EFFECT OF DIGITAL TECHNOLOGIES ON BUSINESS STRATEGY ADOPTED BY BOOK PUBLISHERS IN KENYA

BY

TIMOTHY N. MUITA

A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER'S DEGREE IN CORPORATE MANAGEMENT IN THE SCHOOL OF BUSINESS AND PUBLIC MANAGEMENT AT KCA UNIVERSITY

OCTOBER 2016

DECLARATION

I declare that this dissertation is my original work and has not been previously published or submitted elsewhere presented for any award or degree. I hereby declare that this document contains no material or published by other people except where due reference is made and author duly acknowledged.

Student name: **TIMOTHY NJUGUNA MUITA**

Student Number: **12/02090**

Sign……………………..………..…. Date……………..……..…….

I do hereby confirm that I have examined the masters' dissertation of

Timothy Muita

And have approved it for examination

Sign…………………………….…….... Date……………….……….

Name: Dr. Brigitte Okonga

Dissertation Supervisor

EFFECT OF DIGITAL TECHNOLOGIES ON BUSINESS STRATEGY ADOPTED BY BOOK PUBLISHERS IN KENYA

ABSTRACT

The book publishing industry has always been linked inexorably to the dissemination of knowledge. Publishing and associated printing activities relied on long-standing and proven old technologies to provide a definitive linear progression for the creation of content in print form, providing clear implications for business processes and relationships with the various stakeholders. However, the emergence and development of digital technology may have significant effects on the book publishing industry. Thus the study sought to analyze the effect of digital technologies on business strategies adopted by publishers in Kenya. The study used a cross-sectional study design and employed census approach in the collection of data from all the 86 registered book publishers in Kenya. The sample size of the study was 258, with three respondents per publisher. Purposive sampling was used to select key respondents to participate in the study. Data was collected from participants through an online survey questionnaire that was both closed and open-ended. The data collected was then analyzed through the statistical package for social sciences (SPSS) with results presented through tables, frequencies, and charts. ANOVA was performed in the study. The study results established that all the publishers have made an investment in digital technologies in one way or the other, with the study establishing a bias towards print technology, internet technologies, and E-books/CDs. The study results indicated that there is a significant relationship between internet technologies and business strategies of book publishers. This was indicated with a p-value of 0.036. E-business technologies were found to have no significant relationship with business strategies as shown with a p-value of 0.53. Additionally, the study confirmed that print technologies affect the business strategy of firms as shown with a P-value of 0.04. Overall, the study found out that digital technologies have a low significant effect on business strategy as indicated with an R^2 value of 9.7%. From the study results, it can be concluded that digital technologies affect the business strategies of book publishers and thus the need for book publishers to adopt digital business strategies.

Keywords: Digital Technology, Business Strategy, Book Publishers

ACKNOWLEDGEMENT

All the glory and honor be to God the almighty for his wonders forever; without whose grace this research project would not become a reality; by his grace, it has come to be. A number of people have played a part in the successful completion of this project. It might not be possible to mention all of them by name. However, it is worth mentioning the following persons who have played a part in its completion. First and foremost I would like to thank Dr. Brigitte Okonga, my supervisor, who has been with me through the process, for her guidance, understanding, patience, and most significantly, her friendship up to the end. Secondly, I would like to thank Dr. Muchiri of KCA University for his guidance in getting my graduate career started on the right foot and who played a momentous role in shaping my research methodology, through his teachings and lessons. I would also like to thank members of the Kenya Publishers Association (KPA) for their time and understanding in their provision of insights that have made this project rock solid. Finally, and most importantly, I would like to thank my loving wife, Catherine Wanjiku, a friend whose support, quiet patience and unwavering love is indisputably the foundation upon which this magnificent journey feels so fulfilling.

TABLE OF CONTENTS

DEDICATION

I dedicate this work to my family especially by sons, Shawn Muita, Moran Muita and Jayvon Kiminda whom so much is entrusted to carry the dream forward, together with my dissertation supervisor Dr. Brigitte Okonga: for the assistance that she gave me during the period of my work study. I sincerely appreciate them for their patience and understanding.

LIST OF TABLES

LIST OF FIGURES

ABBREVIATION AND ACRONYMNS

CD-ROM	Compact Disc Read-Only Memory
CDs	Compact Disc
EDI	Electronic Data Interchange
ICT	Information and Communications Technology
KICD	Kenya Institute of Curriculum Development
KIE	Kenya Institute of Education
KPA	Kenya Publishers Association
MBV	Market-Based View
PCs	Personal Computers
PDAs	Personal Digital Assistant
RBV	Resource-Based View
UK	United Kingdom
USA	United States of America
XML	Extensible Markup Language

OPERATIONAL DEFINITION OF TERMS

Strategy: Strategy is the determination of long-run goals and objectives of an enterprise, adoption of courses of action and allocation of resources necessary for carrying out these goals (Masanell, 2009)

Growth Strategy: Strategy aimed at winning larger market share, even at the expense of short-term earnings (Doski et al., 2013)

Marketing Strategy: A statement in very general terms of how the marketing objective is to be achieved (Baker, 2004)

Cost Management Strategy: This is the process of managing costs to a firms advantage (Kelety, 2006)

Digital Business Strategy; This is the strategy that firms adopt to enable them leverage on digital resources (Camillus, 2008)

Digital Technology; Refers to the digital resources that can be used by publisher to analyze, create and distribute information to target consumers (Fitzgerald, 2013)

E-book; Is a digital object with textual and/or other content, which arises as a result of integrating the familiar concept of a book with features that can be provided in an electronic environment (Daniels, 2006).

Techno-ware: The physical attributes of a firm which assist, acquire or create products or services (Kyale, 2015)

Human-ware: The capabilities and potential of employees in a productive scene (Camillus, 2008),

Info-ware: The Embodied or codified knowledge accessible to the firm and (Tanner, 2015)

Organ-ware: The capabilities derived from the firm's structure and the process that determines how it (Ronte, 2001)

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

"Publishing is a business, and its business is the publication of content that entertains, educates, and informs (Birkets, 1994). The publishing industry produces different publications including greeting cards, databases, calenderers, books, magazines, newspapers, directories and other publishing material, excluding software. Over the past few decades, the industry has witnessed a gradual emergence of additional material in alternative formats, such as audio, CD-ROM, and other electronic media. However, the main dominance in the industry continues to emanate from the production of printed material (Stevenson, 2000).The history of the publishing industry as a commercial entity can be traced to the late 1600's when the roles of the publisher and printer were difficult to differentiate. It is during this period that it became apparent there was a need for the publishers to disengage themselves from the printer's role, and adopt a more entrepreneurial role in order for their survival to be guaranteed. This is a process that continued up-to-the 19th century when publishing houses in the USA developed formal structures to cater for the mass market for books which were emerging in the USA, the basis of which is still evident today (Carreiro, 2010).

Book publishing is a complex and highly differentiated industry that is structured along different fields. It is the process of commissioning, producing and distributing books for sale with the process having key players in the production and the distribution areas. In 1998, there were about 10,000 book publishers in 180 countries, constituting the international book publishing industry. Over the past three decades changes have been taking places in the publishing industry even with increased proliferation of publishers, and some beginning to adopt digital technology. The use of digital technologies has changed traditional ways of value creation and capture in book publishing. This has also triggered the possibility of new strategies and business models which were never manifest in the traditional publishing industry (Carreiro, 2010).

1.1.1 *Global Perspective of Digital Technology and Publishing*

As a result of the advent of mass market e-reading devices like e-book readers, tablet PCs, and smart phones changes begun to be felt in the book publishing industry on a massive scale in countries such as the USA and the UK, also in the rest of Europe. Developments in technology have included advances in applications and digital networks, including technologies for E-Business and specific developments such as e-books, rights management technology, and digital print-on-demand technologies. Although the publishing industry has adopted a conservative approach regarding take-up of these technologies, publishers have largely accepted that digital technology will inevitably affect their business model (Davy, 2007).

The trend of digitization in the publishing industry has been on an upward trend with the American print book sales showing an upward trend until 2007. However, from the 2008 book sales have been showing a downward trend with print book sales dropping while e-book sales have been on the rise (Martin, & Tian, 2010). This could be explained by the increased use of digital technology in content creation, storage, and distribution which is fast sweeping into the publishing industry. The changes occasioned by the digital environment has led to the publishing industry been challenged to change some of its previous practices which may no longer be appropriate, and where radical change will be required to ensure a viable, ongoing competitive future. Publishers have been expected to accept the fact that end consumers have changed need due to their use of technology and are thus expected to embrace digital technology in meeting consumer needs (Martin, & Tian, 2010).

Africa, on the other hand, has continued to experience growth in the publishing industry, with Nigeria, Ghana, South Africa, Kenya, and Egypt taking the lead. Nevertheless, this growth has not been experienced on the digital front as experienced in Europe and the USA. This is attributed to the existence of weak infrastructure to support digital publishing as is the case in developed nations. This can be reflected by the fact that South Africa, believed to being a technologically advanced country in Africa, only posted e-book sales of 1.5 million rands of the total sales in 2010. However, with improved internet connectivity, bandwidth and the use of mobile phones opportunities are been presented for publishing firms to adopt the use of technology in publishing in Sub-Saharan countries to meet the ever- changing consumer needs (Jacqui, 2012).

Digital technology use in publishing can take three major forms and these are audiobooks, e-books and web downloads. The growth of the digital platforms depends on progression in three major areas of bandwidth, computer processing power and data storage. The increased adoption of digital technology has been made possible by the following: rapid growth and development of technologies, a turbulent business environment, the growth of global concentrates, increased competition, stakeholders' demands for improved financial performance and more sophisticated customer requirements (Mierzejewska, 2010). This process has led to publishers re-evaluating their strategies, resources, capabilities and business process. The adoption of digital technology provides opportunities to re-engineer publishing value chains to ensure maximum benefits for both participants and customers. Innovative technologies and emerging ideas surrounding said technology are forcing publishers to jump on board the bandwagon or be left behind. The most recent wave to rock the book industry is the electronic book, or ''e-book,'' which has arguably caused the greatest transformation to the long-established publishing industry since Gutenberg and his printing press. E-books, e-reader devices, and the like have made it necessary for publishers and booksellers alike to rethink their business strategy by establishing digital strategy to enhance their survival.

1.1.2 Book Publishing in Kenya

Kenya publishing roots are directly linked to the establishment of the government printer was established in 1899 and the coming of the Christian missionaries in 1930's when the missionaries established printing presses to support their religious work of the gospel through translation of the bible and hymn into African vernacular. The late 1930's, 1940's and 1950's witnessed the emergence of many different multinational publishers and nationalist printers to cater for the increasing demand for quality education by Africans (Rotich, 2000). At the time of Kenyan independence in 1963, there was no privately owned local publishing house, nor a national one. However, this position changed after 1963 when Kenya Institute of Education (KIE) was set up and combined with the Curriculum Development Centre in 1964. It was again renamed Kenya Institute of Curriculum Development (KICD) in 2014. Since the 1970's there has been a gradual increase in the number of publishers with the publishers currently standing at eighty-six (Rotich, 2000). Publishing houses in Kenya fall under two broad categories: transnational/multinational and indigenous publishers. The multinationals are the large and established publishing firms, usually owned by western publishers with branches in several countries. The indigenous firms are those owned by the government or private individuals. This categorization also reflects the history of these publishers. There are currently 86 book publishers in Kenya (KPA, 2015). Since early 2000 there has been an increased proliferation of publishing firms of book publishers, a period which has also been marked with the increased availability of digital technologies in Kenya. This brings to question the potential effect of digital technology on book publishing firms. In the context of the environmental changes which has been occasioned by technology changes in the publishing industry it is necessary to establish how the technological changes have affected business strategies of the publishing industry in Kenya.

1.1.3 Digital Technology

Digital technology refers to the digital resources that can be used by publisher to analyze, create and distribute information to target consumers. Technology plays a dominant role in changing *en masse* the publishing industry. Almost all facets of the industry, from the writing of a book to distributing it to final consumers, have been positively affected by technology, which comes in many forms. Digitization is having a major effect on all aspects of the business from the way book content is produced through the way it is managed and promoted by the way it is sold and distributed. The effects of digital technology have been felt among all in the publishing industry value chain through development of word processors, CD-ROM technology, internet, E- books, printing technologies among others.

1.1.4 Concept of Strategy

According to Chandler (1962), Strategy is the determination of long run goals and objectives of an enterprise, adoption of courses of action and allocation of resources necessary for carrying out these goals. Strategy is seen as a field of enquiry whose main goal is to determine the reasons for success and failure among organizations. Chandler (1962) further clarifies that strategy is made by the top management and executed with the employees at the lower level in an organization. Strategies are never statistic but are always expected to change with respect to the environment in which an organization operates. These changes that have taken place in operational environment include digital technology.

Digital technology is increasingly connected and embedded in products, processes and services and with exponential improvements in ICT and digital world drivers of change have been enhanced in various industries. As ICT has continued to change business strategy has increasingly become affected by digital technologies. A digital business strategy simply refers to the way in which a firm can leverage on digital technologies to create value for an organization. Digital business strategy goes beyond the traditional view on the role of technology in organizations thereby linking the digital business strategy to creation of business value thus giving an organization competitive advantage over other firms (Sandberg, 2014).

1.2 Problem Statement

Incorporation of technology in business strategy in business to enhance sustainability is essential as attested by the number of literature that have focused on strategies and its importance to organizations (Porter, 1996). Thus it is of importance for all companies including book publishing firms to assess all their strategies. The adoption of digital technology has been noted to have impact on business strategies as attested by studies such as Frankfurt (2013), Tian (2008) and Sharvey & Alice (2003) with the impact varying. However, the same cannot be said in developing countries where there are limited studies.

Over the past few years there has been growth of book publishers in Kenya as a result of strategies adopted by book publishers. In spite of the growth experienced in publishing industry, there have been many challenges that have affected their growth, competitiveness and survival. These challenges include cost constraints in relation to operational and distribution, a poor reading culture, loss of revenue due to increased piracy occasioned by photocopying and government policies and regulations (Mboya, 2013). The failure to adopt technology can be blamed for much of these challenges.

However, a number of publishers in Kenya have appreciated and adopted information technology in their operations and distribution. For example, Kenya Literature Bureau has embraced digital technology by digitizing existing titles in form of CDs to sell (KPA, 2014). Despite the adoption of technologies by publishers, little is still known about the impact of digital technologies on business strategies in Kenya.

Prior studies by Castledale Inc (2008), Sharvey & Alice (2003), Frankfurt (2013) and Tian (2008) have shown the impact of digital technologies on the use of digital technology.

Nevertheless, these studies were carried out among start-up book publishers, select book publishers and with no limited studies done locally and regionally.

On the contrary, studies that have focused on book publishers strategies in Kenya, have not concentrated on the effect of digital studies on business strategies. Among the studies adopted include Mboya (2013), Masaya (2009), Kyale (2015) and Barng'etuny (2012).

The aim of this research is therefore to analyze the effect of digital technologies on book publishers in Kenya. It shall focus on internet technology, e-business solutions, and print technologies.

1.3 Objectives of the Study

The general objective of the study is to analyze the effect of digital technology on business strategies of book publishers. The following are the specific objectives.

i. To determine the effect of Internet technologies on the business strategies adopted by book publishers in Kenya

ii. To establish the effect of E-business solutions on the business strategies adopted by book publishers in Kenya

iii. To examine the effect of print technologies on the business strategies adopted by book publishers in Kenya

1.3.1 Research Questions

i. What is the effect of internet technologies on business strategies adopted by book publishers in Kenya?

ii. What is the effect of E-business solutions on business strategies of book publishers in Kenya?

iii. What is the effect of print technologies on business strategies adopted by book publishers in Kenya?

1.4 Justification of the Study

Whilst acknowledging that the use of digital technology has resulted in the development of knowledge on the digital business strategy. The knowledge on digital business strategies is still scanty in the developing world. This study has contributed to the understanding of the concept of digital business strategies in developing world, and by extension to the field of strategic management.

The recommendations and lessons learned from the study may be used by Kenya publishers association and the government to develop guidelines and policies for publishers venturing into digital publishing. These guidelines, regulations, and policies should all be developed against the backdrop of publishers' resources, values and processes. This study will thus help to document any limitations and challenges experienced in adopting digital technology by Kenyan book publishers. This will help the stakeholders develop any policies and guidelines that will help guide the selection, adoption and implementation of digital technology use in Kenya.

With the emerging transition from traditional to digital-based processes, there may be changes in business strategies and this study will help provide a framework for the future development of any business model for commercial book publishers. Inspired by a critical understanding of disruptive changes associated with the use of digital technology in the book publishing sector this study through its findings will further enrich the theoretical understanding of book publishing in a digital age, specifically in developing countries. This study will contribute to the broadening of the strategic management practice within the book publishing industry. This is because through the findings of the study managers, directors and chief executive officers in book publishing industry will be presented with information that can help them in decision-making process on strategic direction.

1.5 Assumptions

The study was carried out under the following assumptions

i. The respondents co-operated and facilitated the process of collecting information from the target respondents.
ii. Majority of the book publishers are based in the county of Nairobi
iii. Some of the book publishers are in the process of adopting digital publishing or have adopted digital publishing.

1.6 Scope of the Study

The study was delimited by focusing nationwide to all the book publishers in Kenya. The study considered the effect of digital technology on business strategies of book publishers, book publishing trends and the views of book publishers towards digital publishing in Kenya. The study focused on book publishers and excluded other categories of publishers. The study was estimated to take a period of three months. The study was limited in terms of the methodology since the study only used quantitative study and not qualitative study which would have provided a better method to gain the views of book publishers.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter shows how the research problem under the study fits into a body of knowledge generated over the ages. It will reveal the knowledge around the use of digital technology, the benefits of digital technology and the effect of digital technology on business strategies of publishing firms.

2.2 Theoretical Framework

The study will be based on the following theories: Theories of competitive advantages and Resource-Based Theory.

2.2.1 Theories of Competitive Advantages

The study will be based on the theory of competitive advantage. Incorporation of digital technology in business brings in a competitive advantage over your competitors. Competitive advantage is obtained when an organization develops or acquires a set of attributes including technologies that enables it to outperform its competitors. Competitive advantage theory is dominated by the following theories: the Market-Based View (MBV), the Resource-Based View (RBV), knowledge-based view, competition theory capability-based view of strategy and relational view of strategy. Competitive advantage attempts to correct for this issue by stressing maximizing scale economies in goods and services that garner premium prices (Stutz & Warf, 2009).

In the Publishing business, these publishing firms have to do everything in their power to achieve competitiveness. Therefore, this will result in acquiring digital technology to minimize cheap cost, increase market access and thus compete better than other. The term competitive advantage is the ability gained through attributes and resources to perform at a higher level than others in the same industry or market (Porter, 1980). However, the study will be based on the following theories of Resource Based theory and competition based theory.

2.2.2 Resource-Based Theory

Resource-based theory underlies the importance of the internal (core competence) and external (industry structure) perspectives on a strategy that the business will acquire. The theory emphasis is on the core competence and capabilities that firm have within and without at its disposal to either adopt or acquire.

This theory focuses on firm's internal environment as a driver for competitive advantage and emphasizes the resources that firms have developed or acquired to compete in the environment. Digital technology is not an exception. Many firms have focused their investment on information technology to improve business efficiency and effectiveness.

Firms classify the resources available to them as either collection of physical and intangible assets and capabilities. Digital technology can be regarded as an intangible resource to a company whose worth is invaluable for the growth and competitive advantage of the business entity.

Competitive advantage is thus attributed to the ownership of a valuable resource other intangible resources may include intellectual properties such as copyrights, patents, brand names among others. Organizational competence such as manufacturing process, management style, value chain management among others. Furthermore, Tywoniak (2007) claims that the essence of strategy formulation is to design a strategy that makes the most effective use of core capabilities. This implies that the focus on internal factors, imposed by the resource-based view in the search of competitive advantages, clearly affects the strategy formulation processes of corporations. The primary task of a resource-based approach to strategy formulation is maximizing rents over time. Tywoniak (2007) also state that "in a world where customer preferences are volatile, the identity of customers is changing, and the technologies for serving customer requirements are continually evolving, an externally focused orientation does not provide a secure foundation for formulating a long-term strategy”. The application of resource-based theory in adoption and use of technology will be central to the study since it will help understand the business strategies of book publishing firms on adoption of technology.

2.2.3 Profit Maximizing and Competition Based Theory

The profit-maximizing and competition-based theory, which was based on the notion that business organization main objective is to maximize long-term profit and developing a sustainable competitive advantage over competitive rivals in the external marketplace. The industrial-organization (I/O) perspective is the basis of this theory as it views the organization external market positioning as the critical factor for attaining and sustaining competitive advantage, or in other words, the traditional I/O perspective offered strategic management a systematic model for assessing competition within an industry (Osterwalder, 2004). Since the theory views the adoption of firm strategies as hinged on the changing environment in the industry the theory will be of help in the understanding of business strategies of book publishing firms in the digital technology environment.

2.3 Empirical Review

Several empirical studies have investigated the relationship between digital technology and business strategy. Ronte (2001) in a survey of book publishing industry established that digital technology is having effects on book publishing industry along the following dimensions: shifts in consumer demand, ease and low-cost of access to print materials on the internet and increased mergers and acquisitions in the book industry. Castledale Inc (2008) in a study in Canada found out that with the emergence of new technologies the publishers’ margins are increasingly being squeezed; Sales of physical books through online retailers and publishers’ own websites continue to grow but at a slow pace and the distribution and sales of digital books (eBooks) and content. Sharvey & Alice (2003) found out that digital technology is likely to trigger positive reaction from authors through expanded audience while for publishers it is likely to have mixed reactions. This according to them is because of nagging issues that relates to new competition, content control, and protection of revenue streams, even amidst the opportunities that it offers. They also established that adoption of digital technology is more likely to increase competition in the industry thus opening the way to new publication channels and diversifying product content. By adopting strategies that stresses rationalization of the distribution system to minimize costs, cross-promotion of print products through digital products, strategic pricing, and leveraging of new revenue sources, particularly through advertising where publishers can turn digitization trends to their advantage.

2.4 Business Strategy in Book Publishing

In order to survive and be profitable in a competitive business environment, firms are employing different strategic approaches available in literature. Masanell (2009) defined business strategy as proceeding by aggressive and defensive actions in order to gain tenable position in the sector, to successfully cope with the five competitive forces and to procure a major return on investment. For this purpose, firms have invented many different approaches. Ansoff (1965) developed a matrix that helps businesses identify growth opportunities in the market. The product/market growth matrix describes a combination of a firm's activities in current and new markets with existing and new products. It outlines four types of growth strategies, namely market penetration, product development, market development and diversification. In market penetration, a firm tries to grow with existing products in its current market. Firms that follow market development strategy try to sell existing products in new market segments. Under product development strategy, a firm develops a new product for existing markets. Finally in diversification, a firm tries to enter a new market with new products.

Teece (2010) classify business strategies into three broad groups: building, holding and harvesting. Building strategies are based on active efforts to increase market share by new product introductions, new marketing programs and so on. Holding strategies are focused on maintaining the existing level of market share. Harvesting strategies are designed to gain short-term earnings by allowing market share to decline. Business strategies are informed by a number of environmental changes some of which are necessitated by digital technologies. Digital technologies has contributed to the reshaping traditional business strategy as modular, distributed, cross-functional, and global business processes in diverse ways. Thus business strategy is simply defined as organizational strategy formulated and executed by leveraging digital resources to create differential value which goes beyond the traditional view, systems and technologies and linking digital business strategy to creating differential business value.

According to Camillus (2008) digital business strategy is different from non-digital business strategy in terms of: scope, scale, the speed of value creation / capture, and sources of value creation. ICT adoption by organizations has an effect on the scope of organizations, products and services generated by activities that it controls. ICT increases the scope of an organization through establishing new connections across boundaries thereby disrupting existing business networks that exists. With the evolution of digital technologies are evolving from internally information system to external information system the strategy scope of companies has been further affected. Bharadwaj et al., (2013) argue that digital business offer distinction in the following ways: dynamic scaling, network effects, information abundance, and scaling based on alliances and partnerships. This happens by allowing the organizations to have new possibilities that enable them to rapidly scale infrastructure and increase network effects.

Digital business strategies can result in increasing the efficiency of organization the following four: product launches, decision-making, supply chain orchestration, and network formation and adaptation. Digitization improves efficiency through facilitating distribution, speeding internal and external decision making communication processes, orchestrate supply chains enabling through establishing new complementary networks. Digital business strategy also affects the creation of new values by organization in at least four ways of: appropriation of value from information, multisided business models, co-dependencies in ecosystems, and appropriation of value from architectural control (Bharadwaj, 2013).

Frankfurt (2013) established that digital technology has led to the creation of new forms of value creation and value capture among start up book publishers, including two-sided markets (advertising) and the provision of publishing services. This he asserts with lower risk and costs can offer startups book publisher’s competitive advantages in the market. Tian (2008) in a study in Australia found out that the book publishing sector is under pressure that is global in nature, and is operating in conditions necessitated by technological changes. The study established that book publishers recognized that digitization is having trends on book publisher’s strategies, particularly on their value proposition strategies. However, the study found out that there is no wholesome policy by publishers to adopt digital strategies faster but by combining it with existing strategies at a slower pace.

2.4.1 Internet Technologies and Business Strategies employed by Book Publishers

Through the use of internet, digitization of published content has enhanced the distribution of written materials. The use of digital technology in various spheres of publishing has opened new horizons for content distribution and exploitation. This has been made possible by eight main elements of digital technology that have dominated the publishing industry.

Firstly, digital printing and publishing have increased the demand that has facilitated localized, on-demand and tailored publications. Secondly, news aggregation and syndication technology has resulted in increased effectiveness and reach of content assets by presenting them across a variety of platforms and bringing the point of aggregation to the user's desktop.

Thirdly, content management and cross-platform publishing technologies where databases holding various types of content (text, images, and audio files) allow users to access and combine the content for output to various platforms such as print pages or websites. Their key feature is that they allow publishers to manage and output their content independent of the target platform. While the fourth element is customer relationship management which is technology that captures data on customers' relationships with the enterprise, and provide a single view of the customer while allowing content and offers to be customized to particular needs.

Digital Rights Management is the fifth element with the technology that enables the exchange and licensing of content between partners and within complex services. One drawback is the failure of firms to devise an approach which adds to user enjoyment as well as delivering value, rather than laying all the emphasis on locking up content. The sixth, digital asset management is a set of coordinated content and document management technologies and processes that allow the storage, retrieval and reuse of digital files in all formats.

Broadband, mobile and wireless as the seventh element are all potentially useful technologies in terms of media richness and the downloading of content, but still to demonstrate their worth in terms of book publishing applications. Third Generation mobile technology and WiFi (Wireless Internet technology) may enhance their potential. It is also important to take the potential value of Blogs into account. The last element of new devices considers as well as 3G mobiles, includes a second generation of tablet PCs and eBook readers to facilitate the publishing of e-books. Although technical issues still need to be resolved such as the need for common standards for readers and rights management the improvement in such devices paves the way for new services. They are not only being targeted by book and business-to-business publishers but also by magazine and journal publishers (European Commission, 2003)

2.4.2 E-business Solutions and Business Strategies adopted by Book Publishers

E-Business is a field that has continued to gain relevancy to publishing industry with publishers taking E-Business seriously, with a consensus emerging among publishers on immediate and long-term effects on publishing business processes and creation of new products and services. Publishing has also been an early participant in developments in E-Business, initially at some cost during the boom associated with the development of the internet in the early 1990s. During that period publishers embraced the prospect of digital technology through the use of CD-ROM technology only for the technology to collapse due to a mismatch between what the consumers were willing to pay for and what the publishers were charging (Antonio et al ,2014).

Although the industry is reeling from the aftershock of the failure experienced in the use of the technology the development of internet played a major milestone in the adoption of E-Business in Publishing. E-Business has taken hold of the publishing industry through the following technology applications: Intranets, Websites, XML and notably electronic data interchange (EDI) which has been employed by publishers in the supply chain. An important feature of current E-Business is the longevity of an existing technology, namely EDI. This technology represents a set of standards for the transfer of business documents, such as purchase orders and invoices, between computers, with the goal of eliminating paperwork and improving response time (Herther , 2005).

The development of E-Business technologies continues to hold a key role in the publishing industry due to its influence on communication patterns in the supplier network of the global industries sector. E-Business provides the benefit of cost minimization by closely integrating buyers and suppliers, and through electronic networks which can integrate the value chain much faster thus providing the publishers with economic benefits .E-Business is seen to offer benefits to publishers with regards to supply chain improvement, and the need to be able to hold and distribute customized content to a wider audience at a cheaper cost. The specific effects of E-Business on the book publishing industry will vary with the different players in the supply chain such as book publishers, distributors, wholesalers and retailers, and with both production and transaction processes. In general, however, E-Business technologies can drive efficiencies and reduce costs, while facilitating the re-use of content and closer relationships with customers.

The potential effect of technological change varies in different industries. In the publishing industry, in different areas publishers will often work with alternative types of content, with the result that they will pursue different courses when engaging in the development and implementation of future technology (Lynch, 2012).

2.4.3 Print Technology and Business Strategies adopted by Book Publishers

According to Daniels (2006) there significant issues which publishers must grapple with in the digital environment include: Digitization and its effects on the management of more products, formats and fragmented content; Digitization and its consequence to production processes and workflows; Digital assets and the creation of reusable assets; Digitization effect on creation of new sales opportunities, channels and intermediaries; enhanced difficulties in the management and protection of intellectual property rights and mixed effect on different areas of the publishing business. Reading habits are changing, and in many cases reading is in decline, owing to increased competition for peoples' money and time, and a growing range of new media, games, and interactive television. The reading habits of people are also changing due to the improved technology available within the publishing industry. These changes include the availability of electronic books or papers in libraries, the ability to buy electronic books via the internet, or through subscription from publishers' websites, and the downloading of books and articles to computers. These changes are causing publishers to pay more attention to the potential of the online business. However, although online is growing in importance, the main trend appears to be one of diversification into alternatives, including digital formats, while retaining traditional lines of business (Davis & Walter, 2003).

Publishers aim in the business is to provide content to the consumers that will meet the consumer needs. However, consumer needs continue to manifest themselves in different ways with the consumer having different choices to satisfy their needs. There exist multiple channels available to readers that provide publications to readers. Publishing involves customers acquiring content, some of which will be in book form and it is not about addressing consumer flexibility while recognizing that consumer is the main element in book publishing supply and value chains. Consumers do not only want products, they seek personal attention from their publishers. (David & Walter, 2004) indicate that the establishment of good relationships with customers is important to the creation of smoother business processes.

Publishers are faced with competition from many competitors within and without the industry. To remain competitive, book publishers need to pay careful attention to both their internal operations and their marketplaces. (Dan & Mary, 2003) argued that the chief most activity that has the potential to change the rules of competition is a technological change which is a key driver to competition. This is because technology influences structural changes in the publishing industry thus leading to the creation of new start-up firms as well as providing an equalizing effect among all the competitors in the book publishing industry. (Renear & Salo, 2003) stated that to maintain a competitive position, a company should master four main technology assets as follows:

The vulnerability associated with the use of both text and images in the publishing industry has led to the gradual adoption of digitization to the various stages of content transformation and to a digital workflow. Content management systems are tools that are implemented to support internal workflow processes and collaborative authoring in publishing a Website or application. Content management systems in the digital environment have been made to extend to digital asset management, collaboration capabilities, and collaborative publishing of websites thus being able to support cross-media publishing of books. The advancement made in publishing industry as a result of the digitization of content management systems has offered numerous benefits for organization to automate routine tasks thus resulting to low operation costs (Renear & Salo, 2003)

The use of digital technology in book publishing industry has resulted in the need to have a digital asset management system just like the physical books need to be warehoused. The digital asset management in the book publishing is carried out through software's which have provided major benefits to the publishers such as the ability to manage and manipulate their assets themselves. However, the digital assets software is expensive particularly to the small and medium publishers thus hampering their adoption (XianRong, 2014). Digital technology has also had a profound effect on content delivery more so on the value chain through drastically reducing the costs of producing, storing and distributing books. The potential is for the publication of e-Books, which are here defined as book text converted into digital form for reading on a screen. The market could be transformed were the key issues of format and screen technology successfully addressed (Davis & Walter, 2004).

Digital technology also offers an opportunity for use in marketing. Traditional publishers have continued to face a challenge in marketing to target consumers owing to a number of reasons including but not limited to the difficulty of identifying their target market, the cost of direct mail marketing to broadly based consumer groups, and the fear of alienating retail accounts. However, with the adoption of digital technology in marketing by book publishers, a number of challenges facing publishers have been addressed. The online environment offers opportunities to vastly reduce the cost of accessing potential customers through so-called email *blasts*, e-newsletters and increasingly, the use of *Blogs* supported by a website. Another emerging innovation that has been made available through the use of digital technology to the publishers is the development of reader communities and interest groups who aim has been to promote the book and reading culture. The publishers through website presence have been able to improve their customer relationship through the ability to provide a range of proactive support services to address consumer needs. Additionally, through the websites, the publishers have been provided with the option of selling to the consumers directly (Kleper, 2001).

2.5 Benefits Associated with Digital Technology to Book Publishers

Digital technologies offer various benefits to book publishers, with these benefits cutting across the following areas: manufacturing process through decreased manufacturing expense since digital delivery requires no paper, no presses, no binders, no shipping. The other advantage offered by digital technology has to do with increased flexibility because inventories, back orders, and out-of-stock situations can be eliminated, freeing capital for investment in new projects. Online delivery also provides an instant international delivery channel without the need to develop physical distribution thus increasing the new market size (Davy, 2007).

E-publishing also offers the opportunity for unprecedented levels of accuracy and interactivity by allowing the reflection of error and update which thus provide the author with an opportunity to address the errors, critics and subsequent questions on book original publication. A number of positive economic advantages are also associated with online delivery. In addition to benefits offered to distribution and production process, the use of digital technology has also offered the consumers great benefits. The use of e-book technologies offer consumers a number of benefits such as inclusion of additional books without additional weight; environmentally friendliness because they consume no paper. Through full-text search capabilities, the visually impaired could benefit more from the e-book technology thus encouraging access to more segments of the society.

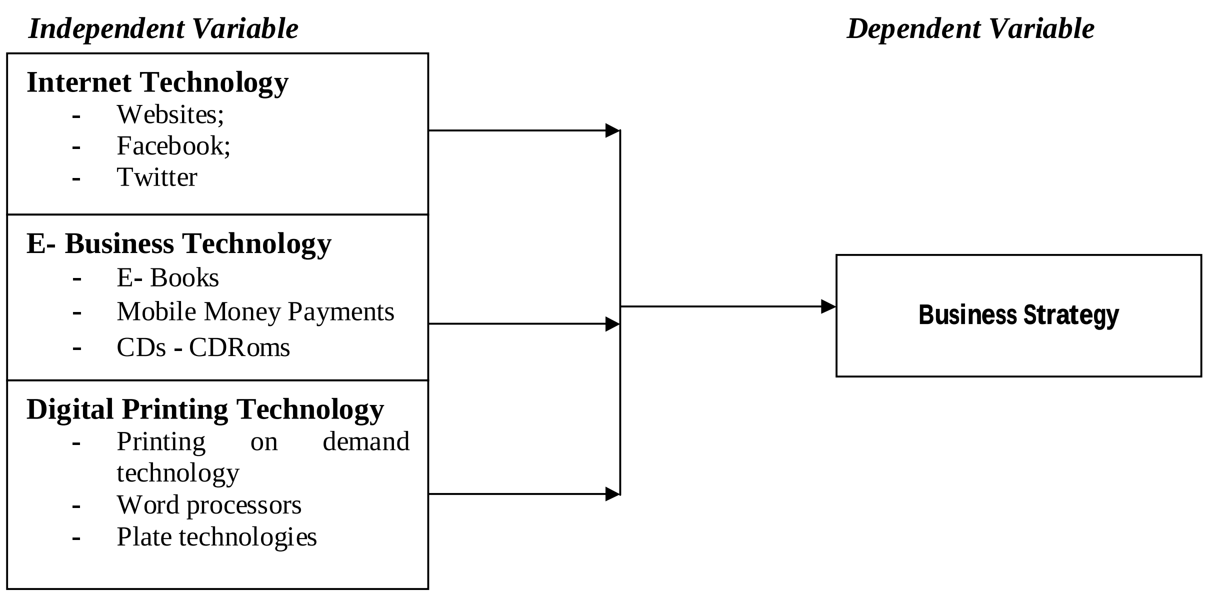
There are, however, negatives that come with the adoption of digital technology. These include limited audience sizes, low adoption level thus creating a gap for publishers to reach a critical mass that provides incentives for new hardware and software development and allows economies of scale in manufacturing. Even more troubling with the use of digital technology are the challenges associated with issues of copyright, fair use, and content control. It is usually easier and more satisfactory to legally purchase a book than to copy it. Publishers are suspicious to the effect of E-publishing for what it may hold to their business through loss of control on content and pirates of digital information. Concerns also exist that digital publishers may face the challenge of low adoption among some consumers. This is due to fear among some consumers that in case of breakdown on their e-readers they might not be able to access their materials of interest (Martin & Tian, 2013). Compatibility issues have also arisen to publishers with regards to adopting digital technology. Many publishing organizations have significant organizational and financial investment in the printing process and to adopt digital technology in some process of book publishing, therefore, provides for some incompatibility in book publishing.

2.6 Conceptual Framework

A conceptual framework is defined as an element of the scientific research process in which a specific concept is defined as a measurable occurrence or in measurable terms that basically gives a clear meaning of the concept. A conceptual framework is a diagrammatic presentation of the relationship between dependent and independent variables. In this study, the dependent variable is business strategies while independent is digital technology and intervening variables are consumer demand and industry environment (Mugenda & Mugenda, 2003).

FIGURE 1

Conceptual Framework



Source; Author 2016

2.7 Operationalization of the Variables

Variable	Indicator	Measurement	Question Number
Internet Technology	Presence on social media, website, employment of an online marketer	Nominal and ordinal level	Section A and B
E-Business Technology	E-payment platforms, E-purchase platforms, E-books, E-library, CDs,	Nominal and ordinal level	Section A and Section C
Printing Technology	On demand printer, word processor,	Nominal and ordinal level of measurement	Section A and D
Business Strategy	Presence of strategic Plans	Nominal and ordinal level of measurement	Section E

2.8 Hypothesis

-Null Hypothesis: There is no significant relationship between Internet technologies and business strategies adopted by book publishers in Kenya.

-Alternative Hypothesis: There is a significant relationship between Internet technologies and business strategies adopted by book publishers in Kenya.

-Null Hypothesis: There is no significant relationship between E-business technologies and business strategies adopted by book publishers in Kenya.

-Alternative Hypothesis: There is a significant relationship between E-business technologies and business strategies adopted by book publishers in Kenya.

-Null Hypothesis: There is no significant relationship between printing technologies and business strategies adopted by book publishers in Kenya.

-Alternative Hypothesis: There is a significant relationship between printing technologies and business strategies adopted by book publishers in Kenya.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The chapter presents research design, the population, the sampling techniques that will be used in the study, sources of data and data collection procedures. Data analysis methods are also discussed.

3.2 Research Design

For the purpose of this study, the research design that was used was descriptive study design. A cross-sectional study design helped the research gather views from different publishers on the potential effects of digital technology on the business strategies of book publishers within the shortest time at minimal cost.

3.3 Target Population

Population is the aggregate of all that conforms to a given specification In other words; population refers to an entire group of individual's, events or objects having a common observable characteristic. For the purpose of this study the researcher focused on all the 86 authorised book publishers in Kenya (KPA, 2014). These publishers were selected because they are registered and are operational in the county, with all the publishers adoption part of digital technologies.

3.4 Sample Size and Sampling Technique

Sampling is the process of selecting a sufficient number of the right elements from the population (Groves, 2010). The study used a census sampling approach that will allow for the selection of respondents from all the 86 book publishers. In each publishing firm three department managers were selected thus bringing the total sample size to 258. Purposive sampling was used to select the key respondents from the book publishers. This is because purposive sampling helped select respondents who provided the required information that will help in meeting the research objectives.

3.5 Instrumentation and Data collection

Primary data was collected through the use of a questionnaire method. This data was collected through an online survey method that was be used in the study. This was adopted to minimize the cost and logistical challenges that were involved in collecting data from the respondents physically. Data collection is the gathering empirical evidence in order to gain new insights about a situation and answer questions that prompt undertaking of the research (Flick, 2009). Primary data was collected from the key sectional heads among the book publishers. A questionnaire tool with both open and close ended questions will be used in the study. This was provided to the respondents online and was self-administered. The questionnaire contained both open ended and close ended questions. The questionnaire method of data collection is selected because it will allow for the collection of many data within the shortest time possible. The questionnaire was subjected to a pre-test to test for reliability and validity.

3.6 Validity and Reliability

Reliability as the degree of consistency and precision in which the measuring of the instrument demonstrates under same circumstances, same research respondents using the same instrument should generate the same results under identical conditions (Amin, 2005). In determining reliability of the instrument, the researcher administered 20 questionnaires to some respondents from publishers who will not be part of the study.

Validity measures the degree to which an instrument measure that which it is out to measure (Smith, 2003). The validity of the instrument was measured using the content valid index that is the total number of valid items/ total number of items. One instrument was selected and subjected to a content valid index and with a score of 0.7 showing validity.

To determine the reliability of the study Cronbanch's Alpha Coefficient was used to assess the internal consistency and with a score of 0.7 established the instrument was considered reliable to be used in the study. After a pilot study, a content score test a score of 0.85 was established thus showing that the research instrument is valid and reliable.

3.7 Data Analysis

Editing of collected data was done to make the data coherent and simpler for presentation. The filled questionnaires were then edited to ensure quality of data is accurate, complete, consistence and uniform. Both descriptive and inferential statistics was used to analyze the data through SPSS. Descriptive statistics will be presented through frequencies, tables, percentages and graphs. Inferential statistics will be analyzed through cross tabulation test, ANOVA tests with the results presented through regression tables and cross tables.

3.7.1 Regression Model

Since the purpose of the study is to analyze how digital technology effects on the business strategies of book publishers. The regression equation of the study used is as shown below:

(i) $Y= \beta 0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$

Where: Y= Business Strategies; X1= digital print technology; X_2= E-business solution X_3= Internet technology and ε = error term.

The study used Pearson correlation to test the relationship between independent variables(X1, X2 and X3) have with the dependent variable Y. This was tested through a P-Value, with a value less than 0.05 indicating that there exist significant relationship between each independent variables and business strategy. The study used ANOVA model to test the combined association between the predictor variables and business strategy. R2 will be used to test for association with an R2 nearing 1 showing that the independent factors are the major determinants for any change in business strategy.

3.8 Ethical Consideration

The researcher assured the respondents of the purposes of the study, confidentiality and privacy was also being assured. A letter of introduction and permission for the study was sought from the Kenya Publishers Association, with a scanned letter been presented to the respondents online.

CHAPTER 4

PRESENTATION OF FINDINGS

4.1 Introduction

The study was conducted to analyze the effect adoption of digital technology such as Facebook, company websites and twitter handle among others on business strategy adopted by book publishers in Kenya. This chapter therefore presents the results of the study.

4.2 Response Rate

During the study, online questionnaire were distributed through email. However, after two months 163 questionnaires were received from the respondents. A longer period was allowed for data collection through online survey. This is because online survey tends to give few responses and there was need to get more responses. The study realized a response rate of 63% (163) respondents. This was considered appropriate for analysis since the response rate was more than 60% of the respondents.

4.3 Validity and Reliability Analysis

The research variables were chosen in such a manner that the explanatory variables which were deemed to have the largest effect on the response variable were investigated. This essentially was the researcher's way of ensuring internal validity of the research. Construct validity can be inferred to be evident due to the fact that all variables of the study were positive and significant, showing a correct formulation of this study's constructs. This was also supported by the ANOVA table significance value of 0.02.

The researcher used the Cronbach's alpha coefficients to test the reliability of this study. The results of reliability testing are shown in *Table 1* below.

TABLE 1

Reliability Analysis

Variable	Cronbach's Alpha	Acceptable?
Internet Technologies	0.860	Yes
E-Business Solutions	0.883	Yes
Printing Technology	0.834	Yes

Source; Author 2016

As evident above, all values of the Cronbach's alpha were greater than 0.7 and therefore the level of internal consistency in the document was acceptable.

4.3 Demographics of the Respondents

This section in the questionnaire reviews the background characteristics of the respondents. It was used to provide comparisons among respondents on their knowledge about the topic and therefore included; the location and years of operation for the publishers and the current department, position and number of years worked in that position for the respondents.

The study results showed that majority of the publishers have been in operation for 10 or more years (50.6%). The results also indicated that 35.5% have been in operation for more than 15 years and 15.1% for between 11 and 15 years. Another 26% have been in operation for less than 5 years and 23% for between 5 and 10 years *(Table 2).* These results conform to the period when free primary education came forth in Kenya. Following the provision of free primary education, a number of publishing centres were established with an aim to take advantage of the benefits associated with the free primary education. These results are similar to the findings of (Kyale, 2015) who also established that majority of publishing firms had been in operation for at least 10 years. This similarity could be attributed to the fact that the studies were conducted in similar periods.

TABLE 2

Publishers' Years of Operations

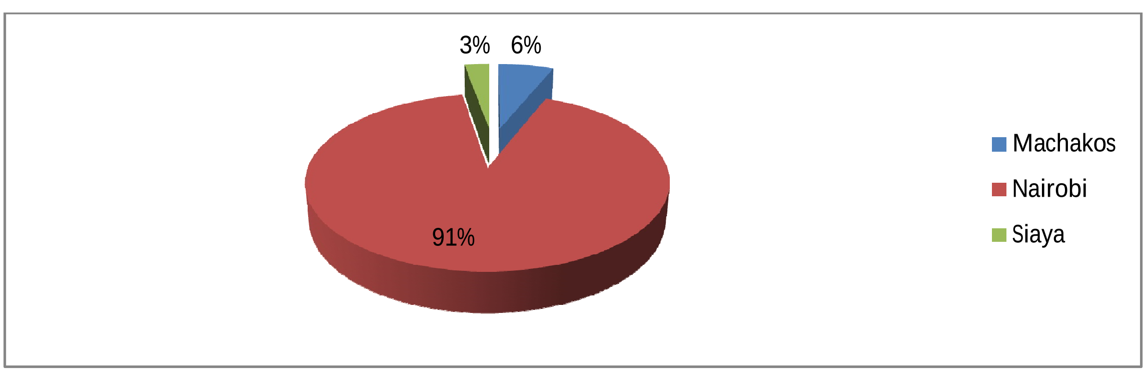
Years of operation of the publisher	Frequency	Valid percent
Above 15 years	54	35.5
Less than 5 years	40	26.3
Between 5 and 10 years	35	23.0
Between 11-15 years	23	15.1
Total	152	100

Source; Author 2016

From *Figure 2* below, it was established that majority of publishers (91%) like, Longhorn Publishers, Kenya Literature Bureau, Phoenix Publishers, Mentor Publishing and many others were located in Nairobi while 9% of the publishers were located outside Nairobi i.e. Ariba Book Publishers in Siaya and Spear Sharp Education in Machakos Counties respectively. These results point to the publisher's perceived benefits of being located in Nairobi. This results show Nairobi as the hub of book publishers and this concurs to the findings of (Kaburu & Wambui, 2013) who established that majority of publisher are located in Nairobi due to the economies of scale that arise with been in Nairobi.

FIGURE 2

Location of Publishers



Source: Author (2016)

The study results indicate in *Table 3* that the respondents were from different departments in the publishing firms. Majority of the respondents (54%) came from the publishing department comprising of the publishers, editors and designers, followed by those from administration (24%) composed of Chief Executive Officers (CEOs), managing directors (MDs), Country and Regional representatives, sales and marketing (12%), finance (7%) and Human resource department (3%). Bulk of the respondents was from publishing department and this is indicative of publishing department as the core of publishing firms. The study results were also representative of all the key departments that were required in the publishing industry. These results were in agreement with the studies of (Kaburu & Wambui, 2013) and (Mutemiko, 2010) which also had majority of respondents coming from publishing department.

TABLE 3

Current Department of Respondents

Current department	**Frequency**	**Valid percent**
Publishing	83	53.5
Administration	38	24.5
Sales and Marketing	18	11.6
Finance	11	7.1
Human resource	5	3.2
Total	155	100

Source: Author (2016)

The respondents reached ranged from managers (34%), editors / publishers / designers (33%), CEOs, MDs, national directors, country and regional representatives (16%) and marketers (6%) among others as indicated on *Table 4*

TABLE 4

Current Position of the Respondents

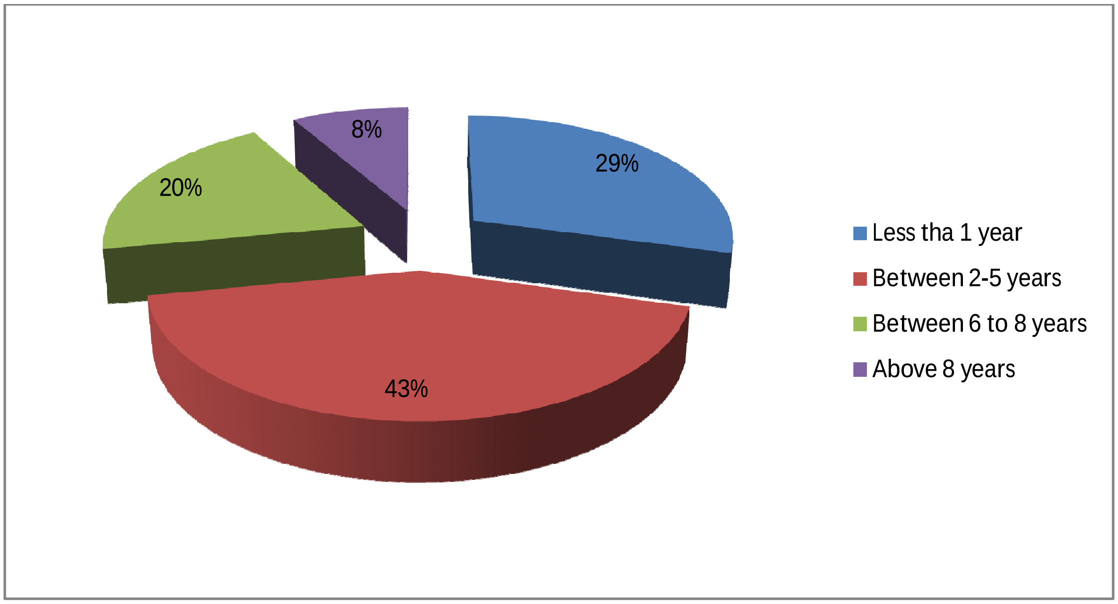
Current position	**Frequency**	**Valid percent**
Managers/Assistant Managers	53	34.0%
Editors/Designers/Publishers	51	32.7%
CEO/Managing/National Directors/Country Reps	25	16.0%
Marketing/sales and communication officer	9	5.8%
Administrator	6	3.8%
Librarian	5	3.2%
Finance Officer	4	2.6%
ICT Support	2	1.3%
Warehouse Supervisor	1	0.6%
Total	**156**	**100.0%**

Source: Author (2016)

Majority of the respondents (43%) had been in their respective publishing firms under the current positions for between 2 and 5 years, while 29% had worked in the publishing firms in the current position for less than one year by the time of the study. In addition, 20% had worked for between 6 and 8 years while only 8% had worked for more than 8 years in their positions as highlighted on *Figure 3*. This is indicative of the relatively high employee turnover at the publishing firms with most employees taking less than 3 years in publishing firms. This is according to (Mutemiko, 2010) is due to employees desire to seek for new opportunities and better terms in the private sector unlike the public sector.

FIGURE 3

Number of years worked at the Current Position



Source: Author (2016)

4.4 Objective One: Internet Technologies that have been adopted by Book Publishing Industry

The study first sought to establish the existence of a strategic plan in the various publishing firms. Most of the respondents (88%) were in agreement that their firms had a strategic plan while 12% believed that their firms had no strategic plan.

4.4.1 Internet Technologies

This section reviewed some of the internet technologies that publishers in the book industry have adopted. The respondents were asked to rate the extent to which the publishers have invested in the various internet technologies. The findings were as presented in the section below:

Majority of the respondents (40%) believed that their firms had invested on the company websites to a great extent, 31% believed to a moderate extent, 20% to a very great extent and 5% and 3% to a very small extent and small extent respectively *(Table 5)*. The results indicate that most publishing firms had adopted use of websites as a marketing strategy to a great extent as shown by the means (mean = 4, great extent) in *Table 7*. The findings of the study demonstrated that publishers had employ the use of websites and this affirms the findings of (Mwazemba, 2014) and (Masaya, 2009) who established that most publishing firms had adopted websites and social media. Companies use websites to communicate product information to their clients. They also upload their product catalogues and pricelists to their websites. The findings showed that social media marketing (especially the use of Facebook, Twitter and Youtube) is also an important part of online marketing.

TABLE 5

Extent of Investment in Company Website

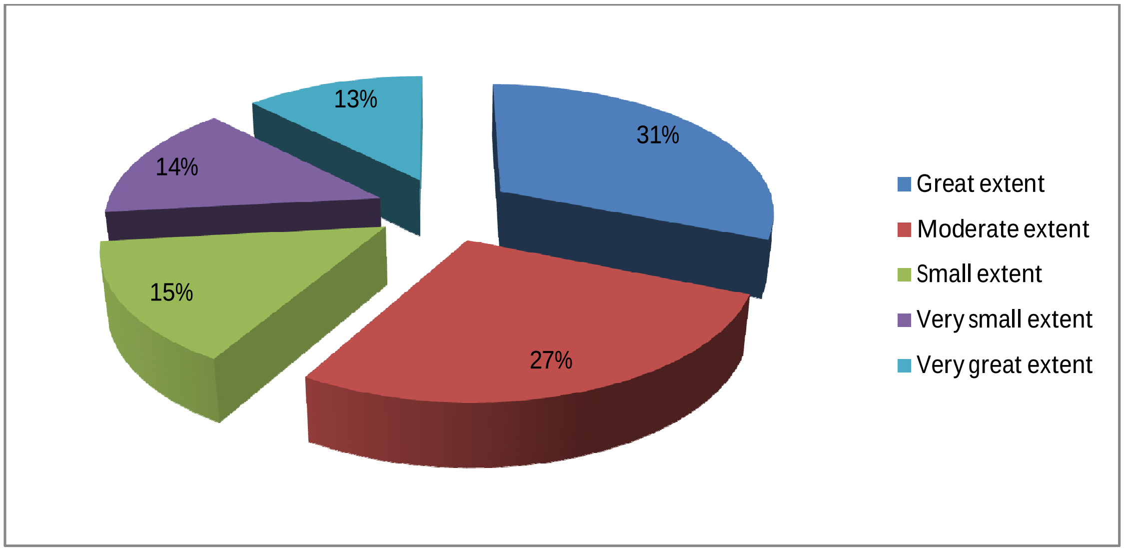
Extent of investment in websites	Frequency	Valid percent
Great extent	65	39.9
Moderate extent	51	31.3
Very great extent	32	19.6
Very small extent	8	4.9
Small extent	7	4.3
Total	163	100

Source: Author (2016)

Further the results indicated that 31% of the respondents were of the opinion that their publishing firms had to a great extent invested in the use of Facebook as a marketing strategy, 27% believed it had to a moderate extent, 15% to a small extent, 14% to a very small extent and 13% to a very great extent *(Figure 4)*. The mean of the results showed that Facebook had been adopted to a moderate extent (mean=3). This results confirms the important role that social media plays for companies with companies increasingly adopting the Facebook page to increase their online presence. These findings align to the results of (Mwazemba, 2014) and (Kimani & Wambui, 2015) who noted that most publishing firms had adopted the use of social media, Facebook in particular.

FIGURE 4

Extent of investment in Facebook page

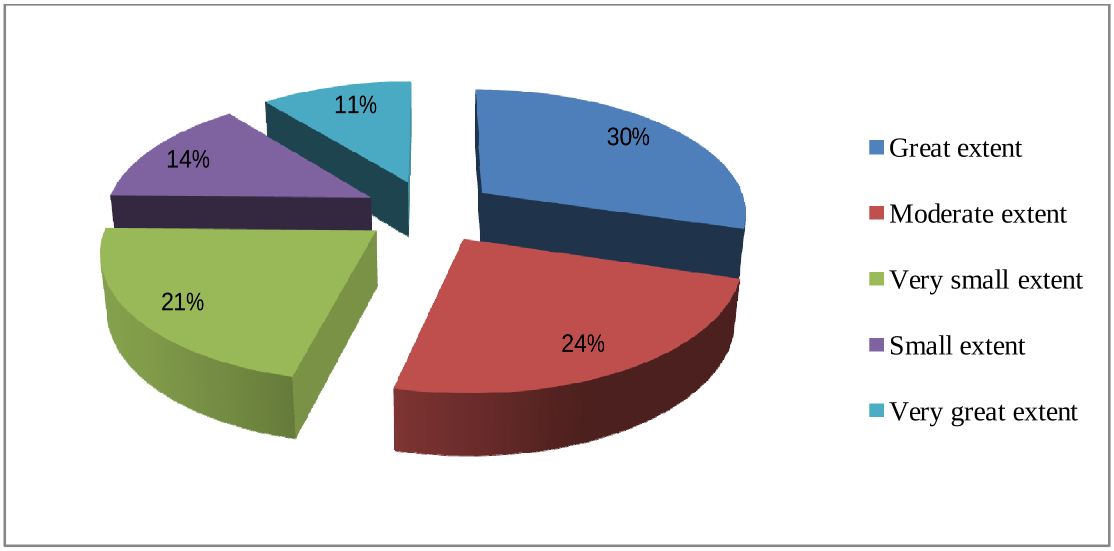


Source: Author (2016)

The study further sought to establish the extent of the investment on the use of twitter handle by the publishing firms. The results revealed that 30% of the respondents believed that their firms had employed use of twitter to a great extent, 24% to a moderate extent and 11% to a very great extent. Others 21% and 14% believed their firms had invested on the use of twitter to a small and very small extent respectively *(Figure 5)*. The mean results showed use of twitter to be to a moderate extent (mean=3) *(Table 7)*. These results show the importance of twitter handles to publishers. The results of this study are corroborated by the findings of Canty (2014) who established with the publishing industry increasingly becoming mobile, most publishers have turned to social media platforms which are more relevant.

FIGURE 5

Publishers with a Twitter Handle

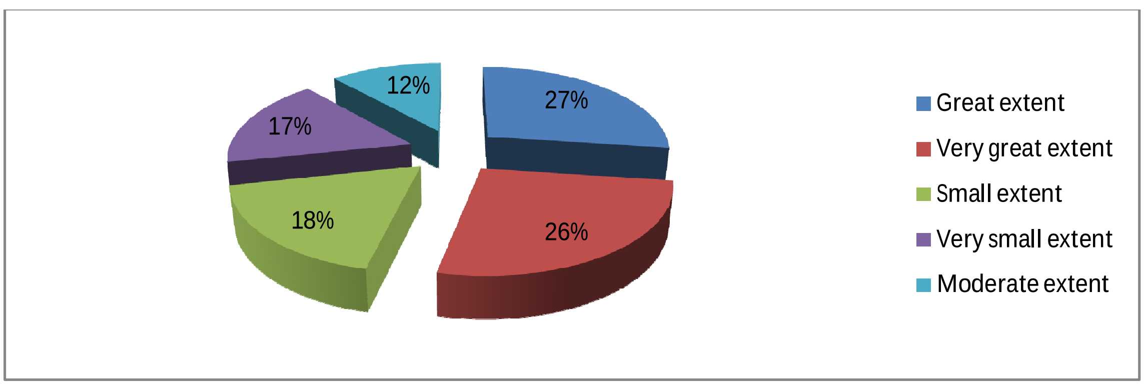


Source: Author (2016)

The results further revealed that the use of digital printing technologies had been used to a moderate extent (mean=3) with 27% of the respondents citing its use to a great extent, 26% to a very great extent, 18% and 17% to a small and very small extent respectively. Another 12% believed that digital printing technologies were used to a moderate extent *(Figure 6).*

FIGURE 6

Extent of Investment in Printing Technologies



Source: Author (2016)

A mobile payment technology such as M-pesa and Airtel money is another area of digital technology that the publishing firms can employ as a marketing strategy. The study also sought to establish the firms' level of investment in this technology. 29% of the respondents perceived that their firms had invested to a great extent, 27% to a very great extent, moderate extent, and 14% and 10% to a small extent and very small extent respectively. From the findings it was evident that majority of the publishing firms had invested in Mobile money payment system. This was affirmed in a study by (Mwazemba, 2014) who argued that the use of mobile money payment has been adopted by book publishers who have increasingly adopted E-commerce in their strategies.

TABLE 6

Extent of Investment in Mobile Payments Technologies

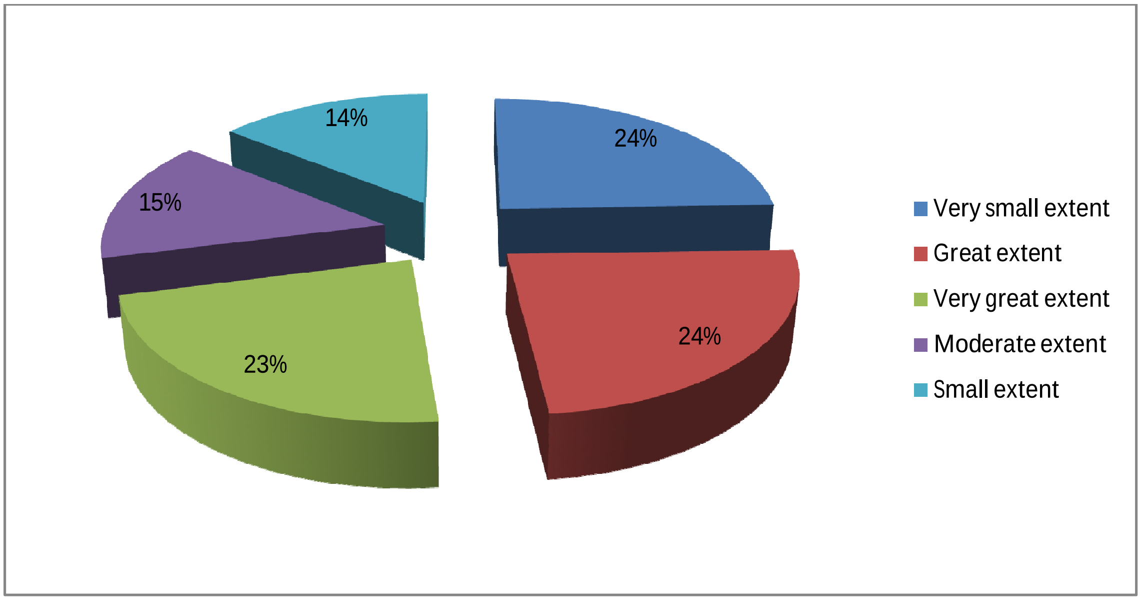
Extent of investment in mobile payments technologies	**Frequency**	**Valid percent**
Great extent	45	28.8
Very great extent	42	26.9
Moderate extent	31	19.9
Small extent	22	14.1
Very small extent	16	10.3
Total	156	100

Source: Author (2016)

The study also sought to establish the perceptions of the respondents on the adoption of the e-books by the publishing firms. Twenty-four per cent and 23% believed to have been adopted to a great and very great extent while 24% and 14% believed to have been adopted to a small and very small extent. Another 15% believed to have been adopted to a moderate extent. The mean was 3 meaning the overall adoption rate was moderate.

FIGURE 7

Extent of investment in E-books

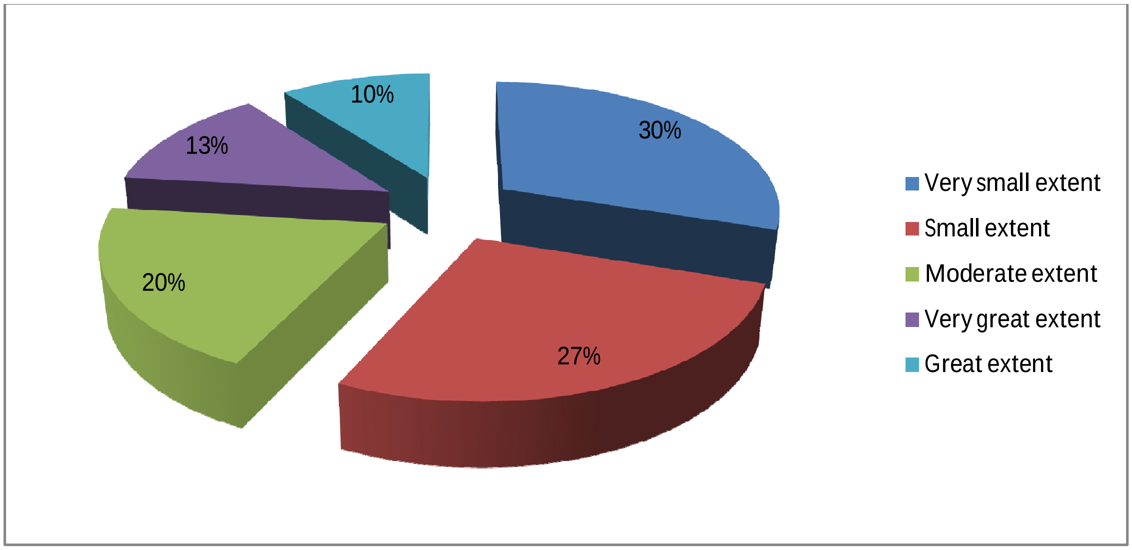


Source: Author (2016)

Last but not least of the digital technologies was the use of CD or CD-ROM. The results revealed that investment in the use of CD or CD-ROM was to a small extent (mean=2) *Table 7*. Majority of the respondents 30% and 27% believed publishing firms had invested in the use of the technology to a very small and small extent respectively. Another 20% believed to have invested to a moderate extent and 13% and 10% to a very great and great extent respectively. Among the technologies CD or CD-ROM was least popular among the publishing firms.

FIGURE 8

Extent Invested in the Usage of CD or CD-ROM Technology



Source: Author (2016)

The results of the study showed that majority of the publishers have invested in digital technologies though to a moderate extent *(Table 7)*. This study results confirms the findings of McIlroy (2014) who found out that publishers are increasingly adopting digital technologies though at varied pace and scale. McIlroy (2014) found out that since the early 2000 most publishers have been adopting various digital technology, with emphasis on reducing the cost of production. The results of the study were also corroborated with the findings of Castledale (2014) that established that digital technologies are increasingly being adopted by publishers in marketing with mixed results depending on the strategy accompanying the use of digital technologies.

TABLE 7

Table Showing Means of the Extent of Investment of Publishing Firms on the Digital Technologies

Descriptive Statistics	N	Mean	SD
Extent of investment in websites	163	4	1.003
Extent of investment in Facebook page	161	3	1.234
Extent of investment in Twitter account	158	3	1.317
Extent of investment in printing technologies	155	3	1.454
Extent of investment in mobile payments technologies	156	3	1.302
Extent of investment in E-books	155	3	1.509
Extent of investment in CD or CD-Rom Technology	156	2	1.356

Source: Author (2016)

4.5 Objective Two: Effect of E-business Solutions on Business Strategies of Book Publishers

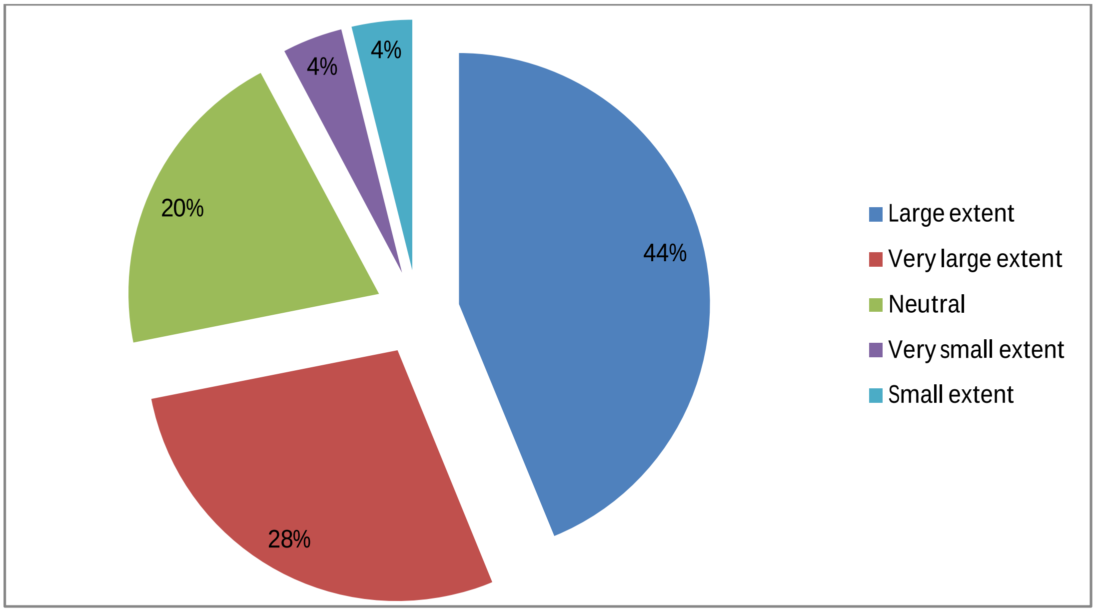
The study attempted to establish the effect of E-business technologies on the business strategies of publishers. This was established through a variety of questions whose results are presented in the sections below:

4.5.1 Effects of Digital Technologies on Business Strategies

Majority of the respondents 44% and 28% believed to a large and very large extent respectively that use of digital technologies improved the marketing of books by publishers. A few of them 4% believed their digital technology has effected on marketing strategy to a small and very small while 20% of the respondents were neutral on the effect of digital technologies on marketing strategies *(Figure 9)*. These findings corroborates with the results of a study by Tian (2008) and Rojers (2010) who established that book publishers in developed countries are increasingly adopting internet technologies in their business operations.

FIGURE 9

Marketing Strategies



An in-depth look at individual technologies showed that respondents were non-aligned concerning the effects of Facebook (n=3). This serves to show that increased use of Facebook is linked to hiring of social media experts and still not an integral part of publishers marketing. Also for twitter, respondents were neutral on their opinion that it had improved their customer relations (n=3). Respondents believed that the use of company websites had made it easier for consumers to know prices of books (n=4). Again the respondents were in agreement that internet technologies had made publishers' products more accessible to consumers (n=4) (*Table 8*). These findings indicate that even with increased technologies most publishers still believe on traditional internet technologies such as websites to be having most effect on Marketing strategies. Social media adoption is varied among publishers as indicated by neutrality. However, there was general consensus that the use of internet technology has improved the visibility of publishers to the consumers. This was confirmed by the fact that post publishers had social media accounts and company websites. The findings of the study demonstrated that publishers employ various innovative forms of online marketing like website marketing, e-mail marketing and social media marketing. Companies use websites to communicate product information to their clients. They also upload their product catalogues and pricelists to their websites. The findings showed that social media marketing (especially the use of Facebook, Twitter and Youtube) is also an important part of online marketing as affirmed by (Kimani & Wambui, 2015) and (Kaburu & Wambui, 2013).

TABLE 8

Effects of Internet Technologies on Business Strategies

Descriptive Statistics	**N**	**Mean**	**SD**
Use of facebook has enabled the publishers to advertise more at lower costs	159	3.48	1.252
Increased use of twitter has resulted to better customer relations	157	3.08	1.214
Company website has made it much easier for consumers to know the prices of our books	155	3.86	1.140
Internet techs has made our products more easily accessible to consumers	159	3.67	1.157

Source: Author (2016)

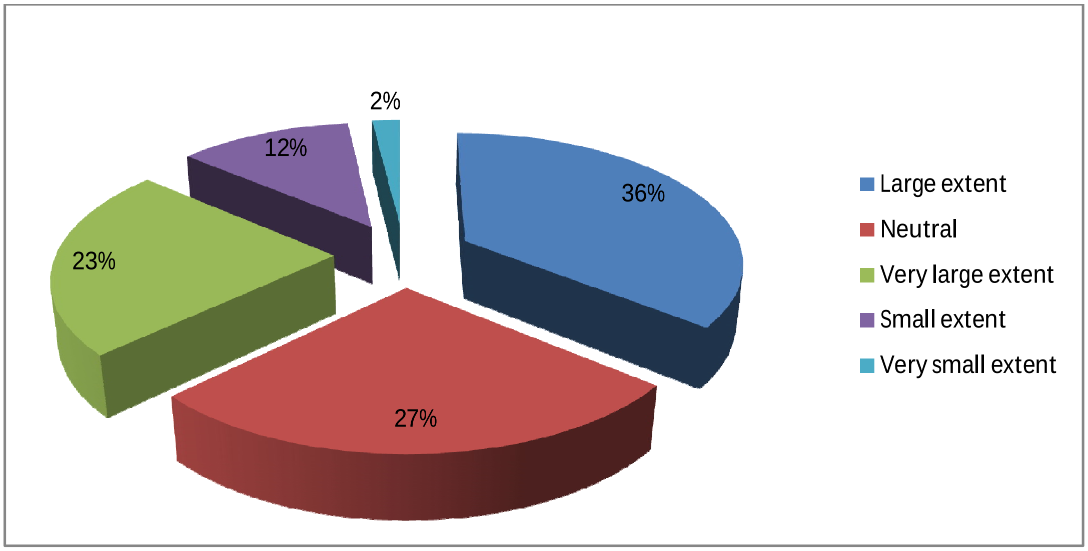
4.5.2 Effects of E-Business on Business Strategies of Book Publishers

This section reviewed the effect of E-business technologies on the growth strategies of book business publishers. This was analysed through a variety of questions whose answers are presented in the section below.

In terms of effects of internet technologies on growth of publishers, 36% of the respondents were of the opinion that E-Business solutions had improved growth of publishers in terms of revenues and market to a large extent and 23% to a very large extent. Another 12% and 2% believed it contributed to a small extent and very small extent. However, a good number of respondents, 23% were of a neutral opinion. The high belief that E-business solution has effected on their growth strategy shows the increased adoption of mobile money transfer among publishers in Kenya. This is because mobile money transfer has been acknowledged as a major contributor to growth of firms in Kenya, particularly by enhancing the adoption of E-business platforms. This is affirmed by (Maxim, 2012) who states that E-business solution use among publishers and distributors has been enhanced by improved payment system across the world.

FIGURE 10

Internet Technologies has made our Products More Easily Accessible to Consumers



Source: Author (2016)

Most of the respondents were buoyant on the use of mobile payments. The respondents believed that mobile services had reduced payment challenges to a large extent (mean=4). However they were of a neutral opinion concerning the use of e-books, and CD-ROM. The results indicate that the uptake of these two technologies is not as fast. This confirms the results of (Qasimi, 2011) who established that the use of e- books and its related technologies has not taken root in developing countries as opposed to developed countries.

Table 9

Effects of E-Business Solutions on Business Strategies

Descriptive Statistics	N	Mean	SD
Use of E-books has led to increased revenues sources for the publishers	159	3.21	1.415
Use of CD-ROM has reduced dependency on certain sales channels	159	2.81	1.165
Use of M-pesa services has reduced payment challenges	159	4.01	0.987
Use of E-books has increased market size of the book publishers	159	3.24	1.343

Source: Author (2016)

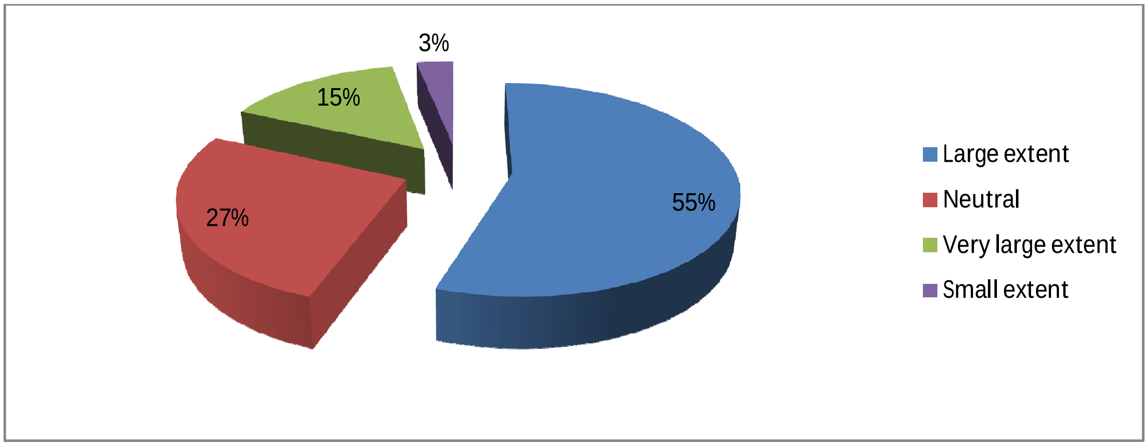
4.6 Objective Three: Effect of Printing Technology on Business Strategies of Book Publishers

This section reviews the effect of printing technology on the business strategies of book business publishers. This was analyzed through a variety of questions who answers with the results presented in the section below.

The results indicated that the use of latest technologies had reduced costs of publishing. This was shown by the respondents' responses (55%) that digital technologies had contributed to low cost in publishing to a large extent and 15% to a very large extent (15%). Another 3% felt the modern printing technologies had reduced costs to small extent. However, a good number of respondents (27%) had a neutral opinion. These results are similar to the findings of (Kulesz, 2016) who found out that a print technology has resulted in reduction of printing costs among book publishers.

FIGURE 11

Effects of Use of Digital Printing Technologies on Cost



Source: Author (2016)

Specifically respondents felt that use of modern printing technologies had led to a cost reduction to a large extent (mean=4). They also believed that use of latest technologies had enabled the publishers to produce quality output at lower costs to a large extent (mean=4). They also believed that technology had reduced distribution costs to a large extent (mean=4). However, the respondents were of a neutral opinion regarding on-demand printing, editing cost and pricing of published works.

TABLE 10

Effects of Digital Printing Technologies on Business Strategies

Descriptive Statistics	**N**	**Mean**	**SD**
Use of modern printing techs has led to cost reduction	159	3.64	0.923
On demand printing has led to cost efficiency	161	3.18	0.968
Use of latest editing technologies has reduced cost associated with editing	161	3.29	1.213
Use of latest technology has enabled the production of quality output	161	3.76	0.914
Use of digital technology has provided better pricing of published works	161	3.49	1.073
Technology will reduce distribution costs for publishers	161	4.03	0.918

Source: Author (2016)

4.7 Hypothesis Testing

The study used analysis of variance (ANOVA) to test the study the study hypothesis. Regression analysis was performed to determine the direction of the relationships between the adoption of digital technologies and change of business strategies by book publishers. The results of this analysis are presented below;

4.7.1 Coefficient of Determination

Table 11 shows the model summary with R^2 0.097 meaning 9.7% of the outcome was predicted by the independent variables; internet technologies, e-business technologies and printing technologies. This means that 90.3% of the change in business strategy can be explained by variables not included in the model

TABLE 11

Model Summary

Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.312a	0.097	0.079	0.861

a Predictors: (Constant), Internet technologies , E-business, printing technologies

4.7.2 Analysis of Variance

Table 12 further presents the results of ANOVA which explains how well the regression equation fits the data.

TABLE 12

ANOVA

Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	11.904	3	3.968	5.347	.002b
	Residual	110.566	149	0.742		
	Total	122.471	152			

a Dependent Variable: Digital technology effect on business strategies

b Predictors: (Constant), internet technologies , E-business, printing technologies

The results show that the regression model predicts the change in business strategy significantly well as shown by the significance value of 0.002. This shows that the effects were statistically significant and therefore the change is not by chance.

4.7.3 Regression Coefficients

The coefficients analysis gives $\beta0$ (Beta) at 2.158, β_1 at 0.196, β_2 at -0.053 and β_3 at 0.23. Where $\beta0$ is the constant, β_1, $\beta_{2,}$ and β_3 are parameter for estimation of the independent variables; internet technologies such as websites, Facebook, twitter, E-business technologies such as e-books and digital printing technologies.

From our regression equation;

$Y= \beta0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \varepsilon$

Where internet technologies, is denoted by X1, E-business by X2 and digital printing technologies by X3 while Business Strategy is Y, the regression equation of the model becomes; Y = 2.158 + 0.196X1 - 0.053 X2 + 0.23X3

It is evident from the above regression model that if all factors were to be held constant including the independent variables then changes in business strategy would be at 2.158 of a unit.

TABLE 13

Coefficients

Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	**Std. Error**	**Beta**		
1	(Constant)	2.158	0.403		5.359	0
	Internet Technologies	0.196	0.093	0.217	2.114	0.036
	E-Business Technologies	-0.053	0.084	-0.062	-0.63	0.53
	Printing Technologies	0.23	0.111	0.183	2.072	0.04

a Dependent Variable: Digital technologies effect on Business Strategies

4.8 Discussion

The study results from the regression model indicated that 9.7% of predictor variables (digital technologies) cause a change in business strategies. These results confirm that book publishers operate in an environment with changing technologies. The changing environment necessitates the publishers to adopt existing technologies in their operation. The results of the study testify that 9.7% of the predictor's variables provide opportunities that the publishers can leverage on in their operation and this has the consequence of changing the business strategies of book publishers. In addition, the study rejected the null hypothesis for two objectives and these were:

(a) There is no significant relationship between internet technologies and business strategies.

(b) There is no significant relationship between printing technologies and business strategies.

The p-values for the variables were positively significant at p=0.036 p=0.04 respectively. The study result confirms the findings of Tian (2008) that established that digital technologies have an effect on business model of book publishers. The findings agree with the findings of Tian (2008) that established that digital technologies bring about changes in business strategy, albeit at a small change. The study findings are also similar to the findings of Gaigher et al (2013) which established that digital technologies have a relatively small effect on business model of book publishers, with most book publishers still focusing on traditional business models.

CHAPTER FIVE

SUMMARY OF FINDINGS, DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter sums up the research report by giving a summary to the answers deduced from the study in relation to the research questions and the views and arguments brought by the literature reviewed. Conclusions to the study are drawn from the findings of the study. Recommendations to the publishing industry are also presented.

5.2 Summary

The main aim of the study was to analyze the effect of digital technology on the business strategies of book publishers in Kenya. The study was triggered by the observations made by the researcher prior to the study that publishers were increasingly adopting digital technologies hence the question on their possible effects. The main research questions were to establish the trends in digital technologies among publishers in Kenya, to determine the effect of digital technologies on marketing strategies of book publishers, to determine the effect of digital technologies on the growth strategies of book publishers and to determine the effect of digital print technology on the business strategies of book publishers in Kenya.

The study found out that the major trend in digital technology was use of Facebook page, company websites, twitter handle, e-books and digital printing technologies. This is in line with the global trends in digital technology adoption by publishing, with print and internet technology increasingly gaining prominence. However, the adoption of these digital technologies is slow and therefore its effects are yet to be fully realized. In addition the study established that most of the publishers have made investments in digital technology to a moderate extent. The uptake of CD-ROM however, is very slow compared to the rest of the digital technologies. Of special interest in the study was the realization that majority of the publishers that make use of internet technologies and E-business technologies are the new entrants in publishing industry. Print technologies the study found out has been used by both new and old publishing firms in Kenya.

On the first objective which was to establish the effect of digital technology on business strategy of book publishers. This was tested by testing the significance of the following internet technologies such as websites, Facebook and twitter. The regression results indicated that two of the factors had a significant effect on business strategies. The use of internet technologies such as websites, Facebook and twitter by publishers had a positive significant relationship on business strategies. This was confirmed through a p-value of 0.036 and mean of 0.196 showing that even though the relationship was significant it was very weak. This is possibly attributed to the mixed use of interactive platforms such as social media and non-interactive platform (publisher's websites; most are non-interactive) by most publishers in Kenya. (Carreiro, 2010) argues that interactive internet technologies significantly contribute to improved marketing practices of book publishers. These results were also affirmed by (Editor & Contributors, 2012) who argue that digital technology platform, social media can only have an effect on business model when not only adopted but when it is used accordingly.

On the Second objective that was to establish the effect of E-business solutions on business strategy of book publishers. The results showed that this particular digital technology has no effect on business strategy of book publishers. This was indicated by p-values of 0.53 and 0.365 for mobile payment and E-book respectively. This is possibly explained by E-book and Mobile payment solutions that are integrated with other digital technology platforms such as social media and websites. This integration in other platforms has enhanced the significance of such platforms at the expense of E-business solutions. The non-significant effect of digital technology on growth could also be explained the reason that diversification of products into E-books is still at an early stage, with E- books still not providing the publishers with more benefits. These study findings concur with the findings of (Qasimi, 2011) and (Carreiro, 2010) who found out those E-business solutions have minimal effect on business models of book publishers in developing and emerging economics.

Regarding the third objective of the study, that was to establish the effect of print technologies on business strategy. The study found out that there was significant relationship between printing technologies and business strategy. This was indicated by a p-value of 0.04. This could be attributed to the relatively large degree to which book publishers have adopted various printing technologies over the past few years and which are known to have a potential effect on business strategy. These results are similar to the study results of Tian (2008) who noted that print technology effect on business model have been significant among book publishers since printing is a key component of book publishers who are concerned about cost reduction.

Finally, the study sought to analyze the effect of digital technologies on business strategy of book publishers. Concerning this objective the study found out that digital technologies only contribute to 9.7% change in business strategies of book publishers, with the remaining change of 90.3% caused by variables that are not in the study. This could be explained by the relatively slow degree to which the key stakeholders in the publishing industry have adopted digital technology. These stakeholders include authors, distributors, publishers and consumers. Any meaningful effect of digital technology is only strengthened by the degree to which all stakeholders embrace digital technology in their work. In the words of (Jha, Joseph, & Mankand, 2016) digital technologies will only have a significant effect on publishing industry to degree it affect different segment of the industry. These findings align to the results of (Kulesz, 2016) who noted in a study done in sub-Saharan Africa that the adoption of digital technology in Sub-Saharan Africa is still in transition and has faced both internal and external challenges that have limited its effect on business models of traditional publishers.

5.3 Conclusion

The study concludes that the process of digitization is well underway in the Kenyan book industry. It is encouraging to note that publishers are investing in the various types of digital technologies. The study concludes that the new entrants into the publishing industry are at ease of adopting the different types of digital technologies than the old publishing firms. The study thus concludes that digital business strategies can enable start-up publishing firms to compete with established publishing firms.

The use of internet technologies has the potential to lead to significant change in business strategy of book publishers in Kenya. Such benefits can only be realized when internet technologies are used to supplement and add value to traditional print publishing. To some extent this can further translate to higher profits for book publishers. Internet technologies effect on business strategy change among publishers is dependent on the increased access of internet technologies among the consumers.

The study concludes that E-business on its own does have limited effect on business strategy. Thus these results conclude that there is need for book publishers to consider the adoption of E-business solutions in light of the proposed provision of School Laptops to primary school kids. In light of the proposed provision of Laptops the study also concludes that an E-business solution has the potential to effect business strategy of publishers in the long run and not short run.

The study concludes that digital print technology has significant effect on business strategy of book publishers in Kenya. This is because one key area that concerns publishers is how to reduce costs while improving profit margins.

The study concludes that effect the digital technology on business strategy depends on the compatibility of the digital technology with the existing traditional technologies and processes The potential effect of digital business strategy on book publishers is also dependent on internal and external factors that exists in the publishing.

5.4 Recommendation

There is need for publishers to take advantage of the digital space that is to be offered through the soon to be launched school laptop project. This will provide an opportunity for publishers to fully integrate digital technologies with traditional technologies thus profiting the book publishers in the long run.

There is need for publishers to relook into their strategies and adopt digital business strategies. This is because the adoption of new business strategies offers the potential for new revenue streams for the reason that the traditional book publishers will benefit from increased revenue streams associated from direct sales and also increased potential of additional revenue from advertisers and consumers will be strengthened.

There is need for publishers to continuously increase their presence in the social media space. This is because social media offers a creative platform for publishers to exploit as they wish and once established, a title's social media presence can be used as a platform to exploit any future social activity that may occur. Though the use of social media may not reap great commercial benefits it can provide great benefit if the publishing industry continues to be social, mobile and digital.

5.5 Areas for Further Research

There is need for more studies to understand the Effect of digital business strategies on startups publishing firm and established firms. This will provide insight on the digital business strategies and its effect on the book publishing sector.

There is need for studies that will include both the consumer and the publisher's views on the effect of digital business technologies. This will help in further development of digital business strategies from key stakeholders in the publishing industry.

REFERENCES

Antonio G., José L, Daniel D, Raquel A & Arévalo J .2014."E-Book publishing in Spain", *The Electronic Library,* 32: 567 – 582.

Babbie, E.R. 2004. *The practice of social research,* 10th ed., Wadsworth, Belmont, CA.

Birkets, S.1994. *The Gutenberg Elegies: the fate of reading in an electronic age*. Faber and Faber London.

Carreiro, E. 2010. "Electronic books: how digital devices and supplementary new technologies are changing the face of the publishing industry", *Publishing Research Quarterly*, 26 (4) 219-235.

Dan S & Mary A. 2003. Books and Digital Technology: A New Industry Model, *Journal of Media Economics*, 16 (2) 71-86.

Daniels, M. 2006. *Brave New World, Digitization of content: the opportunities for booksellers and the Booksellers Association*, Booksellers Association, London.

Daniel R .2000. Textbook Publishing in Kenya, under a new policy on School Textbook Procurement, *Public Research Quarterly*; 13 (11)

Davis, M. & Walter, M. 2003. Next-wave publishing technology-part 1: revolution in process and content, *Seybold Publications*, 3(15) 3-15.

Davis, M. & Walter, M. 2004. Next-wave publishing technology-part 2: revolutions in process, *Seybold Publications*, 3(20) 3-21.

Davis, M. & Walter, M. 2004. Next-wave publishing-part 3: revolutions in content, *Seybold Publications*, 2(23) 3-20

Davy, D. 2007, *The impact of digitization on the book industry*, Castledale Inc., Toronto, Ontario.

Dimitrios K & Nikolaos K. 2014."Electronic textbooks advantages and challenges for the publishers. Research Report

Grant, R.M.1991. The resource-based theory of competitive advantage: implications for strategy formulation, *California Management Review*, 33 (3) 114-35.

Greco, A. 1997. *The book publishing industry.* Allyn & Bacon, Boston.

Grix, J. 2004. *The foundations of research*, Palgrave Macmillan, New York. Hellenic higher education and publishing community", Library Review, 63 (6/7) 531 – 543.

Herther, N.K. 2005. The e-book industry today: A bumpy road becomes an evolutionary path to market maturity, *The Electronic Library,* 23 (1) 45-53.

IBISWorld .2007. *C2423 Book and other publishing in Australia,* IbisWorld, Melbourne.

IBISWorld .2008. *C2423 Book and other publishing in Australia,* IbisWorld, Melbourne.

Jacqui S .2012. Books and Digital Publishing in Africa: What Does the Future Hold?. Africa Bibliography, research report

Jeong, H. 2012. "A comparison of the influence of electronic books and paper books on reading comprehension, eye fatigue, and perception", *The Electronic Library*, 30 (3) 390-408.

KCB, 2013. A Quarterly Publication of the Kenya Copyright Board, Issue 9

Kasdorf, W.E. 2003, *The Columbia guide to Digital Publishing*, Columbia University Press, New York.

Keh, H.T. 1998. Evolution of the book publishing industry: structural changes and strategic implications, *Journal of Management History*, 4 (2) 104-23.

Kleper, M. 2001. *The state of digital publishing*, Prentice Hall, Englewood Cliffs, NJ.

Lynch, K. 2012, "E-books: the future for publishers and libraries", *Collection Building*, 31 (2) 78-80.

Iain S .2000. ""The liveliest of corpses": trends and challenges for the future in the book publishing industry", *Aslib Proceedings*, 52:133 – 137.

Martin, B., and Tian, X .2010. *Books, Bytes and Business. The promise of digital publishin*g, Ashgate Publishing, Burlington.

Mierzejewska, B. 2010 "Disruptive Innovations in Book Publishing - Threat or Opportunity?" *International Journal of the Book* 7(2) 51-60.

Porter, M. E 1980. Competitive strategy. Techniques for analyzing industries and competitors, 52nd edition. Free Press, New York.

Rao, S.S. 2004. Electronic book technologies: an overview of the present situation, *Library Review*, 53 (7) 363-71.

Renear, A. and Salo, D .2003, 'Electronic books & the open eBook publication structure', in W E Kasdorf (eds.), *The Columbia guide to digital 66publishing*, Columbia University Press, New York.

Ronte, H. 2001. The impact of technology on publishing, *Publishing Research Quarterly*, 16 (4) 11-22.

Samrand T & Gholam A M, .2011."E-publishing readiness assessment in Iranian publishing companies", *The Electronic Library*, 29 (4) 470 – 487.

Shepperd, J.A., Grace, J.L. and Koch, E.J. 2008. "Evaluating the electronic textbook: is it time to dispense with the paper text?" *Teaching of Psychology*, 35 (1) 2-5

Scupola, A. 1999. The impact of electronic commerce on the publishing industry: Towards a business value complementarity's framework of electronic publishing, *Journal of Information Science*, 25 (2) 133-45.

Shatzkin, M. 2007. *Demystifying the digital publishing the story of the future. Paper presented at an Australia Council seminar on the future of digital publishing,* 18 July, Sydney, Australia,

Thompson, J.B. 2005. *Books in the digital age,* Polity Press Ltd., Cambridge, UK.

XianRong H & Ting H, 2014."System of digital publishing policies and regulations in China", Library Hi Tech, 32 (3) 397 – 408.

Zivkovic, D. 2005. *The electronic book. The change of paradigm for a changing book market*, Berlin. Sage Publishers

APPENDICES

Appendix I: Questionnaire

I am a student at KCA University carrying out a research study to establish the effects of digital technology on strategies of book publishers in Kenya. This is part of my academic requirements. Do not write your name in this questionnaire. The information you will give will be treated with confidentiality and privacy for research purposes only.

Answer all questions honestly by filling blank spaces or ticking () where applicable.

TOPIC: EFFECT OF DIGITAL TECHNOLOGY ON BUSINESS STRATEGY ADOPTED BY BOOK PUBLISHERS IN KENYA

Section A: Demographic Characteristics

1. Name of Publishing firm (*optional*):...
2. Location of Publisher:…………………………………………….
3. Year(s) of Operation of the Publisher [ ] Less than 5 Years [ ] Between 5- 10 years [ ] 11-15 years [ ] above 15 years
4. What is your Current Department [ ] Human Resource [ ] Finance [ ] Sales & Marketing [ ] Publishing [ ] Other (Specify)…………………………..
5. Current Position...
6. For how long have you been holding the Current Position? [ ] Less than One Year [ ] between 3 to 5 Years [ ] 6 – 8 years [ ] Above 8 years.

Section B: Types of Internet Technologies and Business Strategy

(*The researcher is trying to establish the types of internet technologies used*)

1. Does your organization have a strategic plan [ ] Yes [ ] No [ ] I don't know
2. To what extent has your organization made investment in the following digital technologies
3.

Digital Technologies	Very Small Extent	Small Extent	Moderate Extent	Great Extent	Very Great Extent
Websites					
Facebook Page					
Twitter Account					
Printing Technologies					
Mobile Payments Technologies					
E-Books					
CD or CD Rom Technology					
Others (Specify)…………………					

Section C: E-Business Technologies and Business Strategies

(*The researcher is trying to establish the effect of E-Business Solutions on Business Strategies employed by publishers*)

1. To what extent do you agree to the following statement concerning the effect of E-Business technologies on business strategies of book publishers in Kenya?

	Very Small Extent	Small Extent	Neutral	Large Extent	Very Large Extent
The use of Facebook has enabled the publisher to advertise more at lower costs					
Increased use of twitter handle has resulted to better customer relations					
Company website has made it much easier for consumers to know the prices of our books					
Internet technologies has made our products more easily accessible to consumers					

The Use of E-books has led to increased revenues sources for the publishers					
The use of CD-ROM Technology and E-books has reduced dependency on certain sales channels					
The use of Mpesa services has reduced payment challenges thus improving revenues					
The use of E-book has increased market size of the book publishers					

Section D: Effect of Print Technologies on Business Strategies

(*The researcher is trying to establish the effect of Print Technologies on Business Strategies employed by publishers*).

2. To what extent do you agree to the following statement concerning the effect of digital technologies on growth strategies of book publishers in Kenya?

	Very Small Extent	**Small Extent**	**Neutral**	**Large Extent**	**Very Large Extent**
The use of modern printing technology has led to cost reduction					
On demand printing has led cost efficiency thereby improving revenues of publishers					
The use of latest editing technology has reduced costs associated with editing.					
Increased use of latest technology has enabled the production of quality outputs at lower costs					

The use of digital technology has provided for better pricing of published works					
Technology will reduce distribution costs for publishers					

Section E: Overall Effect of Business Strategy of Book Publishers

	Very Small Extent	**Small Extent**	**Neutral**	**Large Extent**	**Very Large Extent**
To what extent do you think book publishers have been adopting new business strategies					
To what extent do you think digital technologies have had an effect on the publishing industry?					
To what extent has book publishers changed their business strategies as a result of digital technologies adaptation					
To what extent has the proposed "School Laptop Project" affected the business strategy of book publishers					
Any Other Comment;					

THANK YOU FOR YOUR PARTICIPATION

Appendix II: Letter of Permission from KCA University

KCA UNIVERSITY
~ 1 9 8 9 ~

Thika Road, Ruaraka
P.O. Box 56808 - 00200 Nairobi, Kenya
Pilot Line: +254 20 8070408 / 9

Tel: +254 20 3537842
Fax: +254 20 8561077
Mobile: +254 734 888022, 710 888022
Email: kca@kca.ac.ke
Website: www.kca.ac.ke

KCAU/ SGS.15/wm.02

Friday, June 12, 2015

Your Ref ....

To whom it may concern,

Dear Sir/Madam,

RE: RESEARCH PROJECT

This is to certify that **TIMOTHY MUITA REG NO. 12/02090** has been permitted by the School of Business and Public Management to carry out research on the topic **"IMPACT OF DIGITAL TECHNOLOGY ON BUSINESS STRATEGY ADOPTED BY BOOK PUBLISHERS IN KENYA".**

The research is purely for academic purposes and for the partial fulfillment of the requirements for the Master of Business Administration in Corporate Management degree program.

Kindly assist the student with information where possible.

Yours faithfully,

KCA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
12 JUN 2015
P.O. Box 56808 - 00200, NAIROBI

Dr. Muchiri Mwangi
Dean, School of Graduate Studies & Research

Appendix III: Letter of Permission from Kenya Publishers Association

KENYA
PUBLISHERS
ASSOCIATION

A Member of The International Publishers Association

KENYA PUBLISHERS ASSOCIATION
P. O. Box 42767, 00100 Nairobi
Tel: 3752344, 2635498/9 Fax: 3754076, Mobile: 0724 - 255848
info@kenyapublishers.org
Website: www.kenyapublishers.org

15TH June 2015

TO WHOM IT MAY CONCERN

Dear Sir / Madam

RE: **Introduction and Permission to Conduct Research Study**

Timothy Njuguna a student at KCA university is pursuing Masters of Business Administration in Corporate Management, and as part of fulfilling his academic requirements is working on his Master's Thesis entitled; **Impact of Digital Technology on Business Strategy Adopted by Book Publishers in Kenya**.

The purpose of this letter therefore, is to request your permission and goodwill for Timothy to conduct his study at your publishing firm, through the appointment of 3 managers who will anonymously complete an online questionnaire. The information they will give will be treated with confidentiality and privacy for research purposes only.

This study will not only contribute to understanding of the concept of digital business strategy, it will also help Kenya Publishers Association to develop policy and guidelines on digital publishing in Kenya through it recommendations.

Your approval to conduct this study will be greatly appreciated.

Sincerely,

James Odhiambo,
Executive Officer – KPA