

**E-COMMERCE AND PERFORMANCE OF ONLINE BUSINESSES IN
KENYA**

KABUBA PURITY K.

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DECLARATION

This Research Project is my original work and has not been presented for a degree in any other university.

Signature Date:

Kabuba Purity K.

D66/79933/2012

This Research Project Proposal has been submitted for examination with my approval as the University supervisor.

Signature Date

Dr. Kate Litondo

Lecturer, School of Business

University of Nairobi

DEDICATION

I wish to dedicate this work in honor of my late loving dad Paul Kabuba who will always be engraved in my heart, I wish you were here to celebrate the woman I have become. To my dedicated mum Judith Kabuba for your selfless sacrifice and the love you have extended to me throughout your life. Finally to my three awesome brothers for your support, kindness and for believing in me. The Lord Almighty will surely reward you all greatly. I am honored to have you all in my life.

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ABSTRACT

E-commerce has experienced unprecedented growth following the invention of the internet. The creation of new business models such as online companies whereby the company conducts most of its business on the internet. Indeed, there is little doubt that the internet has made it possible to start a global online business than it was it ever was to start a business before. Trading online while fraught with different challenges has been found to pose significant benefits to businesses, consumers and even the society in general. Online companies in developed economies have been largely successful contributing to the economy and in job creation. While the e-commerce sector is still in the formative stages in Kenya, consumers are opening up to the idea of online shopping and relatively few fully fledged online companies are already in operation in the country. The objective of this study was to establish the challenges and benefits of online trading within the Kenyan e-commerce sector. Further it also sought to establish the performance of existing online businesses as well establish the relationship between e-commerce models and performance. The study targeted 30 online companies based in Nairobi County and a cross sectional survey design was adopted. The study findings revealed that some of the challenges affecting online businesses but to a moderate extent are: potential customers reluctance to shop online due to desire to touch/interact with the product prior to making a purchase, lack of personal contact with customers which might be beneficial to business, e-commerce software incompatibility with existing infrastructure, customer distrust regarding privacy of personal data and finally and customers a general lack of trust for online businesses. Further the findings indicates that they are massive benefits associated with online trading. The top rated benefits included cost reduction for the business, ability to reach more potential customers, access to regional and/or global markets, easier and faster to serve customers, customers' ability to access the business on a 24/7 basis, better prices to customers, enhanced collection of customer data, higher quality customer service, increased business visibility through search engine marketing and convenience to customers. The study further revealed that a majority of the online business (63.2%) are still in the start-up stage, 73.7% attract less than 100,000 unique visitors to their websites and a further 78.9% attract less than 100,000 repeat visitors, 73.7% have revenues below IM KES per month and 78.9% serve less than 1,000 customers per month. The current performance of these businesses pale in comparison to similar businesses in developed economies. There was found to be a positive correlation between the C2C e-commerce business model and the performance in terms of unique and repeat visitors to the website. Further, the nature of the product in this case -information and payment mechanism are good predictors of this relationship. The study recommends that in order to improve customer trust in online businesses the business owners need to invest in the requisite technology and systems to secure their customers and their business as well as create consumer awareness to negate this poor perception. On the other hand, the government needs to invest in the enactment of laws and regulatory infrastructure that supports online purchasing. Most importantly Kenyan consumers have to be more willingly to purchase products and services online. Finally, the government has to look into policies and invest in systems that will improve the current internet penetration rates across the country if the e-commerce is going to thrive.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

The internet has become an integral part of the modern day societies and economies across the world. It has led to unprecedented transformations in the business world, communication, social interactions, research and education, governance, philanthropic pursuits and many other spheres of life (St.Amour, 2012). The Internet World Stats (2012) estimated the global internet users to be about 2.4 billion, with developed nations having significantly higher internet penetration rates. Internet use in Kenya started in the early 1990s and until 2009 internet connection was low and an expensive affair as the country relied on expensive satellite connections (Souter & Kerretts-Makau, 2012). However, since the landing of submarine cables internet access has dramatically improved, the Communications Commission of Kenya [CCK], 2012 estimated that they are 14 million internet users in the country. It is important to highlight that 99% of internet subscriptions in Kenya are mobile subscriptions which can be attributed proliferation of smart phones and advanced feature phones (Souter & Kerretts-Makau, 2012).

The advent of the internet saw entrepreneurs all over the world capture ideas and infuse technological innovations to create new products, services and business models (Mahadevan, 2000; Hasan & Harris, 2009). The internet phenomenon also gave rise to purely internet-based businesses now commonly referred “internet based companies” or “online company” a name that is applied to a company that conducts ‘most’ of its business online, since such businesses also engage physical logistic systems (Schultz, 2009). The convenience of online shopping is a compelling allure to consumers who value the ease and efficiency of purchasing some services online such as travel packages and tickets. A global survey conducted by Nielson Global (2010) found that some products bought online are universal. The leading products are books, clothing/accessories/shoes, airline ticket reservations, electronic equipment, tours/hotel reservations and cosmetics/nutrition supplies. Interestingly, online-only shops (such as Amazon.com) have the greatest appeal with one-third of online consumers preferring them to sites that also have traditional “brick and mortar” stores and those that allow consumers to select products from many different online stores.

The concept of internet technology has played a central role in ‘virtual global organisation’. The virtual business is a revolution to contend, creating new business opportunities and

challenges (Nath, 2013). Electronic commerce is beginning to play a central role in fulfilling the daily needs of people. A particularly insightful view was expressed that “Spread of E-commerce shall be directly related to growth of internet in the country.”(Mehta, 2001).

1.1.1 E-Commerce

There is no consensus on the exact definition of e-commerce with a number of different definitions being used in different contexts. A report by United Nations Conference on Trade and Development [UNCTD] (2000) pointed to the existence of six different mediums of electronic commerce (e-commerce): telephone, fax, television, electronic payment and money transfer systems, Electronic Data Interchange (EDI) and Internet. Indeed, it can be argued that the rapid evolution and the increasingly vital role of the internet has resulted in much of the confusion on e-commerce. E-commerce has been described as conducting commercial activities via electronic media, and most commonly, the internet (Kinuthia & Akinnusi, 2014). Nath (2013) defined e-commerce as the buying and selling of goods and services over the World Wide Web or internet. It is apparent from the variety of definitions offered that the key attributes of e-commerce relate to all technology mediated exchanges between organisations and a third party, different forms of electronic media are engaged at some point to facilitate such exchanges (Kinuthia & Akinnusi, 2014; Litondo & Ntale, 2013; Wanjau, Macharia, N., & Ayodo, M. A, 2012).

They are different models of e-commerce some of the most common are discussed here. Business-to-Business (B2B e-commerce) refers to the full spectrum of activities that can occur between two organizations and which is by far the most common form of e-commerce (Harris, 2000; Oracle, 2012; Nath, 2013). Businesses-to-Consumers (B2C e-commerce) e-commerce involves retailing transactions between organizations and individual shoppers for example the online retailers Amazon direct and Target.com. Consumer-to-Consumer (C2C e-commerce) involves transactions between consumers, the e-commerce website serves to facilitate the transaction, good examples of such auction sites are eBay and www.bazee.com. Consumer-to-Business (C2B e-commerce) allows consumers to sell products and services to businesses, examples include freelancer sites such as Task Rabbit and Monster.com. In addition to the models discussed so far, there is e-governance which an umbrella entity used to describe transactions between the government and other entities, such as consumer, business

organizations, and other governments. The e-commerce revolution is far from over, newer models and opportunities are likely to arise as internet technologies continue to evolve (Fox, 2000; Majmudar & Prabhu, 2000).

The creation of a successful company is challenging at best and the unique characteristics of the Internet make it particularly difficult (Schultz, 2009). The accelerated growth of e-commerce activities has occurred under a myriad of obstacles that still continue to impede the adoption of e-commerce and hamper potential benefits for organizations. Jebur, Gheysari and Roghanian (2012) grouped the limitations of e-commerce into technical (lack of universally accepted standards for quality, security, and reliability, communication bandwidth, security, e-commerce software incompatibility with operating system and other applications) and non-technical (privacy, internet access difficulty and expense, consumers will to touch the products, loss in the social interaction). Other clusters of inhibitors to e-commerce have been grouped as; technological (security, web site issues, technology issues including costs, software, infrastructure), managerial (people and organisational issues, management support) and business challenges (customers service, customer old habits, legal issues) (Kuzic, Fisher, & Scollary, 2002). Perhaps one of the most pertinent issue remains to be trust which is a key unlocking the success of e-commerce. Consumers must have confidence about the product information and reliability of the trading partner (Kenpankho, Suwanjan, & Siripongdee, 2005; Hauswirth et al., 2001; Souter & Kerretts-Makau, 2012). Many consumers across the world are reluctant to shop online because of risk both perceived and real associated with such transactions.

There have been some innovations in human history have dramatically transformed the way of life, it can be said that few encompass as many benefits to organizations, individuals, and society as does e-commerce (Jebur, Gheysari, & Roghanian, 2012). These include: access to global markets at low costs, operational efficiency, cost reduction, mass customization, inventories reduction, business efficiency, 24 hours accessibility, lower communication costs, increases sales and profitability (to organizations). Consumers on the other hand have benefited from; more choices, 24 hours access, new markets and price comparisons, better prices due to competitive environments, convenience, time saving, access to extensive information. To the society the benefits are; improved living standards since some merchandise can be sold at lower prices, flexible working conditions, enhanced social connections and facilities delivery of public services which reduces cost and increases quality of the offered services (Wen et al.,

2001; Kuzic et al., 2002; Marshall & McKay, 2001; Jebur et al., 2012; Souter & Kerretts-Makau, 2012). By breaking down the barrier of time and space the internet increases competitiveness in the business environment and levels the playground which allows small businesses to compete with big businesses (Kinuthia & Akinnusi, 2014). Andam (2003) postulates the in developing countries e-commerce poses the advantages of reduced information search costs and transactions costs.

1.1.2 Performance Measures of an Organization

Performance measurement is critical in determining the relative success or failure for an organization and therefore determination of the organization strategy. For online businesses the website is at the core of the business and therefore valid metrics that capture website performance are critical in enabling managers to improve strategies and operations (Ghandour, Benwell, & Deans, 2011). Most researchers posit that performance of an e-commerce business is a multidimensional construct, that can only be determined through various metrics (traffic and site usage metrics, marketing metrics, other performance metrics and multi-dimensional scorecards) than just the traditional models that focused on financial measures (Donkor, 2003; Ghandour et al., 2011; Rossi, 2012). In addition, the complication of what stakeholder perspective (designer, owner, organization, user, investor etc.) to adopt present an additional challenge (Ghandour et al., 2011; Rossi, 2012).

There exists a wide range of literature on models for performance measurement mostly biased towards large organizations, in comparison, research on SME specific models just began more recently (Rossi, 2012). For the e-commerce websites there is an apparent gap in the limited understanding on how to exactly measure performance (Ghandour et al., 2011; Rossi, 2012). Different researchers have divergent views on the performance measurement for e-commerce websites. Donkor (2013) is a proponent of the Balanced Score Card (BCD). Ghandour, Benwell and Deans (2011) developed and empirically tested a model that adopted an owner perspective stance. This study adopted the Ghandour, Benwell and Deans (2011) with some modifications to reflect the organizational and environmental realities of e-commerce companies in Kenya. This model is particularly useful as it evaluates performance as a multidimensional construct determined by more than just financial factors. The study employed

three variables to measure performance: Usage (number of visitors, repeat visitors); financial benefits (online sales) and owner satisfaction (search engine ranking, number of customers).

1.1.3 Online Companies in Kenya

The target population for this study comprised of online companies with official premises in Nairobi County. The qualifying criterion was that the company be an ‘Internet based company’ or “online company” meaning that the company conducts most of its business on the internet, which is a definition widely used by practitioners and academics. By “most of its business” one should understand that the company is purely internet-based and its business is done online (pure-play e-commerce firm), however it still uses e.g. physical logistic systems that assist in delivering services (Schultz, 2009). The sample consisted of e-commerce firms using the B2C, B2B and C2C E-Commerce models. The guiding assumption was that a majority of these online companies are Small and Medium Enterprises (SMEs). According to OCED (2006a) report SMEs form the most dominant type of business, accounting for over 95% and up to 99% of enterprises depending on the country and the net job creation in OCED countries by SMEs is between 60-70%. These observations are in tandem with findings from a Survey carried out by Government of Kenya (2010) which established that about 96% of all entrepreneurs are SMEs operators, employ 75% of the work force and contribute to 18% to the Gross Domestic Product in Kenya.

The most challenging task of this study was the process of screening registered businesses and consolidating a sample of existing online companies. Gathering accurate information on internet activities especially online trading is exceptionally hard in most developing countries, and Kenya is no exception (Souter & Kerretts-Makau, 2012). However, the researcher was able to gain insightful information on some these companies and their range of activities, mostly from online sources such as Alexa.com; Kbo (Kenya Businesses Online, a Google initiative), mainstream media (newspapers and media houses, technology blogs (TechMoran), industry referrals and a few other sources. Some of the relatively successful online companies highlighted included Olx, Rupu, Cheki, Jumia, BuyRent, and BrighterMonday among others.

1.2 Research Problem

Kenya’s population of around 43 million is the seventh largest in Africa. The population growth rate in 2010 was estimated at 2.6% per annum, among the world’s highest, and as a result about

45% of Kenyans are aged 16 and under (Souter & Kerretts-Makau, 2012). While e-commerce is expected to directly and indirectly create new jobs as well as lead to job losses, according to a United Nations report [UN] (2012) the net effect will be positive. E-commerce holds great potential in providing massive employment opportunity for the youth in Kenya especially those with higher skills. Internet companies particularly pose a great advantage in terms of low set-up costs as compared to the traditional brick and mortar business models (Kuzic et al., 2002; Marshall & Mckay, 2001; Jebur et al., 2012). This means youth entrepreneurs can launch their business ventures from their bedrooms and grow them from there.

Some researchers argue that there are many downsides of e-commerce. Fox (2000) argues that in the face of the fiercely competitive e-commerce environment, new customer acquisition is an expensive affair for e-commerce companies, especially those that are joining later. He points out that a research by McKinsey & Co. (1999) suggested that online customer acquisition costs can be as much as 4 times as high as offline. Fox further cautions that with e-commerce one is more or less global by default and must therefore focus on building a global internet brand that can serve a global market if one hopes to remain competitive. Marshall & Mckay (2001) had some disconcerting findings with SMEs in which the interviewees were somewhat disappointed with outcomes from their e-commerce initiatives. The researchers noted that there might have been a correlation though between these results and the apparent lack of planning, evaluation and proactive management of benefits with respect to their e-commerce activities. E-commerce is also riddled with complex hurdles that relate to taxation (Jebur et al., 2012) and lack of global harmonization of legal framework governing cross-border transactions (European Commission, 2012; Souter & Kerretts-Makau, 2012). Given the rate at which e-commerce models are evolving some remain sceptical as to which of the monetization strategies will finally succeed (Wen et al., 2001).

There is a considerable number of studies that have been carried out to analyse varying aspects of e-commerce in developing countries including Kenya. There is an emerging gap in the studies that have been conducted in the past. Most of them have focused on factors influencing the adoption of e-commerce in SMEs (Kinyanjui & McCormick, 2002; Hunaiti, Masa'deh, Mansour, & Al-Nawafleh, 2009; Shemi, 2012; Wanjau et al., 2012; Mutua et al., 2013; Ochola, 2013) and barriers/obstacles facing e-commerce businesses (Kinuthia & Akinnusi, 2014). Other researchers have focused on the impact of e-commerce in commercial banks in Kenya (Magutu, Ongeru & Mwangi, 2009; Mutua et al., 2013).

As earlier mentioned it is apparent that most researchers have concentrated mostly on adoption and barriers of e-commerce, however, research on performance of online companies seems to be lacking. This study will contribute new insights on the actual performance of existing online businesses operating in Kenya by answering the following key questions, what are the magnitude of challenges associated with online trading? what are the associated benefits? and most importantly, of the online companies already in operation how can they be rated in terms of performance?

1.3 Objectives

General objective

To investigate e-commerce and performance of online companies in Kenya

Specifically:

1. Establish the challenges online companies in Kenya face
2. Determine the perceived benefits of online trading
3. Establish the performance of online businesses in Kenya
4. Establish the relationship between e-commerce models and performance of online companies in Kenya

1.4 Value of the Study

This study will provide first-hand information on the current status of e-commerce in Kenya through an analysis of online businesses. To this researcher's knowledge, there seems to be a gap in the studies that have been conducted in the past in these area. This study reveals new insights on the actual performance of the relatively few online businesses that are operating in Kenya at the moment. The findings also validates and disapproves some of the empirical evidence that is already present about the apparent benefits and challenges of e-commerce in developing countries. The entrepreneurs can glean insights on the performance of various e-commerce models in addition to the challenges and benefits inherent to businesses in this sector. In the area of academic research, this study will contribute to the existing literature on the theoretical framework and approaches of analyzing e-commerce websites in developing countries like Kenya. Finally, the policy makers will have a better understanding of priority areas where new policies and laws or amendment thereof can have immediate impact on e-commerce businesses in the country.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

In this chapter, both the theoretical and empirical literature is reviewed on the dynamics of e-commerce and performance evaluation in e-commerce. This progresses from an overview of how the internet revolutionized the business world, through its central role in acceleration of e-commerce. This is followed by a discussion on the different models of e-commerce and the benefits that e-commerce has impacted on organizations, individuals, and society coupled by the challenges of e-commerce. The last section reviews the relevant theories and empirical literature that uncovers the foundations of performance evaluation in e-commerce and the pinpoints to the research gap. This finally leads us to the discussion of a conceptual framework.

2.2 Internet Entrepreneurship

To a greater people across the Globe, Facebook is part of everyday vocabulary. Mark Zuckerberg is the founder and CEO of Facebook the now immensely successful social networking website that he started from his college dorm in Harvard University in Cambridge, when he founded the website in 2004. Now a decade later Facebook, according to The Guardian by the end of 2013, Facebook boasted 1.23billion monthly active users worldwide. The company is ranked as the second most visited website after Google according to Alexa.com and has a market value of \$190 billion. This is the new era of the internet and globalization, indeed there is little doubt that the internet has made it possible to start a global online business than it was it ever was to start a business before (Fox, 2000). Mark Zuckberg is just one among millions of entrepreneurs who spotting the enormous opportunity presented by the internet revolution. Entrepreneurs coming up with new ideas and infusing technological advances to gain leverage in the business world, redefining business models in ways many never thought possible (Fruhling & Digman, 2002; Jebur, Gheysari, & Roghanian, 2012). Away from the plush offices in Silicon Valley in the United States, in India it has been reported that small-scale soybean farmers use a village internet kiosk to check spot prices for their products on the Chicago Board of Trade's website, and getting better prices by cutting out local brokers United Nations Development Programme [UNDP] (2004).

The concept of entrepreneurship and its definition continues to elicit much debate among researchers and economists. Some economists argue that the entrepreneur is one who is willing

to bear the risk of a new venture when presented with a significant chance for profit. Others emphasize the entrepreneur's role as an innovator who markets his innovation. Economist Joseph Schumpeter (1883-1950) viewed entrepreneurship as a force of "creative destruction" a process that leads to creation of new combinations of things that render the old obsolete. Business expert Peter Drucker (1909-2005) on the other hand advanced this idea further describing the entrepreneur as someone who actually searches for change, responds to it, and exploits change as an opportunity. Indeed an analysis of the changes in the communication sector perfectly illustrates this ideologies from typewriters to personal computers to the internet. This study posits that e-commerce is a hybrid phenomenon with its roots in both the Schumpeterian and Drucker schools of thought.

The Internet, particularly through its ability to enable electronic commerce (e-commerce) has redefined the rules of entire industries. Those firms that have embraced e-commerce have stumbled on new opportunities and those that lag behind are quickly becoming irrelevant (Fruhling & Digman, 2002). E-commerce is revolutionizing the way businesses compete, creating fundamental operational changes in business and business-level strategy. A reorientation in strategic thinking by businesses is therefore necessary in order to view e-commerce as an engine of growth and profit rather than cost (Fruhling & Digman, 2002; Andam, 2003)

2.3 E-Commerce

There seems to be no consensus on the exact definition of e-commerce with a number of different definitions being used in different contexts. It is believed that the first business transaction conducted across the internet occurred in 1994 in USA (Jebur et al., 2012). This paved way for the extensive use of the internet for exchanging goods, services and information across the globe. The internet has played the most pivotal role in the rapid growth of e-commerce. Indeed the debate of what really constitutes e-commerce is likely to go on into the future. Some researchers argue that the definition offered by the University of Texas, Centre for Research in Electronic Commerce [CREC] (2001) gives a more precise definition of what really constitutes e-commerce (Rallet, 1999). The CREC approach entailed breaking apart the Internet Economy into layers based upon the unique elements necessary to facilitate the ultimate revenue producer on the internet: sales transactions.

The four layer breakdown makes it possible to distinguish activities relating to Internet management (layers 1 and 2) from those relating to the development of Internet-based commerce (layers 3 and 4). Layer 3 is that of the intermediaries who facilitate the meeting and interactions between buyers and sellers on the Internet such as market organizers (for example, B2B platforms), online travel agencies, online brokers, portals, online advertising etc. Layer 4 is that of actual commerce which constitutes the sale of products and services to consumers or businesses on the internet: e-merchants (Amazon), manufacturers selling online (Dell), airlines selling their tickets online, entertainment services and others. E-commerce in the strict sense should thus comprise layers 3 and 4 that represent intermediation functions and commercial transactions on the networks, narrower definitions referring to only the latter transactions. They are two types of e-commerce firm's pure plays (click-only) and hybrids (click and mortar). The first one do not have a physical presence for example Amazon.com which sells books online and has no physical stores. The click and mortar combine online presence with the physical channels like BarnesandNoble.com, which has a large network of retail bookshops and sells online too (Majmudar & Prabhu, 2000).

Various business models of e-commerce exist and their common underlying theme is that they attempt to leverage information technology to overcome the limitation of traditional business models and improve the efficiency of business processes (Majmudar & Prabhu, 2000; Hauswirth, Jazayeri, & Schneider, 2001) There are various ways of classifying e-commerce business model, however, the most common is according to the parties involved in the business (Majmudar & Prabhu, 2000), other classifications are based on the different strategies through which organizations can monetize (Wen, Chen, & Hwang, 2001; Almeida, Santos, & Monteiro, 2013). The first classification is more accurate since an e-commerce business can employ various monetization strategies to achieve its goals.

Focusing on the different parties involved they are different models of e-commerce some of the most common are discussed here. Business-to-Business (B2B e-commerce) refers to the full spectrum of activities that can occur between two organizations and which is by far the most common form of e-commerce (Harris, 2000; Nath, 2013). The estimated revenue from B2B e-commerce transacted online (excluding electronic data interchange) in the United States was approximately US\$300 billion according to the 2010 U.S. Census compared to almost \$200 billion in retail transactions. A good example here is www.amazon.com an online

bookstore that sells books from various publishers including Wrox, O'Reilly, and Premier Press.

Businesses-to-Consumers (B2C e-commerce) e-commerce involves retailing transactions between organizations and individual shoppers. B2C receives a lot of media attention and hype and most people are familiar with online retailers such as amazon direct and target.com. Consumer-to-Consumer (C2C e-commerce) involves transactions between consumers, the e-commerce website serves to facilitate the transaction, while the seller needs to pay a fixed fee to the online auction house to sell their products, the buyer can bid without paying any fee, and good examples of such auction sites are eBay and www.bazee.com.

Consumer-to-Business (C2B e-commerce) allows consumers to sell products and services to businesses, an example is freelancer sites such as TaskRabbit and www.monster.com. Any business organization that is interested in deploying the services of the consumer can contact him and offer him opportunities. In addition to the models discussed so far, there is e-governance which an umbrella entity used to describe transactions between the government and other entities, such as consumer, business organizations, and other governments. The e-commerce revolution is far from over, newer models and opportunities are likely to arise as internet technologies continue to evolve (Fox, 2000; Majmudar & Prabhu, 2000).

2.3.1 Challenges of E-Commerce

There has been consistent accelerated growth of e-commerce activities as the number of organizations and consumers seeking to tap the benefits of this trade continue to rise. However, this has not been without a myriad of obstacles that still continue to impede the adoption of e-commerce and hamper potential benefits for organizations. Jebur, Gheysari and Roghanian (2012) grouped the limitations of e-commerce into technical (Lack of universally accepted standards for quality, security, and reliability, communication bandwidth, security, e-commerce software incompatibility with operating system and other applications) and non-technical (privacy, internet access difficulty and expense, consumers will to touch the products, loss in the social interaction). Other clusters of inhibitors to e-commerce have been grouped as; technological (security, web site issues, technology issues including costs, software,

infrastructure), managerial (people and organisational issues, management support) and business challenges (customers service, customer old habits, legal issues), (Kuzic et al., 2002).

The creation of a successful company is challenging at best and the unique characteristics of the Internet make it particularly difficult (Schultz, 2009). Perhaps one of the most pertinent issue remains to be trust which is a key unlocking the success of e-commerce. Consumers must have confidence about the product information and reliability of the trading partner (Kenpankho, Suwanjan, & Siripongdee, 2005; Hauswirth et al., 2001; Souter & Kerretts-Makau, 2012). Many consumers across the world are reluctant to shop online because of risk both perceived and real associated with such transactions. These security risks are especially high due to the open nature of the internet coupled with increasing technical knowledge of modern day sophisticated criminals (Jebur et al., 2012). Security is key in achieving to e-commerce success, the parties involved need have a high degree of assurance that their data is protected against accidental or intentional disclosure to unauthorized persons, or unauthorized modifications or destruction (Hauswirth et al., 2001).

An European commission survey (2012) reported that whilst most consumers were potentially interested to shop online they abstained not due to lack of skills or internet access; it was for reasons associated with a general lack of trust in online businesses. This major inhibiting factors about shopping online are concerns with: the security of payments, privacy, receiving or returning goods and getting redress, access to payment card and delivery. In developing economies potential businesses and consumers also have to confront additional issues associated with poor and/or limited internet accessibility and high costs (Souter & Kerretts-Makau, 2012). The growth of e-commerce is also posing challenges to governments especially tax authorities as they begin to institute mechanisms to collect taxes on these transactions (Jebur et al., 2012). Additionally, the complexity and lack of global harmonization of legal framework governing cross-border e-commerce transactions is also a major hurdle that prevents some traders and consumers from engaging in e-commerce (European Commission, 2012; Souter & Kerretts-Makau, 2012).

2.3.2 Benefits of E-Commerce

Many innovations in human history have transformed the way of life, it can be said that few encompass as many benefits to organizations, individuals, and society as does e-commerce (Jebur et al., 2012). The great facilities availed by the internet have greatly propelled the growth of e-commerce therefore increasing the magnitude of benefits. These include: access to global markets at low costs, operational efficiency, cost reduction, mass customization, inventories reduction, business efficiency, 24 hours accessibility, lower communication costs, increases sales and profitability (to organizations). Consumers on the other hand can benefit from; more choices, 24 hours access, new markets and price comparisons, better prices due to competitive environments, convenience, time saving, access to extensive information. To the society the benefits are; improved living standards since some merchandise can be sold at lower prices, flexible working conditions, enhanced social connections and facilities delivery of public services which reduces cost and increases quality of the offered services (Wen et al., 2001; Kuzic et al., 2002; Marshall & Mckay, 2001; Jebur et al., 2012; Souter & Kerretts-Makau, 2012). By breaking down the barrier of time and space the internet increases competitiveness in the business environment and levels the playground which allows small businesses can compete with big businesses (Kinuthia & Akinnusi, 2014).

According to the European Union Survey [2012], the top reasons why consumers shop online for frequent online shoppers include; better prices, perceived savings in time, easier price comparisons, flexibility due to 24 hours access and a wider selection. The report estimated that consumer welfare gains from e-commerce in goods alone in terms of lower online prices and wider choice are estimated to be around €11.7 billion, an amount equivalent to 0.12% of EU, gross domestic product. The product categories where savings of at least 5% can be found online are women's fragrances, in-car navigation, LCD TVs, and mobile phones. The report however cautions that these benefits will not be realized if businesses and consumers refrain from shopping online. Andam (2003) postulates that in developing countries e-commerce poses the advantages of reduced information search costs and transactions costs. Businesses seek this information to guide their business strategies, in addition they can also automatically package and distribute information to specific target groups. Marshall, and Mckay (2001) found out that there seemed a disconcerting lack of planning, evaluation and proactive management of benefits with respect by most SME organizations in regards to their e-commerce initiatives.

2.4 Performance Measures in E-Commerce

Performance measurement is critical in determining the relative success or failure for an organization and therefore determination of the organization strategy. For an e-commerce businesses the website is at the core of the business and therefore valid metrics that capture website performance are critical in enabling managers to improve strategies and operations (Bremser & Chung, 2005; Ghandour et al., 2010). Controversies over which measurements to use exist, however, most researchers posit that performance of an e-commerce business is a multidimensional construct, that can only be determined through various metrics (such as traffic and site usage metrics, marketing metrics, other performance metrics and multi-dimensional scorecards) than just the traditional models that focused on financial measures (Donkor, 2003; Ghandour & Benwell, 2011). In addition, the complication of what stakeholder perspective (designer, owner, organization, user, investor etc.) to adopt present an additional challenge (Rossi, 2012; Ghandour & Benwell, 2011). Due to the limitations such as of resources, some e-commerce website owners employ easily accessible software tools such as the Google Analytics to monitor website performance, online marketing programs and understand customer behaviour (Rossi, 2012).

Performance measurement in e-commerce has its theoretical foundation in Information Technology (IT) and Information Systems (IS) diffusion theories which were invented in the era of technological innovations. The most popular area of study revolves around e-commerce adoption. The Resource-based theory (RBV) has been adopted by some researchers to explain value creation in e-commerce. The RBV was developed to facilitate the understanding of how organizations achieve sustainable competitive advantages, the theory argues that sustained competitive advantage is generated by the unique bundle of resources at the core of the firm (Mohamed, G., Mohd, & Omar, 2008). In relation to e-commerce innovation, RBV theory is used as a theoretical basis for linking e-business usage and business performance. It focuses on how firms leverage their investments in e-commerce to create unique Internet-enabled capabilities that determines a firm's overall e-commerce effectiveness (Zhu & Kraemer, 2002; Shemi, 2012; Ochola, 2013). Other researchers have attempted to use Technological, Organizational and Environmental (TOE) model which was developed by Tornatzky and Fleischer in 1990 to evaluate technology adoption. TOE model identifies three aspects of firm's characteristics that influence the process of adopting, implementing and using technological

innovations this include; the organisation context, the technological context and environment context (Mohamed et al., 2008; Shemi, 2012).

Since it is difficult to determine the best measures of e-commerce capabilities there is a need for the development of an interactive, comprehensive and multidimensional theoretical model that may offer guidance in measuring e-commerce impact on firm's performance. Mohamed et al., 2008 proposed a multi-dimensional theoretical model that combined the TOE model, RBV theory, and the e-business scorecard, arguing that majority of prior studies on e-commerce field from organizations perspective are centred on the use of TOE model and RBV theory. This argument is supported by DeLone & McLean (2003) who caution that used of simplistic and varied measures of performance cannot capture the complex phenomenon that is performance of Information Systems. In 1992 the researchers developed the D&M IS Success Model which recommend the use of multiple interrelated dimensions to capture performance of IS systems. There exists a wide range of literature on models for performance measurement mostly biased towards large organizations, in comparison research on SME specific models just began more recently (Rossi, 2012). For the e-commerce websites there is an apparent gap in the limited understanding on how to exactly measure performance (Ghandour et al., 2011; Rossi, 2012). Different researchers have divergent views on the performance measurement for e-commerce websites Donkor (2013) is a proponent of the Balanced Score Card (BCD). Ghandour and Benwell (2011) developed (after a thorough literature review) and empirically tested a model that adopted an owner perspective stance. The researchers supported their argument by quoting that according to Churchill (1979), a theoretical domain of a complex variables can be formed through an extensive literature review coupled with expert opinion.

This study will adopt the Ghandour, Benwell and Deans (2011) model with some modifications to reflect the organizational and environmental realities of e-commerce companies in developing countries such as Kenya. This model is particularly useful because it evaluates performance as a multidimensional construct determined by more than just financial factors. The study demonstrated that a framework of three factors, Usage, Financial Benefits, and Owner Satisfaction that can be used to model website performance as seen by its owner. From these performance factors seventeen variables that exhibited validity and reliability were tested. This study will measure the following five variables: number of visitors, repeat visitors (usage); online sales (financial benefits) and search engine ranking, number of customers (owner satisfaction).

2.4.1 Website Usage

Researchers have established that usage is a key variable in explaining the performance impact of information technology. This is especially so if the system use is voluntary as in e-commerce websites where the users are customers (Ghandour et al., 2011). Both the nature use and the amount of usage are both important indicators of success and have an impact on the organisation and can be used to make decisions on improving the quality of a website (Bremser & Chung, 2005; Rossi, 2012). The number of visitors and repeat visitors are one of the top traffic measures that can be determined.

2.4.2 Financial Benefits

The financial incentives that e-commerce companies can derive from selling products online is of key interest to the owners. They bear the responsibility of determining the investment levels and it is only plausible that they will invest if their website is creating value as opposed to being a cost (Bruyère, Pillet, & Quoniam, 2008; Ghandour et al., 2011; Mohamed, G., Mohd, & Omar, 2008). Evaluating websites from the financial angle is challenging too as no single measure can be used. Donkor (2013) posited that according to the financial perspective of the Balanced Scorecard the volume of sales and number of customers are some the measures that can be used. According to Zhu & Kraemer (2002) financial performance can be evaluated along three dimensions these include; profitability, cost reduction, and inventory efficiency.

2.4.3 Owner Satisfaction

The benefits of e-commerce have been classified as tangible and intangible (customer loyalty, competitive advantage, enhancing well-being and education of customers and convenient shopping), (Kuzic et al., 2002). Ghandour et al (2011) posits that from an owner's perspective the non-financial or the intangible benefits of a website can also be used as measurements of performance. In the view of the owner, the ability of the website to drive traffic, communicate features that enhance users experience and generate trust can inspire the feelings of satisfaction. Search engine ranking can be a good indicative measure of how well an e-commerce website is being utilized by the target consumers and communicate its competitive position in the market.

2.5 Conceptual Framework

The performance of e-commerce websites has been of key interest to many researchers and academicians. The common agreement has been that financial measures alone are not adequate to gauge the performance of these websites (Donkor, 2003; Ghandour et al., 2011; Rossi, 2012).

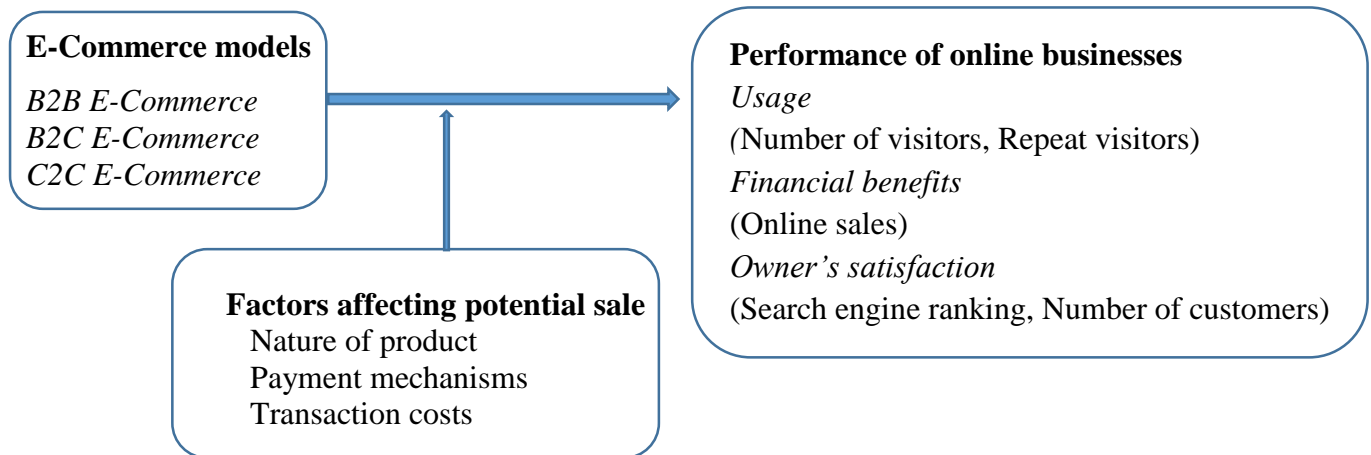


Fig 2.1: Proposed conceptual framework for evaluating the performance of E-commerce websites, modified based on Ghandour et.al (2011) empirical study.

The above proposed model approaches the performance measurement of online businesses as a multidimensional construct. The model has been modified to include six metrics which will collectively be used to determine website performance they include: number of visitors; repeat visitors (usage); online sales (financial benefits) and search engine ranking and number of customers (owner satisfaction). This relationship between ecommerce and performance of online businesses can be mediated by other factors which can affect the potential sale of any product/service over the internet. Several researchers have alluded to factors such as the nature of product and transaction costs (Majmudar & Prabhu, 2000). The payment mechanisms involved which relate to the ease of payment and security of payment mechanisms are concerns for potential customers (Majmudar & Prabhu, 2000; Hauswirth et al., 2001; Kenpankho, Suwanjan, & Siripongdee, 2005; Jebur et al., 2012). These cluster of factors relate to elements that directly or indirectly influence potential client's satisfaction with an e-commerce website and signal the propensity of users/consumers to engage in transactions.

2.6 Summary

Since that initial business transaction across the internet occurred in the USA, the world has witnessed an unprecedented revolution in e-commerce. So much so, that e-commerce to most people is almost synonymous with transacting business online. While e-commerce is haunted by a myriad of challenges, it poses massive benefits to organizations, customers and the society as a whole. Perhaps of great interest is the fact that, e-commerce has made it possible for some businesses to offer their products and services virtually with minimal need to physically interact with customers. This breed of ‘pure-play’ e-commerce firms has been greatly successful in the developed countries and companies such as Amazon, Groupon, E-bay are widely known across the world.

In developing countries like Kenya, this type of e-commerce business model is still in the formative stages. However, there is need to evaluate the performance of the relatively few online companies that do exist, as research in this area seems to be lacking. The framework for evaluating performance of e-commerce websites is a multi-dimensional construct that cannot be based on financial measures alone. This study adopted a model based on three measures (usage, financial benefits and owner’s satisfaction) to evaluate performance of online companies.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research methodology that was used to carry out the study. Research methodology gives details regarding the procedures used in conducting the study. This chapter will therefore focus on: The research design, population, sample design, data collection techniques and method of data analysis.

3.2 Research Design

The purpose of a research design is to ensure that the evidence gathered enables one to answer the initial research question as unambiguously as possible and without bias (Imenda, 2014). This study adopted a cross-sectional survey design as it is instrumental in collecting data from a population of interest at one point in time. This can lead to the formation of inferences that indicate trends and attitudes and enable generalizations of the findings of the research study (Wanjau et al., 2012). The study is descriptive in nature. A descriptive study is fundamental to the research enterprise as it helps demonstrate the existence of a problem and can provoke further research and theory formation in future (Mutua, Oteyo, & Njeru, 2013; Imenda, 2014). In addition, a survey study was preferred because it enabled the researcher to have an in-depth understanding of the research problem across the online businesses.

3.3 Population

The target population for this study comprised of online companies with official premises within Nairobi County. By definition, an online company is one that is purely internet-based and its business is done online, however it still uses e.g. physical logistic systems that assist in delivering services (Schultz, 2009). Gathering accurate information on internet activities especially online trading is exceptionally hard in most developing countries, and Kenya is no exception (Souter & Kerretts-Makau, 2012). As there existed no official records of online companies in Kenya purposive selection was done to counter this challenge.

3.4 Sample Design

The study employed non-probability sampling, in this technique a researcher selects a sample that suits their needs. This method is justifiable in situations where the population may not be well defined or when it constitutes of a small population and has been used extensively in social

research (Battaglia, 2011). Purposive sampling also referred to as judgemental or expert sampling is a type of non-probability sampling that is in some way “representative” of the population of interest without sampling at random, International Labour Organization [ILO] (2009). In this study, a purposive sample was obtained by applying expert knowledge the online businesses operating in Nairobi County to select in a non- random manner a sample of elements that represented a cross-section of the population. The final sample constituted of businesses that meet the following four characteristics: pure-play (click-only) e-commerce firm, had an interactive website, employed either one of this e-commerce business models (B2C e-commerce, B2B e-commerce or C2C e-commerce and had official premises in Nairobi County. The total sample constituted of at least 30 respondents which is the general rule thumb for small populations (Wanjau et al., 2012).

3.5 Data Collection

This study collected primary data using questionnaires comprising of both open-ended and close-ended questions. This is considered an efficient data collection mechanism particularly in quantitative analysis as respondents were subjected to same sets of questions. The questionnaire method is also cost-effective, quicker, eliminates researcher’s bias and is convenient to the respondent as it allows for flexibility. The target respondents were either the business owner or a senior business manager, this is because they were most likely to have the information being sought after in this study. The questionnaire was divided into five parts: part A will capture general information, part B captured the models of e-commerce, part C outlined challenges of online trading, part D highlighted the benefits of online trading and part E evaluated the performance of online businesses.

After designing the questionnaire, the researcher pilot tested it for appropriateness on three different online companies. The respondents were required to critic the questionnaire on content, design and validity. This pre-test was done to detect and correct any weakness in the questionnaire. After the pre-test the researcher made the changes that were deemed necessary. The questionnaires were administered through the drop-pick-later method. To maximize the response rates follow up calls were done at an agreed time. An introductory letter accompanied the questionnaires so as to give authenticity to the research and explain the purpose of the survey.

3.6 Data Analysis

Data obtained through the questionnaires was first checked for completeness and consistency. The questionnaires found correctly filled and fit for analysis were coded. In this study, the researcher utilized descriptive statistics such as measures of central tendencies, frequencies deviations, percentages and the result presented in tables to describe the study parameters. In order to establish the relationships among the study variables, inferential statistics were applied and the following regression model was used:

$$Y = a_0 + a_1 X_1 + a_2 X_2 + e$$

Where:

Y=Performance of online companies

X₁=E-commerce models

X₂=Moderating variables

a₀= Constant

a₁ & a₂: are the coefficients were estimated

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

In this chapter, the researcher presents the analysis, results and discussion of the study findings. The findings are presented according to the described methodology and the study objectives such that the research questions are answered. The results in this section are from analysis of data collected from the questionnaire. 30 questionnaires were distributed targeting either the business owner or a senior business manager, as they most likely to be involved or knowledgeable about the challenges, benefits and performance of the targeted businesses.

4.2 Response Return Rate

Out of the 30 questionnaires distributed to the business owners or senior managers in the online businesses, 28 of them were completed. This translated to 63% response rate which was considered appropriate to enable conclusions and recommendation. The non-response of the remaining companies was attributed mostly to unwillingness to give any information as they considered it confidential especially the section requesting for performance data. One company declined to participate presumably because they did not fit in the target group.

4.3 Demographic Information

To capture the general information, the study sort to establish the age of the online company, the number of employees and the ownership of the company. The findings as illustrated in the table 4.1 below shows that 63.2% of the companies were in existence for less than 5 years, 15.8% were in operation between 6 to 10 years, 10.5% between 11 to 15 years while another 11.5 % had operated for over 15 years. This shows that the majority of online businesses are start-ups, which is expected as online trading is still in the formative stages in most developing countries and Kenya is no exception.

Table 4.1: Age of the Company

	Frequency	Percent	Valid Percent	Cumulative Percent
0-5 Years	12	63.2	63.2	63.2
6-10 Years	3	15.8	15.8	78.9
Valid 11-15 Years	2	10.5	10.5	89.5
>15 Years	2	10.5	10.5	100.0
Total	19	100.0	100.0	

Source: Research data (2014)

Most of the online businesses were considered small as a majority 89.5% had a workforce of less than 50 employees. In fact only a meagre 10.5% can be classified themselves as a large organization and this is because the parent company has the majority of employees.

Table 4.2: No. of Employees

	Frequency	Percent	Valid Percent	Cumulative Percent
1-10 Employees	10	52.6	52.6	52.6
11-20 Employees	4	21.1	21.1	73.7
Valid 21-50 Employees	3	15.8	15.8	89.5
>51 Employees	2	10.5	10.5	100.0
Total	19	100.0	100.0	

Source: Research data (2014)

Further findings as illustrated in table 4.3 below show that, there is an equal number of locally owned companies and those that have a combination of foreign and local ownership at 36.8% of the total respondents, a further 26.3 % of the companies are foreign owned. This indicates that there is a domination of foreign ownership in the online companies' e-commerce sector.

Table 4.3: Company Ownership

	Frequency	Percent	Valid Percent	Cumulative Percent
Locally Owned	7	36.8	36.8	36.8
Foreign Owned	5	26.3	26.3	63.2
Valid Combination of Locally & Foreign Owned	7	36.8	36.8	100.0
Total	19	100.0	100.0	

Source: Research data (2014)

4.4 Challenges of Online Trading

The researcher sought to establish the challenges online businesses in the country are facing with the view to compare what has already been indicated from previous empirical studies. Respondents were required to state if the perceived challenges had influenced their online trading activities to a very great extent rated at 5, great extent at 4, moderate extent at 3, small extent rated at 2 or not at all which was rated at 1. The analysis was done in terms of the frequency (F) of respondents in each scenario and the mode calculated. The study established five challenges that considered to be affecting the online businesses but to a moderate extent. These were: ¹potential customers reluctance to shop online due to desire to touch/interact with the product prior to making a purchase, ² Lack of personal contact with customers which might be beneficial to business, ³ E-commerce software incompatibility with existing infrastructure, ⁴ Customer distrust regarding privacy of personal data and finally ⁵Customers general lack of trust for online businesses.

Table 4.4: Challenges Facing Online Businesses in Kenya

Challenge	Valid	Missing	Mode
Reluctance to shop due to desire to touch/interact with product before purchase	19	0	3
Lack of personal contact with customers which might be beneficial to business	19	0	3
Software Compatibility with existing infrastructure	19	0	3
Customer distrust regarding privacy of personal data	19	0	3
Customers general lack of trust for online businesses	19	0	3
Cost of running and maintain an online business	19	0	2
Slow internet speed	19	0	2
Internet connection failure	19	0	2
Security breaches and fraud	19	0	2
Threat from viruses	19	0	2
High customers acquisition costs	19	0	2
Cost of software acquisition	19	0	1
Disputes arising from returned goods	19	0	1
Difficulty in finding and using website by customers	19	0	1
Difficulty in recruiting staff	19	0	1
Legal hurdles for cross-border e-commerce transactions	19	0	1
Taxation issues` unique to online transactions	19	0	1

Source: Research data (2014)

The study findings compare positively with both theoretical and empirical studies in some areas. Trust which remains to be one of the most pertinent and is key for success of any e-commerce venture seems to be a key challenge for online businesses. The respondents felt that customers were distrustful regarding the privacy of personal data and also potential consumers have a general lack of trust for online businesses. These two issues has been alluded to by various researchers (Kenpankho, Suwanjan, & Siripongdee, 2005; Hauswirth et al., 2001; Souter & Kerretts-Makau, 2012). The trust issues on personal data revolve especially through payment methods which lead to disclosure that can result in grievous loss if this data is accessed by third parties. Hunaiti (2009) reported that through his study a whopping 70% of businessmen in Libya did not feel it is safe to perform online transactions.

Jebur et al (2012) asserts that the perceived security risks of the internet are not unfounded as the open nature of the internet and technical prowess of modern day cyber criminals make the system vulnerable and thus prone to very high risks. Online businesses therefore have to remain proactive, vigilant and invest in the right systems to counter any potential threats to their systems, this can help instil consumer confidence on the integrity of their personal data. Consumers must have confidence about the product information and reliability of the trading partner. An European commission survey (2012) reported that reluctance by potential consumers to shop online was mostly due to reasons that pointed to the lack of trust in the online trading partners.

However, this study opposed findings from Kinuthia & Akinnusi (2014), in their study they assert that online security and cyber- crime, internet connectivity speeds, internet reliability and taxes and tariffs are major barriers facing e-commerce businesses in Kenya. Overall the study findings are very interesting because the respondents rated all the challenges as moderate meaning that there is a high probability of success in finding possible solutions or mitigation measures to counter them. On the other hand some of the challenges the researcher expected to be feature in the study outcome such as slow internet speed, internet connection failure and security breaches and fraud were not considered significant. The overall indication is that the prospects of successfully establishing an online business in Kenya are quite high.

4.5 Benefits of Online Trading

E-commerce is booming in developed economies with many advancing the massive benefits thereof, while in developed countries most online businesses are still in the formative stages. The researcher sought to establish if the same case applies to similar businesses in Kenya. Respondents were required to state if they had experienced any of the perceived of online trading to a very great extent rated at 5, great extent at 4, moderate extent at 3, small extent rated at 2 or not at all which was rated at 1. The analysis was done in terms of the frequency (F) of respondents in each scenario and the mode calculated. Surprisingly, the respondents cited all the indicated benefits with the exception of one which is reduced cost of marketing and advertising.

Table 4.5: Benefits Realized by Online Businesses in Kenya

Benefits	Valid	Missing	Mode
Cost reduction for the business	19	0	5
Ability to reach more potential customers	19	0	5
Access to regional and/or global markets	19	0	5
Easier and faster to serve customers	19	0	5
Customers able to access the business on a 24/7 basis	19	0	5
Better prices to customers	19	0	5
Enhanced collection of customer data	19	0	5
Increased business visibility through search engine marketing	19	0	5
Higher quality customer service	19	0	5
Offers convenience to customers	19	0	5
Reduced information search costs	19	0	5
Ease of access, packaging and distributing information to specific target groups	19	0	5
Potential to operate with less inventory	19	0	4
Lower communication costs (phone and paper work)	19	0	4
Higher sales & profitability	19	0	4
Reduced cost of marketing and advertising	19	0	2

Source: Research data (2014)

The study findings reflect the findings by other researchers, Experian [2011] carried out a survey in the United Kingdom which indicated that convenience, better value for money and

access to a greater product range as the most highly ranked reasons why people shop online. Perceived savings in time, easier price comparisons, and flexibility due to 24 hours access were additional reasons cited in a European Union Survey [2012]. Andam (2003) asserts that in developing countries e-commerce poses the advantages of reduced information search costs and transactions costs. This assertion was confirmed as the respondents indicated to have benefited from access and ease of distribution information to target groups. This is especially important as the business owners and managers can glean limitless valuable insights on how to run and manage their businesses at virtually no cost. Previously this was not possible or the costs thereof inhibitive especially for young and small businesses. Jebur et al. (2012) found that e-commerce businesses could benefit from inventories reduction, lower communication costs and cost reduction and these is similar to findings from this study.

It is mostly an assumed position in the public domain that operating online means reduced cost of marketing and advertising since most people view the internet as a marketing tool. Most businesses fair no better in this assumption, Marshall & Mckay (2001) reported that most businesses had grossly underestimated the marketing and advertising costs only to realize later that they had to spend much more in marketing their web sites and hence costs had blown out. A position that is further confirmed by Fox (2000) who argues that in the face of the fiercely competitive e-commerce environment, new customer acqistion is an expensive affair for e-commerce companies, especially those that are joining later. He points out that a research by McKinsey & Co. (1999) suggested that online customer acquisition costs can be as much as 4 times as high as offline. This study confirms that indeed online businesses do not benefit from reduced cost of marketing and advertising. Online businesses still have to invest in various marketing tools and advertising channels both online and offline to raise awareness and promote their product offerings to their target market.

4.6 Performance of Online Businesses in Kenya

This study also sought to focus on an area of e-commerce that appears to receive less focus from researchers and that is performance of online businesses. The evaluation was based on three factors the first was website usage which was based on two traffic metrics i.e. number of unique visitors and repeat visitors to the website, the second factor was financial benefits which was based on gross online sales and the third factor was owner satisfaction which was based on the number of customers and search engine ranking.

4.6.1 Website Usage

Unique visitors refers to the number of distinct individuals requesting pages from the website during a given period, regardless of how often they visit. For this measure the respondents indicated the number of unique visitors who visited their website in the last month. The results indicate that a majority 73.7% of online businesses are drawing less than 100,000 unique visitors each month, a further 10.5% between 100,001-200,000 visitors, 5.3% had between 200,001-300,000 visits and only 10.5% had more than 300,000 unique visitors to their website.

Table 4.6: Number of Unique Visits

	Frequency	Percent	Valid Percent	Cumulative Percent
1-100,000 Visits	14	73.7	73.7	73.7
100,001-200,000 Visits	2	10.5	10.5	84.2
Valid 200,001-300,000 Visits	1	5.3	5.3	89.5
>300,001 Visits	2	10.5	10.5	100.0
Total	19	100.0	100.0	

Source: Research data (2014)

Repeat visitors' measures the percentage of visitors who return to your site after an initial visit during some specific time period. For this measure the respondents indicated the number of repeat visitors who visited their website in the last month. The results indicate that a majority 78.9% of online businesses are drawing less than 100,000 repeat visitors each month and the remaining 21.1% had more than 300,000 repeat visitors to their website.

Table 4.7: Number of Repeat Visits

	Frequency	Percent	Valid Percent	Cumulative Percent
1-100,000 Visits	15	78.9	78.9	78.9
Valid >300,001 Visits	4	21.1	21.1	100.0
Total	19	100.0	100.0	

Source: Research data (2014)

These traffic metrics indicate that relatively low numbers of people are visiting e-commerce websites. In comparison the top retail e-commerce website in the United States draw huge numbers of unique visitors per month. According to the website Statista (2014) the leading websites are Amazon sites, eBay, Apple.com sites, Wal-Mart and Target which managed to attract on average 162, 104, 91, 61 and 45 million unique visitors each month as of 2nd Quarter in 2014.

According to data by Alexa website (Alexa.com) which reports overall website traffic country by country, a review of the top 10 websites in Kenya indicates that Kenyans are using the internet to mostly access internet search engines (Google), social networking sites (Facebook, Twitter, LinkedIn), Information and entertainment sites (Youtube, Wikipedia, Blogspot), Email and Instant messaging (Google, Yahoo) and Newspaper groups (Standardmedia). Other top local sites belong to entertainment providers (Capital FM, Ghafla) communications companies (Safaricom, Orange). In the e-commerce segment only four sites feature in the top 50 category these are OLX, Jumia, BrighterMonday and BuyRent Kenya.

These low levels of traffic volumes to e-commerce websites can be attributed at least in part to the low internet penetration rates in the country. Kenya has a population of about 43 million, the Communications Commission of Kenya [CCK] (2012) estimated the internet penetration rate at around 18% up from a little over 10% one year previously (Souter & Kerretts-Makau, 2012). Most internet users in Kenya are located mainly in the urban areas and comprise of the younger generation. This improvement can be attributed to landing of submarine cables into the country in 2010. In contrast in developed countries like UK and USA where e-commerce is booming internet penetration rates were estimated at 82.5% and 77.3% respectively (Ptgmedia.pearson 2014).

This situation is further compounded by the reluctance by Kenyan consumers to shop online. According to a research carried out on Kenyan consumer ordering habits by IHUB Research (2012) only about 4% of Kenyan consumers would consider making online purchases. This is reflected in the volume of traffic e-commerce websites attract with a majority 73.7% drawing less than 100,000 unique visitors each month and even less repeat visitors with bulk of the websites at 78.9% attracting less than 100,000 repeat visitors per month. Repeat visitors is one way to determine whether a website is successfully engaging visitors. The higher the number of repeat visitors relative to unique visitors the better the website must be at engaging the average new visitor. However, the era of online shopping in Kenya is just in the formative stages and the sector is set to experience explosive growth. This will revolution will be fast tracked by the improved access to high speed internet and the mobile payments technology. In addition a bulk 45% of Kenyans are aged 16 and under (Souter & Kerretts-Makau, 2012). This generation is tech savvy, is poised to have more disposable income and value convenience.

4.6.2 Financial Benefits

The financial motivation is key for any business owner investing in an e-commerce website. This study sought to establish the financial incentives accrued by online businesses. For this measure the respondents indicated the revenues obtained from their online transactions in the last month. The results indicate that a majority 73.7% have revenues below IM KES per month, .3% average 1M-2M KES, 15.8 % average 2M-3M KES and a meagre 5.3% make above 3M KES per month.

Table 4.8: Gross Online Sales

	Frequency	Percent	Valid Percent	Cumulative Percent
<=1M KES	14	73.7	73.7	73.7
1M-2M KES	1	5.3	5.3	78.9
Valid 2M-3M KES	3	15.8	15.8	94.7
>3M KES	1	5.3	5.3	100.0
Total	19	100.0	100.0	

Source: Research data (2014)

The online sales made by e-commerce websites in Kenya are extremely modest in comparison to similar business in developed countries. According to Statistica.com (2014) Amazon the leading e-retailer in the world grossed about \$ 67.86bn in 2013, other top e-retailers included Apple Inc. at \$ 18.3bn, staples Inc. at \$ 10.4bn., Walmart.com at \$ 10.03bn., and Sears Holdings Corp at \$ 4.9bn. Overall the value of B2C e-commerce sales worldwide was estimated at \$1,251,4bn with the United States accounting for \$593.16bn of this volume.

Jones Lang LaSalle [2013] contrasts the market variations in developed and developing countries in regards to e-commerce. In developed economies online retail sales typically account for between 5% and 15% of total retail spending, and per capita online spending is relatively high with countries such as South Korea, the UK, the United States, Germany and France are leading the way in online retail. The report postulates that these developed markets generally share a number of attributes which include: high rates of internet and mobile broadband usage -with internet penetration rates averaging around 77%, according to ITU (International Telecommunications Union). In sharp contrast, the internet penetration rate in Kenya is estimated at around 18%. Other attributes include low fixed and mobile broadband costs -typically under or around 2% of monthly incomes; a willingness of internet users to purchase online - as indicated by a high digital buyer penetration rate among internet users, regulatory infrastructure that supports online purchasing -including secure online payment systems; well-developed logistics infrastructure - which supports efficient online order fulfilment and mature 'bricks and mortar' retail markets -that make it difficult for retailers to expand sales significantly by developing their store networks, but which offer multi-channel retailers opportunities to secure synergies between their online channels and their store portfolios.

4.6.3 Owner Satisfaction

Gauging performance from an owner's point of view the non-financial or the intangible benefits of a website can also be used as measurements of performance. This study evaluated this factor from two angles that is number of customers served and the search engine ranking within the previous month. The bulk of online businesses surveyed served less than 1,000 customers, while a further 10.5% served between 1,001-5,000 customers an equal numbers served more than 5,000 customers in a month.

Table 4.9: Number of Customers

	Frequency	Percent	Valid Percent	Cumulative Percent
1-1,000 Customers	15	78.9	78.9	78.9
1,001-5,000 Customers	2	10.5	10.5	89.5
Valid >5,000 Customers	2	10.5	10.5	100.0
Total	19	100.0	100.0	

Source: Research data (2014)

Further this researcher wanted to establish the search engine ranking of e-commerce websites relative to other businesses with websites in Kenya. The researcher obtained data from Alexa.com to achieve this goal. The Alexa country-specific rank is a measurement of how a website ranks in a particular country relative to other sites over the past month. The rank is calculated using a proprietary methodology that combines a site's estimated average of daily unique visitors and its estimated number of page views over the past 3 months. The results revealed that 52.6% of online business were ranked in the top 1000 websites in Kenya, 1% of online businesses were ranked at 1,001-2,000 and 2,001-3,000 while the remaining 36.8% of websites were given a rank of above 3,000 (Alexa, 2014).

Table 4.10: Search Engine Ranking

	Frequency	Percent	Valid Percent	Cumulative Percent
1-1000 Rank	10	52.6	52.6	52.6
1,001-2,000 Rank	1	5.3	5.3	57.9
Valid 2,001-3,000 Rank	1	5.3	5.3	63.2
>3,000 Rank	7	36.8	36.8	100.0
Total	19	100.0	100.0	

Source: Research data (2014)

In the course of this research, the respondents expressed mixed reactions on the importance of search engine ranking with some stating that it didn't really matter and they were of the opinion it had no effect on their business. Others were sceptical on the ranking formula used, but some

felt it was a good way of gauging of their success relative to other similar businesses. The main reason businesses establish a presence on the web is to harness tangible and intangible benefits. Owner satisfaction is a form of intangible benefit that can be used to determine website performance (Ghandour et al., 2011). Owners also determine their IT expenditure according to their satisfaction with the website (Huizingh 2002). Consequently, when the website drives traffic, communicates certain features that enhance the user’s experience, generates trust and strengthens the competitive position of the business, the owners are inclined to be satisfied, (Ghandour et al., 2011). Search engine ranking can be a good indicative measure of how well an e-commerce website is being utilized by the target consumers and communicate its competitive position in the market.

4.7 E-Commerce Models and Performance of Online Businesses in Kenya

This researcher also sought to establish if there was any relationship between e-commerce models and performance of online companies in Kenya. The results are as shown below:

Table 4.11: Model Summary (Unique Visits)

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.924 ^a	0.853	0.622	73566.07	0.853	3.69	11	7	0.047
a. Predictors: (Constant), Information, Mobile_Payment, Online_Payment, B2B Model, Credit_Cards, Cheque, Consumer_Service, C2C Model, Debit_Cards, Cash, B2C Model b. Dependent variable: Unique visits									

"R Square Change" column shows the increase in variation explained by the addition of the interaction term (i.e., the change in R²). You can see that the change in R² is reported as .622, which is a proportion. More usually, this measure is reported as a percentage so we can say that the change in R² is 62.2% (i.e., .622 x 100 = 62.2%), which is the percentage increase in the variation explained by the addition of the interaction term. We can also see that this increase is statistically significant (p < .047). We can conclude that the nature of product (when it is

information) and mobile payment do moderate the relationship between the C2C e-commerce business model and the unique visits to the website.

Table 4.12: ANOVA

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	219698420601.641	11	19972583691.058	3.690	.047 ^b
	Residual	37883769816.465	7	5411967116.638		
	Total	257582190418.105	18			

The ANOVA table tests whether the overall regression model is a good fit for the data. This indicates the statistical significance of the regression model that was run. Here, $p < 0.047$, which is less than 0.05, and indicates that, overall, the regression model statistically significantly predicts the outcome variable (i.e., it is a good fit for the data).

Table 4.13: Coefficients

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-215970.691	139878.958		-1.544	.167
	B2B_Model	7877.096	106696.484	.028	.074	.943
	B2C_Model	8424.868	121788.224	.032	.069	.947
	C2C_Model	75860.475	91867.269	.325	.826	.436
	Cash	78654.897	106164.956	.207	.741	.483
	Cheque	-89785.866	58732.461	-.381	-1.529	.170
	Mobile Payment	143315.795	52519.215	.542	2.729	.029
	Credit Cards	51971.956	67489.878	.215	.770	.466
	Debit Cards	34490.872	66124.256	.146	.522	.618
	Online Payment	-17958.914	47333.963	-.077	-.379	.716
	Consumer Service	84255.431	76090.814	.319	1.107	.305
	Information	210562.701	60766.882	.893	3.465	.010

Source: Research data (2014)

The ANOVA table showed regression model for predicting unique visits was significant $p < 0.047$. By evaluating the coefficient table; the C2C model, mobile payment and information were depicted to be strong predictors of unique visitors to a C2C e-commerce website.

$$UV = -215970.691 + 75860.475X_1 + 143315.795X_2 + 210562.701X_3 + 139878.958 \epsilon$$

Where:

UV=unique visits

X₁=C2C business model

X₂=Payment mechanism (mobile payment)

X₃ =Nature of product (information)

Table 4.14: Model Summary (Repeat Visits)

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.923 ^a	0.853	0.621	288118.4	0.853	3.685	11	7	0.047
a. Predictors: (Constant), Information, Mobile Payment, Online Payment, B2B_Model, Credit_Cards, Cheque, Consumer_Service, C2C Model, Debit Cards, Cash, B2C Model b. Dependent variable: Repeat visits									

"R Square Change" column shows the increase in variation explained by the addition of the interaction term (i.e., the change in R²). You can see that the change in R² is reported as .621, which is a proportion. More usually, this measure is reported as a percentage so we can say that the change in R² is 62.1% (i.e., .621 x 100 = 62.1%), which is the percentage increase in the variation explained by the addition of the interaction term. We can also see that this increase is statistically significant ($p < .047$). We can conclude that the nature of product when it is information, mobile payment do moderate the relationship between the C2C e-commerce business model and the repeat visits to the website.

Table 4.15: ANOVA**ANOVA^a**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3364570489267.720	11	305870044478.884	3.685	.047 ^b
	Residual	581085619729.017	7	83012231389.860		
	Total	3945656108996.740	18			

The ANOVA table tests whether the overall regression model is a good fit for the data. This indicates the statistical significance of the regression model that was run. Here, $p < 0.047$, which is less than 0.05, and indicates that, overall, the regression model statistically significantly predicts the outcome variable (i.e., it is a good fit for the data).

Table 4.16: Coefficients**Coefficients^a**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-825826.468	547830.058		-1.507	.175
	B2B_Model	91170.101	417872.293	.082	.218	.834
	B2C_Model	75821.309	476978.459	.073	.159	.878
	C2C_Model	233116.483	359794.298	.255	.648	.038
	Cash	492746.400	415790.586	.332	1.185	.275
	Cheque	-476177.485	230023.213	-.516	-2.070	.077
	Mobile Payment	336080.069	205689.299	.325	1.634	.046
	Credit Cards	217786.751	264321.268	.231	.824	.437
	Debit Cards	489845.380	258972.871	.531	1.891	.100
	Online Payment	-299281.437	185381.474	-.328	-1.614	.150
	Consumer Service	78369.866	298006.476	.076	.263	.800
	Information	789680.489	237990.938	.856	3.318	.013

Source: Research data (2014)

The ANOVA table showed regression model for predicting repeat visits was significant at sig. value=0.047. By evaluating the coefficient table; the C2C model, mobile payment and information were depicted to be strong predictors of repeat visitors.

$$RV = -825826.468 + 233116.483X_1 + 789680.489X_2 + 547830.058 \epsilon$$

Where:

RV=Repeat visits

X₁=C2C business model

X₂=Information

This strong correlation between the C2C e-commerce business model and the performance in terms of unique and repeat visitors to the website is an indication that more Kenyan consumers are willing to engage with this type of online business as compared to the B2B and B2C e-commerce business model. This can be explained by the nature of the product, in this case – information. Most Kenyan consumers are still reluctant to purchase goods online and have trust issues with online trading partners as evidenced by the cited challenges by business owners. However, in the case of online companies following the C2C business model, the e-commerce website acts an intermediary between consumers. In that case, the high traffic to this websites can be explained by the fact that potential visitors have diverse motivations apart from just buying products from the vendors listed on these websites. Some visitors could be interested in carrying out price comparisons with the intention to visit physical stores later. The option of using mobile payments is likely to act as an incentive to purchase products online because the process is more direct, easy and less risky as compared to other payments methods such as debits and credit cards which are vulnerable to fraud. Consumers are likely to feel more secure using mobile payment which is also very much entrenched in the Kenyan business culture. The negative correlation between repeat visits and cheque as a payment mechanism could be linked to the perceived risk and the time factor before the payment process is completed. These findings are in tandem with the research by (Majmudar & Prabhu, 2000) who assert that the as the nature of product and the payment mechanisms involved which relate to the ease of payment and security of payment mechanisms are concerns for potential customers and can influence the potential sale of any product/service over the internet.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a summary of the research findings, conclusions and recommendations as observed by the researcher. It also points out limitations of the study and provides suggestions for further research as well as implication of the study on policy and practice.

5.2 Summary

Since the advent of the internet, E-commerce has grown in leaps and bounds also leading to creation of purely internet-based businesses now commonly referred as online companies. Online sales are booming in developed economies while as in developed countries like Kenya online companies are still in the formative stages. In developed economies online retail sales typically account for between 5% and 15% of total retail spending, and per capita online spending is relatively high with countries such as South Korea, the UK, the United States, Germany and France are leading the way in online retail. It is from this view that this study was carried to establish the benefits and challenges of online trading in Kenya as well as performance of the relatively few existing online companies.

The findings that of the 19 online companies that responded 63.2% of the companies were in existence for less than 5 years of age since being incorporated, most of the online businesses were considered small as a majority 89.5% had a workforce of less than 50 employees. It was also emergent that there is a domination of foreign ownership in the online companies' e-commerce sector. The study established five challenges that considered to be affecting the online businesses but to a moderate extent. These were: potential customers reluctance to shop online due to desire to touch/interact with the product prior to making a purchase, lack of personal contact with customers which might be beneficial to business, e-commerce software incompatibility with existing infrastructure, customer distrust regarding privacy of personal data and finally and customers general lack of trust for online businesses.

The study indicates that they are massive benefits associated with online trading. The respondents concurred that they had experienced the following benefits to a very great extent these are: cost reduction for the business, ability to reach more potential customers, access to regional and/or global markets, easier and faster to serve customers, customers' ability to

access the business on a 24/7 basis, better prices to customers, enhanced collection of customer data, increased business visibility through search engine marketing, higher quality customer service, increased business visibility through search engine marketing and convenience to customers. Three other benefits that is potential to operate with less inventory, lower communication costs (phone and paper work) and higher sales & profitability were considered beneficial to a great extent.

The study further revealed that a majority 73.7% of online businesses are drawing less than 100,000 unique visitors each month, a further 10.5% between 100,001-200,000 visitors, 5.3% had between 200,001-300,000 visits and only 10.5% had more than 300,000 unique visitors to their website. In addition, a majority 78.9% of online businesses are drawing less than 100,000 repeat visitors each month and the remaining 21.1% had more than 300,000 repeat visitors to their website. In terms of financial benefits, the results indicate that a majority 73.7% have revenues below 1M KES per month, .3% average 1M-2M KES, 15.8 % average 2M-3M KES and a meagre 5.3% make above 3M KES per month. The bulk of online businesses 78.9% served less than 1,000 customers, while a further 10.5% served between 1,001-5,000 customers an equal numbers served more than 5,000 customers in a month. The results revealed that 52.6% of online business were ranked in the top 1000 websites in Kenya, 1% of online businesses were ranked at 1,001-2,000 and 2,001-3,000 while the remaining 36.8% of websites were given a rank of above 3,000.

Of the four performance metrics evaluated two of them that is unique visitors and repeat visitors were found to have a positive correlation with the e-commerce business models and thus good predictors of performance for the e-commerce business models. This was the case when the mediating variables of nature of the product being sold and payment mechanisms were introduced to the model. This two factors can affect the potential sale of any product/service over the internet. The value of gross online sales and the number of customers served were found to have no relationship with the e-commerce business models.

5.3 Conclusion

Online companies are still in the formative stages in Kenya, the study reveals that the benefits of online trading far outweigh the challenges. This study infers that it is however not correct for online businesses to expect reduced cost of marketing and advertising. Indeed online

businesses still have to invest in various marketing tools and advertising channels both online and offline to raise awareness and promote their product offerings to their target market. The study also established that trust in e-commerce online companies features strongly as one of the key challenges. Customers are not only distrustful about the privacy of their personal data but also have a general lack of trust for online businesses. This issue points to the need for proactive investment in security systems and consumer awareness campaigns by business owners and policy and regulatory reinforcement by the government. On the upside slow internet speed, internet connection failure and security breaches and fraud were not considered to be significant challenges.

In terms of performance Kenyan online companies pale in comparison to their counterparts in developed economies this is was seen across all the performance metrics evaluated which included unique visitors and repeat visitors to the websites, gross online sales, search engine ranking and number of customers served. In order for the online sales to flourish, improved internet penetration across the country, low fixed and mobile broadband costs, presence of a regulatory infrastructure that supports online purchasing are some factors that need to be addressed. Kenyan consumers also have to be more willing to purchase products online and have confidence with these trading partners.

5.4 Recommendations for Policy and Practice

The study findings reinforce previous assertion by other researchers that online businesses pose enormous benefits to potential entrepreneurs in developing countries. One of this benefit is cost reduction, one of the most cited barrier to starting a business in Kenya has been lack of finances. However, it is far much possible to start an online venture with low start-up capital in comparison to a brick and mortar store. One of the young entrepreneurs interviewed narrated of how she started her online business with just a few thousands shillings and a laptop from the comfort of her bedroom. To curb the unemployment issue the government can invest in short entrepreneurial programs tailor-made for the unemployed youth for training and equipping them with requisite knowledge and skills to start their own online ventures innovatively.

Trust in online businesses is still a raging issue that entrepreneurs have to contend with. Most potential customers are distrustful of the way in which their personal data will be handled and some skeptical about the quality of online products and services and assured delivery of the same. This issue cannot be solely addressed by the entrepreneurs, on one hand they need to

invest in the requisite technology and systems to secure their customers and their business as well as create consumer awareness to negate this poor perception. On the other hand, the government needs to invest in the enactment of laws and regulatory infrastructure that supports online purchasing. Additionally the government has to look into policies that invest in systems that will improve the current internet penetration rates in the country if the e-commerce is going to thrive.

5.5 Limitations of the Study

The study results may have the some limitations inherent to the industry in which the research was carried out. The E-commerce sector in Kenya especially online businesses is still in the formative stages, a majority of the companies are still in the start-up stage, there was great tendency for these companies to be reluctant and overprotective in divulging sensitive information especially on performance metrics which they felt may leak to competitors. Most of these young companies are keen to retain and protect any valuable resource that may give them a competitive edge in the market. This of course made it difficult to obtain the required data. Some questionnaires had unanswered questions which made it difficult to analyze data in some parts. This can cause non response biased which can affect the validity and reliability of the results though not to a great extent.

Due to the scope and limitation of resources for this study it was not possible to investigate the factors influencing performance and also to monitor performance over a considerable duration of time and thus the recommendations for further research.

5.6 Suggestions for Further Research

One of the study objectives was to determine the extent of challenges and benefits associated with online trading. The findings indicate that there relatively few challenges which most respondents considered to be of moderate effect to their online businesses. In contrast wide array of benefits were cited, the most pressing question is why then are Kenyan entrepreneurs especially the youth not taking advantage of this massive opportunity to launch online businesses? are there more factors at play which were not captured in this study which require further investigations? Further research also needs to be done on the factors influencing the performance of online businesses. The performance metrics used in this study revealed that in comparison to similar businesses in developed economies online businesses in Kenya are lagging behind. After factoring in the fact that most are still in the startup stage (63.2%) it

would be interesting if future studies can evaluate the performance of these businesses over time to establish their growth and survival rate.

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APPENDICES

APPENDIX I: Introduction Letter

Dear Respondent,

I am a student at the University of Nairobi undertaking a Master of Science in Entrepreneurship and Innovations Management course. To fulfil the requirements of the aforementioned course, I am required to undertake a research project.

I have designed a questionnaire to gather information on my research paper whose title is “E-Commerce and Performance of Online Businesses in Kenya.” I would therefore kindly request you to participate in responding to the questionnaire below.

All information you disclose will be treated with utmost confidentiality and the data shall be used for academic purposes only.

Yours Faithfully,

Kabuba K. Purity

Student No. D66/79933/2012

University of Nairobi.

APPENDIX II: Questionnaire

Section A: General Information

1. Name of the Company _____
2. How long has the company been in operation? _____
3. Gender Female Male
4. Age of the respondent (years) _____
5. Highest level of education attained Secondary College University Post Graduate
 Doctorate
6. Job title or position of the respondent in the organization.

7. How many employees are in the organization? _____
8. How would you classify your organization in regard to ownership?
 Locally owned Foreign owned Combination of local and foreign other: Please specify _____
9. How would you describe the nature or the type of products/ services that you sell to your customers? _____
10. What type of e-commerce firm is your business? Click-only (conduct 'most' of your business online) Click and Mortar (sell online and also have a physical premises).
11. Which modes of payment do you accept from your customers? Cash Cheque Mobile payments Credit cards Debit cards Online payment systems Other
12. How do you deliver purchased goods to your customers? Door delivery Pick up Door delivery or Pick up

Section B: Models of e-commerce

13. Which model of e-commerce is your firm using?
 B2B e-commerce (refers to commercial transactions between businesses.)
 B2C e-commerce (retailing transactions between organizations and individual shoppers.)
 C2C e-commerce (transactions between consumers, the e-commerce website serves to facilitate the transaction.)

Section C: Challenges of online trading

14. To what extent would you say the following **perceived challenges** have influenced your online trading activities with potential customers? Indicate according to the scale shown below:

- 1 -not at all
- 2 -to a small extent
- 3 -to a moderate extent
- 4 -to a great extent
- 5 -to a very great extent

Challenges of online trading	1	2	3	4	5
a) Potential customers reluctant to shop online as they would wish to touch/ interact with the products before making a purchase					
b) Lack of personal contact with customers which might be beneficial to your business					
c) Cost of running and maintaining an online business					
d) Slow internet speed					
e) Internet connection failure					
f) Cost of software acquisition					
g) Software compatibility with existing infrastructure					
h) Security breaches and fraud					
i) Threats from viruses					
j) Customers distrust regarding the privacy of their data and other personal information					
k) Disputes arising from returned goods					
l) Customers general lack of trust for online businesses					
m) Reported difficulty in finding and using your website by customers					

n) High customer acquisition costs					
o) Difficulty in recruiting staff with the right skill-set					
p) Legal hurdles for cross-border e-commerce transactions					
q) Taxation issues unique to online transactions					
a. Any other challenges not mentioned above	1	2	3	4	5

Section D: Benefits of online trading

15. To what extent would say you have experienced the following **perceived benefits** associated with online trading. Indicate according to the scale shown below:

- 1 -not at all
- 2 -to a small extent
- 3 -to a moderate extent
- 4 -to a great extent
- 5 -to a very great extent

Benefits of online trading	1	2	3	4	5
a. Cost reduction for the business					
b. Ability to reach more potential customers					
c. Access to regional and/or global markets					
d. Potential to operate with less inventory					
e. Easier and faster to serve customers					

f. Customers are able to access your services on a 24/7 basis					
g. Lower communication costs (phone and paper work)					
h. Better prices to your customers					
i. Higher sales & profitability					
j. Enhanced collection of customer data					
k. Reduced cost of marketing and advertising					
l. Increased visibility of your business through search engine marketing					
m. Higher quality customer service					
n. Offers convenience to customers					
o. Reduced information search costs					
p. Ease of packaging and distributing information to specific target groups					
Any other benefit of online trading not mentioned above?	1	2	3	4	5

Section E: Firm Performance

(For question 16 & 17, indicate the visitors' information captured by the website measured by web analytics or clickstream data).

16. How many unique visitors did your website attract during last month?

17. How many repeat visitors did your website attract during last month?

18. What was the gross amount of online sales made last month?

19. What was the search engine ranking of your website as of last month?

20. How many customers did you firm serve within the last month?

APPENDIX III: List of Companies

	List of Companies
1	Bidrobuy
2	Brightermonday
3	Buyandsell.co.ke
4	Buyrentkenya.com
5	Cakes.co.ke
6	Careers24.co.ke
7	Cheki.co.ke
8	Closet 49.co.ke
9	Easytaxi
10	Eatout.co.ke
11	Events254
12	Farmfreshkenya
13	Fresh & more
14	Hellofood
15	Jovago
16	Jumia.co.ke
17	Kenyabuzz
18	Lamudi
19	Mama Meals on Wheels
20	Mamamikes
21	Mimi Online Shop
22	Mystrawberrystore.co.ke
23	N-soko jobs
24	N-soko property
25	Olx.co.ke
26	Pigiame
27	Property24.co.ke
28	Rupu
29	Staynow
30	Travelstart.co.ke