

**INFLUENCE OF DIGITAL COMMUNICATION PLATFORMS ON  
COMPETITIVE ADVANTAGE: A CASE STUDY OF KENYA  
REVENUE AUTHORITY**

**BY**

**GACHUGI DIANA WABUO**

**UNITED STATES INTERNATIONAL UNIVERSITY-  
AFRICA**

**SUMMER 2017**

**INFLUENCE OF DIGITAL COMMUNICATION PLATFORMS ON  
COMPETITIVE ADVANTAGE: A CASE STUDY OF KENYA  
REVENUE AUTHORITY**

**BY**

**GACHUGI DIANA WABUO**

**A Research Project Submitted to the Chandaria School of Business in  
Partial Fulfilment of the Requirement for the Degree of Masters in  
Business Administration (MBA)**

**UNITED STATES INTERNATIONAL UNIVERSITY-AFRICA**

**SUMMER 2017**

## STUDENT'S DECLARATION

I, the undersigned, declare this my original work and has not been submitted to any other college, institution or university other than the United States International University in Nairobi for academic credit.

Signed \_\_\_\_\_

Date: \_\_\_\_\_

**Gachugi Diana Wabuo (ID No: 646076)**

This project report has been presented for examination with my approval as the appointed supervisor.

Signed \_\_\_\_\_

Date: \_\_\_\_\_

**Dr. Juliana, M. Namada**

Signed: \_\_\_\_\_

Date: \_\_\_\_\_

**Dean, Chandaria School of Business**

## **COPYRIGHT**

ALL RIGHTS RESERVED. Any unauthorized reprint or use of this research report is prohibited. No part of study may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system without express written permission from the author and the university.

Gachugi Diana Wabuo Copyright © 2017

## **ACKNOWLEDGEMENT**

I would not have been able to achieve this success without the support of a number of important persons, who in their own way contributed to it. First and foremost, I sincerely thank God Almighty who gave me the grace and strength to persevere this far.

I would like to thank my supervisor Dr. Juliana Namada for believing in me and inspiring me every step of the way. I appreciate immensely the mentorship that she provided me in this process of completing my project.

I thank all my friends, classmates and office colleagues who encouraged and inspired me to the very end with their timely advice and invaluable support. I acknowledge the USIU administration for the opportunity to further my education; to them I will ever be indebted.

To my family, yours has been a sacrifice that only God will be able to repay.

## **DEDICATION**

I would like to dedicate this proposal to my beautiful and loving mother Faith Muthoni Gachugi for the constant motivation, prayers and support in this MBA program.

## **ABSTRACT**

The objective of the study was to determine the influence of digital platforms on competitive advantage with a focus on Kenya Revenue Authority (KRA). This study aimed at determining the influence of social media on competitive advantage, assess the influence of mobile phone platforms on competitive advantage and examine the influence of organizational website on competitive advantage of KRA.

The study adopted a descriptive correlation research method design to measure the influence of digital communication platforms on competitive advantage with a focus on Kenya Revenue Authority. The descriptive research method was the best for this study because it focused on the relationship between digital communication platforms and competitive advantage of KRA. The study used questionnaires to get data from respondents. The study focused on 40 employees at KRA head office in Nairobi. The study used census approach on the targeted population. The study used inferential and descriptive statistics adopted in analysis of data and presentation. Statistical Package for Social Sciences (SPSS) was used to analyse the data for this research. Tables and figures were used in data presentation.

The study determined the influence of social media on competitive advantage. The study found that social media activities at Kenya Revenue Authority are aligned with other forms of traditional advertising and this has helped the organization address misconceptions from customers. The study also revealed how mobile phone platforms influence competitive advantage of Kenya Revenue Authority. The study found that KRA uses mobile devices for communication networks in business activities for Customer Relation Management (CRM). The study examined the effect of organizational website on competitive advantage of Kenya Revenue Authority. The study reveals that through the use of website, KRA has improved on its revenue collection through the expansion of their reach.

The study concludes that social media activities at KRA are aligned with other forms of traditional advertising. This has helped KRA address misconceptions and errors through dialogue with customers. The E-business services have enabled KRA to increase its revenue collection. Mobile Commerce (m-Commerce) has improved commercial

activities at KRA hence the use of M-commerce has provided a modern image to the organization. The study also concludes that through the use of website, KRA has improved on its revenue collection by expanding their reach. The website has changed the balance of power in relationships with the KRA and its customers.

The study recommends the management of Kenya Revenue Authority and other organizations to align their social media activities with other forms of traditional marketing. The organizations should enhance adoption of pull marketing strategy to attract contents through their respective customers' mobile devices. The study also recommends the use website because it was found to improve on revenue collection and employ promotion strategies to provide a direct link with customers to enter into dialogue with them about their services.

## **ABBREVIATIONS AND ACRONYMS**

<b>CRM:</b>	Customer Relation Management
<b>GDP:</b>	Gross Domestic Product
<b>GOK:</b>	Government of Kenya interacts
<b>ICT:</b>	Information Communication Technology
<b>IT:</b>	Information Technology
<b>KRA:</b>	Kenya Revenue Authority
<b>PDA:</b>	Personal Digital Assistant
<b>RFID:</b>	Radio Frequency Identification
<b>ROI:</b>	Return on investment
<b>SCM:</b>	Supply Chain Management
<b>SME:</b>	Small and Medium Enterprise (SME)
<b>SMS:</b>	Short Messaging Services
<b>SPSS:</b>	Statistical Package for Social Science
<b>WLAN:</b>	Wireless Local Area Network
<b>WWW:</b>	World Wide Web

## TABLE OF CONTENTS

<b>STUDENT’S DECLARATION</b> .....	<b>iii</b>
<b>COPYRIGHT</b> .....	<b>iv</b>
<b>ACKNOWLEDGEMENT</b> .....	<b>v</b>
<b>DEDICATION</b> .....	<b>vi</b>
<b>ABSTRACT</b> .....	<b>vii</b>
<b>ABBREVIATIONS AND ACRONYMS</b> .....	<b>ix</b>
<b>TABLE OF CONTENTS</b> .....	<b>x</b>
<b>LIST OF TABLES</b> .....	<b>xii</b>
<b>LIST OF FIGURES</b> .....	<b>xiii</b>
<b>CHAPTER ONE</b> .....	<b>1</b>
<b>1.0 INTRODUCTION</b> .....	<b>1</b>
1.1 Background of the Study .....	<b>1</b>
1.2 Statement of the Problem.....	<b>5</b>
1.3 General Objective of the Study.....	<b>7</b>
1.4 Specific Objectives of the Study.....	<b>7</b>
1.5 Significance of the Study .....	<b>7</b>
1.6 Scope of the Study .....	<b>8</b>
1.7 Definition of Terms.....	<b>8</b>
1.8 Chapter Summary .....	<b>9</b>
<b>CHAPTER TWO</b> .....	<b>10</b>
<b>2.0 LITERATURE REVIEW</b> .....	<b>10</b>
2.1 Introduction.....	<b>10</b>
2.2 Social Media and Competitive Advantage .....	<b>10</b>
2.3 Mobile Phone Platforms and Competitive Advantage.....	<b>15</b>
2.4 Organizational Website and Competitive Advantage.....	<b>20</b>
2.5 Chapter Summary .....	<b>25</b>
<b>CHAPTER THREE</b> .....	<b>26</b>
<b>3.0 RESEARCH METHODOLOGY</b> .....	<b>26</b>
3.1 Introduction.....	<b>26</b>

3.2	Research Design.....	26
3.3	Population and Sampling Design.....	26
3.4	Data Collection Methods .....	27
3.5	Research Procedures .....	28
3.6	Data Analysis Techniques.....	28
3.7	Chapter Summary .....	29
 <b>CHAPTER FOUR.....</b>		<b>30</b>
<b>4.0</b>	<b>RESULTS AND FINDINGS .....</b>	<b>30</b>
4.1	Introduction.....	30
4.2	Background Information.....	31
4.3	Social Media and Competitive Advantage .....	34
4.5	Mobile Phone Platforms and Competitive Advantage.....	37
4.9	Organizational Website and Competitive Advantage.....	40
4.10	Chapter Summary .....	43
 <b>CHAPTER FIVE .....</b>		<b>44</b>
<b>5.0</b>	<b>DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS .....</b>	<b>44</b>
5.1	Introduction.....	44
5.2	Summary .....	44
5.3	Discussion.....	46
5.4	Conclusions.....	52
5.5	Recommendations.....	53
 <b>REFERENCES.....</b>		<b>55</b>
<b>APPENDICES .....</b>		<b>61</b>
APPENDIX 1: LETTER OF INTRODUCTION .....		61
APPENDIX II: QUESTIONNAIRE .....		62

## LIST OF TABLES

<b>Table 4.1:</b> Social Media and Competitive Advantage.....	<b>34</b>
<b>Table 4.2:</b> Model Summary of Social Media and Competitive Advantage .....	<b>35</b>
<b>Table 4.3:</b> ANNOVA of Social Media and Competitive Advantage.....	<b>36</b>
<b>Table 4.4:</b> Coefficients Variation of Social Media and Competitive Advantage.....	<b>36</b>
<b>Table 4.5:</b> Mobile Phone Platforms and Competitive Advantage .....	<b>37</b>
<b>Table 4.6:</b> Model Summary of Mobile Phone Platforms and Competitive Advantage .....	<b>38</b>
<b>Table 4.7:</b> ANNOVA of Mobile Phone Platforms and Competitive Advantage .....	<b>39</b>
<b>Table 4.8:</b> Coefficients Variation of Mobile Phone Platforms and Competitive Advantage .....	<b>39</b>
<b>Table 4.9:</b> Organizational Website and Competitive Advantage.....	<b>40</b>
<b>Table 4.10:</b> Model Summary of Organizational Website and Competitive Advantage.....	<b>41</b>
<b>Table 4.11:</b> Annova of Organizational Website and Competitive Advantage .....	<b>42</b>
<b>Table 4.12:</b> Coefficient of Variation of Organizational Website and Competitive Advantage .....	<b>42</b>

## LIST OF FIGURES

<b>Figure 4.1:</b> Response Rate .....	<b>30</b>
<b>Figure 4.2:</b> Gender of Respondents .....	<b>31</b>
<b>Figure 4.3:</b> Level of Education of Respondents .....	<b>31</b>
<b>Figure 4.4:</b> Working Experience of Respondents .....	<b>32</b>
<b>Figure 4.5:</b> Involved in Digital Platform .....	<b>33</b>
<b>Figure 4.6:</b> How Digital Platform has Impacted KRA .....	<b>33</b>

## CHAPTER ONE

### 1.0 INTRODUCTION

#### 1.1 Background of the Study

Since 1982, digitization has taken place and there has been a steady increase in the use of digital technologies. Products such as televisions, telephones, music, watches and cameras have changed to digital formats (Ellis-Chadwick, 2012). Various enterprises from small to large, non-profit organizations to government agencies are undergoing digital transformation that has turned digitization into new processes, transactions and activities (Anna van, 2015). Digitization has revolutionized the way we work, govern, educate, manage our health, travel, enjoy life and shop. The technologies of digitization have enabled the change of traditional forms for example; information storage such as paper and photographs into binary code of computer storage which has also resulted to the digital transformation of human interaction and economic transactions (Gil, 2015).

Technology adoption typically occurs in an S-curve, with exponential growth and accelerating rate of diffusion with each new technology release. With these in mind, most companies are adopting to the evolving use of technology by their customers and key stakeholders by venturing to digital platforms (Ernst & Young, 2011). Irene (2015) states that, technology also offers huge opportunities, instant feedback from and constant engagement with target audiences, user-generated content, targeted distribution and marketing platforms, data analytics, video (both advertising and editorial), to name a few. However, this has come at the expense of meaningful engagement with their customers through physical interaction despite digitization having a positive return on investments (ROI) in personalization technologies as indicated by 60% of the 2000 organizations surveyed by Accenture (Accenture, 2017). Ciborra (2013) adds that, digitization has radically transformed the creation, consumption and delivery of content.

According to Ciborra (2013) digital platforms have redesigned the way we access services on the website spurring a new generation of digital devices. These has leveraged digital technologies to transform the customer value equation driving competitive advantage by connecting and empowering people in ways that create value in the market place, setting out new standards for how companies, government and nonprofit agencies deliver value in their customers (Fenwick , 2013).To achieve best value for customers,

businesses are forced to venture into digitization to stand apart from the crowd in their industry by offering the right services or goods to a particular target population (Richards, 2016). This explains that the effects of increased digitization in the world are reaching every corner of our lives with the amount of data generated annually from digital platforms reaching 35million gigabytes. For example, everyday, 100 million tweets are generated on twitter (Friedrich , Le Merle, & Peterson , 2011).

According to Libert, Beck and Wind (2016) most digital platforms are billion dollar businesses which include platforms such as facebook, twitter, Uber, Airbnb, Pinterest, and Snapchat. This platforms are drawing the attention of investors, customers and employees wreaking havoc in traditional businesses due to the value creation and the network of people being brought together to create and share the value at the same time leading to market shaking effects that has never been experienced with traditional platforms of doing business (Anna van, 2015). Through digital platforms, it is now possible to have rapid inexpensive scaling among other advantages through online market places and online communication channels. This has led to the facilitation of the rapid exchange value between network participants at near zero-marginal cost (Accenture, 2017).

To succeed in today's business, entities are aggressively adopting innovation as the cornerstone of their strategy (Coleman, 2015). According to Ramey (2012), business can adopt use of technology to achieve competitive advantage on their (ROI) return on investment driven by five major forces including; buyer power, supplier power, threat of substitute products or services and the threat of new entrants. This results to a company acquiring or developing a set of attributes that allow it to outperform its competitors which is known as the obtainment of competitive advantage (Wang, 2014).

Porter & Millar (2011) adds that in search of competitive advantage companies differ in competitive scope such as the geographical, industry, segment and the vertical scope which create an environment for competitive advantage. Digital platforms present a powerful effect on competitive scope allowing companies to coordinate activities in far flung geographic locations. For example; Boeing engineers work on designs online with foreign suppliers. Such initiatives enable new interrelationships among businesses,

expanding the scope of industries in which companies must compete to achieve competitive advantage (Cakmak & Elcin Ta, 2012).

According to Fenwick (2013), internationally, organizations are enabled by digital and social technologies, estimated that 79% of workers in western nations depend on internet (Friedrich , Le Merle, & Peterson , 2011). For example; a leading banking and insurance company in the USA lead in Forrester's customer experience index in part through the adoption of an enterprise-wide customer experience focus leveraging digital technologies. (Fenwick, 2013). Through digital platforms, Disney movies fans can now buy cinema tickets on Facebook and invite their friends to join them at the show (Friedrich, Le Merle, & Peterson, 2011). All over the world, governments are also seeking ways to provide convenient and reliable government information and services by digitizing records, historical information and also engaging with customers in the digital platform. (Arthur, Loots, & Trujillo, 2014)

In Africa, digital transformation is connecting the continent to the rest of the world enabling change for good. Through this connectivity, indicates the rise in the internet economy through faster internet penetration, increasing internet contribution to GDP positive outlooks for growth of digital capabilities a huge business potential. This has resulted to a dawn of many African governments to define strategies and capture the potential for change (Amatka, 2016). Olayinka and Evans (2016) adds that, across the African continent, digital platforms are making it easier for people across Africa to find and purchase goods, locate jobs, make payments, get rides, find accommodations, access movies and much more (Olayinka & Evans, 2016). In West Africa, this has resulted to the development of e-commerce platforms such as Jumia that sells basically everything West Africa wants to consume growing to a unicorn class creating ecosystems that attract investors and innovators making e-commerce one of the unique stars of digital business in Western Africa (Amatka, 2016).

In Eastern Africa, Kenya, Ethiopia and Rwanda have become the powerbrokers attracting investors in various sectors –digital ecosystem one of the areas that this countries is championing the world through mobile money usage. Altogether, at least six different major mobile money platforms exists such as M-Pesa and Airtel Money. These platforms make Eastern Africa the most advanced mobile money region drawing attention from all

over the world creating new innovations that could become the big success stories also internationally (Amatka, 2016).

According to Atagana (2014), Kenya has been at the forefront of digital innovation in Africa with unique products such as M-pesa and Ushahidi showing that the digital revolution in the country is set to continue growing as indicated by the country's digital and social media landscape report. Kahuthu (2016) states that this growth is based on the adoption of dynamic technological systems in Kenya which to a large extent has been influenced by globalisation. Use of technology-digital platforms has helped the country prop up its profile as a globalised economy intensifying cross-border movement of capital, goods, services and also facilitation of international trade between Kenya and other nations.

As a result, the government showed his support for digitization through the launch of e-Citizen in the year 2014 an official digital platform that enables people to access and pay for government services online. This has also helped Kenyans interact with government service departments and agencies (Kahuthu, 2016). Mutegi (2015) adds that, intensifying this efforts, in June 2015, during the 6<sup>th</sup> social media day marked worldwide, the Kenyan government launched a programme known as Government of Kenya interacts (GOK interacts) which entailed the use of digital platforms by the government to interact with citizens.

The Kenya Revenue Authority (KRA) was established by an Act of Parliament, Chapter 469 of the laws of Kenya, which became effective on 1st July 1995. The Authority is charged with the responsibility of collecting revenue on behalf of the Government of Kenya. It is governed by a board of directors consisting of both public and private sector experts, makes policy decisions to be implemented by KRA Management. The Chairman of the Board is appointed by the President of the Republic of Kenya .The Chief Executive of the Authority is the Commissioner General who is appointed by the Minister for Finance.

In the Kenyan Economy, KRA plays the role of Administering and enforcing written laws or specified provisions of written laws pertaining to assessment, collection and accounting for all revenues in accordance with these laws. It advises on matters

pertaining to the administration or and the collection of revenue under written laws; Enhance efficiency and effectiveness of tax administration by eliminating Bureaucracy, Procurement, Promotion, Training and Discipline; Eliminate tax evasion by simplifying and streamlining procedures and improving tax payer service and education thereby increasing the rate of compliance; Promote professionalism and eradicate corruption amongst K.R.A. employee by paying adequate salaries that enables the institution to attract and retain competent professionals of integrity and sound ethical morals and restore Economic Independence and Sovereign pride of Kenya by eventually eliminating the perennial budget deficits by creating organizational structures that maximize revenue collection (KRA, 2008).

Through effective administration of tax laws relating to trade, KRA ensured the protection of local industries to facilitate economic growth. They ensure effective allocation of scarce resources in the economy by effectively enforcing tax policies thereby sending the desired incentives and shift signals throughout the country; Facilitate distribution of income in socially acceptable ways by effectively enforcing tax laws affecting income in various ways; Facilitate economic stability and moderate cyclic fluctuations in the economy by providing effective tax administration as an implementation instrument of the fiscal and stabilization policies and they are a watchdog for the government agencies by controlling exit and entry points to the country to ensure that prohibited and illegal goods do not pass through Kenyan borders (KRA, 2008).

The Kenya Revenue Authority (KRA) is charged with collecting revenue on behalf of the Kenyan Government. The entity was established in 1995 after an Act of Parliament, Chapter 469 of the laws of Kenya became effective on 1st July 1995. Since its inception, KRA has spent time and resources setting up systems, procedures and adopting new strategies to enhance their operational efficiency in their processes (KRA, 2017). Venturing into digital platforms is one of the areas that KRA has focused on as they adopt new strategies especially to enhance accountability, increase revenue and curb corruption for competitive advantage (Kisia, 2017). This forms the background of this research to identify the influence of digital platforms on competitive advantage with a focus on KRA.

## **1.2 Statement of the Problem**

Many organizations are very active in adopting digital platforms strategies to enhance competitiveness (Sinha, 2009). Such studies have mainly been undertaken in developed

world. A limited number of studies about the influence of digital platform on organization's competitive advantage have been conducted in developing economy, predominantly in Kenya.

According to Surber (2016), he noted that various companies are competing to make the necessary workplace transformation and achieve competitive advantage through digitization. He established inconsistency and dislocation between digital and physical channels as digital channels develop in isolation resulting in frustration of customers when for example they cannot complete an online interaction when they walk into a store.). According to Gatner (2015), there is need for enterprises to understand and exploit digital platform effects throughout their businesses as digitization moves from an innovative trend to a core competency. In conclusion Katz, Koutroumpis and Callorda, 2013; Vrana (2011) noted that organizations that do not explore this platforms, threaten their ability to attract, deliver, retain and have their products/services perceived as value adding by customers.

The Kenya National ICT Masterplan (2014) focused on digitization of government agencies as one of the strategic pillars resulting to various agencies digitizing their services and records and embracing the use of digital platforms to showcase their services. However, the masterplan noted that Kenyan people have a perception of bureaucracy, corruption and lack of efficacy in government agencies impeding on change being embraced fully by the society. Based on digitization being a requirement of the Kenyan government most agencies have also been seen to embrace the digital platforms as a requirement without the technical know how of how to use the platforms to interact with their customers and how to use the feedback from customers through the digital platforms to improve their services.

Very little literature has also been published on issues impeding the digitization process in government agencies in Kenya including the influence of digital platforms for competitive advantage. This include studies by Amollo (2011) and Mwirigi and Kinyanjui (2012) on digitization of libraries in Kenya focused on the practices and challenges facing libraries in Kenya and the preservation of local content in the National Library of Kenya. However, findings from this studies cannot be generalized to other

government agencies providing the need of this study to determine the influence of digital platforms on competitive advantage with a focus on KRA.

### **1.3 General Objective of the Study**

The general objective of this study was to determine the influence of digital platforms on competitive advantage with a focus on Kenya Revenue Authority (KRA)

### **1.4 Specific Objectives of the Study**

**1.4.1** To determine the influence of social media on competitive advantage

**1.4.2** To assess the influence of mobile phone platforms on competitive advantage.

**1.4.3** To find the influence of organizational website on competitive advantage.

### **1.5 Significance of the Study**

The findings of this study are significant to;

#### **1.5.1 KRA Organization**

This study identifies the gains that KRA has achieved with the use of digital platforms and how they can better improve their services to achieve a competitive advantage.

#### **1.5.2 Future Scholars**

The study enhances a wealth of knowledge on competitive advantage that companies gain as a result of using digital platforms. This is a basis for broader future research.

#### **1.5.3 Government**

The Kenyan government may use the findings of this study to and ensure that other government offices are digitized to achieve competitive advantage in their work. These findings can assist the government in doing an audit of the digitizing process in other offices and incorporate it in some of the vision 2030 milestones.

#### **1.5.4 Citizens**

The findings of this research study points out the remarkable milestones that KRA has achieved over the years. They also are able to identify the services they can access

through digital platforms and also erase the notion that government offices are bureaucratic and difficult to get any good services.

## **1.6 Scope of the Study**

The study is based in Kenya on digital platform and competitive advantage at Kenya Revenue Authority (KRA). The study focused on employees from KRA headquarters in Nairobi. The study focused on evaluating whether digital platforms have influenced competitive advantage of KRA. The study focused on 40 employees of KRA including staff at the communication department who deal with the digital platforms that the company engages in and the senior marketing team. The study was carried out in five months February 2017 to June 2017.

## **1.7 Definition of Terms**

### **1.7.1 Digital platforms**

This is a technological basis of delivering services/content from service providers to the end users. Example of digital platforms include; Facebook, twitter, YouTube etc. (Anna van , 2015)

### **1.7.2 Digitisation**

This is the conversion of analogue information to digital information (Ernst & Young, 2011).

### **1.7.3 Competitive advantage**

According to Michael Porter, Competitive advantage is a function of providing efficient buyer value compared to competitors (low cost), or performing activities at comparable cost but in unique ways that create more buyer value, hence, command a premium price (differentiation) than competitors (The Economist, 2008).

### **1.7.4 Social Media**

Social media is the collective of online communications channels dedicated to community-based input, interaction, content-sharing and collaboration (Dellarocas, 2013).

### **1.7.5 Website**

A website is a location connected to the Internet that maintains one or more pages on the World Wide Web (Jaruzelski & Dehoff, 2011).

### **1.7.6 Internet**

Internet is a global computer network providing a variety of information and communication facilities, consisting of interconnected networks using standardized communication protocols (Kaplan & Haenlein, 2010).

## **1.8 Chapter Summary**

This chapter presents the background information on digital platforms and competitive advantage giving various examples at the international, regional and country level. The chapter also identifies the problem statement focusing on the influence of digital platforms on competitive advantage in government agencies in Kenya a problem that this research seeks to address. The objective and specific objectives of the study; significance of the study, scope of the study and definition of terms are also presented in this chapter.

Literature Review based on the specific objectives of this research will be presented in chapter two. The research methodology used in this research is presented in chapter three and results and findings of the research are presented in chapter four. Chapter five presents the discussion, recommendation and conclusion for the research.

## **CHAPTER TWO**

### **2.0 LITERATURE REVIEW**

#### **2.1 Introduction**

The chapter provides the literature review on the influence of digital platforms on competitive advantage. The chapter is separated into various sections beginning with influence of social media; influence of mobile phone platform; influence of organizational website and influence of information technology on competitive advantage. The Chapter concludes with a chapter summary.

#### **2.2 Social Media and Competitive Advantage**

##### **2.2.1 Influence of Social Media**

According to Kaplan and Haenlein (2010), contemporary organizations have little to no influence over what clients or rather customers say about their brand to each other on social media. The firm simply acts as spectator to customer communication and consumer behaviours. Firms can now use social media to interact with and engage customers in real time, solicit innovative ideas from customers, correct error reports, emphasize positive and factual messages, fix damages, and disperse viral information like a giant word-of-mouth machine (Gallaughier & Ransbotham, 2014). Godes and Mayzlin (2012) found that social media functions like a giant word-of-mouth machine that accelerates distribution of information. Despite the fact that companies cannot control what people may say about their brand, their presence on social media will give them the opportunity to address any misconceptions or errors through dialogue with any customer that stops by to verify or inquire.

Social media include Wikipedia, Facebook, Twitter, Linked-In, Virtual games, and YouTube. Social media, such as Wikipedia (Online Encyclopedia), can be used for collaborative projects, where customers can create a source of information that they can depend on for making their purchasing and spending decisions (Kaplan & Haenlein, 2010). This means that anyone can put negative information on Wikipedia about a firm and visitors might see it as credible information that may influence their purchase decisions later. Blogs are social media that are equivalent to personal websites that allow others to participate through comments, links, texts, pictures, and videos (Hoffman &

Novak, 2010). Kwak, Lee, Park, and Moon (2010) reveal that customers create information, dialogue, knowledge, and opinions about goods and services via social media. It is, therefore, in the best interest of firms to get on board to have direct access to their customers. A firm getting on social media is one thing, yet knowing what social media to get on is another.

Firms should be careful on how they implement their social media strategy and on what platform they choose to do so. This is because different social media attract different kinds of customers and appeal to different kinds of purposes as well as messages (Kaplan & Haenlein, 2010). Mangold and Faulds (2014) suggest that firms should align their social media strategy with their corporate culture and strategy. While Wikipedia may be for customers who want detailed information about firms, Facebook is for people who like to know what their friends think, YouTube is for those that want to see and hear about a brand or products, and Twitter is usually for trendy people who like headlines and trending news. Firms must understand what kind of audience they cater to and how the audience likes to learn about things. Unattended issues left on social media by customers may become an embarrassment, and firms should respond without emphasizing negative behaviours (Gallaughar & Ransbotham, 2014).

Firms that choose to use multiple social media must ensure that their activities are aligned. Social media activities should be integrated with other forms of traditional advertising (TV, radio, print, email blast), and should provide access to all, including employees (Kaplan & Haenlein, 2010). Social media can be content communities, such as YouTube, through which users share large amounts of content by the minute through videos, text, slides, as well as pictures, and YouTube shares 100 million videos a day (Mathur, Black, Cao, Berger, & Weinberg, 2012). Social networking sites like Facebook and Twitter, allow users to create profiles, invite and accept friends, exchange emails and instant texts, share videos, pictures, and links. Kaplan and Haenlein (2010) confirm that Facebook has over 250 million users. There are a lot of users and markets on social media for firms to capitalize on, but they should align and integrate their conversations with traditional advertising in order to reach those that still respond to non-online interactions (Gallaughar & Ransbotham, 2014).

Firms can also reach customers through virtual games, which is also a form of social media. According to the Huffington Post (2010) and the New York Times (2008),

President Obama utilized Xbox 360 games to reach out to male youth voters and players (ages 16-30) in 10 states during his Presidential campaign race in 2008. President Obama got 66% of voters below the age of 30 to win the 2008 Presidential election as his strongest voting age group (USA Today, 2011). Virtual game world, like Microsoft's X-Box, are social media that allows users to appear as three-dimensional avatars and interact with other users' avatar as if they were their real selves in the gaming world restricted by rules (Kaplan & Haenlein, 2010). Virtual social worlds, like Second Life, are just like the virtual gaming world, but are free to behave in any manner and live as they like without the restriction of rules, as well as create content that can be exchanged or sold for money (Kwak, et al., 2010). Multiple users in virtual games can be present at the same time, within the same screen, and viewing the same setting or scene. Any advertisement or conversation placed at that setting can be viewed by thousands or millions of users simultaneously. If President Obama could use social media towards winning his Presidential election, then firms in need of maintaining or creating a competitive edge regularly need social media to target particular audiences with the right message at the right time.

### **2.2.2 Inviting Customers to Participate in Social Media**

Social media offer a platform for traditional marketing where firms talk directly to customers, and modern marketing, where customers can talk to each other and to the firms (Mangold & Faulds, 2014). According to Ellison, Steinfield, and Lampe (2015), social capital is having people stay connected and sharing ideas within a community that is already inhabited. There is a need for firms to have social capital (this is, retained customers on social media) in an attempt to promote their goods and services within a comfortable and trusted environment, such as social media provides.

Ellison, et al., (2015) state that Facebook provided some psychological well-being for users with low self-esteem and low life satisfaction that creates social capital. In so doing, ideas and involvement are shared without physical contact or individuals actually knowing each other. Many people who are shy in real life find comfort in social media to express themselves freely. In order to attract these kinds of customers and many more, incentives and discounts should be offered to customers in order to attract them first for interaction and dialogue.

### **2.2.3 Provide Incentives for Customer Subscription**

Contemporary, Wikipedia is one of the top five results whenever you search for many companies and products, and customers can read all the remarks that other customers have about that brand without any company's ability to defend themselves (Kaplan & Haenlein, 2010). Instead of firms expecting customers to utilize search engines to find all kinds of information about their brand, the firm can create their own social media, which can also be referenced by other social media and be found on the top search engine results as well (Durukan, Bozaci, & Hamsioglu, 2012). Blogs are social media that are equivalent to personal websites that can be adopted to allow customers to participate through comments, links, texts, pictures, and videos (Kaplan & Haenlein, 2010). Customers create information, dialogue, knowledge, and opinions about goods and services via social media. It is, therefore, in the best interest of firms to get on board to have direct access to their customers. A firm getting on social media is one thing, yet knowing what social media to get on is another.

Mass e-mail campaigns as well as a message on their monthly bills can be used to invite customers to join their social media for a little discount or coupon for a product or service. If they are already social media fanatics, they will easily join, often for free. These customers may not only verbally tell their physical friends about their new social media friend (the firm), but whenever the firm accepts their friendship, the social media friends of the user are notified (Dellarocas, 2013). On Twitter, users can search for the firm and request to follow their tweets or can view who their friends are following and decide to join the firm. On YouTube, users are allowed to search for firms and subscribe to their videos so that they get notified when new videos are posted. Users can also connect their videos to the firm's video(s) on similar issues and whoever finds the video on the list of "related videos" can also watch it. It is advisable for firms to use social media to converse about their coupons and new services (Kaplan & Haenlein, 2010).

### **2.2.4 Offering Credits, Discounts, and New Services**

In this day and age, for any more or less significant purchase, it has roughly become very important to gain knowledge about the brand, product or service, and compare it with the corresponding of competing brands before bearing in mind purchasing it. While potential customers do so, they communicate with friends, google the products, search on Twitter and

examine experiences of those who have used the brand, service or product earlier. The internet has now become the most ordinary tool that customers use to discover information on services and products that they are taking into account buying. Besides opinions of family and friends, people use the internet as first source of information when making a most important purchase decision. Whether they like it or not, individuals are holding discussions on the internet about the services and products they have used, sharing both bad and good experiences and feedbacks. In fact, almost two out of every three conversations online refers to a product, brand or service (Hubspot, 2012).

Customers are utilizing social media as a resource centre and tool to research their purchasing options before they make their purchasing decisions (Mangold & Faulds, 2014). As long as firms are frequently offering credits, discounts, and new services, this will always keep the firm's conversation on social media very interesting. Customers love to feel like they are getting more for their money. They will always visit the firm's social media to read their notifications or post on their own account to see what they can benefit from the following month or later. The more customers comment and share their opinion (like or dislike), the more their friends get to see firm's messages or postings (Ellison, et al., 2015).

### **2.2.5 Addressing Customers' Issues Effectively**

Customers making purchasing decisions are relying on social media for source of information than firm's traditional marketing and commercials (Mangold & Faulds, 2014). Thureau, et al. (2010) argues that the reason behind this is that social media solves customer problems for free as a result companies increasing quality and service reducing on their advertisement costs.

Firms need to respond to customer concerns in the shortest time possible as customers are making purchasing decisions in real time. Delay in responding to customer concerns online results in other people seeing the concerns which is a negative image for a company this includes, notification on twitter, Facebook and YouTube. can alert other users of what is happening to a firm alerts other people who are able to see comments (Kaplan & Haenlein, 2010).

According to Gallagher and Ransbotham (2014), use of postings strategically promotes firms products as evidenced through Wal-Mart and McDonalds Facebook presence and

also the presence of TV stations on twitter. In addition, feedback received from social media sites can help a company to companies make changes to their processes and methodologies, resulting in new product offers. They can create innovative bundles and carry out dynamic pricing based on this feedback (Singla & Durga, 2015).

## **2.3 Mobile Phone Platforms and Competitive Advantage**

### **2.3.1 Mobile Phone Platform**

Nowadays, Mobile phones turn out to be a major part of our life due to its advanced features. It is difficult to avoid such new technologies, while we all know the effect of mobile phone on our society and also on environment. The convergence of communication and computing for mobile consumer devices is on the evolutionary course to bring interoperability and leverage the services and functions from each and every industry (Nurfit, 2012).

Mobility has become a key factor in Information Technology (IT) strategy (Perez, 2012). The literature indicates that the use of mobile devices can assist the communication networks in business activities, such as Supply Chain Management (SCM), parcel tracking and Customer Relation Management (CRM) (Saunders, 2011). Mobile Commerce (m-Commerce) operates where mobile devices facilitate business operations that enhance and improve commercial activities (Varshney & Vetter, 2012). In commercial organisations, mobile devices such as Personal Digital Assistant (PDA) phones can help business users to organise their daily appointments, storing contacts phones numbers, receiving emails and surfing the internet, from a single mobile device (Baltzan & Phillips, 2010). Stockbrokers can receive critical information on their PDAs such as changes in financial stocks and shares at any time and also access financial documents and make amendments with the use of built in word processing applications.

Short Messaging Services (SMS) is another mobile solution making mobile payments or m-Payments (Alexy & Reitzig, 2012). In Croatia, parking in the city can be difficult as parking areas can be on either side of the road, or one large central lot located far from the drivers destination, the hassle of walking to 'top up' a parking meter and then walking back to the destination can be tedious. The driver receives an SMS acknowledgement text to indicate the expiration time of the parking meter and can then choose to return to the

vehicle or extend the parking meter by replying to the SMS text (Jaruzelski & Dehoff, 2011).

Addenbrooke's Hospital in Cambridge, highly regarded for the success of kidney operations in the last few years is utilising Blackberry's mobile phone application to wirelessly connect to the hospital's centralised database to keep track of available organ donors. The use of mobile devices allows surgeons and doctors to make on the spot decisions as they track available donors that match with the patient's profile. An indirect application of using these mobile phones in this situation can also be used to assist emergency crews in applying first aid. In the event of an accident, by taking images of any unusual wounds and forwarding them to specialists, a remote doctor can advise the ambulance crew to apply appropriate first aid to the victim (British Red Cross, 2004). The agility and mobility of using these mobile devices can prove advantageous to commercial operations Laudon and Laudon (2012), especially e-commerce applications. The increased demand of mobile devices is due to the improvements of wireless technology that has allowed managers to select from a wide variety of mobile technology to apply to their business. The use of m-commerce can provide both competitive advantage and modern image to the business. However, there are risks associated with it, such as the cost of development, security issues relating to viruses and privacy policies. It is imperative that the business should analyse the type of mobile devices which can best enhance their business activity (Varshney & Vetter, 2012). The use of strategic IT frameworks could be used for assessing mobile business application to aid business practitioners in decision making.

A combination in the use of mobile applications and e-business can offer competitive advantage by creating new platforms to reach global markets (O'Brien & Marakas, 2011). The e-business services allow business companies to reduce costs and increase revenue from distribution. Increased online sales and the use of mobile devices can enhance mobile business activities. For example, mobile applications are currently being used in warehousing, Small and Medium Enterprise (SME) and Customer Relationship Management (CRM) systems that allow tracking of parcels etc. This principle of distribution and transaction can be adapted for e-government or e-society applications. In these cases information can be distributed electronically similar to the e-society i2010, that the European Commission is developing for a European Information Society that

promotes growth and jobs in the EU (Pearlson & Saunders, 2011). John Hopkins Hospitals has implemented mobile applications to assist in their medical activities, such as e-prescriptions. This implementation saves the hospitals \$1,000 per day by providing the pharmaceutical information and the medicine that the patient needs (Thurau, et al., 2010).

There are two types of mobile data retrieval technologies, which are classified as web-enabled and standalone. The Web-enabled architecture involves mobile devices to send and retrieve information from a centralised database. With the standalone database, the data are distributed and stored on the mobile devices (Jaruzelski & Dehoff, 2011). The database can share the data among mobile devices, but the original data remain in the mobile device for example using PDAs for collecting questionnaire data. The type of wireless technology used, such as Wireless Local Area Network (WLAN), Wifi, Bluetooth and WiMax, will also affect the type of mobile application that a company can apply in their business activities. The most popular ones are Bluetooth and Wi-Fi connections which are simple and less expensive to use (Kwak, Lee, Park, & Moon, 2010).

### **2.3.2 Mobile Devices as a Marketing Channel**

Mobile marketing is a wide term and frequently used quite loosely when talking about mobile advertising or mobile commerce. Terms have been to some extent superimposed as a result of the rapid growth and development of electronic commerce, which led to the emerging of mobile commerce, and so the terms have not had time to really institute themselves. Findings of Leppäniemi and Karjaluoto (2008) support this, as according to them the terms mobile advertising, mobile marketing, wireless advertising and wireless marketing have all been used either explicitly or implicitly in academic study to conceptualize marketing communications in mobile media. More than anything, mobile is a conduit, through which information can be effectively and quickly shared. It is studied, that consumers normally have positive image about marketing communications which are executed through a mobile media (Kaplan, 2012).

One of the most thoughtful study on the subject of mobile marketing comes from Varnali and Toker (2010), who did a inclusive literature review about mobile advertising, consisting of 255 journal articles from 82 different journals published between 2000 and

2008, and they were unanimous in their conclusion that there has not been established a generally accepted categorization framework for mobile marketing. Fundamentally this illustrates that there is no one solid and real answer for the question of what mobile marketing is. The research points out that quick increase of the propagation in the simple business potential of mobile marketing in reality attracts researchers from a variety of other fields to study the phenomenon, therefore the research of the field as whole is extremely inconsistent and fragmented. Studies by Han, Cheng, and Song (2010) support those of Varnali and Toker (2010), asserting that over and over again only precise segments are studied, and hardly ever more than one of them is covered in one study. Most popular of the said segments are strategy, applications, and different views on legal issues, public policies and consumer behavior; like adoption and acceptance, perceived consumer value, attitudes, role of trust, and many more. This has led to not having an ordinary conceptualization of the mobile advertising, and as a result it could be said that no clear definition is yet agreed on it, at least on researchers' perspective. Varnali and Toker (2010) recapitulate this as "the scope of mobile marketing is still vague". Smutkupt, Krairit, and Esichaikul (2010) made the same findings in their study, noting that most of the academic research, which has tried to provide analytical framing to the subject, has often been specific on context, based on single viewpoint, and even developed purposively to imitate the authors' notions, and therefore the results can be well thought-out being inconclusive, and having a low applicability.

### **2.3.3 Push- and Pull-Marketing**

This technology dependency is accurately what gives contemporary mobile marketing its exclusive twist, and it must be said that mobile marketing's definitions are more modified by the technologies involved, than by marketing aims. By researching these technology types and how marketers utilize them, Dickinger, Haghirian, Murphy, and Scharl (2004) revealed that mobile marketing, like most marketing channels, can be categorized in to two separate groups: push and pull. However, push and pull communication strategies in mobile marketing slightly differ from common mass marketing techniques (Leppäniemi & Karjaluo, 2008). Push marketing is the more traditional way of the two, where content is "pushed" on behalf or by of advertisers to consumers through their mobile devices, without the permission of the end-user. Pull marketing covers the rest of the mobile marketing techniques, where the consumer eagerly "pulls" marketing information or other brand related content to him or herself by engaging with some preset "trigger

media” via mobile device (Scharl, Dickinger, & Murphy, 2005). According to research by Pousttchi and Wiedemann (2006), it does not matter which of the two kinds of marketing communication a business decides to use, because consumers are not likely to allow any type of mobile marketing if they do not foresee advantage in getting the advertisements. For that reason the basis of mobile marketing campaign has to be the purpose to present something of value to consumers.

Push-marketing, even though still used, is considered not as effectual as pull-marketing. Push-marketing’s biggest issue is the fact, that consumer’s perception of meddling has a negative impact on consumer’s attitude to mobile marketing (Zhang & Li, 2012). Pull-marketing increase benefit by utilizing the richer customer data, so the organizations can offer more personalized and pertinent marketing, which is advantageous for both parties (Kautonen, Karjaluoto, Jayawardhena, & Kuckertz, 2007). Time and again pull-marketing is therefore called permission-based mobile marketing, referring to the fact that end users must agree and give permission to receive information from an organization, as well as offer personal data for them in exchange (Hennig-Thurau, et al., 2010). This enables businesses to improve offerings and services individually, thus building stronger relationships with customers, and creating mutual benefit (Haghirian & Inoue, 2007).

Heinonen and Strandvik (2007) argued that permission is not an automatic guarantee that the consumer pays attention: it is only a way to open up a communication channel and to have some indication of the consumer’s potential areas of interest. It has also been studied that the more experience consumers have with mobile marketing, the less influence the perceived control will have on permission (Jayawardhena, Kuckertz, Karjaluoto & Kautonen, 2009). Permission-based marketing is becoming increasingly popular, as consumers tend to trust big brands with established media presence enough to let them take advantage of personal data, such as demographic and location information. In fact regarding the trust, brands’ media presence weighs more than the consumers’ own experiences (Han, Cheng, & Song, 2010). According to Haghirian, Madlberger, and Tanuskova (2005), the higher the perceived credibility of mobile advertiser is, the higher the perceived advertising value is for the consumer.

Mobile technology’s rapid development pace has indeed created many new marketing channels and methods in recent years. Consumers on all demographics are engaging increasingly in multi-channel mobile marketing campaigns Persaud and Azhar (2012),

and mobile devices are increasingly more pre-sent in multimedia marketing, either as a supporting or activating media (Kaplan, 2012). Haghirian, Madlberger, and Tanuskova (2005) came to conclusion that “mobile technologies have the potential to create new markets, alter the competitive landscape of business, and change existing societal and market structures”. These digital media have vastly improved marketers possibilities to reach potential customers via content and context personalization like never seen before (Heinonen & Strandvik, 2007).

## **2.4 Organizational Website and Competitive Advantage**

### **2.4.1 Organizational Website**

The Internet lowers entry barriers for new competitors as there is no requirement for huge capital investment and sales forces as a result able to enter into e-commerce. Internet access is also seen to increase the number of people using it resulting in increase of online business competition in various industries. According to the Department of Commerce’s ‘Digital Economy 2000’ report<sup>1</sup>, in 2000 the number of people with Internet access reached an estimated 304 million worldwide, an increase of almost 78 percent over 1999 (Betts, 2011). The Internet also brings many more companies into competition with one another by expanding geographic markets (Porter 2001).

The Internet changes the basis of competition by radically altering product/service offerings and the cost structure of firms (for instance, cost reductions in production, distribution, and transaction) (Bakos, 2011). The Internet also changes the balance of power in relationships with buyers and suppliers by increasing or decreasing the switching costs of these buyers and suppliers. By reducing customers' search costs, the Internet makes price comparison easy for customers, and thus increases price competition (Evans & Wurster, 2012). The price competition resulting from lowered customer search costs increases rivalry among existing competitors, reduces switching costs of customers, and thereby shifts bargaining power to customers. On the other hand, IT reduces menu cost - the cost of administering multiple prices for a number of different products or services - and, in part, facilitates price discrimination (Bakos & Brynjolfsson, 2007). The Internet creates new substitution threats by enabling new approaches to meeting customer needs and performing business functions (Porter 2001). World Wide Web (WWW) technology itself has produced new promotion venues. The Internet also facilitates an electronic integration of the supply chain activities, achieving efficient distribution and

delivery. It also facilitates partnerships or strategic alliances by networking partners or allies.

There are many strategies of achieving competitive advantage using internet and websites. These are product strategy, price strategy and promotion strategy.

#### **2.4.2 Product Strategy**

On the Internet, consumers can easily collect information about products or services without travelling to stores to inspect products and compare prices. In the offline market researching product offerings can be extremely expensive and time consuming. As a result, consumers rely on product suppliers and retailers to aid them in the search, and the suppliers and retailers take advantage of this situation by charging higher prices (Allen & Fjermestad, 2011). Consumers end up paying more and often not getting the product they really wanted. However, this is not the case for e-commerce. In the Internet market, a complete search of product offerings is possible at virtually no cost. Because consumers can easily compare prices and find close substitutes, companies are forced to lower prices. Companies cannot achieve competitive advantage simply by exploiting consumers' search costs, as they did in the physical market (Bakos, 2011).

An alternative is for companies to make consumers' product comparison more difficult by differentiating their products from others. One possible competitive strategy is product bundling. Product bundling promotes the benefits of the whole package, thus keeping buyers from comparing individual items. For instance, Gateway started bundling its Internet services and computers in response to plunging computer prices (Sinha, 2009). AOL, recently merged with Time Warner, is strengthening its bundling strategy by adding interactive and on-demand television, music on computer, and email on mobile phone to its existing services. By adding more services to a bundle, the company could command a higher price for its bundling service. Moreover, adding services to bundles is financially attractive because it is less expensive to sell an additional service to an existing customer than it is to attract a new customer (Schiesel, 2011). This product (or service) bundling strategy counteracts the threat of product substitutes and rivalry among existing firms.

Another strategy is innovation or the introduction of niche products, which also counteracts the threat of product substitutes, new entrants into the market, and competition among existing firms. By using the direct access to consumers enabled by the Internet, companies can collect information, identify target consumers, and better introduce products or services to meet consumers' needs. Companies can also collect information on new products desired by small segments of the market. By creating products that meet the needs of consumers in these niche markets, companies can command higher prices (Sinha, 2009). Another strategy associated with niche products or innovation is customer-centric strategy. Compared to a product-centric strategy, which pushes products to consumers, customer-centric strategy pulls information from consumers to improve and customize products (Viehland, 2012).

An expansion into related product lines can also be a good strategy. According to Porter (1987), the expansion into related product lines can exploit transfer of skills or sharing of activities such as promotion and distribution, which will lead to competitive advantage. Sharing can lower costs by achieving economies of scale and effectively utilizing company resources such as market information, managerial or technical expertise, and knowledge. Like traditional companies, Internet companies can also expand their product line into areas related to their existing product lines. For example, Amazon.com recently started selling personal computers in addition to its existing line of electronic products such as disk drives and memory (Bakos & Brynjolfsson, 2007). Amazon.com holds no computer inventory and has computers shipped directly from a computer distributor to its customers. This allows Amazon.com to save inventory-holding costs. However, such expansion cannot bring increased profits to Amazon.com without effective utilization of its existing customer base and information, and managerial or technical knowledge of e-business.

### **2.4.3 Price Strategy**

The Internet enables consumers to compare prices, products, and services across suppliers. For example, by logging onto price-comparison sites like Pricescan.com and shopping agents like Bottomdollar.com, consumers can readily compare the prices and features of more than 10,000 products available on the Web (Sinha, 2009). This leads to increased price competition and lowers the prices of products or services. According to Bakos, (2011), lower search costs for price and product offerings in Internet marketplaces

promote price competition among sellers. The Internet thus significantly affects competition, and intensive price competition can eliminate sellers' profits.

To overcome these threats, companies have to employ appropriate pricing strategies for selling products over the Internet. Sellers can employ a price discrimination strategy that makes it difficult for buyers to compare the prices of alternative product offerings (Bakos, 2011). By collecting information about buyers, companies can perform more effective price discrimination. For instance, Staples.com charges different prices for different markets by asking customers to enter their zip codes before they can obtain prices. Sinha (2009) suggests two strategies for price discrimination: price lining and smart pricing. Price lining refers to the practice of offering the same products or services at various price points to meet different customers' needs. For example, American Online charges five different rates that vary according to subscriber usage. Smart pricing refers to the practice of charging various prices from market to market, depending on market conditions and differences in how customers value the product (for instance, the pricing strategy of Staples.com). Bundling can also be thought of as a type of price discrimination since it reduces the heterogeneity of choices facing consumers and thus their willingness to pay for individual items (Bakos & Brynjolfsson, 2007). In bundling, a single price is applied to a bundle. If consumers' demands remain heterogeneous even after bundling, then a mixed bundling strategy, which charges different prices for different bundles, can be applied.

Companies can also protect profits by achieving cost leadership in a particular market or industry. If sellers cannot price discriminate, the lowest price sellers can charge is the marginal cost of production. As competition intensifies, companies may have to lower their production costs to protect profits. Or companies may have to improve their product or service offerings with added values. Even in intensive price competition, better products or services will raise customers' switching costs and still command higher margins. For example, OfficeDepot.com provides added value to customers' order process (Gulati & Garino, 2012). Each contract customer has a customized view of the OfficeDepot.com site. When logging on, the customer's employees are automatically assigned an authorization level that limits what they can buy and how much they can spend. With this value-added service, OfficeDepot.com can protect its profits. By eliminating paper purchase orders, the authorization system also benefits customers by

reducing their purchase order costs and thus keeps them from switching to other suppliers (Dellarocas, 2013).

#### **2.4.4 Promotion Strategy**

One of the reasons why many dot.com companies do not realize profits is that they spend a great deal of money for mass marketing to promote their e-brands to consumers. One television executive recently said, "The dot-coms spent like drunken monkeys trying to build their brands. They were willing to pay any price. They were unsophisticated and in a hurry" (Ellis-Chadwick, 2012). The recent demise or downsizing of so many Internet start-ups has had a significant effect on television network revenues (Carter, 2011).

Traditional mass marketing using television commercials, trade allowances, discounts, coupons, and sweepstakes is no longer successful in the Internet market, even in consumer-packaged-goods segments, where rival products now differ very little, since consumers can easily acquire information on the price and characteristics of products (Schiesel, 2011). Sales promotions with coupons and discounts seldom build customer loyalty to brands because customers conclude that the lower prices are a fair reflection of the company's costs. When the promotions are over, customers evidently believe the regular prices are excessive and turn to rival products (Sinha, 2009). Thus mass marketing and sales promotions result in expensive, inefficient brand management.

To manage e-brands effectively and efficiently, companies have to employ promotion strategies different from those used by traditional marketing. One tactic is to build a direct link with consumers and enter into a dialogue with them about products (dialogue-based marketing or one-to-one marketing). This allows companies to provide customers with information about their products, collect information about their customers, and engage in data mining. They can then customize products to meet customer needs and offer promotions tailored to specific customer groups. This process helps build a base of loyal and profitable customers (Schiesel, 2011). Allen and Fjermestad (2011) also argue that the benefits of personalized promotions will be greatest when customers are interested in detailed product information or the product is marketed as state-of-the-art. The Internet encourages companies to employ this marketing based on direct, personalized relationships with customers (so-called 'relationship marketing').

According to Sinha (2009), the Internet also provides customers with an unprecedented degree of control over the entire marketing process. As consumers become proficient at using the Internet, they will only buy products that precisely match their needs. Thus, companies must formulate customer-centric promotion strategies that respond to this new customer power. Allen and Fjermestad (2011) suggest that brand management will be successful only when it is associated with beliefs and experiences such as feelings, associations, and memories. Thus, Internet promotion must also focus on presenting information about the experiences and beliefs of consumers associated with each brand.

Another promotion strategy for gaining competitive advantage is revenue-sharing marketing strategy (Hoffman & Novak, 2010). A revenue-sharing marketing strategy is an affiliated marketing program with partners based on commissions. For example, Amazon.com launched its affiliate program in 1996 and now has some 400,000 affiliates. CDnow.com (the pioneer of revenue-sharing strategy), REI.com, and Dell Computers also have strong affiliate programs. As the Internet continues to mature, companies can seek out specific segments of potential customers and the corresponding Web sites, and then establish revenue-sharing marketing programs with Web sites that can deliver those potential customers. Compared to traditional mass marketing, revenue-sharing programs allow companies to keep track of purchases made by customers and draw a direct line from marketing (expenses) to sales (performance). However, traditional marketing mechanisms such as television commercials are still important in that they can attract off-line customers. Thus, Internet companies need to find a good balance between Internet promotion (one-to-one or many-to-many marketing) and traditional mass promotion (one-to-many marketing) (Schiesel, 2011).

## **2.5 Chapter Summary**

This chapter determines the influence of digital platforms on competitive advantage of Kenya Revenue Authorities (KRA), the influence of; social media, mobile phone platform and information technology on competitive advantage. The next chapter, research methodology, explores the best methodology the research adopted to reach to the solution of the problem.

## **CHAPTER THREE**

### **3.0 RESEARCH METHODOLOGY**

#### **3.1 Introduction**

Research methodology used in this research is described in this chapter. The chapter covers the research process; design, population, and sampling design that includes; the target population, sampling design, sampling frame, sampling technique and sampling size. The method of data collection, procedure used in this research, analysis of the data and the instruments of research are also described in this chapter.

#### **3.2 Research Design**

Research design is defined as the blue print for the collection, measurement, and analysis of data (Langen, 2009). This is the overall strategy that a researcher chooses to integrate the different components of a study in a coherent and logical way ensuring that the research problem is effectively addressed. This research adopted descriptive research design to measure the influence of digital communication platforms on competitive advantage with a focus on Kenya Revenue Authority. The comparison of the variables under study, description and interpretation of existing relationships, made descriptive research design appropriate for this study.

This design is appropriate because the respondents are expected to inform how using digital communication at KRA has impacted on competitive advantage. The design focuses on understanding and explaining the digital platforms and competitive advantage constituting the blueprint for the collection, measurement and analysis of data. This research helps in providing information that will be used for further research so as to gain conclusive evidence in future. The research targets staff at KRA digital communication department.

#### **3.3 Population and Sampling Design**

##### **3.3.1 Population**

This is defined as the huge collection of objects and individuals that is the main focus of a study (Cooper & Schindler, 2008). A population is also known as a well-defined collection of individuals or objects known to have similar characteristics. 40 KRA Staff at the head office were the target population for this study. The staff was drawn from the

communication department who deal with digital platforms and the senior marketing team.

### **3.3.2 Sampling Design**

#### **3.3.2.1 Sampling Frame**

Sampling frame is a list of all the items in a population. It can be a list of things that a sample is drawn from (Andale, 2014). A sampling frame must be constructed in research to ensure that the correct population targeted in the research is identified. The sampling frame for the study was obtained from the human resource office at KRA head office.

#### **3.3.2.2 Sampling Technique**

This is defined as the process of identifying a sample from a population (Cooper & Schindler 2008). This study did not however employ a sampling technique but conducted a census on the target population. Census is described as process whereby all population members are involved in a research process for data collection (Kothari (2004). The census was conducted on 40 employees of KRA.

#### **3.3.2.3 Sampling Size**

Sampling size is defined as individuals, items, objects selected to represent a larger population in research (Chaudhuri & Stenger 2005). This study included the total population of employees of the KRA communication department involved with the digital platforms and the senior marketing team at the company a total of 40 employees who were all involved in this research by carrying out a census.

### **3.4 Data Collection Methods**

Data collection methods are defined as ways of gathering facts that include behaviours, attitudes and perceptions from the respondents (Cooper & Schindler, 2008). In this research, data was collected using primary data collection techniques and secondary data collection techniques. Secondary data was gathered in literature related to this study by other scholars and primary data collected using questionnaires that was structured including both open ended questions that provided an insight of the respondent and close ended questions.

The open ended questions include the general information of the respondent and the closed ended questions include questions designed on the basis of the specific objectives and were standardized, valid and reliable for testing purposes for this research. Closed ended questions ensured that the respondents are restricted to certain categories in their responses using the Likert scale. The questionnaires were distributed to the target population using a research assistant who was oriented of what is expected in this data collection process.

### **3.5 Research Procedures**

Research Procedures can be defined as the process of processes involved in identifying and developing a topic for a research investigation (Cooper & Schindler, 2008). This study conducted a pilot study by pre-testing the questionnaires on four employees of the KRA who were not participating in the main study. The pre-test ensured the validity and reliability of the questionnaire. Based on the pre-test, any amendments were done on the questionnaires before administering the final questionnaires. An introductory letter approved by the university was presented to KRA to facilitate the data collection and upon approval by the organization; the questionnaires were administered to the employees of KRA who are target respondents for this research with the help of a qualified research assistant. In ensuring high response rate, reminders and pre-contact with respondents was done. Important to note is that ethical issues of confidentiality and privacy was emphasised on the introductory letter guaranteeing the organization and the respondents that this research is purely academic.

### **3.6 Data Analysis Techniques**

Data analysis techniques are defined as processes of evaluating data using analytical and logical reasoning to examine each component of the data provided. This technique helps in developing explanations, describing facts, detecting patterns and testing hypothesis. It is used in all of the sciences and also in business, administration, and in policy (Cooper & Schindler, 2008). Descriptive statistics help researchers to describe measurement distribution and entails graphs, charts, numbers and tables that describe, summarize, organize and present raw data (De Vaus, 2006).

The data collected using questionnaires will be coded and entered into Statistical Package for Social Science (SPSS) for analysis. The coding will help in avoiding errors and

omissions of questionnaires. The entered data will be analysed and data presented using descriptive statistics including mean, standard deviation and coefficient of variation as well as use of regression analysis as inferential statistics.

### **3.7 Chapter Summary**

Procedures and research methods used in this study were discussed in this chapter. The total population under study included 40 employees and the sampling frame was based on the whole population by conducting a census. A pilot test was conducted to examine the completeness and clarity of the questionnaire and data was analysed using SPSS and findings, conclusion and recommendations of the study presented in chapter four and five.

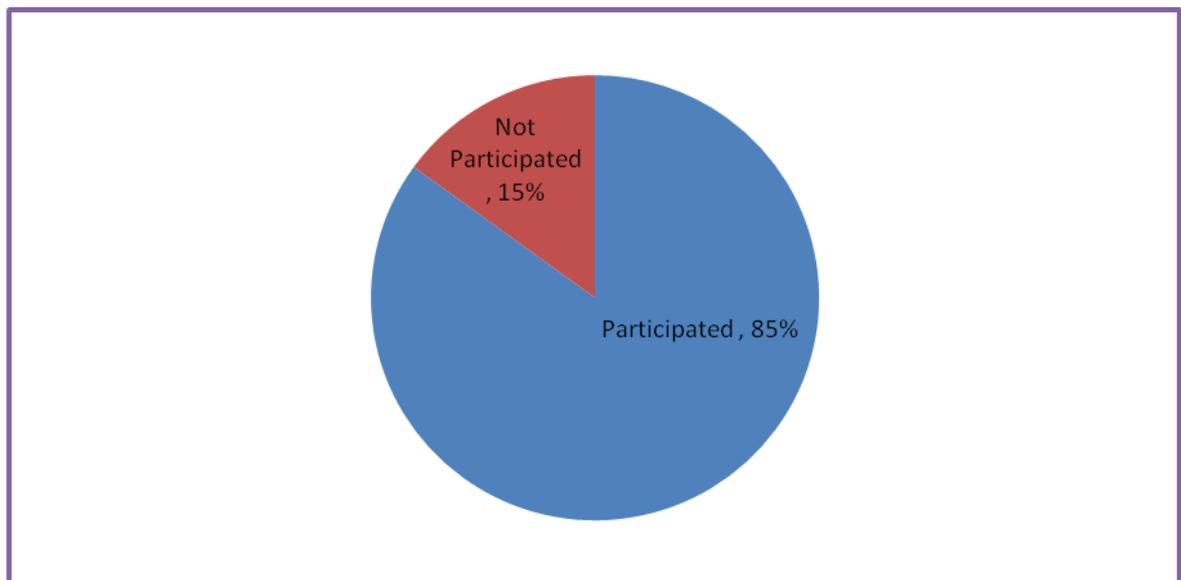
## CHAPTER FOUR

### 4.0 RESULTS AND FINDINGS

#### 4.1 Introduction

This chapter illustrates the analyzed results and findings of the study on determining the influence of digital platforms on competitive advantage of Kenya Revenue Authority (KRA). The first section of the chapter is about the response rate. The second section is about the background information, which shows the respondents' demographic presentation. The third section is about the influence of social media on competitive advantage. The fourth section deals with the influence of mobile phone platforms on competitive advantage. The fifth section is on the influence of organizational website on competitive advantage in Kenya Revenue Authority and the final section is the summary of the whole chapter.

##### 4.1.1 Response Rate

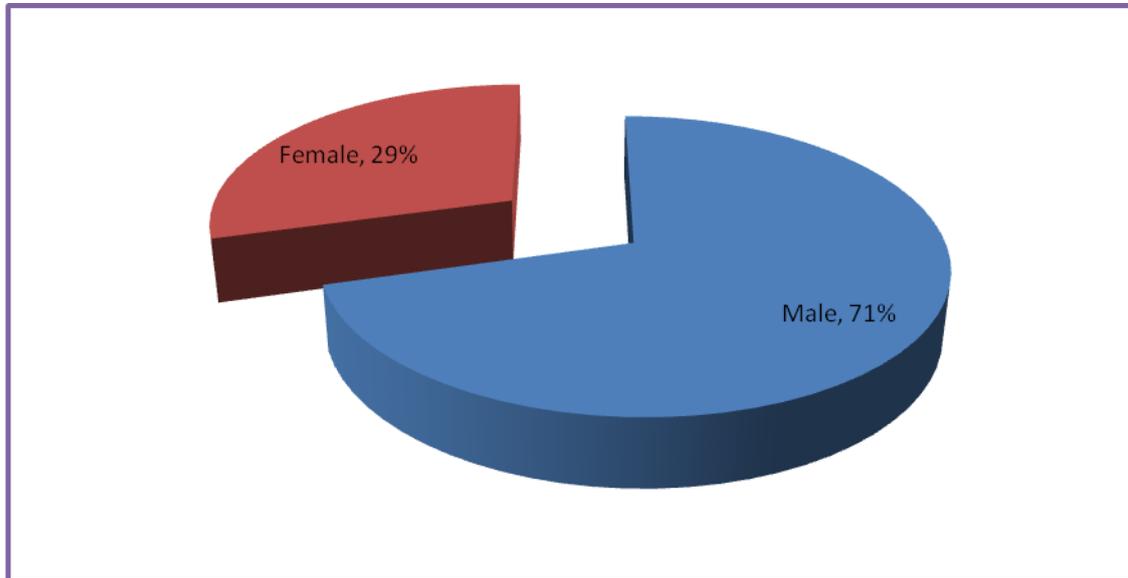


**Figure 4.1: Response Rate**

The total number of individuals or respondents participated in a study is known as response rate. The response rate is presented in the form of percentage. This study had a population size of 40 staff working at KRA head office in Nairobi. The study in Figure 4.1 depicts the response rate of the study. From the study, it is crystal clear that 85% of the respondents participated in the study while 15% did not participate in the study. The study, therefore, implies that the response rate is well above the average response rate to represent the population.

## 4.2 Background Information

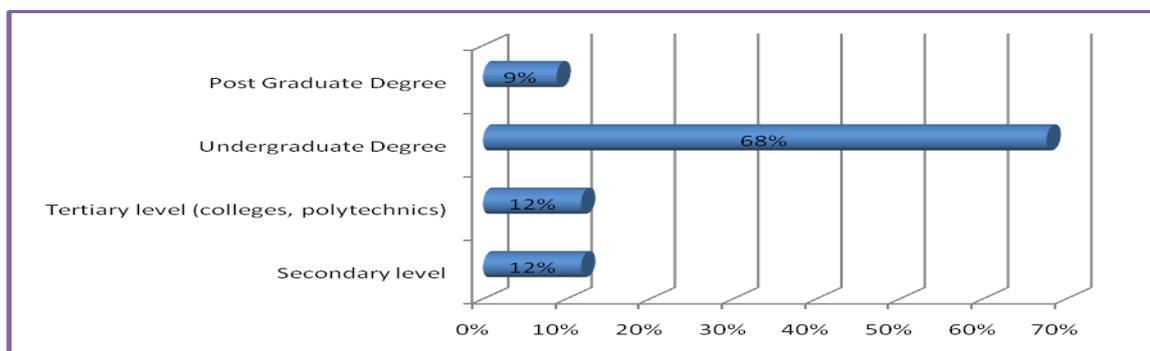
### 4.2.1 Gender of Respondents



**Figure 4.2: Gender of Respondents**

Figure 4.2 was used to show the gender representation of the study. It is well revealed that 29 percent of employees at KRA head office were females and 71 percent of the employees were males. This therefore illustrates that majority of the employees at KRA are men. This means that the organization enjoys flexibility in working. This is because men can work for more or rather longer hours than women. They can also willingly go for night shifts and longer seminars which is not the case for married women employees.

### 4.2.2 Level of Education of Respondents

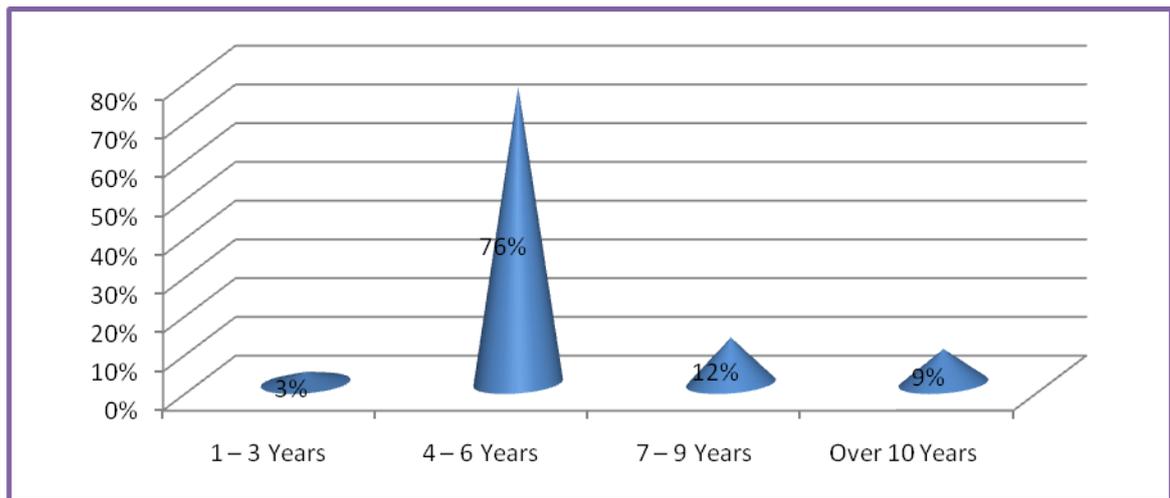


**Figure 4.3: Level of Education of Respondents**

Table 4.3 represents the level of education of the KRA's employees. The level of education was categorized into four levels as; secondary level of education, tertiary level of education, undergraduate level of education and post graduate level of education. From

the figure, it is revealed that, 12 percent of the respondents had secondary level of education, 12 percent had tertiary level of education, 68 percent had undergraduate degree level of education, and 9 percent had post graduate degree level of education. This implies that most of the employees hold undergraduate degrees. This means that KRA easily make informed rational decisions to move the organization forward.

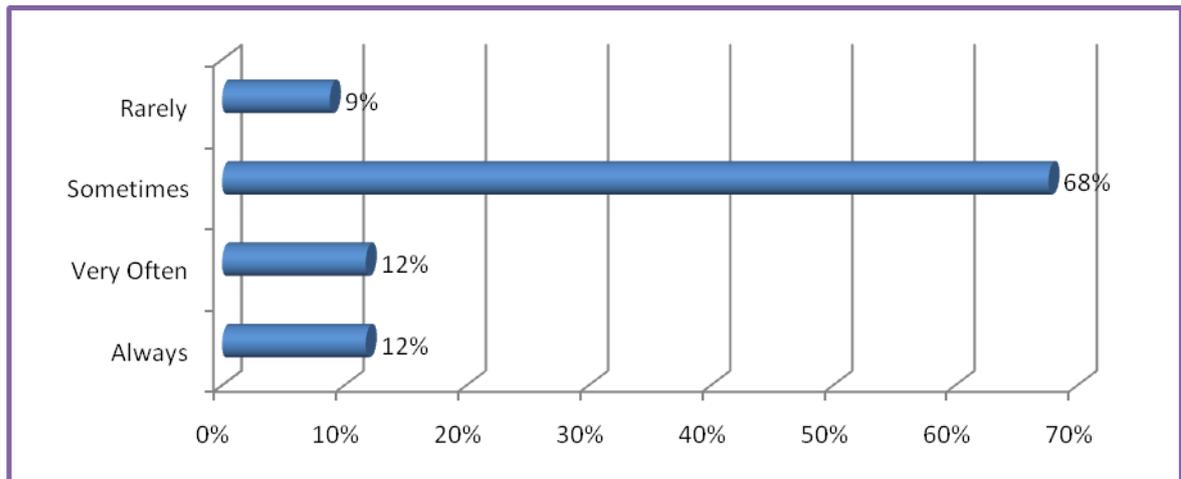
### 4.2.3 Working Experience of Respondents



**Figure 4.4: Working Experience of Respondents**

Figure 4.4 represents the respondents' year of working experience at Kenya Revenue Authority. From the figure, 3 percent of staff have less than three years of working experience in the organization, 76 percent of the employees have four to six years of working experience in KRA, 12 percent of the employees have seven to nine years of working experience in the organization and 9 percent of the staff at KRA have more than ten years of working experience. The study implies that the majority of the staff (76 percent) had a work experience of four to six years. This translates that the majority of the KRA staff have moderate experience at work hence the organization ought to invest in employee trainings and development to enhance their knowledge and expertise.

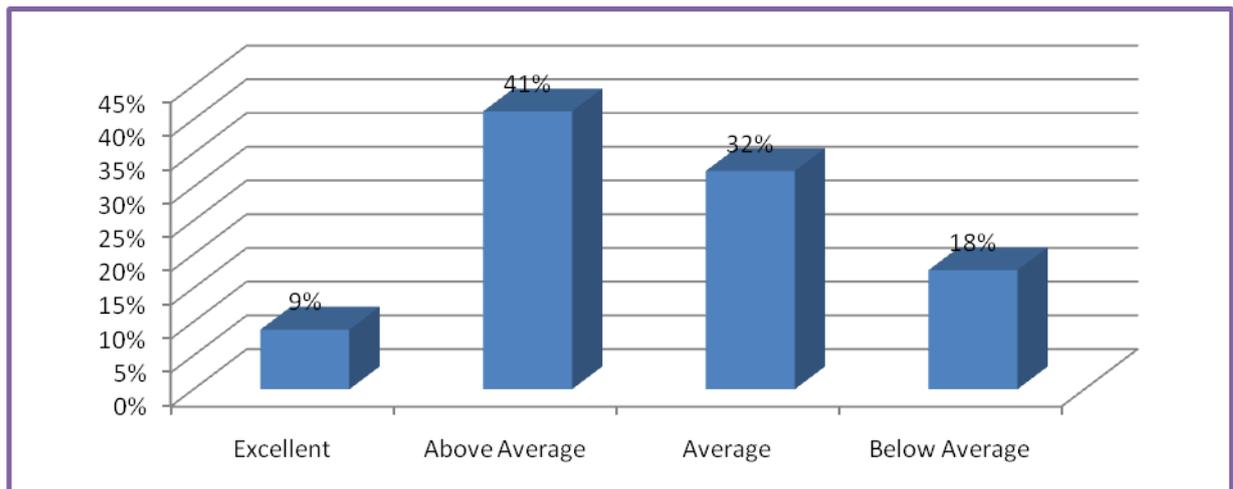
#### 4.2.4 Involved in Digital Platform



**Figure 4.5: Involved in Digital Platform**

To show the level of respondents' involvement in digital platform at KRA, Figure 4.5 was used. The table indicates that 12 percent of respondents had always been involved in handling digital platform, 12 percent of the respondents had very often been involved in handling digital platform, 68 percent had sometimes been involved in handling digital platform and 9 percent of respondents had rarely been involved in handling digital platform. This means that majority of the employees at KRA are sometimes involved in handling digital platform.

#### 4.2.5 How Digital Platform has Impacted KRA



**Figure 4.6: How Digital Platform has Impacted KRA**

Figure 4.6 reveals how the digital platform has impacted the performance of KRA. The figure shows that 9 percent of respondents believe that digital platform has caused

excellent performance of KRA, 41 percent of respondents believe that digital platform has cause above average performance of KRA, 32 percent of respondents found that the digital platform has caused average performance of KRA and 18 percent of respondents believe that digital platform had a below average impact on KRA performance.

### 4.3 Social Media and Competitive Advantage

The first objective of the study was to determine the influence of social media on competitive advantage in Kenya Revenue Authority. The study sought information from social media activities, customers, social medial platforms, social media alignment, and promotional services.

#### 4.3.1 Descriptive of Social Media

**Table 4.1: Social Media and Competitive Advantage**

	N	Mean	Std. Deviation	C.V
KRA has managed to capitalize on social media in attempt to promote their services	34	4.79	0.41	0.09
Social media has helped KRA address misconceptions with customers	34	4.74	0.45	0.09
KRA use social media platforms such as twitter to interact and engage customers	34	4.68	0.48	0.10
Social media activities at KRA are aligned with other forms of traditional advertising	34	4.59	0.61	0.13
Social media has helped KRA address errors through dialogue with customers	34	4.41	0.61	0.14
KRA has aligned their social media strategy with the overall organization strategy	34	4.62	0.65	0.14
KRA is frequently offering new services to its customers	34	4.56	0.71	0.15
KRA is frequently offering credits/discounts (waivers) to its customers	34	3.76	0.74	0.20
KRA has aligned their social media strategy with their corporate culture	34	3.65	0.77	0.21
KRA has introduced incentive for customers who frequent their social media sites	34	4.65	0.81	0.17
Social media activities at KRA are integrated with other forms of traditional advertising	34	4.24	0.86	0.20
KRA use social media platforms such as Facebook interact and engage customers	34	2.56	0.93	0.36

Statistical program called SPSS was used to test for descriptive statistics of parameters of social media. The descriptive results for parameters of social media were provided in

terms of the mean, standard deviation and coefficient of variation (C.V). From the study, the total number of respondents analyzed in each measure was 34. This was determined by the number of valid complete questionnaires in each case.

The mean for social media ranged from 2.56 to 4.79. The findings from the study illustrates that Kenya Revenue Authority uses social media to enhance her competitiveness and achieve competitive advantage. Even though the study shows that respondents agreed that most of the parameters of social media enhance competitive advantage, they disagreed on the last parameter that KRA uses Facebook interact and engage customers hence the lowest mean of 2.56.

The standard deviation for social media ranged from 0.410 to 0.927. The significant parameter is that social media activities at KRA are aligned with other forms of traditional advertising while the least significant parameter is that KRA uses Facebook interact and engage customers. It means that social media platform is significant to KRA’s achievement of competitive advantage. The study also revealed that coefficient of variation of the parameters ranged from 0.09 to 0.36.

**4.3.2 Regression Analysis of Social Media and Competitive Advantage**

To determine relationship between social media and competitive advantage, regression was conducted between parameters of social media as a predictor variable against the competitive advantage achieved in the Kenya Revenue Authority.

**Table 4.2: Model Summary of Social Media and Competitive Advantage**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.814 <sup>a</sup>	0.662	0.64	0.41581
a. Predictors: (Constant), KRA has aligned their social media strategy with the overall organization strategy, Social media has helped KRA address misconceptions with customers				
b. Dependent Variable: Competitive Advantage				

Table 4.2 reveals that R<sup>2</sup> of the model is 0.814 meaning that 81.4 percent of the variations in the competitive advantage achieved at KRA are as a result of effective utilization of social media. The 18.6 percent difference is due to factors not predicted in this model symbolized by the error term. The study, using this model, tested whether there is a strong empirical ground to conclude that social media significantly enhances competitive advantage.

**Table 4.3: ANNOVA of Social Media and Competitive Advantage**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	10.495	2	5.248	30.352	.000 <sup>b</sup>
	Residual	5.36	31	0.173		
	Total	15.855	33			
a. Dependent Variable: Competitive Advantage						
b. Predictors: (Constant), KRA has aligned their social media strategy with the overall organization strategy, Social media has helped KRA address misconceptions with customers						

From ANNOVA in Table 4.3, there is a p-value of 0.000. The study concludes that there is a significant relationship between social media and competitive advantage at Kenya Revenue Authority. This implies that social media has a significant influence in enhancing competitive advantage.

The standardized coefficients of social media parameters in table 4.4 are 0.373 and 0.539 and p values are 0.007 and 0.000 respectively. The study used linear regression model to test the relationship between social media and competitive advantage at Kenya Revenue Authority. The linear equation model is stated as;  $Y = \alpha_0 + \alpha_1 X_1 + \epsilon$ : Where Y=Competitive Advantage,  $\alpha$  = Constant value,  $X_1$  = social media addressed misconceptions,  $X_2$  = aligning social media strategy with overall organizational strategy, and  $\epsilon$  = error term

The following were the results of the model in Table 4.4,

**Table 4.4: Coefficients Variation of Social Media and Competitive Advantage**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.468	0.774		-1.898	0.067
	Social media has helped KRA address misconceptions with customers	0.577	0.198	0.373	2.915	0.007
	KRA has aligned their social media strategy with the overall organization strategy	0.574	0.136	0.539	4.22	0
a. Dependent Variable: Competitive Advantage						

The study thus represents competitive advantage as,

Competitive advantage = -1.468 + 0.373 social media addressed misconceptions + 0.539 aligning social media strategy with overall organizational strategy +  $\epsilon$

It means that a unit change in the ways social media is applied causes a change of 0.912 in Kenya Revenue Authority's competitive advantage.

#### 4.5 Mobile Phone Platforms and Competitive Advantage

The second objective of the study was to assess the influence of mobile phone platforms on competitive advantage of Kenya Revenue Authorities. The study sought information from communication networks, short messaging services, mobile commerce, pull marketing, push marketing, E-business services, mobile payments, strategic IT frameworks, and web-enabled architecture.

##### 4.5.1 Descriptive Statistics of Mobile Phone Platforms

**Table 4.5: Mobile Phone Platforms and Competitive Advantage**

	N	Mean	Std. Deviation	C.V
KRA uses mobile devices for communication networks in business activities for Customer Relation Management (CRM)	34	4.76	0.55	0.12
KRA uses Short Messaging Services (SMS) as a mobile solution to reach its customers	34	4.38	0.60	0.14
Mobile Commerce (m-Commerce) has improved commercial activities at KRA	34	4.71	0.63	0.13
KRA customers have adopted pull marketing to attract content from KRA through their mobile devices	34	4.59	0.66	0.14
KRA uses push marketing to get their content to their consumers through their mobile devices	34	3.68	0.77	0.21
E-business services have enabled KRA to increase its revenue collection.	34	4.12	0.81	0.20
The use of M-commerce has provided a modern image to KRA	34	4.12	0.81	0.20
KRA customers use mobile payment to pay for services rendered	34	4.35	0.85	0.20
KRA uses strategic IT frameworks to assess mobile business application to aid business practitioners in decision making	31	4.32	0.95	0.22
KRA uses e-business to by creating new platforms to reach global markets	34	3.41	1.05	0.31
KRA uses Web-enabled architecture mobile devices to send information from a centralized database	34	3.91	1.08	0.28
KRA uses Web-enabled architecture mobile devices to retrieve information from a centralized database	34	3.41	1.40	0.41

The study adopted mean and standard deviation (S.D) as statistical tools that were used to categorize the significance of the parameters of mobile phone platforms. The total number of respondents analyzed in each measure was 34.

The means for mobile phone platforms and competitive advantage ranged from 3.41 to 4.76. This implies that Kenya Revenue Authority has heavily invested in mobile phone platforms to enhance its services and achieve competitive advantage. This is shown with the most of respondents agreeing that mobile phone platform has played a great deal in achieving competitive advantage.

The study also demonstrates that the standard deviation for mobile phone platforms and competitive advantage ranged from 0.554 to 1.395. The implication of these results is that there was high deviation among the opinions of the respondents about the influence of mobile phone platforms and competitive advantage. The opinions were especially highly deviated on the statement that KRA uses Web-enabled architecture mobile devices to retrieve information from a centralized database.

#### 4.5.2 Regression Analysis of Mobile Phone Platforms and Competitive Advantage

The study sought to statistically test whether mobile phone platforms significantly affects competitive advantage of Kenya Revenue Authority. This was tested using the perceived parameters of mobile phone platforms as predictor variables against the competitive advantage achieved in KRA.

**Table 4.6: Model Summary of Mobile Phone Platforms and Competitive Advantage**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.868 <sup>a</sup>	0.753	0.738	0.35512
a. Predictors: (Constant), 8. KRA uses Web-enabled architecture mobile devices to retrieve information from a centralized database, KRA uses Short Messaging Services (SMS) as a mobile solution to reach its customers				
b. Dependent Variable: Competitive Advantage				

The study shows that the R<sup>2</sup> from this test is 0.753 meaning that 75.3 percent of the variation in competitive advantages of the Kenya Revenue Authority results from mobile phone platforms. The remaining 24.7 percent is due to other factors not tested in this model.

**Table 4.7: ANNOVA of Mobile Phone Platforms and Competitive Advantage**

Model	Sum of Squares	Df	Mean Square	F	Sig.	
1	Regression	11.946	2	5.973	47.362	.000 <sup>b</sup>
	Residual	3.909	31	0.126		
	Total	15.855	33			
a. Dependent Variable: Competitive Advantage						
b. Predictors: (Constant), 8. KRA uses Web-enabled architecture mobile devices to retrieve information from a centralized database, KRA uses Short Messaging Services (SMS) as a mobile solution to reach its customers						

The ANNOVA in Table 4.7 above has a p-value of 0.000. The study hence concludes that there is a statistical significant relationship between parameters of mobile phone platforms and competitive advantage at Kenya Revenue authority.

In table 4.8, study used linear regression model to test the relationship between mobile phone platforms and competitive advantage achieved at KRA. Table 4.8 illustrates the results of the model.

**Table 4.8: Coefficients Variation of Mobile Phone Platforms and Competitive Advantage**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-0.399	0.513		-0.778	0.443
	KRA uses Short Messaging Services (SMS) as a mobile solution to reach its customers	0.694	0.104	0.604	6.647	0.000
	KRA uses Web-enabled architecture mobile devices to retrieve information from a centralized database	0.373	0.045	0.75	8.256	0.000
a. Dependent Variable: Competitive Advantage						

The study thus represents competitive advantages as,

$$\text{Competitive advantage} = -0.399 + 0.604 \text{ short messaging services} + 0.750 \text{ Web-enabled architecture mobile devices} + \epsilon$$

It means that a modification of mobile phone platforms causes a change of 1.354 in competitive advantage in Kenya Revenue Authority.

## 4.9 Organizational Website and Competitive Advantage

The objective of the study was to examine the influence of organizational website on competitive advantage in Kenya Revenue Authority. The study sought information from website, promotional strategies, product/services offerings, balance of power, customer centric, service comparison, and cost leadership.

### 4.9.1 Descriptive of Organizational Website

In table 4.9, tests for descriptive statistics were conducted on SPSS which is statistical software.

**Table 4.9: Organizational Website and Competitive Advantage**

	N	Mean	Std. Deviation	C.V
Through the use of website, KRA has improved on its revenue collection through the expansion of their reach.	34	4.59	0.61	0.13
Through the website, KRA has been able to employ promotion strategies providing a direct link with customers to enter into a dialogue with them about their services	34	4.29	0.76	0.18
The website has changed the basis of competition by altering product/service offerings of KRA	34	4.18	0.83	0.20
The website has changed the balance of power in relationships with the KRA and its customers	34	3.97	0.83	0.21
KRA has formulated customer-centric promotion strategies that respond to new customer power.	34	3.97	0.83	0.21
The website has made service comparison easy for customers increasing KRA profits.	34	4.00	0.85	0.21
KRA has protected her revenues by achieving cost leadership in the industry	34	4.00	0.85	0.21
KRA website has facilitated partnerships/ strategic alliances by networking partners	34	4.09	0.90	0.22
KRA has been able to enter into e-commerce easily because they do not need sales forces and huge capital investments as they do in offline markets.	34	3.88	1.07	0.27
The website has changed the basis of competition by altering the cost structure of KRA	34	3.59	1.10	0.31
The website has created new substitution threats by enabling new approaches to meeting customer needs	34	3.59	1.10	0.31
The website has created new substitution threats by enabling new approaches to performing business functions at KRA	34	3.91	1.16	0.30

The descriptive results for parameters of organizational website were provided in terms of the mean, standard deviation and coefficient of variation. The total number of respondents analyzed in each measure was 34.

From the table, the mean for organizational website ranged from 3.59 to 4.59. The findings of the study imply that Kenya Revenue Authority utilize the organization website to achieve competitive advantage. The study shows that respondents strongly agreed that effective and informative organizational website enhances competitive advantage.

The study also reveals that the organizational website and competitive advantage had standard deviation ranging from 0.609 to 1.164. The study reveals that there was great variation of respondents' opinions on the statement that; the website has created new substitution threats by enabling new approaches to performing business functions at KRA. The coefficient of variation ranged from 0.13 to 0.30.

#### 4.9.2 Regression Analysis of Organizational Website and Competitive Advantage

Table 4.10 shows that the model summary of organizational website.

**Table 4.10: Model Summary of Organizational Website and Competitive Advantage**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.960 <sup>a</sup>	0.922	0.912	0.20619
a. Predictors: (Constant), KRA has protected her revenues by achieving cost leadership in the industry, KRA website has facilitated partnerships/ strategic alliances by networking partners, The website has created new substitution threats by enabling new approaches to meeting customer needs				
b. Dependent Variable: Competitive Advantage				

The coefficient of determination or rather  $R^2$  for the relationship between organizational website and competitive advantage was 0.922. The  $R^2$  means that that 92.2 percent of competitive advantage in Kenya Revenue Authority was explained by organizational website. The remaining 7.8 percent was explained by other factors not considered in the model.

Table 4.11 shows the overall model significance with a p-value of 0.000. From the study, it is concluded that organizational website has a significant influence on KRA's achievement of competitive advantage.

**Table 4.11: Annova of Organizational Website and Competitive Advantage**

Model	Sum of Squares	Df	Mean Square	F	Sig.	
1	Regression	14.622	4	3.656	85.982	.000 <sup>b</sup>
	Residual	1.233	29	0.043		
	Total	15.855	33			
a. Dependent Variable: Competitive Advantage						
b. Predictors: (Constant), KRA has protected her revenues by achieving cost leadership in the industry, KRA website has facilitated partnerships/ strategic alliances by networking partners, The website has created new substitution threats by enabling new approaches to meeting customer needs.						

In table 4.12, study used linear regression model to test the relationship between mobile phone platforms and competitive advantage achieved at KRA. Table 4.15 illustrates the results of the model.

**Table 4.12: Coefficient of Variation of Organizational Website and Competitive Advantage**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.477	0.195		2.443	0.021
	The website has created new substitution threats by enabling new approaches to meeting customer needs	0.197	0.04	0.313	4.969	0.000
	KRA website has facilitated partnerships/ strategic alliances by networking partners	0.399	0.056	0.518	7.107	0.000
	KRA has protected her revenues by achieving cost leadership in the industry	0.219	0.067	0.27	3.254	0.003
a. Dependent Variable: Competitive Advantage						

The relationship in the table was represented by the following equation:

$$\text{Competitive Advantage} = 0.477 + 0.313 \text{ new substitution} + 0.518 \text{ strategic alliances} + 0.270 \text{ revenue protection} + \epsilon$$

The regression equation shown above indicates that a strategic modification in the utilization of organizational website causes an increase of 1.101 in competitive advantage.

#### **4.10 Chapter Summary**

This chapter has provided the results and findings with respect to the data given out by the respondents from Kenya Revenue Authority (KRA). The chapter provided analysis on the response rate, background information, social media, mobile phone platforms and organizational website on competitive advantage in Kenya Revenue Authority. The next chapter provides the summary, discussions, conclusions and recommendations.

## **CHAPTER FIVE**

### **5.0 DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter presents a summary, discussion, conclusions and recommendations of the study all offered subsequently.

#### **5.2 Summary**

The objective of the study was to determine the influence of digital platforms on competitive advantage with a focus on Kenya Revenue Authority (KRA). This study aimed at determining the influence of social media on competitive advantage, assess the influence of mobile phone platforms on competitive advantage and examine the influence of organizational website on competitive advantage of KRA.

The study adopted a descriptive correlation research method design to measure the influence of digital communication platforms on competitive advantage with a focus on Kenya Revenue Authority. The descriptive research method was the best for this study because it focused on the relationship between digital communication platforms and competitive advantage of KRA. The study used questionnaires to get data from respondents. The study focused on 40 employees at KRA head office in Nairobi. The study used census approach on the targeted population. Analysing data and its presentation, inferential and descriptive statistics was used and analysis done using Statistical Package for Social Sciences (SPSS), and analyzed data presented in figures and tables.

The study determined the influence of social media on competitive advantage. The study found that social media activities at Kenya Revenue Authority are aligned with other forms of traditional advertising and this has helped the organization address misconceptions from customers. It was found from the study that Kenya Revenue Authority use social media platforms such as twitter, Facebook, you-tube and others to interact and engage customers. Social media has help Kenya Revenue Authority to offer new services to its customers including credits, discounts and waivers. This has helped the organization to address errors through dialogue with customers. The study revealed

that Kenya Revenue Authority has managed to capitalize on social media in attempt to promote their services hence their social media strategy is aligned with corporate culture. This has made the social media strategy to be part of the organizational strategy.

The study revealed how mobile phone platforms influence competitive advantage of Kenya Revenue Authority. The study found that KRA uses mobile devices for communication networks in business activities for Customer Relation Management (CRM). The organization uses short messaging services (SMS) which is found entailed in the mobile device to reach its customers. The study revealed that Mobile Commerce (m-Commerce) has improved commercial activities at KRA hence the organization's customers have adopted pull marketing to attract content from the organization through their mobile devices. The E-business services have enabled KRA to increase its revenue collection and the use of M-commerce has provided a modern image to KRA. Due to mobile phone platforms, KRA customers use mobile payment to pay for services rendered hence increasing the amount of revenue collected.

The study examined the effect of organizational website on competitive advantage of Kenya Revenue Authority. The study reveals that through the use of website, KRA has improved on its revenue collection through the expansion of their reach. Through the website, the organization has also been able to employ promotion strategies providing a direct link with customers to enter into a dialogue with them about their services. The study found that KRA has formulated customer-centric promotion strategies that respond to new customer power hence the website has changed the balance of power in relationships with the KRA and its customers. From the study, it was observed that the website has made service comparison easy for customers increasing KRA profits. Lack of huge capital investments and sales forces have resulted to KRA entering into E-Commerce as a result of using the website.

## **5.3 Discussion**

### **5.3.1 Social Media and Competitive Advantage**

The study analyzed the influence of social media on competitive advantage of Kenya Revenue Authority. The study found that the social media activities at KRA are aligned with other forms of traditional advertising. The study agrees with the findings of Kaplan and Haenlein (2010) who argue that social media activities should be integrated with other forms of traditional advertising like television, print, email blast and radio, and should provide access to all, including employees. On the other hand, the study agrees with Gallagher and Ransbotham (2014) who found that there are a lot of users and markets on social media for firms to capitalize on, but they should align and integrate their conversations with traditional advertising in order to reach those that still respond to non-online interactions. Mathur et al. (2012) confirmed that social networking sites like Facebook and Twitter, allow users to create profiles, invite and accept friends, exchange emails and instant texts, share videos, pictures, and links hence it is a good platform to market products and services.

The study found that social media has helped KRA address misconceptions with customers. The findings concur with the findings of Godes and Mayzlin (2012) who confirm that despite the fact that companies cannot control what people may say about their brand, their presence on social media will give them the opportunity to address any errors through dialogue with any customer that stops by to verify or inquire. Gallagher and Ransbotham (2014) found that firms can easily use social media to interact with and engage customers in real time, solicit innovative ideas from customers, correct error reports and emphasize positive, and factual messages, fix damages, and disperse viral information at a very high speed. The study finding contradict the findings of Kaplan and Haenlein (2010) who found that modern-day organizations have little to no influence over what customers say about their brand to each other on social media. The authors found that the organization simply acts as spectator to customer communication and consumer behaviours.

The study showed that social media activities at KRA are aligned with other forms of traditional advertising. The findings agree with Abu, Kaplan and Haenlein (2010) who argue that organizations that choose to use multiple social media must ensure that their activities are aligned. Gallagher and Ransbotham (2014) on the other hand found that

social media can be content communities, such as YouTube, through which users share large amounts of content by the minute through videos, text, slides, as well as pictures, and YouTube shares 100 million videos a day. Huffington (2010) asserts that organizations can also reach customers through virtual games, which is also a form of social media.

From the study, it is well demonstrated that KRA has aligned their social media strategy with their corporate culture and overall organizational strategy. The study supports the findings of Mangold and Faulds (2014) who found that organizations should be careful on how they implement their social media strategy and on what platform they choose to do so. This is because different social media attract different kinds of customers and appeal to different kinds of purposes as well as messages. The study also found that organizations must understand what kind of audience they cater to and how the audience likes to learn about things. The study also agrees with the findings of Gallagher and Ransbotham (2014) who found that unattended issues left on social media by customers may become an embarrassment, and firms should respond without emphasizing negative behaviors.

From the study it is found that KRA is frequently offering new services to its customers. The study reveals that KRA is frequently offering credits, discounts and waivers to its customers. Ellison, et al. (2015) argue that as long as firms are frequently offering credits, discounts, and new services, this will always keep the firm's conversation on social media very interesting. Hubspot (2012) found that customers love to feel like they are getting more for their money. They will always visit the firm's social media to read their notifications or post on their own account to see what they can benefit from the following month or later. The more customers comment and share their opinion (like or dislike), the more their friends get to see firm's messages or postings. Mangold and Faulds (2014) reveal that customers are utilizing social media as a resource centre and tool to research their purchasing options before they make their purchasing decisions.

The study found out that, customers no longer rely on traditional marketing or firms commercials but on social media. This study agrees with Kaplan and Haenlein (2010) who added that as a result of customers making quick purchasing decisions, firms must consider the concerns and issues of their customers and resolve them immediately. The study also agrees with the findings of Thureau, et al., (2010) who revealed that social

media is utilized to solve customer-related problems for free, thereby increasing customer service and quality while reducing service cost.

### **5.3.2 Mobile Phone Platforms and Competitive Advantage**

The study found that KRA uses mobile devices for communication networks in business activities for Customer Relation Management (CRM). The study concurs with the findings of Varshney and Vetter (2012) who found that mobile commerce (m-Commerce) operates where mobile devices facilitate business operations that enhance and improve commercial activities. The study findings also agree with the findings of Baltzan and Phillips (2010) who affirm that in commercial organizations, mobile devices such as Personal Digital Assistant (PDA) phones can help business users to organize their daily appointments, storing contacts phones numbers, receiving emails and surfing the internet, from a single mobile device. The study concurs with Perez (2012) who in his findings argues that mobility has become a key factor in Information Technology (IT) strategy hence the use of mobile devices can assist the communication networks in business activities.

From the study, it is found that KRA customers have adopted pull marketing to attract content from KRA through their mobile devices. The findings of the study agree with Zhang and Li (2012) who assert that pull-marketing increase benefit by utilizing the richer customer data, so the organizations can offer more personalized and pertinent marketing, which is advantageous for both parties. The study also agrees with the findings of Hennig-Thurau, et al., (2010) who found that pull-marketing is permission-based mobile marketing, referring to the fact that end users must agree and give permission to receive information from an organization, as well as offer personal data for them in exchange. According to the study, pull marketing enables businesses to improve offerings and services individually, thus building stronger relationships with customers, and creating mutual benefit.

From the study, it is confirmed that E-business services have enabled KRA to increase its revenue collection. The study findings support the findings of O'Brien and Marakas (2011) who reveals that the e-business services allow business companies to reduce costs and increase revenue from distribution. O'Brien and Marakas found that increased online sales and the use of mobile devices can enhance mobile business activities. The study

reveals that a combination in the use of mobile applications and e-business can offer competitive advantage by creating new platforms to reach global markets. The study found that the principle of distribution and transaction can be adapted for e-government or e-society applications.

The study reveals that KRA uses strategic IT frameworks to assess mobile business application to aid business practitioners in decision making. This concurs with the findings of Varshney and Vetter (2012) found it important for the business to analyze the type of mobile devices which can best enhance their business activity. The study also agrees with the findings of Laudon and Laudon (2012) who confirm that the increased demand of mobile devices is due to the improvements of wireless technology that has allowed managers to select from a wide variety of mobile technology to apply to their business. The study affirms that the use of m-commerce can provide both competitive advantage and modern image to the business. The findings agree with Varshney and Vetter (2012) who found that the agility and mobility of using these mobile devices can prove advantageous to commercial operations.

From the study, it is confirmed that KRA uses Web-enabled architecture mobile devices to send information from a centralized database. This contradicts the findings of Thureau, et al., (2010) who clarify that there are two types of mobile data retrieval technologies. These are classified as web-enabled and standalone. The findings of the study agree with the findings of Jaruzelski and Dehoff (2011) who found that with the standalone database, the data are distributed and stored on the mobile devices. In addition, the study agrees with Kwak, et al., (2010) who found that the database can share the data among mobile devices, but the original data remain in the mobile device for example using PDAs for collecting questionnaire data.

The study found that KRA uses Short Messaging Services (SMS) as a mobile solution to reach its customers and that customers use mobile payment to pay for services rendered. The study findings concur with the findings of Jaruzelski and Dehoff (2011) who found that mobile phone platforms are critical in different organizations. For instance the authors observed that in Croatia, drivers receives an SMS acknowledgement text to indicate the expiration time of the parking meter and can then choose to return to the vehicle or extend the parking meter by replying to the SMS text.

### **5.3.3 Organizational Website and Competitive Advantage**

The study confirms that through the use of website, KRA has improved on its revenue collection through the expansion of their reach. This concurs with findings of Betts (2011) who indicates that the number of people with internet access increases, competition for online businesses in many industries also increases. This occurs as there are no sales forces or huge capital investments required. The study contradicts the findings of Bakos (2011) who found that the internet changes the basis of competition by radically altering product/service offerings and the cost structure of firms. On the other side, the study agrees with Evans and Wurster (2012) who found that internet changes the balance of power in relationships with buyers and suppliers by increasing or decreasing the switching costs of these buyers and suppliers. Evans and Wurster affirm that by reducing customers' search costs, the internet makes price comparison easy for customers, and thus increases price competition.

The study found that through the website, KRA has been able to employ promotion strategies providing a direct link with customers to enter into a dialogue with them about their services. Allen and Fjermestad (2011) in their study found that to manage e-brands effectively and efficiently, companies have to employ promotion strategies different from those used by traditional marketing. The study found that the website promotion strategy allows companies to provide customers with information about their products, collect information about their customers, and engage in data mining. Schiesel (2011) found that website promotion strategy can customize products to meet customer needs and offer promotions tailored to specific customer groups. The study found that this process helps build a base of loyal and profitable customers. In focusing strategy, a firm chooses a market niche where buyers have distinctive preferences or requirements. To confirm the findings, Allen and Fjermestad (2011) argue that the benefits of personalized promotions will be greatest when customers are interested in detailed product information or the product is marketed as state-of-the-art.

The study found that KRA has formulated customer-centric promotion strategies that respond to new customer power. This agrees with the findings of Allen and Fjermestad (2011) who found that brand management will be successful only when it is associated with beliefs and experiences such as feelings, associations, and memories. The study agrees with Sinha (2009) who reveals that internet provides customers with an

unprecedented degree of control over the entire marketing process. The study found that customer centric strategy is critical in an organization because as consumers become proficient at using the internet, they will only buy products that precisely match their needs. The study disagrees with the findings of Hoffman and Novak (2010) who revealed that internet promotion must also focus on presenting information about the experiences and beliefs of consumers associated with each brand.

From the study, it was confirmed that the website has changed the basis of competition by altering product/service offerings of KRA. The study also revealed that the website has changed the balance of power in relationships with the KRA and its customers. The study agrees with the findings of Bakos and Brynjolfsson (2007) who found that the price competition resulting from lowered customer search costs increases rivalry among existing competitors, reduces switching costs of customers, and thereby shifts bargaining power to customers. On the other hand, the study agrees with Evans and Wurster (2012) who found that IT reduces menu cost - the cost of administering multiple prices for a number of different products or services - and, in part, facilitates price discrimination. To confirm the assertion of Porter (2001), the study revealed that the internet creates new substitution threats by enabling new approaches to meeting customer needs and performing business functions.

The study revealed that due to the internet and website, consumers can easily collect information about products or services without travelling to stores to inspect products and compare prices. The study agrees with Bakos (2011) who found that in the internet market, a complete search of product offerings is possible at virtually no cost. Bakos revealed that consumers can easily compare prices and find close substitutes; companies are forced to lower prices. The study disagrees with the assertions of Allen and Fjermestad (2011) who found that organizations cannot achieve competitive advantage simply by exploiting consumers' search costs, as they did in the physical market. The study agrees with Sinha (2009) who found that in the offline market researching product offerings can be extremely expensive and time consuming. As a result, consumers rely on product suppliers and retailers to aid them in the search, and the suppliers and retailers take advantage of this situation by charging higher prices.

The study found that the website has made service comparison easy for customers increasing KRA profits. The findings of the study agree with findings of Sinha (2009)

who reveals that the internet enables consumers to compare prices, products, and services across suppliers. The study on the other hand disagrees with the assertions of Sinha (2009), who found that service comparison leads to increased price competition and lowers the prices of products or services. The study agrees with Bakos (2011) who asserts that lower search costs for price and product offerings in internet marketplaces promote price competition among sellers. The study revealed that the internet thus significantly affects competition, and intensive price competition can eliminate sellers' profits.

## **5.4 Conclusions**

### **5.4.1 Social Media and Competitive Advantage**

The study concludes that social media activities at KRA are aligned with other forms of traditional advertising. This has helped KRA address misconceptions and errors through dialogue with customers. The study also concludes that KRA use social media platforms such as twitter, Facebook and you tube to interact and engage customers. This has been easy because Kenya Revenue Authority has aligned social media activities with other forms of traditional advertising. KRA has aligned their social media strategy with their corporate culture hence it frequently offer new services, credits, discount and waivers to its customers. The study concludes that KRA has managed to capitalize on social media in attempt to promote their services by aligning their social media strategy with the overall organization strategy.

### **5.4.2 Mobile Phone Platforms and Competitive Advantage**

From the study it is concluded that KRA uses mobile devices for communication networks in business activities for Customer Relation Management (CRM). This has been achieved by uses Short Messaging Services (SMS) as a mobile solution to reach its customers. The study concludes that the E-business services have enabled KRA to increase its revenue collection. Mobile Commerce (m-Commerce) has improved commercial activities at KRA hence the use of M-commerce has provided a modern image to the organization. The study also concludes that due to mobile phone platforms, KRA customers have adopted pull marketing to attract content from KRA through their mobile devices. The study concludes that KRA uses strategic IT frameworks to assess mobile business application to aid business practitioners in decision making.

### **5.4.3 Organizational Website and Competitive Advantage**

The study concludes that through the use of website, KRA has improved on its revenue collection by expanding their reach. The website has changed the balance of power in relationships with the KRA and its customers. The study concludes that through the website, KRA has been able to employ promotion strategies providing a direct link with customers to enter into a dialogue with them about their services. By doing this, the organization has protected her revenues by achieving cost leadership in the industry. KRA has been able to formulate customer-centric promotion strategies for new customer power as huge capital investments and sales forces are not required. The website has made service comparison easy for customers increasing KRA profits making KRA able to protect her revenues by achieving cost leadership in the industry.

## **5.5 Recommendations**

### **5.5.1 Recommendation for Improvement**

#### **5.5.1.1 Social Media and Competitive Advantage**

The study recommends the management of Kenya Revenue Authority and other organizations to align their social media activities with other forms of traditional marketing. Social media platforms such as twitter, Facebook, and you tube should be constructed in a way that it help to interact and engage customers and address errors and misconceptions from customers about an organization. The study recommends KRA and other companies to frequently offer new services like credits, discounts and waivers to customers and make sure that social media strategy is aligned with their corporate culture and overall organization strategy. In contemporary business era, companies should capitalize on social media in attempt to promote their services.

#### **5.5.1.2 Mobile Phone Platforms and Competitive Advantage**

The study recommends management of KRA and other companies to use mobile devices for communication networks in business activities for Customer Relation Management (CRM). The organizations should utilize Short Messaging Services (SMS) as a mobile solution and Mobile Commerce to improve commercial activities. The organizations should enhance adoption of pull marketing strategy to attract contends through their respective customers' mobile devices. E-business services have enabled businesses to

increase its revenue collection hence the organizations should adopt the services. The study recommends KRA and other companies use strategic IT frameworks to assess mobile business application to aid business practitioners in decision making.

#### **5.5.1.3 Organizational Website and Competitive Advantage**

The study recommends the use website because it was found to improve on revenue collection and employ promotion strategies to provide a direct link with customers to enter into dialogue with them about their services. To enhance on profitability, the study recommends KRA and other organizations to formulate customer-centric promotion strategies that respond to new customer power. Sales forces and huge capital investments are not required while using e-commerce as a result of using the website. As a result, the website is a recommendation for all organizations to have. The use of website in marketing is recommended because it has changed the basis of competition by altering the cost structure.

#### **5.5.2 Recommendation for Further Research**

The study was only carried in one service organization (Kenya Revenue Authority). Further researches about influence of digital communication platforms on competitive advantage should be carried on in other industries like, financial, industrialization and agricultural.

## REFERENCES

- Andale, C. (2014,). Stastics. Retrieved from How to.com:  
[www.statisticshowto.com/sampling-frame/](http://www.statisticshowto.com/sampling-frame/)
- Accenture. (2017). Technology Vision 2017. Retrieved from Accenture:  
<https://www.accenture.com/t20170206T064234>
- Alexy, O., & Reitzig, M. (2012). 'Managing the business risks of open innovation',  
*McKinsey Quarterly* , pp. 1–5.
- Allen, E., & Fjermestad, J. (2011). "E-Commerce Strategies: The Manufacturer Retailer  
Consumer Relationship,". *Proceedings of the 5th Americas Conference on  
Information Systems*.
- Amatka. (2016). *The Future of Digital Business Models in sub-Saharan Africa* . South  
Africa: Future Watch Report.
- Amollo, B. A. (2011). *Digitization of libraries in Kenya. Presented at the 2nd  
International Conference on African Digital Libraries and Archives*. South Africa:  
University of Witwatersrand.
- Anna van , B. (2015). *Digital platforms: an analytical framework for identifying and  
evaluating policy options* . Netherlands: TNO Innovation for life.
- Arthur, B. H., Loots, M., & Trujillo, M. F. (2014). The promise of digital libraries in  
developing countries. *Communications of the ACM* , 82-85.
- Atagana , M. (2014, March 20). 15 key trends shaping Kenya's social and digital media  
landscape. *Memebum* .
- Bakos, Y. (2011). "The Emerging Role of Electronic Marketplaces on the Internet,".  
*Communications of the ACM* , 41(8), pp. 35-42.
- Bakos, Y., & Brynjolfsson, E. (2007). "Aggregation and Disaggregation of Information  
Goods: Implications for Bundling, Site Licensing and Micropayment Systems,"  
*Proceedings of Internet Publishing and Beyond*. The Economics of Digital  
Information and Intellectual Property Kennedy School of Government, Harvard  
University.
- Baltzan, P., & Phillips, A. (2010). *Business Driven Technology, 4th edn.*, Boston,USA.:  
McGraw-Hill Irwin.
- Betts, M. (2011). "It's Official: There really is a 'Digital Economy'," *Computerworld*.
- Blattberg, R. C., & Deighton, J. (2010). Interactive Marketing: Exploiting the Age of  
Addressability. *Sloan Management Review* , 5-14.

- Bradley, S. P. (2009). *The Role of IT Networking in Sustaining Competitive Advantage*. In: S.P. Bradley, J.A. Hausman, and R.L. Nolan (eds). *Globalisation, Technology and Competition: The Fusion of Computers and Telecommunications in the 1990's*. Boston, Massachusetts, USA: Harvard Business School Press.
- Cakmak, P. I., & Elcin Ta. (2012). The Use of Information Technology on Gaining Competitive Advantage in Turkish Contractor Firms. *World Applied Sciences Journal* , 274-285.
- Carter, B. (2011). "Dying Dot-coms, Dwindling TV Ads,". *The New York Times*, December 18, 2000.
- Chaudhuri, A., & Stenger, H. (2005). *Survey Sampling: Theory and Methods 2nd ed.* Sounf Parkway, NW: CRC Press.
- Ciborra, C. (2013). Digital Platforms: Toronto's Competitive Advantage. *Toronto Financial Service Alliance* , 1-7.
- Coleman, K. (2015, October 30). *Tech innovation is the cornerstone of competitive strategy*. Retrieved from Computer World.com: <http://www.computerworld.com/article/2991533/emerging-technology/tech-innovation-is-the-cornerstone-of-competitive-strategy.html>
- Cooper, D. R., & Schindler, P. S. (2008). *Business Research Methods*. New York: McGraw Hill.
- Cronin, M. J. (2011). *Doing Business on the Internet: How the electronic highway is transforming American companies*. New York, USA: Van Nostrand Reinhold.
- Dellarocas, C. (2013). The digitization of the word of mouth: Promise and challenges of online feedback mechanism. *Management Science* , 49(10), 1407-1424.
- De Vaus, D. A. (2006, May 2). *Research Design in Social Research*. Retrieved from Sage Publications: <http://libguides.usc.edu/c.php?g=235034&p=1559832>
- Durukan, T., Bozaci, I., & Hamsioglu, A. B. (2012). An investigation of customer behaviors in social media. *European Journal of Economics, Finance, and Administrative Sciences* , 44, 148-158.
- Ellis-Chadwick, F. (2012). Digital marketing and Social Media. *Key Dimensions of the Digital Communication Environment* , 1-37.
- Ellison, N. B., Steinfield, C., & Lampe, C. (2015). The benefit of Facebook "friends": Social capital and college students' use of online social network sites. *Journal of Computer-Mediated Communication* , 12, 1143-1168.

- Ernst & Young. (2011). *The Digitisation of Everything : How Organizations Must Adapt to Changing Consumer Behavior*. UK: Ernst & Young.
- Evans, P., & Wurster, T. S. (2012). "Getting Real About Virtual Commerce,". *Harvard Business Review* , pp. 84-94.
- Fenwick , N. (2013, January 28). *How to achieve competitive advantage through digital business*. Retrieved February 2, 2017, from cio.co.uk: <http://www.cio.co.uk/it-applications/how-achieve-competitive-advantage-through-digital-business-3432069/>
- Friedrich , R., Le Merle, M., & Peterson , M. (2011). The Next Wave of Digitiation: Setting your Direction , Building Your Capabilities. *Booz & Company* , 1-24.
- Gallaughar, J., & Ransbotham, S. (2014). Socialmedia and customer dialog management at Starbucks. *MIS Quarterly Executive* , 9(4),197-212.
- Gatner. (2015). *Building the Digital Platform: Insights from the 2016 Gartner CIO Agenda Report*. USA: Gartner CIO.
- Gil, P. (2015, December 27). *A Very Short History of Digitization*. Retrieved from Forbes.com: <http://www.forbes.com/sites/gilpress/2015/12/27/a-very-short-history-of-digitization/#6246119425f1>
- Godes, D., & Mayzlin, D. (2012). Using online conversations to study word of mouth. *Marketing Science* , 23(4), 545-560.
- Gulati, R., & Garino, J. (2012). "Get the Right Mix of Bricks and Clicks,". *Harvard Business Review* .
- Hoffman, D. L., & Novak, T. P. (2010). How to acquire customers on the web. *Harvard Business Review* , 3, 1-8.
- Huffington Post. (2010). [www.huffingtonpost.com/ 2010/03/03/obama-video-game-ads-feat\\_n\\_134668.html](http://www.huffingtonpost.com/2010/03/03/obama-video-game-ads-feat_n_134668.html). Retrieved March 04, 2017, from [www.huffingtonpost.com](http://www.huffingtonpost.com): [www.huffingtonpost.com](http://www.huffingtonpost.com)
- Irene, I. (2015, October 2). "*Future media growth will come from digital platforms- and African audiences are on mobile*". Retrieved from African Media Leaders Forum: <https://www.africanmedialeadersforum.org/future-media-growth-will-come-from-digital-platforms-and-african-audiences-are-on-mobile/>
- Jaruzelski, B., & Dehoff, K. (2011). 'The global innovation 1000: Why culture is the key',. *Strategy+ Business*, iss. 65, Winter 2011, , pp. 1–16.
- Kahuthu, C. W. (2016, October 27). How Digital Platforms has Helped Ease Access to Services. *Business Daily* .

- Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The Challenges and opportunities of social media. *Business Horizons* , 53, 59-68.
- KRA. (2008). Retrieved March 29, 2017, from <http://www.kra.go.ke/index.php/about-kra/about-the-authority>
- Katz, R. L., Koutroumpis, P., & Callorda, F. (2013). The Latin American path towards digitization. 6-24.
- Kenya National ICT Masterplan. (2014). *The Kenya National ICT Masterplan: Towards a Digital Kenya*. Nairobi: ICT Authority.
- Kenya Revenue Authority. (2017). *About us*. Retrieved from KRA Website: <http://www.revenue.go.ke/index.php/about-kra/kra-history>
- Kisia, P. (2017, January 9). Nairobi City's digital payment platform has failed. *Standard Media Digital* .
- Kothari, C. (2004). *Research Design : Qualitative, Quantitative and Mixed Methods Approaches 4th ed*. New Delhi: New Age International Publishers.
- Kwak, H., Lee, C., Park, H., & Moon, S. (2010). What is Twitter, a social media or a news media? *The International World Wide Web Conference*.
- Laudon, K. C., & Laudon, J. P. (2012). *Management information systems: Managing the digital firm, 12th edn.*, Prentice Hall.
- Libert, B., Beck, M., & Wind, J. Y. (2016, July 22). *3 Ways to Get Your Own Digital Platform*. Retrieved from Harvard Business Review Website: <https://hbr.org/2016/07/3-ways-to-get-your-own-digital-platform>
- Malone, T. W., Yates, J., & Benjamin, R. I. (2010). Electronic Markets and Electronic Hierarchies. *Communications of the ACM* 30(6). , 30(6).
- Mangold, W. G., & Faulds, D. J. (2014). Social media: The new hybrid element of the promotion mix. *Business Horizons* , 52, 357-365.
- Mathur, P., Black, J. E., Cao, J., Berger, P. D., & Weinberg, B. D. (2012). (2012). The impact of social media usage on customer buying behavior. *Advances in Management* , 5(1), 14-22.
- Mutegi, L. (2015). Kenya Government to launch a programme to interact directly with citizens on social media platforms. *CIO/East Africa* .
- Mwirigi, P., & Kinyanjui, M. (2012). Digitization and Preservation of Local Content in the National Library of Kenya. *SCECSAL 20th Conference*. Nairobi.
- New York Times. (2008). <http://www.nytimes.com/2008/10/15/arts/15arts-002.html>. Retrieved from nytimes: /www.nytimes.com/

- Nurfit. (2012). *Smartphone Addiction and Impact on Society*. Retrieved from <http://nurfitriah.wordpress.comsmartphoneaddiction>:  
<http://nurfitriah.wordpress.comsmartphoneaddiction>
- O'Brien, J. A., & Marakas, G. M. (2011). *Management Information Systems, 10th Edition*. New York, USA.: McGraw-Hill.
- Olayinka , D.-W., & Evans, P. C. (2016). The Rise of African Platforms: A Regional Survey. *The Center for Global Enterprise* , 1-20.
- Pearlson, K. E., & Saunders, C. S. (2011). *Managing and Using Information Systems: A Strategic Approach, Fourth Edition*,. USA: John Wiley & Sons.
- Perez, S. (2012). *U.S. Mobile Market, Samsung, Android Top The Charts; Apps Overtake Web Browsing*. Retrieved from Retrieved from <http://techcrunch.com/2012/07/02/comscore-in-u-s-mobile-market-samsung-android-top-the-charts-apps-overtake-web-browsing>: Retrieved from <http://techcrunch.com/2012/07/02/comscore-in-u-s-mobile-market-samsung-android-top-the-charts-apps-overtake-web-browsing>
- Porter, M. (1987). "From Competitive Advantage to Corporate Strategy,". *Harvard Business Review* .
- Porter, M. (2001). "Strategy and the Internet,". *Harvard Business Review* , March 2001, pp. 62-78.
- Porter, M. E., & Millar, V. E. (1985). How Information Gives You Competitive Advantage. *Harvard Business Review* , 149-160.
- Porter, M., & Millar, V. E. (2011). How Information Gives You Competitive Advantage. *Harvard Business Review* .
- Ramey, K. (2012, November 14). *Use of Technology in Business – To Gain Competitive Advantage*. Retrieved from Use of Technology Website: <http://www.useoftechnology.com/technology-business-competitive-advantage/>
- Rayport, J. F., & Sviokla, J. J. (2014). Managing in the Marketspace. *Harvard Business Review* , 141-150.
- Richards, L. (2016, March 3). *Business Strategies for a Competitive Advantage*. Retrieved from Chron.com: <http://smallbusiness.chron.com/business-strategies-competitive-advantage-4633.html>
- Rick, T. (2016, January 1). *The Real Challenges of Digitization is not Technology*. Retrieved from Meliorate: <https://www.torbenrick.eu/blog/technology/the-real-challenges-of-digitization-is-not-technology/>

- Roberts, R., & Sikes, J. (2011). 'How IT is managing new demands: McKinsey Global Survey results',. *McKinsey on Business Technology* , Number 22, Spring 2011, pp. 24-33.
- Sabbagh, K., Friedrich, R., El-Darwiche, B., Singh, M., & Ganediwalla, S. (2012). *Maximizing the Impact of Digitization*. New Delhi: Boot and company.
- Saunders, M. (2011). *Strategic Purchasing and Supply Chain Management (2nd ed.)*. New Jersey: Prentice Hall Financial Times.
- Schiesel, S. (2011). "Planning the Digital Smorgasboard: For This Media Conglomerate, the Future is All-You-Can-Eat,". *The New York Times* .
- Sinha, I. (2009). "Cost Transparency: The Net's Real Threat to Prices and Brands,". *Harvard Business Review*, March-April .
- Surber , K. (2016). *The Drive to Digitization and the Impact on Your Business and Customers*. Retrieved from Cisco Blogs: <http://blogs.cisco.com/partner/the-drive-to-digitization-and-the-impact-on-your-business-and-customers>
- The Economist. (2008). Competitive Advantage. *The Economist* .
- Thurau, T. H., Malthouse, E. C., Friege, C., Gensler, S., Lobschat, L., Rangaswamy, A., et al. (2010). The impact of new media on customer relationship. *Journal of Service Research* , 13(3), 311-330.
- USA Today. (2011). <http://www.usatoday.com/news/politics/story/2011-10-23/obama-youth-voters/50885704/1>. Retrieved 03 04, 2017, from USA Today: <http://www.usatoday.com>
- Varshney, U., & Vetter, R. (2012). Mobile Commerce: Framework, Applications and Networking Support. *Mobile Networks and Applications* , 7(3), 185-198.
- Viehland, D. W. (2012). "Critical Success Factors for Developing an e-Business Strategy,". *Proceedings of the 5th Americas Conference on Information Systems*.
- Vrana, R. (2011). Organizational Aspects of Digitization Projects in the Croatian Republic. *Library Management* , 589-598.
- Wang, H.-L. (2014). Theories for Competitive Advantage. *University of Wollongong Research Online* , 1-13.

## **APPENDICES**

### **APPENDIX 1: LETTER OF INTRODUCTION**

GACHUGI DIANA WABUO  
UNITED STATES INTERNATIONAL UNIVERSITY AFRICA  
P.O BOX 14634, 00800.  
NAIROBI

TO Whom it May Concern

### **RE: RESEARCH DATA COLLECTION ON THE INFLUENCE OF DIGITAL COMMUNICATION PLATFORMS ON COMPETITIVE ADVANTAGE**

I am a student at United States International University-Africa taking a Master's degree in Business Administration-(MBA); Strategic Management. As partial fulfilment of my MBA degree, I am conducting a research on The Influence of Digital Communication Platforms on Competitive Advantage.

You have been selected as one of the lucky respondents for this study. The results of this study will provide Kenya Revenue Authority with data on the influence of digital communication platforms on competitive advantage.

I request your involvement in answering the questionnaire to the best of your knowledge. Kindly note that any information given through this questionnaire is confidential and only used for the purpose of this study. Your assistance and response is much appreciated.

Regards;

Gachugi Diana Wabuo

Contact: 0725246980

Email: [diana.gachugi@bbdomediaedge.com](mailto:diana.gachugi@bbdomediaedge.com)

## **APPENDIX II: QUESTIONNAIRE**

### **SECTION A: GENERAL INFORMATION**

#### **1) Gender of Respondents**

Male

Female

#### **2) Period worked with Kenya Revenue Authority**

1 – 3 Years (  )                      3 – 6 years (  )

6 – 9 years (  )                      9 – 12 years (  )

Over 12 years (  )

#### **3) What is your highest level of school completed?**

Secondary level

Tertiary level (colleges, polytechnics)

University

Post Graduate

#### **4 a) Are you actively involved in handling KRA digital Platforms?**

Always     Very Often                       Sometimes                       Rarely                       Never

#### **4 b) How has the digital platforms impacted on the work at KRA?**

Excellent     Above Average     Average     Below Average     Very Poor

#### **5. How is the experience with using digital platforms compared to when KRA did not use any?**

Excellent     Above Average     Average     Below Average     Very Poor

## SECTION B: THE INFLUENCE OF SOCIAL MEDIA

Kindly indicate the influence of Social media at KRA. Please (√) tick appropriately on a scale of 1-5. 1-Strongly Disagree, 2-Disagree, 3-Uncertain, 4-Agree, 5-Strongly Agree

	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
1. KRA use social media platforms such as Facebook interact and engage customers	1	2	3	4	5
2. KRA use social media platforms such as twitter to interact and engage customers	1	2	3	4	5
3. Social media has helped KRA address misconceptions with customers	1	2	3	4	5
4. Social media has helped KRA address errors through dialogue with customers	1	2	3	4	5
5. KRA has aligned their social media strategy with their corporate culture	1	2	3	4	5
6. KRA has aligned their social media strategy with the overall organization strategy	1	2	3	4	5
7. Social media activities at KRA are integrated with other forms of traditional advertising.	1	2	3	4	5
8. Social media activities at KRA are aligned with other forms of traditional advertising	1	2	3	4	5
9. KRA has managed to social capital on social media in attempt to promote their services	1	2	3	4	5
10. KRA has introduced incentive for customers who frequent their social media sites	1	2	3	4	5
11. KRA is frequently offering credits/discounts (waivers) to its customers	1	2	3	4	5
12. KRA is frequently offering new services to its customers	1	2	3	4	5

## SECTION C: INFLUENCE OF MOBILE PHONE PLATFORMS

Kindly indicate the influence of mobile phone platforms at KRA. Please (√) tick appropriately on a scale of 1-5. 1-Strongly Disagree, 2-Disagree, 3-Uncertain, 4-Agree, 5-Strongly Agree

	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
1. KRA uses mobile devices for communication networks in business activities for Customer Relation Management (CRM)	1	2	3	4	5
2. Mobile Commerce (m-Commerce) has improved commercial activities at KRA	1	2	3	4	5
3. The use of M-commerce has provided a modern image to KRA	1	2	3	4	5
4. KRA uses Short Messaging Services (SMS) as a mobile solution to reach its customers	1	2	3	4	5
5. KRA customers use mobile payment to pay for services rendered	1	2	3	4	5
6. KRA uses strategic IT frameworks to assess mobile business application to aid business practitioners in decision making	1	2	3	4	5
7. KRA uses Web-enabled architecture mobile devices to send information from a centralised database	1	2	3	4	5
8. KRA uses Web-enabled architecture mobile devices to retrieve information from a centralised database	1	2	3	4	5
9. KRA uses e-business to by creating new platforms to reach global markets	1	2	3	4	5
10. E-business services has enabled KRA to increase its revenue collection.					
11. KRA uses push marketing to get their content to their consumers through their mobile devices					
12. KRA customers have adopted pull marketing to attract content from KRA through their mobile devices					

## SECTION D: INFLUENCE OF ORGANIZATIONAL WEBSITE

Kindly indicate the influence of the organizational website at KRA. Please (√) tick appropriately on a scale of 1-5. 1-Strongly Disagree, 2-Disagree, 3-Uncertain, 4-Agree, 5-Strongly Agree

	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
1. KRA has been able to enter into e-commerce easily because they do not need sales forces and huge capital investments as they do in offline markets.	1	2	3	4	5
2. Through the use of website, KRA has improved on its revenue collection through the expansion of their reach.	1	2	3	4	5
3. The website has changed the basis of competition by altering product/service offerings of KRA	1	2	3	4	5
4. The website has changed the basis of competition by altering the cost structure of KRA					
5. The website has changed the balance of power in relationships with the KRA and its customers	1	2	3	4	5
6. The website has made service comparison easy for customers increasing KRA profits.	1	2	3	4	5
7. The website has created new substitution threats by enabling new approaches to meeting customer needs	1	2	3	4	5
8. The website has created new substitution threats by enabling new approaches to performing business functions at KRA	1	2	3	4	5
9. KRA website has facilitated partnerships/ strategic alliances by networking partners	1	2	3	4	5
10. Through the website, KRA has been able to employ promotion strategies providing a direct link with customers to enter into a dialogue with them about their services	1	2	3	4	5
11. KRA has formulated customer-centric promotion strategies that respond to new customer power.	1	2	3	4	5
12. KRA has protected her revenues by achieving cost leadership in the industry	1	2	3	4	5

## SECTION E: COMPETITIVE ADVANTAGE

Kindly indicate the extent to which the influence of digital platforms have impacted on competitive advantage at KRA. Please (√) tick appropriately on a scale of 1-5. 1-Strongly Disagree, 2-Disagree, 3-Uncertain, 4-Agree, 5-Strongly Agree

	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
1. KRA uses social media platforms to create a competitive advantage for the company targeting the right audience with the right message.	1	2	3	4	5
2. KRA has expanded its services transferring skills of promotion leading to competitive advantage.	1	2	3	4	5
3. The use of M-commerce has provided a competitive advantage for KRA	1	2	3	4	5
4. KRA uses mobile applications to offer competitive advantage by creating new platforms to reach global markets	1	2	3	4	5
5. KRA has adopted revenue sharing marketing strategy to attain competitive advantage	1	2	3	4	5

**THANK YOU FOR YOUR TIME!!**