

# **MOBILE ADVERTISING IN GHANA: A STUDY TO EXPLORE ITS PROSPECTS**

**By**

**DANIEL KWESI GHANSAH BENTIL**

**(PG 3049109)**

**A Thesis submitted to the Institute Of Distance Learning, Kwame Nkrumah**

**University of Science and Technology in partial fulfillment of the**

**requirements for the degree of**

**COMMONWEALTH EXECUTIVE MASTERS OF BUSINESS**

**ADMINISTRATION**

**MAY 2012**

## DECLARATION

I hereby declare that this submission is my own work towards the Executive Masters Of Business Administration and that, to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text.

Daniel Kwesi Ghansah Bentil

(PG 3049109)

Signature

Date

Certified by:

Mr. J. O. Welbeck

Supervisor

Signature

Date

Certified by:

Prof. I. K. Dontwi

Dean, IDL

Signature

Date

## **DEDICATION**

I dedicate this work to my wife, Evelyn Bentil- you are a good wife and mother. I also dedicate it to my son Albert Bentil and daughter Ivy Bentil, together you make me appreciate and enjoy family life.

# KNUST

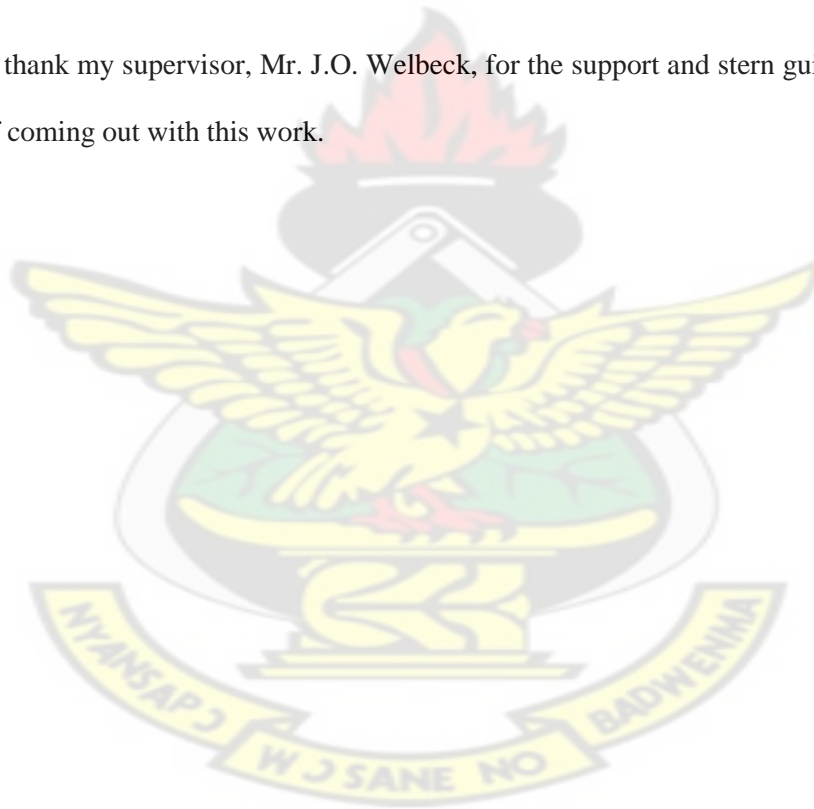


## ACKNOWLEDGEMENT

I thank the Almighty God for giving me the grace and sufficiently providing for me throughout the period I undertook this course. I also wish to acknowledge my parents, especially my mother for the foundation given me which has brought me this far in my education.

Special thanks go to Nana Ama Amoah Bamfo for her patience, time and effort to ensure a good work is done.

I also wish to thank my supervisor, Mr. J.O. Welbeck, for the support and stern guidance given me in the process of coming out with this work.



## **ABSTRACT**

The study sought to explore the use of mobile telephony by firms to advertise goods, products and services. Out of Ghana's population of twenty-five (25) million, mobile subscriber base of the telecommunication industry reached a peak of fifteen (15) million as at the end of June 2012. Mobile advertising, one of the key advertising tools used by firms in developed economies and parts of Africa has not witnessed active usage in Ghana, except for bulk messaging by political parties and other groups. Most messages sent though useful to consumers are unsolicited generating a lot of public outcry. Firms in Ghana could package their adverts for specific audience. The study therefore sought to assess the prospects and challenges of mobile advertising by firms in Ghana. In order to achieve the objectives of the study, 100 questionnaires for consumers and 70 for firms were administered in Dansoman and its environs. Descriptive statistic was used to analyse the responses and the results presented in tables. Findings indicate that mobile phone users and firms were aware of mobile advertising. The low usage of the facility could be attributed to lack of information of the service/product by mobile network providers. The study also revealed that firms are willing to use the network platforms to reach their clients if the cost of advertising is relative cheaper than the traditional forms of advertising. In conclusion, mobile advertising can be beneficial to consumers and firms if challenges such as cost and product education are improved. The study recommends that telecommunication companies should engage firms and phone users on the benefits of using mobile advertising as an alternative advertising tool.

## TABLE OF CONTENTS

### TITLE PAGE

DECLARATION.....	ii
DEDICATION .....	iii
ACKNOWLEDGEMENT .....	iv
ABSTRACT .....	v
LIST OF TABLES .....	viii

### **CHAPTER ONE ..... 1**

#### **INTRODUCTION..... 1**

1.1 BACKGROUND TO THE STUDY.....	1
1.2 STATEMENT OF THE PROBLEM.....	4
1.3 OBJECTIVES OF THE STUDY.....	5
1.4 RESEARCH QUESTIONS .....	5
1.5 SIGNIFICANCE OF THE STUDY .....	5
1.6 SCOPE AND LIMITATIONS OF THE STUDY.....	6
1.7 ORGANIZATION OF THE STUDY .....	6
1.8 OPERATIONAL DEFINITIONS .....	7

### **CHAPTER TWO ..... 8**

#### **LITERATURE REVIEW ..... 8**

2.1 INTRODUCTION.....	8
2.3 INFORMATION COMMUNICATION TECHNOLOGY (ICT) .....	10
2.4 GENERAL TELEPHONY .....	13
2.5 MOBILE CONTENTS.....	17
2.6 USE OF MOBILE CONTENTS IN GHANA.....	23
2.7 REASONS WHY FIRMS AND INDIVIDUALS DO NOT PATRONIZE MOBILE CONTENT SERVICES.....	25
2.8 SIM CARD REGISTRATION IN GHANA .....	27
2.9 SUMMARY OF THE CHAPTER.....	28

### **CHAPTER THREE ..... 29**

<b>METHODOLOGY .....</b>	<b>29</b>
3.1 INTRODUCTION.....	29
3.2 RESEARCH DESIGN .....	29
3.3 SOURCES OF DATA.....	29
3.4 THE STUDY POPULATION .....	30
3.5 SAMPLE SIZE .....	30
3.6 SAMPLING PROCEDURE.....	30
3.7 SAMPLING TECHNIQUE.....	31
3.8 RESEARCH INSTRUMENTS.....	31
3.9 DATA COLLECTION PROCEDURE .....	31
3.10 DATA ANALYSIS.....	32
<b>DATA ANALYSIS AND DISCUSSION OF RESULTS .....</b>	<b>33</b>
4.1 INTRODUCTION.....	33
<b>SUMMARY OF FINDINGS RECOMMENDATIONS AND CONCLUSION .....</b>	<b>47</b>
5.1 INTRODUCTION.....	47
5.2 SUMMARY OF FINDINGS .....	47
5.3 CONCLUSION .....	48
5.4 RECOMMENDATIONS.....	48
5.5 FURTHER STUDIES.....	50
<b>REFERENCES.....</b>	<b>51</b>
Appendix 1.....	60
Appendix 2.....	64

## LIST OF TABLES

Table 1 Sex Distribution	32
Table 2 Age Distribution	33
Table 3 Employment	33
Table 4 Level of Education	34
Table 5 Mobile Communication Networks that phone users are subscribed to	34
Table 6 Marital status	36
Table 7 Phone users awareness of mobile content services	36
Table 8 Services that phone users are aware of	37
Table 9 Willingness of phone users to be informed about mobile content services	37
Table 10: Access of any mobile content services using mobile phone	38
Table 11 Reasons for not accessing mobile content services	39
Table 12: Ownership type of firm	39



Table 13: Nature of business	40
Table 14: Awareness of advertising over MCNs	41
Table 15: Reasons for not advertising over MCNs	41
Table 16: Perception of the cost involved in making firm's services accessible over MCNs	42
Table 17: Perceived profitable in making your firm's services accessible over MCN	43
Table 18: Effort in making a firm's service available over MCNs	43
Table 19: Perceived level of publicity if firm's services are over MCNs	44
Table 20: Forms of advertising firm's service(s)	45

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 BACKGROUND TO THE STUDY**

Over the years, most businesses have been grown, through the use of traditional mass media advertising mediums. These come in the form of billboards, newspapers, television and radio. The choice of any of these medium depends largely on a number of factors, among which are the kind of customers the company intends to target, the cost involved, and even, the availability and effectiveness of such mediums.

Advertising, in general is any form of communication used to encourage or persuade an audience (viewers, readers or listeners, sometimes a specific group of people), to continue or take some new action (Mashable, 2012). Most commonly, the desired result is to drive consumer behavior with respect to a commercial offering. The purpose of advertising may also be to reassure employees or shareholders that a company is viable or successful. Advertising messages are usually paid for by sponsors.

Commercial advertisers often seek to generate increased consumption of their products or services through branding, which involves the repetition of an image or product name in an effort to associate certain qualities with the brand in the minds of consumers (London School of Business and Finance, 2012). Non-commercial advertisers who spend money to advertise items other than a consumer product or service include political parties, interest groups, religious organizations and governmental agencies. In 2010, spending on advertising was

estimated at \$142.5 billion in the United States and \$467 billion

# KNUST



worldwide (Antonio, 2012). According to (Bowen, 2012), as technology evolved, and keeps evolving at a breakneck pace and new tools are created to reach and connect with customers, many businesses started considering other channels of reaching their target markets as these customers became more demanding and increasingly sophisticated. Companies started looking for new advertising ventures that will connect them more effectively with potential customers. With the advent of technology came the introduction of mobile advertising which provides companies with another way to reach consumers on a personal level, through their mobile phones (Articlebase, 2011). As cell phones became more advanced, so did the technology available to send advertising messages to consumers. Companies could then use mobile marketing campaigns to increase traffic. Mobile advertising can have many forms, including text messages, mobile websites, and banner and video advertising. Mobile advertising therefore became the panacea to the corporate marketing department's woes. This new wave of advertising afforded companies to come up with its innovative advertising strategies that will create ripples marketing. Mobile advertising is a form of advertising via mobile (wireless) phones or other mobile devices (Mobile advertising, 2012). It is considered to be a subset of mobile marketing. Mobile advertising has been found to be one of the best ways through which a company could get their message across to many people on a per day basis. Mobile phones currently outnumber TV sets by over 3 to 1; PC-based internet users by over 4 to 1; and the total laptop and desktop PC population by nearly 5 to 1 (Mobile Advertising, 2011). Unlike adverts on the television and radio that the viewers can ignore if they do not want to listen or watch, a text message received on a mobile phone could hardly be ignored. One of the most interesting reasons for companies to advertise via customers'

mobile phones is that about 90% of all text messages are read within three minutes of their delivery, and over 99% of all text messages are read by the recipient Single point, (2011).

The mobile phone has become a part of everyday life for millions of people across the world. People now consider the ability to communicate by phone across the country (and even the world) as ordinary. Most mobile phone users are within an arm's reach of their devices over 90 percent of waking hours, including times when other media are not available. The concept of mobile advertising is based on the fact that customers can almost always be reached. Six in ten people around the world now have mobile phone subscriptions, meaning mobiles are the communications technology of choice, particularly in poor countries, according to a UN report (The New York Times, 2009).

Despite this, many businesses are still missing out on the huge potential benefits of using mobiles phones as a part of their business. There is a need for businesses to think about more than just the tools or means; there is the need to think about their audience and context. This becomes even more important as customer touch points and interactions increase.

## 1.2 STATEMENT OF THE PROBLEM

Ghana's population stands at approximately 25 million as at the 2010 Population and Housing Census. According to the National Communications Authority (NCA), mobile subscriber base as at 30<sup>th</sup> June, 2012 is estimated to be over 15 million customers, representing 60 percent of the population. Mobile advertising, one of the key advertising tools used by firms in developed economies and parts of Africa has not witnessed active usage in Ghana, except for bulk messaging by political parties and other groups. A lot of

messages sent though useful to consumers are unsolicited generating a lot of public outcry. However, advertisements could be packaged for intended audience as practiced in Kenya, Spain, France, Japan and other developed economies. Global mobile advertising market was estimated at one billion euros in 2008 with a compounded annual growth rate of 43 percent (Berg Insight, 2012). Ghana's space presents a profitable avenue for firms to reach their clients at cheaper cost as well as provide consumers with low search and information cost.

### 1.3 OBJECTIVES OF THE STUDY

The general objective of this study is to assess the challenges and prospects of mobile advertising by firms in Ghana.

Specifically, the study has the following objectives:

1. To determine the awareness level of mobile advertising in Ghana
2. To assess the challenges and prospects of mobile advertising in Ghana

### 1.4 RESEARCH QUESTIONS

1. What is the awareness level of mobile advertising in Ghana
2. What are the challenges and prospects of mobile advertising in Ghana

### 1.5 SIGNIFICANCE OF THE STUDY

It is the hope of this study to come out with empirical data to convince firms and businesses of the enormous benefits in store if they make their services available over MCNs to be



accessed by mobile phone users. It is expected to prove the prospects that lie in advertising and providing services through mobile phone users because of the large number of phone users in Ghana.

## 1.6 SCOPE AND LIMITATIONS OF THE STUDY

This study in general covered the theoretical aspects of mobile advertising with an emphasis on mobile content services and how firms could make their services available over MCNs. The empirical section focused on information and data available on mobile advertising, mobile phone users in Ghana, mobile telephony and mobile contents.

Due to time and financial constraints, the study did not sample people from each and every region in Ghana. A cross section of people from the Greater Accra region was chosen for the survey.

## 1.7 ORGANIZATION OF THE STUDY

The research is presented as follows:

The study is organized into five main chapters. Chapter one provided an introduction which focused on the background of the study, statement of problem, research objectives, research questions, scope of study and relevance of the study, a brief methodology and organization of the work. Chapter two provided a review of relevant and current literature on the research problem and objectives. The chapter three provided the description and explanation of the procedures followed in collecting data especially the primary data. The fourth chapter

involved data analysis and discussion of the results. The fifth and the final chapter gave the summary, conclusion, findings and recommendations as well as the referencing for the study.

## 1.8 OPERATIONAL DEFINITIONS

**Final Consumers:** This refers to mobile phone users in Ghana.

**Mobile Advertising:** any form of advertising that is done over mobile communication networks and that could be accessed by mobile phone users.

**Firms:** This refers to companies, enterprises and businesses that have services that could be made available over mobile communication networks.

**Mobile Communications Networks (MCN)** This refers to the networks of the communication companies in Ghana, namely: MTN, Vodafone, Tigo, Airtel, and Expresso.

**Mobile content:** This is any type of media which is viewed or used on mobile phones, like ringtones, graphics, discount offers, games, movies, and GPS navigation.



## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 INTRODUCTION**

This chapter focuses on the theoretical frame work of the study. In view of the objectives and parameters of this study, the chapter reviews relevant literature on the use of mobile telephony especially mobile contents and reasons why firms do not make their services available over mobile communications networks (MCNs).

#### **2.2 DEFINITIONS OF THE TERM “SERVICES”**

Services are generally defined as commodities that cannot be stored or disappear in use, or as activities that require personal contact. The distinct characteristics of services are intangibility, perishability, heterogeneity of the product, and simultaneity of production and consumption (Sasser *et al.* 1978). Two economic units are required for a service to be produced – the consumer and the producer (Hill 1987). Service has also been defined as "a social act which takes place in direct contact between the customer and representatives of the service company" (Evans & Lindsay, 1993). While the consumer cannot retain the actual service after it is produced, the effect of the service can be retained. Managing a service operation requires the manager to understand the service concept, service delivery system and service levels. Since the consumer plays a key role in the definition and evaluation

of all three elements, it is imperative that service managers have a clear understanding of consumer expectations and perceptions (Sasser *et al.* 2007)

With greater choice and increasing awareness, consumers are more demanding of quality service (Angur, Nataraajan and Jahera, 1999) and players can no longer afford to neglect customer service issues (Firoz and Maghrabi, 1994)

Wikipedia (n.d.), also defines a service as: “a type of economic activity that is intangible, is not stored and does not result in ownership”. This means that a service is consumed at the point of sale. Services, according to Wikipedia (n.d.), are one of the two key components of economics, the other being goods. Examples of services include the transfer of goods, such as the postal service delivering mail, and the use of expertise or experience, such as a person visiting a doctor. Services differ from goods in a number of ways, most commonly in the immediacy of the relationship between supplier and consumer. Many services are non-transportable; i.e. they require the physical proximity of supplier and customer--for example, the provision of a hotel service requires that the hotel is where the customer wishes to stay, a cleaning service for a business must be provided at the site of the business, and a haircut requires that both hairstylist and client be present.

Services, according to 1993 System of National Accounts (SNA), are not separate entities over which ownership rights can be established. They cannot be traded separately from their production. Services are heterogeneous outputs produced to order and typically consist of changes in the condition of the consuming units realised by the activities of the producers at the demand of the customers. By the time their production is completed they must have been

provided to the consumers. The 1993 SNA further explains that "There is a group of industries, generally classified as service industries, that produce outputs that have many of the characteristics of goods, i.e., those concerned with the provision, storage, communication and dissemination of information, advice and entertainment in the broadest sense of those terms--the production of general or specialised information, news, consultancy reports, computer programs, movies, music, etc. The outputs of these industries, over which ownership rights may be established, are often stored on physical objects--paper, tapes, disks, etc.--that can be traded like ordinary goods. Whether characterised as goods or services, these products possess the essential characteristic that they can be produced by one unit and supplied to another, thus making possible division of labour and the emergence of markets."

Service performance in telecom services consists of two dimensions: network performance and customer service performance (Kim and Jin, 2007). As Kotler and Keller (2006) observed, customers are becoming harder to please; they are smarter, more price conscious, more demanding, less forgiving, as they are approached by many more with equal or better offers. Hence, the challenge is beyond producing satisfied customers as competitors can do it too; the challenge is to produce delighted and loyal customers. This challenge is perhaps brought about by the increasing financial sophistication of customers which is facilitated by efficient use of information technology, and the entry of new aggressive competitors in the marketplace (Frimpong, 1999).

## 2.3 INFORMATION COMMUNICATION TECHNOLOGY (ICT)

The dramatic impact of technologies on human existence is undisputable. Machines (including computers) and their programming have immensely extended the capabilities of individuals and societies throughout history; changing public and private behaviors and upsetting or reinforcing societal structures (Coombs et al., 1987; Cohen et al., 2004; Chéneau-Loquay, 2007).

ICTs have applicability to practically all areas of human existence and have the ability to break through significant barriers to human development – barriers to knowledge, participation and economic opportunity (Chattopadhyay and Duflo, 2004). On another level, the emergence of a global economy driven by information networks has made it practically imperative that ICTs be incorporated into the economies of all nations or else they risk damaging insignificance in world affairs. While the development of ICTs has always been of relative concern, in recent times, developing countries have come under considerable pressure to improve their telecommunications systems (Chéneau-Loquay, 2007).

It is becoming clear that information and communication technologies in themselves have secured a life of their own, in that they enhance the ability to communicate, and deliver competitive advantages to those who have the most advanced ICTs. For example, the level of ICT capability that one has (e.g., dial-up vs. broadband Internet access) affects the type of participation one can engage in, and the types of foreign investment that nations can attract (Chéneau-Loquay, 2007; Castells et al., 2007). Overall, ICTs have become critical components for any development drives because of the inherent advantages of being able to communicate and because of the importance of communication technologies in the

contemporary global environment (Carroll, 2002b). And simple access to ICTs is the first stage that must be crossed to bring the benefits to disadvantaged populations.

In Sub-Saharan Africa, developments in information and communication technology (ICT) have radically changed the way business is done. Electronic commerce is now thought to hold the promise of a new commercial revolution by offering an inexpensive and direct way to exchange information and to sell or buy products and services. This revolution in the market place has set in motion a revolution in many sectors for the provision of a payment system that is compatible with the demands of the electronic marketplace (Balachandher et al, 2001; Eggleston et al, 2002).

In Ghana, the earliest forms of electronic and communications technologies used to enhance service delivery were mainly office automation devices. Telephones, telex and facsimile were employed to speed up and make more efficient, the process of servicing clients. For decades, they remained the main information and communication technologies used for transacting business in many offices (Frimpong, O. 1999).

Later in the 1980s, as competition intensified and the personal computer (PC) got proletarian, Ghanaian companies began to use them in office operations to service clients. The advent of the internet technology saw many institutions, including banks, networking their branches and operations thereby making the one-branch philosophy a reality. Notably, The Trust Bank, Barclays Bank and the Standard Chartered Bank pioneered this very important



electronic novelty, which changed the banking landscape in the country (Sey, 2008; Slater and Kwami, 2005).

Arguably, the most revolutionary electronic innovation riding on the back of the internet in this country and the world over has been the ATM. In Ghana, banks with ATM offerings have them networked and this has increased their utility to customers (Aboagye-Debrah, 2007).

Despite the internet market being the most competitive telecommunication market in Africa (International Telecommunications Union (ITU), 2007) the growth of computer and internet diffusion in Africa has been less impressive than that of mobile phones. The average Internet penetration for the whole of Africa is just 4.8% and the top ten connected countries on the continent have internet diffusion rates ranging from 8% to 38% (ITU, 2007). Poor communities are especially disadvantaged in this area. At present, the ITU (2007) estimates that just about 0.5% of villages in Africa have a public access internet facility. Broadband access is even lower, with about just 10% of internet subscribers having broadband access, of which over three-quarters are in four North African countries.

## 2.4 GENERAL TELEPHONY

Cell phones offer special applications that may cost a little extra, but allow users to do much more with their device. Smartphones in particular have applications for text messaging, accessing the internet, checking emails, participating in live chat discussions and engaging in

video conferences. The era of public access wireless telephony was arguably ushered in by the Grameen Foundation with the development of the Village Phone Program, which put mobile phones in the hands of women in poor communities for use as public payphones (Souter, 2005; Castells, 2006). This program has engendered immense global attention and evaluations have indicated significant benefits to the community in terms of access to telephony, and the mobile phone owner in terms of income generation and a range of other social and economic benefits. A number of program replications have been set down in some African countries including Uganda and Rwanda, and some modified versions of the idea have also emerged based on different ownership and operational models (Castells *et al.* 2006).

Mobile phone network connections are less expensive to acquire than fixed lines or Internet access, hence their rapid adoption around the African continent. Phones can also enhance intangible assets by facilitating access to resources and the making of claims (e.g., by giving them the ability to communicate with relevant authorities or individuals). The spread of mobile phones across the developing world is one of the most remarkable technology stories of the past decade (Sey, 2008). Buoyed by prepay cards and inexpensive handsets, hundreds of millions of first-time telephone owners have made voice calls and text messages part of their daily lives. However, many of these same new mobile users live in informal and/or cash economies, without access to financial services that others take for granted. Indeed, across the developing world, there are probably more people with mobile handsets than with bank accounts (DFID, 2006).

Various initiatives use mobile phones to provide financial services to “the unbanked.” These services take a variety of forms—including long-distance remittances, micropayments, and informal airtime bartering schemes—and go by various names, including mobile banking, mobile transfers, and mobile payments.

Africa is the fastest growing mobile market in the world. The continent's subscriber base grew by 66% in 2005 to 135 million users, compared with growth of just 11% in Western Europe during the same period (FAO, 2008). Mobile phones work easily, require minimum investment and training and can perform a variety of functions (FAO, 2008). Mobile banking in developed economies is just another channel among many others which are competing for consumer acceptance and investor commitment. But, in Africa and other developing economies they are the most cost effective means of delivering financial services and in particular the most economical way of providing access to remittances (Jack and Suri, 2010).

ICT has been found to have a lot of prospects for organizations and firms. Suggested mobile devices could be the most effective technology for stimulating the demand in a research study that was conducted by the Commonwealth Telecommunications Organization (CTO) in July, 2009 on behalf of Nokia Siemens Networks and Nokia, a minority of the stakeholders interviewed and supply of public services. Surprisingly, most of these were from government and civil society and not the private sector. This suggests many private sector stakeholders still see mobile devices as tools for voice and commercial value added services such as ring tones. A number of reasons were given for the effectiveness of mobile devices. The first reason given was the number of users and increasing penetration. More people than ever have ownership of mobile devices capable of accessing e-services and e-content.



- Mobiles offer increasing interactivity

Stakeholders provided examples of the way in which mobile users demand commercial content and influence the creation and supply of content.

- Mobiles connecting people to the Internet

In Ghana, urban users are using mobiles to receive an “Internet experience” through WAP services provided over GPRS. In South Africa, 3G networks provided by Vodacom and MTN

enable a number of relatively rich users in urban areas to have a better Internet experience with mobile devices than most had through PCs.

- Mobility

The mobile device enables people to access content wherever they are. It reduces the opportunity costs associated with traveling or corrupt practices.

- Inclusiveness

The mobile device is increasing the inclusion of the most marginalized people in society, and could enable them to access public services currently out of their reach. In India, Tata Indicom’s Mobile Micro Money (M<sup>3</sup>) is an example of the mobile increasing inclusion. The service, developed in collaboration with Microfinance Institutions (MFIs), enables MFI agents who work in rural areas to provide updates on new and existing accounts using mobile device.

## 2.5 MOBILE CONTENTS

According to Wikipedia, mobile content is any type of media which is viewed or used on mobile phones. These include ringtones, graphics, discount offers, games, movies, and GPS navigation. As mobile phone use has grown since the mid 1990s, the significance of the devices in everyday life has grown accordingly. Owners of mobile phones can now use their devices to make calendar appointments, send and receive text messages (SMS), listen to music, watch videos, shoot videos, redeem coupons for purchases, view office documents, get driving instructions on a map, and so forth. The use of mobile content has grown accordingly.

Mobile content via SMS is still the main technology for communication used to send mobile consumers messages, especially simple content such as ringtones and wallpapers. Because SMS is the main messaging technology used by young people, it is still the most effective way of reaching this target market. SMS is also ubiquitous, reaching a wider audience than any other technology available in the mobile space (MMS, bluetooth, mobile e-mail or WAP). More important than anything else, SMS is extremely easy to use, what makes adoption increase day by day.

There are so many types of mobile contents that firms that wish to increase their sales and profitability through advertisement could use. Mobile application development, also known as mobile apps, is one type of mobile content that has become a significant in managing

travel schedules, buy movie tickets, preview video content, manage RSS news feeds, read digital version of popular newspapers, identify music, look at star constellations, and much more. For example, in the Philippines, a mobile application called iTyphoon is used to provide information about typhoons. Another type of mobile content is Mobile games. These are applications that allow people to play a game on a mobile handset. The main categories of mobile games include Puzzle/Strategy, Retro/Arcade, Action/Adventure, Card/Casino, Trivia/Word, and Sports/Racing, given in approximate order of their popularity. Mobile music is also another type of mobile content. This is any audio file that is played on a mobile phone. Mobile music is normally formatted as an Advanced Audio Coding (AAC) file or an MP3, and comes in several different formats. Monophonic ringtones were the earliest form of ringtone, and played one tone at a time. This was improved upon with polyphonic ringtones, which played several tones at the same time so a more convincing melody could be created. The next step was to play clips of actual songs, which were dubbed Realtones. These are especially preferred by record labels as this evolution of the ringtone has allowed them to gain a cut of lucrative ringtone market (Africa mobile content conference and awards, 2012). These Realtones generate royalties for record labels (the master recording owners) as well as publishers (the writers). Mobile music is becoming an integral part of the music industry as a whole. In 2005 the International Federation of Phonographic Industries (IFPI) said it expects mobile music to generate more revenues than online music before the end of that year (Cosima, 2005).

In the first half of 2005, according to (Wikipedia, 2006), the digital music market grew enough to offset the fall in the traditional music market – without including the sale of ringtones, which still makes up the majority of mobile music sales around the globe. Some other types of mobile contents include mobile video, Mobishow or a Cellsode, Mobile streaming radio, mobile TV etc.

Mobile content services basically have to do with the data segment of the communication market. Since the late 1990s, mobile content has become an increasingly important market worldwide ( Kaskade, 2011). The South Koreans are reported to be the world's leaders in Mobile Content and 3-G mobile networks; Japanese followed closely by the Europeans, are heavy users of their mobile phones and have been attaining custom mobile content for their devices for years (Kaithanfoley, 2011). In fact, according to (News4geeks, 2012), mobile phone use has begun to exceed the use of PCs in some countries. In the United States and Canada, mobile phone use and the accompanying use of mobile content has been slower to gain traction because political issues on open networks do not exist in America (Mobile Gambling, 2011).

Mobile content is usually downloaded through WAP sites, but new methods are on the rise. In Italy, 800,000 people are registered users to Passa Parola, an application that allows users to browse a big database for mobile content and directly download it to their handsets. (RTRobot, 2011) This tool can also be used to recommend content to others, or send content as a gift. Worthy of note is Quick Response (QR) code. This a cell phone readable bar code

that can store website URL, plain text, phone numbers, email addresses and pretty much other alpha-numeric data (QR Stuff, n.d). This is an in-built feature in the cell phone that allows it to access mobile contents. Say that you are using a QR code in an advertisement or even a window display. There are two pieces of context that you must take into consideration. The first is that your potential customer, should they scan the code, will be using a mobile device to retrieve information. Therefore, any information that is linked to that code needs to be mobile-ready. (QR Stuff, n.d).

Smartphones by design can access mobile contents. A smartphone is a mobile phone built on a mobile computing platform, with more advanced computing ability and connectivity than a feature phone (Mashable, 2012). The first smartphones were devices that mainly combined the functions of a personal digital assistance (PDA) and a mobile phone or camera phone. Today's models also serve to combine the functions of portable media players, low-and-compact digital cameras, pocket video cameras, Global Positioning System (GPS) navigation units. Modern smartphones typically also include high-resolution touch screens, web browsers that can access and properly display standard web pages rather than just mobile-optimized size, and high speed data access via Wi-fi and mobile broadband. However, other feature phones could be used in accessing mobile content depending on the in-built features of that phone. (Wikipedia, 2012) This means that, the features in other devices have developed and the line between smart phones and other phones has become blurred.



Mobile content usage has exploded during the past couple of years and mobile internet has suddenly become a mass market. This is largely enabled by new mobile devices that make mobile browsing easy and comfortable (Snellman, 2009). The mobile device base has a strong influence on mobile content service uptake and development. The device base is developing continuously and today there are more mobile devices with advanced features than ever before.

In Finland, smart phone penetration has increased and there were around 1.2 million smart phones in the Finnish mobile networks at the end of 2008 (Snellman, 2009). The overall mobile internet usage has been recorded to have increased. The growth has been driven by many simultaneous developments, including upgrading the mobile device base with newer models, the improved mobile networks and the increasing amount of mobile-dedicated internet sites (Snellman, 2009). According to Snellman (2009), in 2008, over one million Finns accessed internet with their mobile phones. Generally the top list of mobile-accessed sites corresponds with the list of most popular regular internet sites. News sites are among the most popular sites in both mobile and regular browsing. Social media and adult entertainment sites are also among the most popular mobile sites.

On current trends, mobile phone content has been postulated to play an increasing role in the lives of millions across the globe in the years ahead, as users will depend on their mobile phones to keep in touch not only with their friends but with world news, sports scores, the latest movies and music, and more. In the United States of America for example, the mobile content industry is expected to grow at a compound 16.3 percent annual growth rate from 2008 through 2013; however, the most significant uptake will occur only after 2010 (Mason, 2008).

In their study on the mobile content market, (Giuseppe Bonometti, Raffaello Balocco, Peter Chu, Shiv Prabhu and Rajit Gadhet, 2009), identified six barriers, at the industry level, that hinder the mobile content market in the United States of America. Chief among these barriers was customer awareness and education. The other barriers mentioned in this study that pose as impediments in the mobile content market are user habits and acceptance, pricing strategies, regulations, platform's standards and solutions and Off Deck underdevelopment.

In spite of the challenges bedeviling the mobile content market, it holds a great deal of prospects. In Finland, the revenue of the mobile content market totaled 69 million euro in 2008 (Snellman, 2009). The expenditure on mobile advertising was approximately two million euro, whereas that on other customer relation communication was roughly 10 million euro in 2008. The expenditure on advertising consisted mainly of SMS marketing and mobile banners in mobile sites, while other mobile advertising forms are still rather insignificant. Customer relation communication expenditure consisted of various forms of external and internal communication mainly via SMS. The mobile content market in Finland, according to Snellman (2009), also consists of dozens of service categories with different market maturity stages and growth rates. This market growth is expected to remain moderate in the coming few years but to accelerate in the long run. The mobile advertising market is however explained as still being in its infancy. However, mobile customer relation communication has been identified as a significant market. Meanwhile, services that were growing and had a significant positive impact on the total market revenue in 2008 included directory services,

public transport tickets, vehicle registry inquiries and mobile auctions. The market value of these services according to Snellman (2009), increased in 2008 due to the growing use of these services and the increased prices for some of these services.

The Finnish mobile industry, according to Snellman (2009), has a self-regulation body that consists of mobile content market players, mobile operators and other interest groups. The body aims at securing healthy market conditions and growth opportunities for the market. It has intervened into unhealthy marketing and subscription service practices provided by a couple of mobile content market players.

## 2.6 USE OF MOBILE CONTENTS IN GHANA

Ghana has not been left in this new wave of mobile telephony with regards to mobile content. Currently, there exist channels and opportunities for firms, institutions, projects and companies to showcase the products and services they have available to prospective clients or consumers. As technology evolves at a breakneck pace globally and new tools are created to reach and connect with customers, there is the need for Ghanaian firms to think about their intended audience and context.

With the development of value added services on Global System for Mobile communications (GSM) in Ghana, a number of mobile content service providers have powered a range of



services, from financial, media, education, religious, through to sports. Such service providers create the needed platforms for mobile subscribers in Ghana to use their handsets in vastly enhanced ways. They provide the conduit for firms to advertise their products and services in a rather convenient way. In Ghana, there are mobile content service providers that provide integrated entertainment, information gathering, sharing and marketing services with the objective to build and retain mobile relationships between firms and their clientele base. An example of such mobile content service provider is TXTGHANA.

The media in Ghana have been a great benefactor of mobile content services. Through designated codes, television and radio stations especially are able to get their audience involved in their various programmes. Such codes are announced in the course of the programmes and offer their audiences the opportunity to participate and contribute to discussions etc. This way, these media houses have become more interactive and educative. This form of media-audience interaction is used in musical programmes, talk shows, current affairs programmes, advertising and promotions, live programs and contests, reality based programs, voting, chatting, audience opinion scrolling, music, entertainment services etc (Articlebase, n.d).

The field of finance and m-commerce has also not been left out in the mobile content telephony. Banking services, stock market information, SMS payment and electronic recharge voucher sales could all be carried out in any easy, convenient way through mobile

content services (Inforgile Technologies, 2007). This also enables such firms to reach out to a wide range of customers.

One area of the entertainment industry that mobile content telephony has greatly impacted is the movie industry. Through SMS, movie scheduling service has become more convenient to the service providers as well as become easily accessible to customers who patronize such service and potential customers as well. This is one service which allows mobile subscribers to receive SMS movie schedule of movies showing at certain periods. Currently in Ghana, the Silverbird cinema at the Accra Mall is one such firm that uses this medium in informing the public especially its customers of movie schedules. The movie schedule provides the subscriber with the title of the movies, the times the movies are showing and date the movie will be shown (Mobile Content, 2012).

## **2.7 REASONS WHY FIRMS AND INDIVIDUALS DO NOT PATRONIZE MOBILE CONTENT SERVICES**

A research study was conducted by the Commonwealth Telecommunications Organization (CTO) on behalf of Nokia Siemens Networks and Nokia. The research which was undertaken in Ghana, India and South Africa was to gather evidence about the demand and supply factors affecting the provision of public services through local e-content. It was discovered that although all technologies should be considered, mobile devices have the potential to be the most effective technology for stimulating the demand and supply of public services through local e-content in a broad range of contexts.

However, the study by the CTO 2007 revealed that not many of the key stakeholders consulted recognized the benefits of mobile communications. Moreover, out of more than 900 end users surveyed, only half felt it was important to receive e-content services through a mobile device or the Internet. This, according to the study, can partly be attributed to low awareness of the benefits of mobile communications, resulting from a lack of socially-orientated e-content currently delivered through mobile devices. The CTO 2007 study concluded that there is clearly a need to educate people about the potential of mobile communications to stimulate the demand and supply of public services. Of course, practical examples help increase understanding, and some can be found in each country, but these need to be scaled-up if they are to raise awareness about the ability of mobile devices to be more than tools for talking. The large and increasing subscriber base of mobile devices, the way they enable users to demand services, and the way they are giving an increasing number of users an “Internet experience” are important. The private sector was found to already be delivering services over mobile devices.

One reason why firms do not see the use of ICT and especially mobile content services as a competitive means of marketing their products and services could largely be attributed to the low number of ICT users in the country. In Ghana, only 2.7% of the population are internet users (Heeks, R. 2007) In the research study was conducted by the CTO the key stakeholders interviewed in each of the three countries, thus, Ghana, India and South Africa, felt low broadband usage may be attributed, to an extent, to “bottlenecks” caused by each government’s ownership of the incumbent operator and the way it had stifled competition. The bottlenecks identified by these stakeholders include the high cost of broadband. The cost

of a broadband connection to the home in Ghana, for example, is prohibitively high for most citizens. However, examples of relatively low prices for entry-level broadband packages in India and South Africa suggest high prices may be less of a barrier. Another bottleneck identified was the High cost of international bandwidth. The cost of international bandwidth was not mentioned in India. However, in Ghana and South Africa, it was cited as a key reason for high broadband prices.

## 2.8 SIM CARD REGISTRATION IN GHANA

In Ghana, the body mandated to regulate the provision of communications services is the National Communications Authority (NCA) (National Communications Authority, 2012). The mission of the NCA is to regulate the communications industry by setting and enforcing high standards of competence and performance to enable it contribute significantly and fairly to the nation's prosperity through the provision of efficient and competitive services. As a regulator, the NCA is enjoined by law to ensure that telecom operators maintain a reliable database of all telephone subscribers.

On July 1, 2010, Ghana embarked on a SIM Card Registration Exercise which required users of mobile telephony services to register their SIM cards (NCA, 2011). The aim in undertaking the exercise, among other things, was to empower subscribers as bona fide owners of their telephone numbers and in turn strengthen them to demand better services from their operators. By registering their numbers, subscribers improve their chances of seeking replacement of their SIM cards in the event of loss. The exercise was to run for a full year from July 1 2010 to June 30 2011 at the end of which any SIM card that remained

unregistered would be deactivated. The registration exercise was also to provide a platform for the efficient functioning of other electronic communications services including mobile money transfer and other such services since the identity of SIM Card Owners can easily be verified (National Communications Authority, 2011). Due to the importance attached to this exercise, Parliament at its sitting on February 1, 2012 adopted the Subscriber Identity Module Registration Regulations, 2011 (L.I. 2006) to give backing to SIM card registration (National Communications Authority, 2011). The Legislation provided that from March 3 2012, no SIM card can be used if not duly registered. Consequently, no mobile network operator would be able to activate a SIM card for a new customer without it having been registered. Also existing subscribers who had either not registered their SIM cards or whose earlier registrations were invalid were required to re-register, failing which their SIM cards will be de-activated.

On February 10, 2012, the NCA declared that as at the time, there were about 21 million subscribers in Ghana and that as per checks by the NCA, “a majority has been able to register their SIMs” (Ghana News Network, 2012).

## 2.9 SUMMARY OF THE CHAPTER

The vast information available on mobile advertising and mobile contents goes to indicate that the subject under study is one of great importance to the mobile phone industry.

## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.1 INTRODUCTION**

This chapter looks at the approach used in conducting the study. The design of the study, target population as well as the techniques utilized in the selection of the sample is also explained in this chapter. Further, the data gathering tool and procedure are also described. Finally the sources of data and data analysis techniques are also explained in this chapter.

#### **3.2 RESEARCH DESIGN**

This section provides an outline of the research methodology employed to explore the prospects that mobile advertising holds for firms and businesses in reaching their target consumers in Ghana. The selection of the sample, measuring instruments and the procedure for data collection utilized relating to the research is delineated.

#### **3.3 SOURCES OF DATA**

Data from various sources were utilized in obtaining the information for this study. Primary data, which served as the main source of data for this study, was obtained by the use of questionnaires. Other source of data was obtained from similar research done. The internet, books, the print media etc. were used to gather data that were relevant to the topic.



### 3.4 THE STUDY POPULATION

Two sets of target populations were used in this research. The first consisted of final consumers - users of mobile phones within the Accra Metropolis, specifically the Dansoman vicinity. The area is remarkable for its estate which is considered to be among the largest estates in West Africa (Wikipedia, 2012). This large estate area is inhabited by a cross-section of the Ghanaian populace permeating all classes of society. The mixed population of Dansoman underscored its choice as an area for the sample collection for this study. The cross-sectional nature of the population presented an opportunity to gather data that represented the entire city and the country in general. The second target population consisted of firms who do not have their services over MCNs, also within the Accra Metropolis. Dansoman can be described as the service hub of the city of Accra. Almost every business entity that offers a service in the city has an office in this vicinity.

### 3.5 SAMPLE SIZE

A sample size of 100 was chosen for the final consumers while a sample size of 70 was also chosen for the firms.

### 3.6 SAMPLING PROCEDURE

A two-stage approach was employed in choosing the samples used in this study. For the first sample of final consumers, the researcher purposively selected persons who use mobile phones. Out of them, 100 were randomly sample. The second sample of firms also used the same approach where firms who do not have their services over MCNs were purposively

sampled, and then 70 were selected using the random sampling method. Participation was voluntary.

### 3.7 SAMPLING TECHNIQUE

The purposive/judgemental non-probability sampling technique was used in this study because of the objective of the researcher to target the specific sample for the study.

### 3.8 RESEARCH INSTRUMENTS

A structured questionnaire was used for the collection of data on the study. The questionnaire was specifically designed to accomplish the objectives of the study. Two sets of questionnaires were developed and assigned to two different groups, namely, firms and final consumers. The questionnaire for the firms were in two parts: Section A and Section B. Section A sought for information on the firms while Section B sought responses on the firm's knowledge on firms' services over MCNs. The questionnaire for the final consumers sought to ask questions concerning people's knowledge about services that can be accessed over mobile phones, the potential benefits, the current level of patronage, the current challenges and future prospects of accessing firm services by using mobile phones.

Firms who do not have their services over MCNs were also interviewed to determine whether they knew their services could be accessed over MCNs. They were asked why they had not make their services available and accessible over MCNs

### 3.9 DATA COLLECTION PROCEDURE



The survey was carried out through self-administered questionnaire. Questionnaires were pretested and re-arranged to ensure that they are simple, straight forward and without ambiguity. Translations were provided for respondents who were uncomfortable with the English language.

### 3.10 DATA ANALYSIS

Data was collected over a two-week period. In all, representatives from 75 firms were interviewed. A total of 70 usable reports were generated. A total of 120 questionnaires were distributed to individuals with 106 returned. After scrutiny, 100 completed questionnaires were found to be usable with 6 rejected for a variety of reasons.

Microsoft office Excel was used to analyze the data. In order to effectively conduct a valid analysis in the presentation and analysis of the data collected on the research field, the researcher used descriptive statistics such as tables and charts to depict the relevant data. Moreover, the study made use of other studies and compared it to the data in order to provide conclusions and competent recommendations.

Statistical Package for the Social Sciences (SPSS) was used to analyze the data. Simple percentages were used to interpret the data.

## CHAPTER FOUR

### DATA ANALYSIS AND DISCUSSION OF RESULTS

#### 4.1 INTRODUCTION

The chapter covers the presentation and analysis of data gathered from the hundred (100) respondents from the final consumers and the seventy (70) firms. Findings of the study are presented in this chapter in relation to the responses given with regards to the set objectives and research questions of this study. The first part deals with findings from the final consumers while the second part covers the firms that were interviewed. In order to contextualize the research, comparisons are made with available literature on the topic as provided earlier in this study. Tables have been used in the presentations.

#### 4.2 INFORMATION FROM FINAL CONSUMERS

##### Demographic Information

**Table 1: Sex Distribution**

	Frequency	Percentage
Male	81	81.0
Female	19	19.0
Total	100	100

*Source: Field Data, 2012*

Of the 100 respondents, 81 were males while the remaining 19 were females. This frequency was arrived at as a result of the researcher's use of the random sampling method in selecting the respondents for this study.

**Table 2: Age Distribution**

	Frequency	Percentage
21-30	50	50.0
31-40	27	27.0
41-50	18	18.0
Above 50	5	5.0
Total	100	100.0

*Source: Field Data, 2012*

The age distribution as depicted in Table 2 reveals that majority of the respondents, N=50 representing 50% are aged between the ages of 21 and 30. This, just like Table 1 could also be attributed to the random sampling technique used by the researcher in selecting the respondents.

**Table 3: Employment**

Kind of Work	Frequency	Percentage
Official (public and private work)	22	22
Self – employment	34	34
Student	27	27
Unemployed	17	17
<b>Total</b>	<b>100</b>	<b>100</b>

*Source: Field Data, 2012*

From Table 3, it could be deduced that 44% (N= 44) of the respondents are students and unemployed. This means that the use of mobile phones cuts across financial and economic divides. People use mobile phones for different reasons and purposes. This finding is therefore in agreement with one of the outcomes of the study conducted by the CTO, in which stakeholders pointed out that the mobile device is increasing the inclusion of the most marginalized people in society, and could enable them to access public services currently out of their reach. The finding also reinforces the assertion by the FAO (2008) which points that in India, mobile phones work easily, require minimum investment and training and can perform a variety of functions.

**Table 4: Level of Education**

Level of Education	Frequency	Percent
No education	0	0
Basic Education	7	7.0
Senior High School	12	12.0
Diploma	11	11.0
First Degree	61	61.0
Second degree	9	9.0
<b>Total</b>	<b>100</b>	<b>100.0</b>

*Source: Field Data, 2012*

Table 4 indicates that all the respondents have had some form of formal education. This means they could read, understand and respond to the questions asked in the questionnaires.

**Table 5: Mobile Communication Networks (MCN) that phone users are subscriber to**

<b>Type of MCN</b>	<b>Frequency</b>	<b>Percent</b>
MTN	15	15
Airtel	8	8
Tigo	10	10
Expresso	5	5
Vodafone	11	11
Airtel & Vodafone	9	9
MTN & Vodafone	12	12
MTN & Airtel	9	9
MTN & Tigo	5	5
Vodafone, Tigo, & Airtel	6	6
Vodafone, MTN, & Airtel	4	4
MTN, Vodafone, & Expresso	3	3
MTN, Tigo, Expresso, Vodafone	3	3
<b>Total</b>	100	100

*Source: Field Data, 2012*

From Table 5, 51% of the respondents indicated that they have subscribed to more than one mobile communication network. The laws of Ghana do not prohibit consumers from subscribing to more than one MCN. Consumers subscribe to any MCN based on personal preference or the quality of service of the network. As clearly pointed out by Angur, Natarajan & Jahera (1999), consumers are more demanding of quality service with greater choice and increasing awareness. Quality of service or its absence could therefore be attributed to the choice of two or more mobile communication networks by consumers. This finding also to a great extent is in line with Kim & Jin (2006) that service performance in telecom services consists of two dimensions: network performance and customer service performance. The finding also agrees with Kotler and Keller (2006) that customers are becoming harder to please; they are smarter, more price conscious, more demanding, less forgiving, as they are approached by many more with equal or better offers.

**Table 6: Marital status**

Status	Frequency	Percent
Single	50	50.0
Married	40	40.0
Divorced	6	6.0
Widowed	4	4.0
<b>Total</b>	<b>100</b>	<b>100.0</b>

Table 6 indicate that 50% of respondents are married. This support table 2 which show that 76% of respondents are between 21 and 40 years. It also agrees with table 4 which show that 60% of respondents are first degree graduates.

**Table 7: Phone users' awareness of mobile content services**

Awareness	Frequency	Percent
Yes	63	63
No	37	37
Total	100	100

*Source: Field Data, 2012*

Table 7 indicates that majority of the respondents, N=63, are aware of services that could be accessed using mobile phones. This is good for firms in Ghana that wish to make their services available over MCNs because consumer awareness of the existence of the mobile content market is high. Taking into account the finding in the study conducted by Bonometti et al (2009) on the mobile content market in the United States of America which identified customer awareness and education as the topmost barrier, this finding in this study promises some prospects for the mobile content market in Ghana.



**Table 8: Services that phone users are aware of**

Services	Frequency	Percent
Paying bills	18	28.6
Job offers	34	54
Prices of agric products	6	9.5
Others	5	7.9
Total	63	100

*Source: Field Data, 2012*

Out of the 63 respondents who indicated in Table 7 that they were aware of services that were made available over MCNs, 54% (N=34) indicated that 'Job Offers' was the service that they were mostly aware of. This was followed by 'Paying Bills' with 28.6%.

**Table 9: Willingness of phone users to be informed about mobile content services.**

	Frequency	Percent
Yes	28	76
No	9	24
Total	37	100

*Source: Field Data, 2012*

From Table 7, 37% (N=37) of the respondents indicated that they were not aware of any services that could be accessed using mobile phones. When asked whether they would like to be informed and also would like to access such services using their mobile phones, 28 out of the 37 respondents, representing 76% responded in the affirmative as indicated in Table 9. This is positive for the mobile content market in Ghana as a lot more people are willing to be informed on the availability of such services. Unlike the over 900 end users surveyed in the CTO study in which only half felt it was important to receive e-content services through a



mobile device or the internet, this study reveals that only 24% (N=9) of the 37 respondents who were not aware of mobile content services over MCNs were not willing to be informed and access such services. This, according to the study, can partly be attributed to low awareness of the benefits of mobile communications, resulting from a lack of socially-orientated e-content currently delivered through mobile devices.

KNUST

**Table 10: Access of any mobile content services using mobile phone**

	Frequency	Percent
No	100	100
Yes	0	0

*Source: Field Data, 2012*

Even though from Table 7, 63% (N=63) of respondents were aware of some mobile content services that could be accessed using their mobile phones, Table 10 reveals that none of the respondents (N=100) have ever accessed any of such services. This study is therefore in agreement with the suggestion by the CTO study that there is a need to educate people about the potential of mobile communications to stimulate the demand and supply of public services.

**Table 11: Reasons for not accessing mobile content services**

Reasons	Frequency	Percent
Mobile advertisement is not very common	25	25
It is expensive to access such services	63	63
There's low publicity and education	12	12
Total	100	100

*Source: Field Data, 2012*

From Table 11, it could be deduced that the chief reason why final consumers have not accessed services over MCNs is the cost involved. Mobile credits are deducted from the consumer's mobile units anytime the consumer responds or accesses the services from the firm that put up the advertisement. However, 37% of the respondents attributed their inability to access such services to these reasons: 'Mobile advertisement is not very common' and 'low publicity' on this medium of advertisement.

#### 4.3 INFORMATION FROM FIRM SERVICES

**Table 12: Ownership type of firm**

Ownership Type	Frequency	Percentage
Sole proprietorship	48	69
Limited liability company	22	31
Total	70	100

*Source: Field Data, 2012*

Table 12 indicates that out of the 70 firms, 69% of them are sole proprietorship. In Ghana, there are a number of different options available to an entrepreneur in deciding what form of business organization (or legal vehicle) to use to launch his entrepreneurial venture (Docstock, n.d.). The six main options available to the entrepreneur are Sole Proprietorship, Partnership, Limited liability company, Unlimited Liability Company, External Company and Cooperative (Delmar, 2011).

**Table 13: Nature of business**

<b>Nature</b>	<b>Frequency</b>	<b>Percentage</b>
Real Estate	6	8.6
Educational	21	30
Cinema	4	5.7
Microfinance	11	15.7
Laundry	10	14.3
Ladies and Gents wear	6	8.6
Clothing design and sales	8	11.4
Other	4	5.7
Total	70	100

*Source: Field Data, 2012*

Table 13 indicates that 30% (N=21) of the firms interviewed were in the educational sector. This is followed by the fashion sector, thus, firms that fell under ‘Ladies and Gents wear’ and ‘Clothing design and sales’ with a total of 20%. Since the researcher of this study randomly selected the firms who do not have their services over MCNs, Table 3 reveals that educational firms are in the majority as N=21. There is however more opportunity for these urban-centered educational firms as they could capitalize on the benefits of mobile advertising especially in a metropolitan city such as Accra. Today’s parent is busier than ever

(Kessides, 2005). Parents and guardians who might not frequent their children/wards' schools could be informed and updated on important information if such services are made available by these educational firms over MCNs.

**Table 14: Awareness of advertising over MCNs**

<b>Responses</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	70	100
No	0	0
Total	70	100

*Source: Field Data, 2012*

All the 70 firms interviewed in this study were aware that their services could be made available over MCNs, as indicated in Table 14. Analysis from Table 7 also pointed out that 63% of the respondents interviewed as final consumers were aware of mobile content services over MCNs. From the analysis of the two tables, it could be deduced that the awareness level of the population on the mobile content market in Ghana is very high.

**Table 15: Reasons for not advertising over MCNs**

<b>Responses</b>	<b>Frequency</b>	<b>Percentage</b>
Not much education on such services over MCNs	22	31.4
Other means of advert are cheaper	6	8.6
We do not think such a service will be appealing to our customers	13	18.6
Not thought of it. No one seem to be doing it	29	41.4
Total	70	100

*Source: Field Data, 2012*

Although analysis from Tables 7 and 14 indicate that awareness of respondents on the mobile content market is high, 41.4% (as indicated in Table 15) of firms have not thought of using this means in reaching their intended clients. 31.4% also pointed out that they have not had their services over MCNs because they have not received much education on this opportunity. This finding substantiates the study by the CTO which revealed that not many of the key stakeholders consulted in their study recognized the benefits of mobile communications. However the CTO study proposed that ICT have a lot of prospects for organizations and firms as more people than ever have ownership of mobile devices and therefore capable of accessing e-services and e-content.

**Table 16: Perception on the cost involved in making your firm's services accessible over MCNs**

Responses	Frequency	Percentage
Very expensive	4	5.7
Quite expensive	14	20
Cheap	45	64.3
Very cheap	7	10
Total	70	100

*Source: Field Data, 2012*

Even though the firms interviewed gave various reasons why they had not utilized the mobile content market in Table 15, Table 16 indicates that 64.3% perceived the cost involved in getting their services over MCNs as cheap; with 10% perceiving it as very cheap. This means that cost, is not the reason why these firms are not utilizing the mobile content market in reaching their target clients/consumers.

**Table 17: Perception on the profitable in making firms' services accessible over MCNs**

Responses	Frequency	Percentage
Very profitable	22	31.4
Quite profitable	41	58.6
Not profitable	7	10
Total	70	100

*Source: Field Data, 2012*

When asked about the profitability gains, 90% of firms interviewed, as indicated in Table 17, described the prospect of making their services accessible over MCNs with various degrees of profitability. This finding therefore corroborates with the assertion by Balachandher et al (2001) and Eggleston et al (2002) that electronic commerce is now thought to hold the promise of a new commercial revolution by offering an inexpensive and direct way to exchange information and to sell or buy products and services.

**Table 18: Efforts in making a firm's service available over MCNs**

Responses	Frequency	Percentage
Quite difficult	19	27.2
Easy	43	61.4
Very easy	8	11.4
Total	70	100

*Source: Field Data, 2012*

From Table 18, only 27.2% (N=19) out of the N=70 firms interviewed perceived the process of making their services over MCNs to be quite difficult. However, 72.8% of the respondents perceived the process with various kinds of ease. One reason that account for the perception in the ease of the process of making firms' services available over MCNs is the SIM Card



registration in Ghana. According to the National Communication Authority, the registration exercise, among other things, is to provide a platform for the efficient functioning of electronic communications services such as mobile money transfer and other such services since the identity of SIM Card Owners can easily be verified (National Communications Authority, 2011).

KNUST

**Table 19: Perceived level of publicity if firm's services are over MCNs?**

<b>Responses</b>	<b>Frequency</b>	<b>Percentage</b>
Very high	58	82.8
High	12	17.2
Low	0	0
Very low	0	0
Total	70	100

*Source: Field Data, 2012*

Table 19 indicates that all 70 firms perceived the publicity they would receive should they make their services over MCNs as 'Very high' (N=58) and 'high' (N=12). This means that all firms interviewed perceived a lot of publicity prospects. This perception is not far-fetched if one considers the declaration by the NCA that as at February 10, 2012, there were about 21 million mobile network subscribers in Ghana (Daily Graphic, 2012). This therefore provides a good opportunity for firms to reach out to a wider coverage of their intended target customers.

**Table 20: Forms of advertising firms' service(s)**

	Frequency	Percentage
Television	4	5.7
Radio	9	12.8
None	45	64.3
Newspapers	12	17.2
Total	70	100

*Source: Field Data, 2012*

Table 20 indicates that 64.3% of the firms interviewed did not use any avenue for advertising their services. Despite the prospects that advertising provides for companies and firms, these firms (N=45) are not taking advantage of the opportunities that good advertisement presents. However, the remaining 35.7% used television, radio and newspapers. From the study by CTO, one reason why firms do not see the use of ICT and especially mobile content services as a competitive means of marketing their products and services could largely be attributed to the low number of ICT users in the country. In Ghana, only 2.7% of the populations are internet users (CTO report).

## **CHAPTER FIVE**

### **SUMMARY OF FINDINGS RECOMMENDATIONS AND CONCLUSION**

#### **5.1 INTRODUCTION**

This chapter provides recommendations as a result of the salient findings emanating from the study. The chapter as well provides conclusions that can be drawn from the research and offers suggestions for future research into the challenges and benefits of making firms' services over MCNs.

#### **5.2 SUMMARY OF FINDINGS**

The results of the study indicate that awareness is high among the target population as majority of the respondents, N=63, are aware of services that could be accessed using mobile phones. Consumer awareness of the possibility, availability and the existence of the mobile content market is high. This evidence is further substantiated by the knowledge of some services that could be accessed over MCNs by this N=63 respondents indicated in Table 8. This finding therefore contrasts the findings of the study conducted by Bonometti et al (2009) on the mobile content market in the United States of America which identified customer awareness and education as the topmost barrier.

Notwithstanding the high level of awareness among the target population, when asked whether they had ever accessed any service over MCNs using their mobile phones, Table 10 reveals that none of the respondents (N=100) have ever done this. This study is therefore in

agreement with the suggestion by the CTO study that there is a need to educate people about the potential of mobile communications.

One other finding from the study is the fact that all the 70 firms interviewed indicated that they were aware that their services could be made available over MCNs. Interestingly, 41.4% (as indicated in Table 15) of firms have not thought of using this means in reaching their intended clients while 31.4% pointed out that they have not had their services over MCNs because they have not received much education on this opportunity. This finding therefore corroborates the study by the CTO which revealed that not many of the key stakeholders consulted in their study recognized the benefits of mobile communications.

### 5.3 CONCLUSION

Mobile advertisement holds a lot of prospects for organizations and firms as more people than ever have ownership of mobile devices and therefore capable of accessing e-services and e-content. Today's world of marketing has become more technological, while consumers have become more sophisticated and demanding. In view of this, there is the need for firms to explore and use other means of reaching their intended market. From the findings of this study, the researcher therefore concludes that mobile advertising holds a lot of prospects for firms and businesses that need to be critically looked at considering the number of mobile network subscribers in Ghana.

### 5.4 RECOMMENDATIONS

Recommendations will be made on the key findings of this study especially for firms to inspire them to see the prospects in making their services available over MCNs.

First of all, this study has revealed that the awareness level of the firms' potential consumers on the availability and accessibility of services over MCNs is high. This means that even though mobile advertising might come as a new form of advertisement to these firms, they do not have to spend extra resources in educating their potential consumers on the procedures involved. This study therefore recommends that firms could apart from using their traditional means of advertisement also venture into exploring mobile advertisement as a potential, effective channel of reaching their target market. The researcher further recommends that firms who have not yet explored nor considered mobile advertising could conduct a cost benefit analysis of the currently available advertising channels that they are using alongside mobile advertising. This would further highlight the potential of mobile advertising.

51% of respondents (final consumers) had subscribed to more than one MCN as they have become more demanding of quality service from their MCNs with greater choice and increasing awareness. Quality of service or its absence could largely be attributed to the choice of two or more mobile communication networks by consumers. By this, it is recommended to firms who wish to make their services available on MCNs to consider more than one network in reaching their target consumers.

In order to promote mobile advertising as a major form of advertisement in today's technological environment, the researcher further recommends to firms to tie some incentives to attract their target consumers to access their services. For instance, discounts could be

given to consumers who access a service as a result of the advertisement they received on their mobile phones.

Another reason why the researcher strongly recommends mobile advertising to firms and businesses is that unlike advertisement on radio, TV, billboards etc, advertisement via the mobile phone stays with the consumer and has a more direct, personal effect. Even if the consumer would delete the information, there is a higher chance of he or she reading before deletion. Moreover, advertisement via mobile phone could be accessed by the consumer at anywhere and anytime unlike the other traditional forms of advertising.

It is also recommended to government agencies, non-governmental organisations and all other entities that deal with or support small and medium-scale enterprises to recommend mobile advertisement to them.

## 5.5 FURTHER STUDIES

The researcher suggest that detailed cost and benefit analysis of mobile advertising be done.

This is expected to encourage firms to advertise via mobile phones.

Studies of threats to mobile advertising must also be done. This is to guide all stake holders as mobile advertising is practiced.



## REFERENCES

Aboagye-Debrah. (2007) Inspiring stories from the African continent. Retrieved from

[http://www.sbafricaday.com/media/pdf/sbsa\\_africa\\_inspiring\\_stories.pdf](http://www.sbafricaday.com/media/pdf/sbsa_africa_inspiring_stories.pdf)

Africa's Mobile Content Conference and Awards, (2012). Mobile content industry, Retrieved

from <http://www.huetzmobile.com>

Angur, M.G., Nataraajan,R. and Jahera, J.S. (1999). *Service quality in the banking industry: an assessment in a developing economy*. International Journal of Bank Marketing, **17**(3) 116-123.

Antonio. (2012). The Advertising Industry. Retrieved from

<http://englishelxna2.wordpress.com/2012/03/26/the-advertising-industry/>

Articlebase, (2011). *Mobile Banner Creator Review - The Perfect method to Advertise on*

*Mobile Phones*. Retrieved from [http://www.articlesbase.com/online-promotion-](http://www.articlesbase.com/online-promotion-articles/mobile-banner-creator-review-the-perfect-method-to-advertise-on-mobile-phones-4520926.html)

[articles/mobile-banner-creator-review-the-perfect-method-to-advertise-on-mobile-phones-](http://www.articlesbase.com/online-promotion-articles/mobile-banner-creator-review-the-perfect-method-to-advertise-on-mobile-phones-4520926.html)

[4520926.html](http://www.articlesbase.com/online-promotion-articles/mobile-banner-creator-review-the-perfect-method-to-advertise-on-mobile-phones-4520926.html)

Articlesbase (n.d). *Integrated Marketing Communication*. Retrieved from <http://www.articlesbase.com/marketing-tips-articles/integrated-marketing-management-imc-4029166.html>

Balachandher, K. G., Santha, V., Norhazlin, I., and Rajendra, P., (2001). *Electronic Banking in Malaysia: A Note on Evolution of Services and Consumer Reactions*.

Berg Insight, (2012). *Mobile Advertising*. Retrieved from [http://en.wikipedia.org/wiki/Mobile\\_advertising](http://en.wikipedia.org/wiki/Mobile_advertising)

Bowen, D (2012). Principles and drivers of the new marketing environment, (2012). Retrieved from <http://www.oup.com/uk/orc/bin>.

Carroll, J. (2003). *Completing design in use: Closing the appropriation cycle*. Retrieved February 2, 2008 from <http://is2.lse.ac.uk/asp/aspecis/20040031.pdf>

Carroll, J., Howard, S., Peck, J., & Murphy, J. (2002). *'No' to a free mobile phone: When adoption is not enough*. Proceedings of the 13th Australasian Conference on Information

Carroll, J., Howard, S., Peck, J., & Murphy, J. (2002). *A field study of perceptions and use of mobile telephones by 16 to 22 year olds*. Journal of Information Technology Transfer and Application, 4(2), 49-61.

Castells, C., Fernandez-Ardevol, M., Qui, J., & Sey, A. (2007). *Mobile communication and society: A global perspective*. MA: MIT.

Chéneau-Loquay, A. (2007). *From networks to uses patterns: The digital divide as seen from Africa*. *Geojournal*, 68, 55-70.

Cohen, D., Garibaldi, P., & Scarpetta, S. (2004). *The ICT revolution: Productivity, differences and the digital divide*. Oxford University Press.

Coombs, R., Saviotti, P. and Walsh, V. (1987). *Economics and Technological Change*. Macmillan: London.

Cosima, M. (2005). *Guardian Unlimited*. Retrieved from  
Daily Graphic. (2012) *NCA Gives One Month Moratorium To Mobile Subscribers*. Retrieved from <http://www.graphic.com.gh/dailygraphic/page.php?news=19363>

Delmar, A. (2011). *A guide to forming your own business*. Retrieved from [http://dmc122011.delmar.edu/sbdc/pdf/guide\\_to\\_inc.pdf](http://dmc122011.delmar.edu/sbdc/pdf/guide_to_inc.pdf)

DFID. (2006). *The Enabling Environment for Mobile Banking in Africa*: Porteous,D  
Docstock, C. (n.d.). *Legal and Regulatory Policy Considerations*. Retrieved from [http://www.docstoc.com/docs/90098408/Chapter-6---Legal\\_-Regulatory-and-Policy-Considerations](http://www.docstoc.com/docs/90098408/Chapter-6---Legal_-Regulatory-and-Policy-Considerations)

Eggleston, K., Jensen, R., & Zeckhauser, R. (2002). *Information and telecommunication technologies, markets, and economic development*. Retrieved from

Evans, J. R., and Lindsay, W. M. (1993). *The management and control of quality*. New York: West Publishing Company.

FAO Policy Learning Programme, (2008). *Strategies for Increasing Farm Financing Activities – Session 4 Design*. Retrieved from [http://www.fao.org/docs/up/easypol/522/3-4\\_module设计\\_151EN.pdf](http://www.fao.org/docs/up/easypol/522/3-4_module设计_151EN.pdf)

Firoz, N.M. and Maghrabi, A.S., (1994). *The role of service marketing in economic development: analysis*. International Journal of Management. 2, 631-7.

Frimpong, O (1999). International Journal of Business and Management. Retrieved from [www.ccsenet.org/ijbm](http://www.ccsenet.org/ijbm)

Ghana News Network (2012). *No extension for SIM card registration*. Retrieved from Ghana News Network.

Ghana Statistical Service. (2010). *Population and housing census 2010*. Retrieved from <http://www.ghana.gov.gh/census/phc2010>.

Giuseppe Bonometti, Raffaello Balocco, Peter Chu, Shiv Prabhu and Rajit Gadh. (2009). *Mobile content market an exploratory analysis of problems and drivers in the us*

Heeks, R. (2007). National e-government plans. Retrieved from [http://www.cto.int/Portals/0/docs/research/towards-effective-egovernance/Towards\\_Effective\\_eGovernance.pdf](http://www.cto.int/Portals/0/docs/research/towards-effective-egovernance/Towards_Effective_eGovernance.pdf)

Hill, P. (1977). On goods and services.” review of Income and wealth 23(4);315-338 *International Federation of Phonographic Industries (IFPI)*,(2012),retrieved from <http://www.wikipedid.org/mobile> content.  
<http://www.analysismason.com/Research/Publications/Reports/Mobile/Mobile-media-and-entertainment>

Infogile Technologies. (2007) Mobile Banking – The Future. Retrieved from [http://www.infogile.com/pdf/Mobile\\_Banking.pdf](http://www.infogile.com/pdf/Mobile_Banking.pdf)  
in-the-US-forecasts-20072012/.

ITU (2004). *The portable internet*. Retrieved from [www.itu.int/osg/spu/publications/portableinternet/](http://www.itu.int/osg/spu/publications/portableinternet/).

ITU (2007). *Measuring village ICT in sub-Saharan Africa*. Retrieved from [http://www.itu.int/ITU-D/ict/statistics/material/Africa\\_Village\\_ICT\\_2007.pdf](http://www.itu.int/ITU-D/ict/statistics/material/Africa_Village_ICT_2007.pdf).

ITU (2007). *Telecommunications/ICT markets and trends in Africa*. (2008). [http://www.itu.int/ITU-D/ict/statistics/material/af\\_report07.pdf](http://www.itu.int/ITU-D/ict/statistics/material/af_report07.pdf).

ITU. (2007). *Measuring the information society: ICT Opportunity Index and Telecommunications Indicators*. Retrieved from <http://www.itu.int/ITU-D/ict/publications/ict-oi/2007/index.html>.

Jack, W. and Suri, T. (2010). *The Economics of M-PESA*.

Kaitlanfoley (2011). Content Essay. Retrieved from <http://kaitlanfoley.wordpress.com/2011/04/19/content-essay/>

Kaskade, J (2011). *Mobile*. Retrieved from [http:// www.jameskaskade.com](http://www.jameskaskade.com)

Kassem S. (1989). “Services marketing: the Arabian Gulf experience”, *Journal of Services Marketing*, 3. 61-71

Kessides, C. (2005). *The Urban Transition in Sub-Saharan Africa: Implications for Economic Growth and Poverty Reduction*. Retrieved from <http://www.worldbank.org/afr/wps/wp97.pdf>

Kotler, P. and Keller K. L. (2006). *Marketing management* (12th Ed.). New Jersey: Prentice-Hall, Inc, Upper Saddle River.

London School of Business and Finance. (2012). *Marketing Training*. Retrieved from <http://www.lsbfb.org.uk/marketing-Training>

Mashable. (2012). *Smartphones*. Retrieved from <http://mashable.com/follow/topics/smartphone/>



Mason, A. (2008). Mobile Media and Entertainment in the U.S.: Forecasts 2007–2012. Retrieved from.

Mobile Content. (2012) Music and Entertainment Services. Retrieved from

[http://www.mobilecontent.com.gh/services/music\\_entertainment.php](http://www.mobilecontent.com.gh/services/music_entertainment.php)

Mobile Gambling, (2011). *Mobile Content*. Retrieved from

<http://www.mgambling.info/2011/08/mobile-content/>

National Communications Authority. (2011). *SIM Card Identification*. Retrieved from

<http://www.nca.org.gh/72/81/SIM-Card-Identification.html>

National Communications Authority. (2011). *Press Statement: SIM card registration*.

Retrieved from <http://www.nca.org.gh/73/34/News.html?item=236>

National Communications Authority. (2011). *SIM Card registration*. Retrieved from

<http://www.nca.org.gh/72/81/SIM-Card-Identification.html>

National Communications Authority. (2012). *Telecommunications Legislation And*

*Regulation In Ghana*. Retrieved from <http://fugarandcompany.com.gh>

News4geeks. (2012). *Mobile Internet to exceed PC access*. Retrieved from

<http://news4geeks.net/2012/05/03/mobile-internet-to-exceed-pc-access-in-india-by-the-end-of-this-year/>

QR Stuff (n.d.). QR Stuff. Retrieved from: <http://www.qrstuff.com/> 2012/05/24

Retrieved from: <http://refractory.unimelb.edu.au/2009/06/25/mobile> content market an exploratory analysis of problems and drivers in the u.s.

RTRobot, (2011) Mobile Application Technology, retrieved from [http://www.rtbob.net/mobile\\_video](http://www.rtbob.net/mobile_video)

Sasser, W. E., Olsen, R. P. and Wyckoff, D. D. (1978). Management of Services Operations, Massachusetts: Allyn & Bacon

Schwab (Eds.), *The global information technology report 2001-2002: Readiness for the networked world* (pp. 62-74). New York: Oxford University Press.

Sey, A. (2008). Mobile Communication and Development: A Study Of Mobile Phone Appropriation In Ghana. *A Dissertation Presented to the Faculty of the Graduate School, University of Southern California.*

Slater, D. & Kwami, J. (2005). *Embeddedness and escape: Internet and mobile use as poverty reduction strategies in Ghana*. ISRG Working Paper 4. Retrieved from [www.isrg.info](http://www.isrg.info).

Slocombe, M. (2009). *Two Thirds of Mobile Phone Subscriptions in Developing Nations*. Retrieved from <http://digital-lifestyles.info/2009/03/03/two-thirds-of-mobile-phone-subscriptions-in-developing-nations/>

Snellman, Kalle. (2009). MOBILE CONTENT SERVICES MARKET IN FINLAND  
retrieved from [http://www.idean.com/wp-content/uploads/2009/06/mobile\\_content\\_services\\_market\\_in\\_finland\\_2009-2014.pdf](http://www.idean.com/wp-content/uploads/2009/06/mobile_content_services_market_in_finland_2009-2014.pdf)

Souter, D. (2005). *The economic impact of telecommunications on rural livelihoods and poverty reduction: A study of rural communities in India (Gujarat), Mozambique and Tanzania*. CTO/DFID Report KaR Project 8347. Accessed May 31, 2006 at <http://www.telafrica.org/R8347/files/pdfs/FinalReport.pdf>.

The ICT development index (IDI), (n. d.) Retrieved from <http://www.static.guim.co.uk>

TXT GHANA. (2012). *Our partners*. Retrieved from <http://www.txtghana.com>,  
Wikipedia, (2012). *Mobile advertising*. Retrieved from [http://www.en.wikipedia.org/wiki/Mobile\\_advertising](http://www.en.wikipedia.org/wiki/Mobile_advertising).

Wikipedia. (2012). Mobile phone features. Retrieved from [http://en.wikipedia.org/wiki/Mobile\\_phone\\_features#cite\\_note-11](http://en.wikipedia.org/wiki/Mobile_phone_features#cite_note-11)

Wikipedia. (2006). *Mobile Content*. Retrieved from [http://en.wikipedia.org/wiki/Mobile\\_content#cite\\_note-10](http://en.wikipedia.org/wiki/Mobile_content#cite_note-10)

Wikus, E. (2011). *Innovative Marketing*. Retrieved from <http://blog.graphicmail.com/post/2011/08/30/Innovative-Mobile-Marketing-Send-bulk-SMSs-with-a-link-to-mobile-site.aspx>

Appendix 1  
**Questionnaire for Firm Services**

Dear Sir/Madam,

I am a student of the KNUST, Institute of Distance Learning, carrying out a research on the Prospects of Mobile Advertising in Ghana.

I would be grateful if you could provide answers to the following questions. All information provided by respondents will be treated confidentially. Thank you.

**Section A: Information on the firm**

1. How long has your company been in existence?
  - a. Before 1990 [ ]
  - b. 1990-1995 [ ]
  - c. 1996- 2000 [ ]
  - d. 2001- 2005 [ ]
  - e. 2006- 2010 [ ]
  - f. 2011 and beyond [ ]
  
2. What is the ownership type of your company?
  - a. Sole proprietorship [ ]
  - b. Partnership [ ]
  - c. Limited partnership [ ]
  - d. Limited liability company [ ]
  - e. Corporation (for-profit) [ ]
  - f. Corporation (not-for-profit) [ ]
  - g. Cooperative [ ]
  - h. Others (Specify).....

3. What is the nature of the business?

- a. Dealers in Auto Parts [ ]
- b. Dealers in Electrical Products [ ]
- c. Services [ ]
- d. Manufacturing [ ]
- e. Food and Beverages [ ]
- f. Others (Specify).....

**Section B: Knowledge about firm services over MCNs**

4. Are you aware that your service(s) can be made accessible over MCNs?

- a. Yes [ ]
- b. No [ ]

5. Why have you not had your firm's services over MCNs?

- a. Not much education on such services over MCNs [ ]
- b. Other means of advertising less expensive [ ]
- c. We don't think such a service will be appealing to our consumers [ ]
- d. Other, state.....

6. In your opinion, how expensive is it to make your firm's services accessible over MCNs?

- a. Very expensive [ ]
- b. Quite expensive [ ]
- c. Do not know [ ]
- d. Cheap [ ]
- e. Very cheap [ ]

7. How profitable do you think making your firm's services accessible over MCNs will be to your firm?

- a. Very profitable [ ]      b. Quite profitable [ ]  
c. Do not know [ ]      d. Not profitable [ ]

8. How difficult is it to get your firm's service(s) accessible over MCNs?

- a. Very difficult [ ]      b. Quite difficult [ ]  
c. Do not know [ ]      d. Easy [ ]  
e. Very easy [ ]

9. Do you perceive any security challenges with your service(s) being accessed over MCNs?

- a. Very challenging [ ]      b. Quite challenging [ ]  
c. Not challenging [ ]      d. State the challenge [ ]

10. How would you describe the publicity on the possibility of firms' services over MCNs?

- a. Very high [ ]      b. High [ ]  
c. Low [ ]      d. Very low [ ]

11. Which of these other means of advertisement do your firm use?

(Tick as many as applies)

- a. Television [ ]      b. Billboards [ ]  
c. Radio [ ]      d. Other,

state.....

- e. Newspapers [ ]



12. Do you find making your firm's services over MCNs complex?

a. Yes ☐ b. No ☐

**THANK YOU**

KNUST



Appendix 2  
**Questionnaire for Final Consumers**

Dear Sir/Madam,

I am a student of the KNUST, Institute of Distance Learning, carrying out a research on the prospects of Mobile Advertising in Ghana

I would be grateful if you could provide answers to the following questions. All information provided by respondents will be treated confidentially. Thank you.

**Section A: Demographic Data**

Please provide answers to all questions precisely and accurately. (Please tick where appropriate).

1. Gender:      a. Male      ☐      b. Female      ☐
  
2. Age
  - a.  $\leq 20$       ☐
  - b. 21 – 30      ☐
  - c. 31 – 40      ☐
  - d. 41 – 50      ☐
  - e.  $\geq 51$       ☐
  
3. Level of Education
  - a. Basic Education      ☐      b. Senior High School      ☐
  - c. Technical Education      ☐      d. Diploma      ☐      d.
  - Professional      ☐      e. First Degree      ☐
  - f. Masters      ☐      g. Other (Specify) .....

4. Employment:

- a. Official (Public) ☐ b. Worker (Private) ☐  
c. Self-employed ☐ d. Student ☐  
e. Unemployed ☐ f. Others  
(Specify).....

5. Marital status:

- a. Single ☐ b. Married ☐  
c. Divorced ☐ d. Widowed ☐

**Section B: Information on MCN**

6. How long have you been using mobile phones?

- a. Less than 1year ☐ b. 1-5years ☐  
c. 6-10years ☐ c. More than 10years ☐

7. Which of the Mobile Communication Networks (MCN) are you a subscriber to?

- a. MTN ☐ b. Kasapa ☐  
c. Tigo ☐ d. Airtel ☐  
e. Vodafone ☐ f. Others (Please Specify) .....

8. Are you aware of any services that can be accessed using mobile phones?

- a. Yes ☐ b. No ☐

9. If yes, which services are you aware of? You may choose more than one.

- a. Paying utility bills
- b. Job offers
- c. Prices of Agric. Products
- d. Movie schedules
- e. Health services
- f. Others

KNUST

10. If no, would you like to be informed about services that can be accessed with your mobile phone?

- a. Yes ☐
- b. No ☐

11. Have you ever accessed any mobile content service using mobile phone?

NB: Mobile content is any type of media which is viewed or used on mobile phones, like ringtones, graphics, discount offers, games, movies, and GPS navigation

- a. Yes ☐
- b. No ☐

12. If yes, which services have you accessed?

- a. Paying utility bills
- b. Job offers
- c. Prices of Agric. Products
- d. Movie schedules
- e. Health services
- f. Others

13. If no which of these could be the reason; you may choose more than one

- a. Not seen or heard others do it.
- b. There is no education on accessing such services on radio, TV etc.

- c. I do not usually read unexpected texts.
- d. I not believe in such services and think it is a waste of credit to access them.
- e. Others.
14. Do you know or have any security challenges when accessing services over MCNs?
- a. Yes [ ] b. No [ ]
15. If yes, state some of these security challenges.
- .....
- .....
- .....

State your views on the under-listed statements with the following responses [Where SA = Strongly Agree; A = Agree; N = Neutral; D = Disagree; and SD= Strongly Disagree].

No.	Attitude Statement	Response				
		SA	A	N	D	SD
15	I find receiving advertisements via the mobile phone positive					
16	I find SMS and MMS mobile advertising messages useful					
17	I find mobile entertainment services (video, game etc) positive					
18	I prefer mobile shopping to traditional shopping because of lower price advantage of products and services					
19	There are security problems in mobile shopping					
20	I find mobile shopping suitable					
21	My general intention to shop via mobile phone is very high					
22	I find mobile shopping more entertaining than traditional shopping					
23	I prefer mobile shopping when I have enough time					

24	It is beneficial to use mobile phone to access services					
25	I find shopping via mobile phone positive					
26	I will shop via mobile phone in the future					
27	It is faster to use mobile phone to access services than other means I know					

KNUST  
THANK YOU

