stated the importance of internet advertising given the growing trends in internet penetration as seen in the study where 97% of the respondents had encountered online mobile phone adverts.
CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction
This chapter presented summary of the findings, conclusion and recommendations of the study in line with the objectives of the study.

5.2 Summary of the Study
The study established that the influence of internet advertising on purchase of mobile phones was to a moderate extent determined by encountering and clicking on the advert by users. However, this extent was higher with regards to purchase recommendations among users who encountered and interacted with the internet advert. It was also established that there existed differences among users and their potential to purchase mobile adverts after encountering internet adverts. Male students purchased more that their female counterparts. Purchase was also higher among respondents who belonged to the 21-25 age groups, were undergraduate students, accessed the internet daily and designated their intensity of use as heavy users. 53.3% of the respondents showed positive attitude towards internet advertising by reading and interacting with adverts they encountered online. The study also showed that it was important for the advertisers to focus on product features, increase their online advertising frequency and improve on their advertisement’s design and appeal.

5.3 Conclusion
The study sought to study the influence of internet advertising on purchase of mobile phones and concludes that internet advertising influences purchase of mobile phones to a low extent as only 32% of the respondents purchased mobile phones after encountering internet advertisements. However, internet advertising played a major role with regards to reach and information because
97% of the respondents had encountered internet adverts while 66% of the respondents had clicked the advert or actively interacted with it. 68% of the respondents confirmed that they made purchase recommendations to others and this significantly increased the likelihood to purchase by the potential customers through referrals by the respondents.

5.4 Recommendations
The study recommends that although internet advertising had low influence on purchases it should still be used by marketers especially with regards to its potential to reach a large audience. This is affirmed by a majority of the respondents who confirmed encountering internet adverts and actively interacting with the adverts by clicking on them. They further affirmed that they made purchase recommendations to other people and thus increased the potential for increased sales through referrals. This meant that other variables in play are likely to have reduced their capacity to make the purchase at the time but they still viewed the information as important enough to be explored and shared with others. Marketers should consider fine tuning and adding incentives to their online adverts to provide unique experiences for their customers in order to influence purchases through internet advertising.

5.5 Limitations
The study was limited by the small sample size. The sample size could have been expanded and diversified by including the different colleges within University of Nairobi. A larger and more diversified sample size would have been beneficial to the study’s result by increasing the study’s capacity for generalizations. The study would also have benefited from a question about income of the respondents but this would have necessitated the expansion or alteration of the population to include the general working class community of Nairobi. This question would have provided
insights into income ranges and how this affects purchase of mobile phones as advertised through internet campaigns.

5.6 Suggestions for Further Studies
This study focused on the influence of internet advertising on purchase of mobile phones among University of Nairobi Students. A similar study should be carried out to focus on the working class community around Nairobi. This would introduce the income variable that could be useful in further establishing the influence of internet advertising on purchases. A similar study focusing on fast moving consumer goods (FMCGs) should also be done in order to establish the variation between the influences of internet advertising on different product groups in the market.
REFERENCES


APPENDICES

Appendix I: Research Questionnaire

Dear participant,

I am a student of the University of Nairobi carrying out a study on the influence of internet advertising on purchase of mobile phones. This study is being carried out as part of completion for my Masters of Business Administration program. The findings of the research study will go a long way to inform the fields of marketing and business administration. I kindly request you spare a few minutes of your time and honestly answer the questions below.

Sincerely,

Timothy Mbiti.

INSTRUCTIONS: Fill or tick in the provided space

1. Gender
   - Male
   - Female

2. Age
   - 18-20
   - 21-25
   - 26-30
   - 31 and above

3. Level of study
   - Undergraduate
   - Post graduate

4. How often do you access the internet?
   - I am always online
   - On a daily basis
   - On a weekly basis

5. Which internet user category do you belong to with regards to intensity of use?
   a) Light user (accessing email or social networks only)
   b) Heavy user (combining email/social networks, research, news, work online)

6. Have you encountered mobile phone adverts served on the internet? Yes
   No

7. Which mobile phone brand have you seen being advertised online?
   - Samsung
   - Apple
   - Nokia
   - Tecno
   - Infinix
   - LG
   - Bird
   - Others (specify)

8. What aspect of the online mobile phone advert made you interact with it (please tick one)?
   1) Information
   2) Design
   3) Creativity
   4) Personal interest
9. Tick accordingly

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree or disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I read mobile phone adverts I encounter on the internet</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Online mobile phone adverts need to focus on their unique product features</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobile phone brands need to increase their online advertising frequency to improve their visibility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Online mobile phone adverts need to improve on their design and appeal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. Have you ever clicked on an online mobile phone advert?
Yes [ ] No [ ]

11. Have you ever made a mobile phone purchase after viewing an online mobile phone advert?
Yes [ ] No [ ]

12. Have you ever recommended someone to buy a particular mobile phone that you encountered being advertised through the internet?
Yes [ ] No [ ]

13. What do you think online advertisers need to do to make online mobile phone adverts impactful?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Appendix II: Logistic Regression Model

The logistic regression model for determining mobile phone purchases and purchase recommendations was established as follows;

\[ Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \varepsilon \]

Where;

- \( Y \) = Mobile phone direct purchases/ or Purchase recommendations
- \( X_1 \) = Encountered online mobile phone adverts
- \( X_2 \) = Clicked online mobile phone adverts
- \( \varepsilon \) = Error term
- \( \beta \) = Coefficient
- \( \alpha \) = Constant

\( X_1 \) in the model should be replaced by the value of the response with regards to whether the respondent has encountered an online mobile phone advert. For purposes of this study and the model, the response Yes in that particular question was coded 1 while the response No coded 0.

\( X_2 \) in the model should be replaced by the value of the response with regards to whether the respondent interacted with the online mobile phone advert by clicking on it. For purposes of this study and the model, the response Yes in that particular question was coded 1 while the response No coded 0.