2019

Implication of information technology adoption on business models adopted by law firms in Nairobi County

Katumbi Mailu
Strathmore Business School (SBS)
Strathmore University

IMPLICATION OF INFORMATION TECHNOLOGY ADOPTION ON BUSINESS MODELS ADOPTED BY LAW FIRMS IN NAIROBI COUNTY

KATUMBI MAILU

MBA/53807/2017

A RESEARCH DISSERTATION SUBMITTED TO STRATHMORE UNIVERSITY BUSINESS SCHOOL IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF BUSINESS ADMINSTRATION IN STRATHMORE UNIVERSITY

MAY, 2019

DECLARATION

I declare that this work has not been previously submitted and approved for the award of a degree by this or any other university. To the best of my knowledge and belief, the dissertation contains no material previously published or written by another person except where due reference is made in the thesis itself.

Ms. Katumbi Mailu

Signed: _____ Dated: _____

Approval

The dissertation of Ms. Katumbi Mailu was reviewed and approved by:

Dr. Vincent Omwenga (Supervisor),
Faculty of Information Technology,
Strathmore University.

Dr. George Njenga,
Dean, Strathmore Business School,
Strathmore University.

Prof. Ruth Kiraka,
Dean, School of Graduate Studies,
Strathmore University.

ABSTRACT

Competitive advantage in the market and maximization of stakeholder profits have been the main motivators for investors. However, due to competition, globalization and technological advancement there is need to align technological adoption with business models. Most organizations have adopted information technology to ease their operational procedures and cumulatively optimize on their business models. Hence, the current study seeks to establish the implication of information technology adoption amongst law firms in Nairobi County. Specifically, to examine the business models adopted by law firms, to establish information technology adoption levels in law firms, to determine the effect of information technology adoption in business operations in law firms and consequently to establish the relationship between information technology adoption and business models adopted by law firms in Nairobi County. The study was anchored on diffusion of innovation theory, technology acceptance model, disruptive innovation theory and dynamic capabilities model. Simple random sampling was adopted to select 97 law firms in Nairobi County. Primary data was collected though a questionnaire administered to managing partners of 97 law firms in Nairobi County. The study adopted a descriptive research design and descriptive statistics such as mean, standard deviation, frequency and percentages as well as inferential statistics were used to analyse the data. The study was able to achieve a response rate of 86.6% and the findings were presented in figures and tables. Results from the study indicated that the most common business models were customer focused and service-based models, which were common amongst all firms. From the findings, there was no agreement or disagreement on whether the levels of information technology adoption amongst law firms in Nairobi County could be classified as early adopters, early maturity, late maturity and laggards. Majority agreed that information technology adoption had an effect on law firm's business operations. Information technology adoption had affected time management, file and client's information management, enhanced client's interactions and increased efficiency within their law firms. Regression and correlation analyses revealed positive and significant relationship between information technology adoption and the type business model adopted. The study revealed that business models adopted by any law firm is anchored on their desire to promote customer satisfaction and enhance their revenue capacity. Secondly, most law firms in Nairobi County are either early adopters or early maturity adopters since they had an average of 3.4 out of 5. Thirdly, there is need for examination on the state of information technology adoption by respective law firms to optimize on benefits associated with respective business model adopted by law firms. It is recommended that law firms in Nairobi County should align their business models according to their customer needs. In the arena of academia, scholars can contribute towards this end by undertaking more studies to fill the knowledge gap particularly on the business operations in law firms and business models that are specific to law firms. Further empirical studies on information technology adoption specific to legal practice and operations is recommended.

Key words: Information Technology Adoption, Business model, Business operations.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

KEY DEFINITIONS

Business Model: Logical framework detailing how an organization can optimize on its market share and customer base, business strategy adopted, perceived benefits and service life cycle (Teece, 2010) and (Dinter, 2011). It was operationalized as customer focused model, service-based model, revenue-based model, virtual practice and consultancy

Business Operations: Integrated operational procedures with a business as characterized by state of case management, information management, client account management, communication and networking and the day-to-day administrative tasks (Cohn & Hull, 2009)

Information Technology Adoption: The state of law firm incorporation of information technology on its operations (Oliveira, 2011). It was operationalized as early adopters, early maturity, late maturity and laggards.

ACRONYMS AND ABBREVIATIONS

ABS	Alternative Business Strategies
ANOVA	Analysis of Variance
BI	Business Intelligence
IT	Information Technology
ITA	Information Technology Adoption
LDP	Legal Disciplinary Practices
LSK	Law Society of Kenya
NACOSTI	National Commission for Science Technology and Innovation
SPSS	Statistical Packages for Social Scientists

ACKNOWLEDGEMENTS

I would like to express my gratitude to the many people who saw me through this dissertation in many different ways and with whom this dissertation would not have come to completion. Foremost, is to my supervisor Dr. Vincent Omwenga, for the invaluable support, guidance and encouragement; To Charles Wanyoike Githira for help in data analysis and making me appreciate the chapter better; To Paul Bikundo, for your invaluable support and guidance; To my family members, whose moral support was my greatest strength. To my dear friends Joy, Thama and Nduh who shared the same quest and made the journey gratifying. Special thanks to my mother Elizabeth Mutumi Mailu, for always painting the finish line closer, making it seem reachable despite obstacles along the way and waiting right at the finish line.

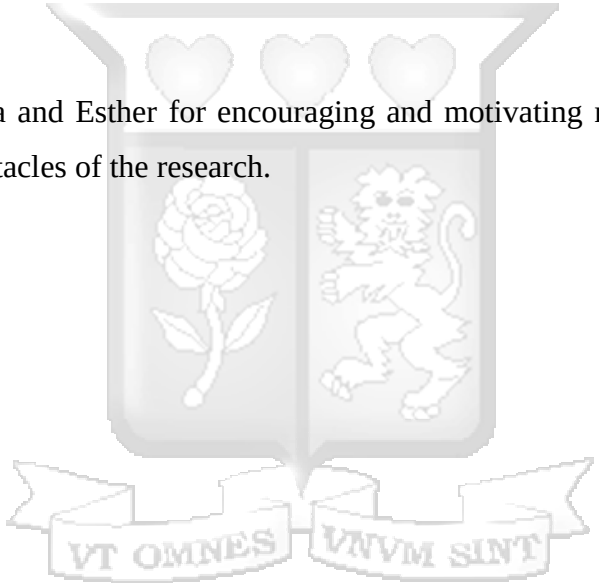
DEDICATION

To God almighty for his mercies and blessings.

To my dear parents, Elizabeth Mutumi Mailu and Pius Mailu Kioko, who planted a seed in me long before I could understand its meaning and nurtured it into faith, hard work, integrity, perseverance, excellence and many more values. You have constantly inspired me and showered me with love.

To my dearest siblings Claire, Gertrude and Bernard for walking with me every step of the way and encouraging me on this journey with great belief.

To my friends Thama and Esther for encouraging and motivating me especially during the hardest times and obstacles of the research.



CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

This study explored the implication of information technology adoption on business models of law firms in Kenya. Globally, the legal field is undergoing an era of transformation. The era of data and paperwork management is undergoing replacement by the software solutions occasioned by innovation in the technology field (McGinnis & Pearce, 2014). Traditionally, law firms have largely operated in the same way resulting in challenges; first, due to the dynamic business environments, second, the high demand for innovative service delivery by the clientele base and lastly high competition from rival law firms within the same markets (Ben-Ari, Frish, Lazovski, Eldan, & Greenbaum, 2017). There is need to embrace information technology specifically in business operations as in other industries so that law firms can leverage resources and capabilities to create competitive advantage in a very unpredictable legal market. Adoption of information technology in business operations is perceived as time and cost efficient in the performance as compared to the traditional way of performing activities in organizations. The need for timely adherence, better value creation and competitive advantage in diverse fields propels the urge of information technology adoption and this is a high motivator for the legal industry to embrace information technology adoption (Bigda, 2018).

Tradition law practice was characterised by massive paper work, manual research and non- interrelated operations amongst local and international law firms. Globalization has altered the trend on organization practices and ITA has simplified practices on several industries. Most firms such as banking and state corporations have incorporated IT to aid in their decision-making (Williams, Platt, & Lee, 2015). The future looks bright in the legal field with the projection of reduced hours of paperwork, analysis, and other labour-intensive activities. The process of standardizing, production and automation of the tasks done by lawyers grants them time to analyse a case and use sufficient information towards reaching a solution for the end-user (McKamey, 2017). Much of the collaborative tasks are done in-house while others being outsourced thus exempting them from handling all legal tasks from start to finish. Therefore, ITA significantly impacts on the legal industry majorly through the expansion of legal operations (Bigda, 2018), narrowing the practice, creation and growth of

business models, acceleration of service delivery, replacement of the dominant structures and changing customer expectations in the acquisition of legal services.

Technological innovations in Kenya is very dynamic. Since the launch of M-pesa services in the year 2007, the service industries in Kenya have been undergoing transformation and the legal industry is no different (Bowman, 2010). The situation is occasioned by the nature and increased complexities involved in handling high profile cases (Odhiambo-Mbai, 2003). Recently, the Kenyan judiciary has handled international cases involving persons within or without the country thus highlighting the need for streamlined technology integrated structures. Due to technological advancement, geographical limitations are now no hindrance to the practice of law. In Kenya, the judiciary has used video conferencing also known as virtual courts to provide litigants an audience with judges where there have been geographical limitations (Mbui, 2014). This has helped the judicial arm of government to improve on cost effectiveness, access to justice, judicial records management and lastly faster and expeditious disposal of cases.

Work through the use of information technology is easier and more efficient as it minimizes the tedious tasks allowing lawyers time to focus more on their presentation to either the client or courts and similar forums (Ashley, 2017). Moreover, the use of technology makes advisory services efficient and more accurate. Thanks to technology, a number of firms in the legal sector view the change in the industry as inevitable and thus seek to pursue technologies that can be effectively incorporated in their business models (Bigda, 2018). The rapid development and commercialization of information technology has prompted organizations to modernize performance of business operations and due to that, business models have developed over the years (Jewel, 2014). This is based on the expectation that the information technology adoption in operations and processes leads to improvement in their operating efficiencies, customer service levels, overall strategy and competitive advantage hence determining the type of business model they adopt. When customers evaluate the quality of the service they receive from an institution they use different criteria, which are likely to differ in their importance, usually some being more important than others are. These determinant attributes are the ones that define service quality and customer satisfaction (Dube & Gumbo, 2017). Law firms are service-based organizations, which are very competitive in nature, and it is therefore very important that a winning business model is adopted to ensure competitive advantage in the legal market. Business models adopted by corporations ought to

be distinguished by their technology choices. In fact, IT can be perceived as tools for strategic communication, knowledge gathering and exchange through heterogeneous tools. Some notable implications of ITA are organization capacity to gather business intelligence, which may disrupt their operational and organization procedures (Teece, 2010). Further, the success of any model is dependent on acceptability of technology adopted.

1.1.1 Role of Information Technology in Law Firms

Information technology enabled companies in the world have managed to unseat existing market leaders and surpassed long-standing businesses across multiple industries (Jewel, 2014). In the last decade alone, changes in information technology have been witnessed in cloud computing, artificial intelligence, block chain, and other technology platforms that have transformed the way business is conducted (Bigda, 2018). Consequently, the legal industry is no exception to this technological age that serves as a catalyst towards competitive business strategy in the legal dimension. In fact, both lawyers and non-lawyers are leveraging on technological advancement particularly ease of access to mobile phones, the internet and legal software to offer subsidized legal services to a readily available clientele (Ashley, 2017; Ben-Ari, Frish, Lazovski, Eldan, & Greenbaum, 2017).

Presently, law firms with traditional business models especially in the developed world are facing serious competition from contemporary law firms that have embraced and integrated technology in their business model for value creation to their clients and other stakeholders (Bigda, 2018). Arrangement, transfer, interpretation and retrieval of information, work that used to be performed by human lawyers has been taken over by technology making it faster, more efficient and effective particularly when one program can be used to perform all these functions (Jewel, 2014).

Information technology has also contributed to ease of legal practice in courts and other governmental bodies. It is relatively easier and faster now to search for precedence in case law and legal forms than it was twenty years ago (Bowman, 2010). In Kenya, a database of case law, legal forms and the laws of Kenya is the go-to resource for any practicing lawyer and legal student. The Kenya Law Reports database helps coordinate, inform and harmonize the Kenyan legal practice particularly litigation and judicial affairs.

1.1.2 Business Models

A business model is company road map on how to maximize shareholders wealth (Teece, 2010). An organization offering services or products ought to segment its market and adopt strategy to create competitive advantage and minimize operational costs (Li & Liu, 2014). Business success is dependent on clarity of its financing, operational, marketing and strategic model and the model ought to be customized to dynamic and sporadic business environment.

All organizations goals must consider their operational framework to be aligned to existing or new markets, which they may penetrate for value addition. Ideally, a firm ought to describe its value depending on services and goods demanded by and offered to its clientele (Peteraf, 1993). Law firms are exposed to stringent competition locally and internationally and they must align their service quality to be in line with their peers globally (Rolfsen, 2011). New entrants in local and international markets must documents their financial, operational, human capital, marketing and organization industry culture needs which steer achievement of targeted revenue projections. The major drawback of business models is underestimation of its implantation costs at initial and implementation phases, which may jeopardize its value contribution (Teece, 2010).

Traditional business models include direct sales, advert based, franchises and brick and mortar. One important component that dictates the type of business model adopted are the type of business operations carried out by an organization (Teece, 2010). These have been improved by advancement of information technology that has led to the creation of technology-adopted models (Williams, Platt, & Lee, 2015).

Information Technology Adoption (ITA) implication in an organization is dependent on its power and ability to simulate alternative solutions. Today law firms have massive amounts of data, which would aid in provision of legal services hence the need to incorporate technology in their business model. Even though, these data can be consolidated through technology there is need to evaluate cost implications and level of risk exposure upon subscription to data service providers (Tekoaly, 2018). Consequently, there is need to empirically examine the extent of information technology adoption by law firms in Kenya. How do these technologies affect the choices of their business models?

1.1.3 Law Firms in Nairobi County

Whilst it remains difficult to contrast performance between law firms in the determination of the best order of performance, it is possible to rate them based on the number of cases handled and the possible positive outcome in the critical cases deliberated. The following list notes the top law firms based on their performance and capability to handle several cases at a go without compromising on the service delivery (Law Society of Kenya, 2018). A lawyer is an individual who has undergone legal training and an advocate of high court is a legal graduate with post graduate qualification from Kenya school of law. A law firm in Kenya is a registered business whose composition consists of persons who are dually members of the LSK as well as licenced legal practitioners. The business of law firms in Kenya is regulated by the Advocates Act, which prohibits law firms from carrying out any other professional services other than the practice of law. Law firms are categorised into three; sole proprietorships, partnerships and limited liability partnerships. The target population of this study had the above characteristics.

Notable law firms in Nairobi County Kenya are; Anjarwalla & Khanna Co. Advocates (A&K), Coulson Harney Advocates, Daly & Inamdar Advocates, Hamilton Harrison & Mathews, Iseme, Kamau & Maema Adcovates (IKM), Kaplan &Stratton Advocates, Mohammed Muigai Advocates, Muthaura Mugambi Ayugi & Njonjo Advocates, Oraro & Co Advocates and Prof. Albert Mumma and Company Advocates. The overwhelming majority of the law firms listed above operate in the in the Capital City while others have branches in major cities and towns across the nation. By large, all of them make use of technology in their operations in minimizing time and increasing collaboration in their teamwork in diverse locations.

1.2 Statement of the Problem

Business operations are geared towards maximization of shareholders wealth and profitability. This is not guaranteed due to operational costs which may escalate in absence of adoption of innovative procedures to conduct business. Law firms ought not to lag behind on technological adoption if they wish to reign on competitive advantage associated with it. There is need for organization technological capacity alignment so as to create avenues for competitive advantage to distinguish from competitors. ITA serves as a means towards an end in streamlining of legal service delivery. In increasing efficiency, IT comes in to increase

benefits to the ultimate consumer and user whereby it makes it easier for the lawyers in application and the clients waiting to benefit from the effectiveness of the application (Williams, Platt, & Lee, 2015). In this respect, it requires a combined effort of the technical team and the lawyers who serve as implementers or beneficiaries of the same.

Ambivalent findings on the implication of information technology adoption have been reported. These findings have been acknowledged to methodological, theoretical, conceptual and timely gaps. For example, Murad and Amer (2014) through use of multivariate regression analysis revealed positive effect of information technology on non-governmental performance in Yemen. The study failed methodically due to its failure to tests classical regression assumptions before fitting the model. Ahmad (2014) reported positive effect of information technology on performance of food industries in India. These findings could not be generalized in Kenya since there are different distribution channels of goods and services industries. Seif and Nofan (2016) reported positive contribution of information technology on organization performance and efficiency of accounting departments. This study was carried out in banking sector whose organization culture differs from legal practice. Njuki, Othoth, Mutua and Mwangombe (2013) reported positive effect of information technology on competitive advantage amongst commercial banks in Mombasa. Fitted regression model in absence of diagnostic tests.

Methodologically, several studies have adopted inferential analysis in absence of relevant diagnostic tests (Njuki et al., 2013; Ahmad, 2014; Murad & Amer, 2014). This have increased possibilities of drawing biased findings. Secondly, subjective selection of respondents has increased possibilities of drawing non-randomized data from judgementally selected respondents (Juer, 2016; Agwe, 2018). Conceptually, most studies have narrowed their examination on direct link between IT adoption and business model. This study conceptualized direct and indirect link with business operations. Thirdly, there are contextual differences whereby most studies have examined implication of IT adoption in other sectors such as commercial banks and state corporations whose size and business interest differs with law firms in Nairobi County (Njuki et al., 2013). There are timely changes which have been precipitated by sporadic technological advancement which have eased sharing and dissemination of information. This has ultimately altered business models adopted by

heterogenous organization in anticipation of wealth maximization principle and attainment of competitive advantage. Hence, the current study examines the implication of ITA on business models adopted by law firms in Nairobi County.

1.3 Objectives of the Study

1.3.1 General Objective

The main objective of the study was to establish the implications of information technology adoption on business model in law firms in Nairobi County.

1.3.2 Specific Objective

Specifically, the study was guided by the following objectives:

i. To examine the business models adopted by law firms in Nairobi County.

ii. To establish IT adoption levels in law firms in Nairobi County.

iii. To determine the effect of IT adoption in business operations in law firms in Nairobi County.

iv. To establish the relationship between IT adoption and the business models in law firms in Nairobi County.

1.4 Research Questions

The study sought to answer the following research questions:

i. What are the business models adopted by law firms in Nairobi County?

ii. What are the IT adoption levels by law firms in Nairobi County?

iii. Which effect(s) does IT adoption have on the business operations in law firms in Nairobi County?

iv. What is the relationship between IT and the business models in the law firms in Nairobi County?

1.5 Significance of the Study

Empirical examination on the implication of technology on business models will benefit, law firm management, policy makers and academia. Law firm management may benefit from this empirical evidence since they will understand the implication of information technology adoption on the type of business models adopted. Courtesy of empirical findings, legal practices may be informed on the requisite measures to adopt to gain competitive advantage.

Recommendations from this study may provide insight on policy improvements to enhance performance of law firms especially on evidentiary production in courts. Documented evidence on business intelligence capacity in legal practice will examine preparedness of respective firms to respond to dynamic business needs. Ability and capacity of legal firms to incorporate technology would enhance their strategic posture.

The study may provide empirical and theatrical consistency or inconsistency depending on ITA implication on business models. From these findings, future scholars may customize future empirical studies depending on current findings.

The study may provide amongst information technology practitioners and software developers since they may gather evidence on existing situation on implication of information technology adoption and business models amongst law firms. This may draw insight on specific areas to focus on while developing software which may aid in service delivery in legal fraternity.

1.6 Scope of the Study

The study focused on law firms based in Nairobi County. The main respondents of the study were managers of law firms based in Nairobi County. Law firms in Nairobi County were the best subject since majority of them had not only adopted information but have altered their business models through mergers and partnership with local and international firms.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

In this chapter theoretical framework, empirical review and conceptual framework of the study will be presented. Theoretical framework presents theories anchoring the study, their relevance and strengths will be discussed in relation to the study. Empirical review will support existing nexus between information technology adoption and business models adopted in different sectors. Existing gaps to be bridged by the study will be elaborated. Conceptual framework will present graphical view of the implication of information technology adoption on business models.

2.2 Theoretical Framework

This study will be anchored on technology acceptance model, disruptive innovation theory and dynamic capabilities theories. Technology acceptance model supports the need to incorporate technology to achieve economic growth and development. Disruptive innovation theory argues in favour of technological advancement as tools for achieving superior performance in an organization. Dynamic capabilities support the need for an organization to accumulate resources so as to respond to sporadic business environmental changes.

2.2.1 Diffusion of Innovation Theory

This theory was documented by (Rogers, 2003). The theory supports why technological innovations are developed and the rate at which they spread. Innovations are spread and disseminated through diffusion amongst social circles. Successful implementation of an innovation is achieved through, innovative, adoption of relevant communication channels, have target audiences and must be achieved within given time.

According to Rogers (2003) there is need for incorporation of human capital since its acceptability will be dependent on degree of resistance it faces from organization employees. This will aid in achievement of its core objective in business set up which is sustainability of a specific firm. Coherent, up down and down up communication networks should be developed this would aid enhancing participative decision making within an organization.

Corporations should invest on measures to devise behavioral changes amongst employee since ITA is dependent on degree of risk appetite amongst organization employees.

According to Skinner & Staiger (2005) and Rogers (2003) technology adoption follows normal distribution with five categories, which are innovators, early majority, late majority, early adopter and laggards. This classification was proposed to easily identify unique characteristics of individuals hailing from a given group. This grouping has been purported to support the degree of IT adoption. Choice of IT adoption is amplified by geographical location, political environment, social cultural practices, state of economic development and globalization (Glanz, Rimer & Lerman, 1992). These attributes have joint or individual influence on technology adoption. For example, innovators are perceived to be risk takers, young, financially empowered and high social status. They are credited for incorporating innovations in business operations. Early adopters, the next 13.5% to adopt technology, have adopted high levels of information technology adoption in their business operations. Owing to their social economic empowerment they are perceived to be strategic leaders and innovation adopters (Karahanna, 1999)

The third category constitutes of early majority; they have a high likelihood of adopting information technology as compared to their peers. They are open to new ideas though they adopt them dependent on evidence gathered upon piloting. Socially and financially there are below average. They have longer period of executing technology adoption as compared to innovators and early adopters (Karahanna, 1999). Fourthly, late majority are characterized by risk averseness, which is highly influenced by sentiments from laggards (Glanz, Rimer & Lerman, 1992). Increased networking capacity within their operational circles have high likelihood on IT adoption. Finally, laggards accounts for 16% of IT adopters. They have low affinity to information technology and despise it owing to past individual or collective IT adoption experiences (Katz & Shapiro, 1986).

The theory is applicable for the study because there are differing levels of information technology adoption within an organization. They can be broadly classified into early adopter, early maturity, late maturity and laggards. There is a high likelihood of altering business model upon adoption of information technology.

2.2.2 Technology Acceptance Model

Technology acceptance model (TAM) proposes how technology adoption can be used to amplify economic development and growth (Venkatesh, 2000). The model hypothesis is that prior to technology adoption an institution ought to understand its needs to minimize possibilities of misusing technology capacity (Szajna, 1996).

In the current era of technology and data revolution there is need for alteration of organization culture to incorporate information technology to its operational framework (Li & Liu, 2014). According to Mun (2003), these are the main facets of technology acceptance model; perceived usefulness and perceived ease of use. The former supports application of information technology to enhance employee performance and the latter supports simplification of job performance. The model has been modified to incorporate trust and risk management attributes which can be achieved through knowledge management capacity of specific organization.

TAM success is dependent on external factors, which include social, economic and political factors. Socially, there is need to synchronize language, human computer interface and human capital to operationalize information systems. Politically technology acceptance will be hinged on policies developed and instability of regulatory framework. Prevailing economic conditions will motivate organization to raise finances to support transition from traditional to technological supported business operational procedures. Failure to accept and support technological capacity will hamper incorporation of technology business operational procedures in law firms in Nairobi County.

2.2.3 Disruptive Innovation Theory

The purpose of his theory is to elaborate the role of technological advancement on disruptive business environment (Yu, 2010). Technological investment in an organization is based on its need to retain and attract new customers. Strategically placed corporations are continuously improving their services and products to minimize likelihood of market share cannibalization and locking of new market entrants (Christensen et al, 2015). Successful technological adopters have to forecast future customers demand and respond on time (Hwang, 2008).

Adoption of disruptive innovative strategies to guide their operational procedures. First, they ought to consider how they may deepen their legal services and enhance adoption of heterogeneous legal services to corporate and individual clients. In fact, reliance on customers' feedback would aid in development of customized services, which will break into blue ocean markets and enhance realignment in competitive advantage (Hwang, 2008). Despite of the theory being supportive of business models, there is mismatch on understanding of relevance of disruption on innovation. Technology incorporation may lead to massive resources and benefits anticipated to be achieved through technological development. Healthy adoption of technological based service delivery has enhanced dominance of major corporations on service delivery.

The theory is relevant for the study since law firms ought to incorporate technology to consolidate their business operations through case management, information management, client account management, communication and networking and day-to-day administrative tasks. Through this, firms will optimize of their resources by realignment of their operational procedures, acquired technological assets and select technology based on cost benefit analysis.

2.2.3 Dynamic Capabilities Theory

Dynamic capabilities theory was developed to advance propositions echoed by research-based theory on its support for the role of strategic resources allocation to achieve competitive advantage (Pisano, 1997). Unlike resources-based theory, which is anchored on choices of resources, dynamic capabilities support resources selection and development to respond to business need (McKelvie, 2009). Organization dynamic capacity is anchored on its ability to align its resources to sporadic business environment.

The theory is fit for the study since there is need for legal firms in Nairobi County to devise measures to align themselves strategically to enhance attainment of competitive advantage. Competitive advantage can be achieved courtesy of dynamic capabilities which would enhance capacity of an organization to mould technologically supported operational procedures. This would aid in management of legal documentation and enhance communication and networking during research amongst players of case in a legal firm.

2.3 Empirical Literature Review

This section will discuss past empirical studies depicting business models adopted by organizations, levels of IT adoption by organizations, effect of IT adoption on business operations and the relationship between IT adoption on business model adopted by an organization.

2.3.1 Business Models Adopted by Organizations

Business model concept has become popular because of the arise of ICT (Information and Communication Technologies) and globalization, thus, very often the term 'business model' is associated with ICT, Internet, or e-business. The term "business model" is used by many authors, but not necessarily means the same concept (Li & Liu, 2014). In literature there is not a specific defined concept of business model .

A simple understanding of business model is that it is a representation of how a company buys and sells goods and services and earns money (Teece, 2014). In addition, they described business model as a story that explains how an enterprise works. Although these descriptions of business model seem very simple, they provide the basic idea of what is business model. To be more specific Teece (2010) defined business model as a conceptual tool that contains a set of elements and their relationships and allows expressing a company's logic of earning money. It is a description of the value a company offers to one or several segments of customers and the architecture of the firm and its network of partners for creating, marketing and delivering this value and relationship capital, in order to generate profitable and sustainable revenue streams. Here company's logic of earning money refers to an abstract comprehension of the way a company makes money, in other words, what it offers, to whom it offers this and how it can accomplish this.

According to Shafer (2005), a good business model motivates people and brings in a rich stream of profits. To be more specific, a business model helps the manager to capture, understand, communicate, design, analyze, and change the business logic of the firm (Osterwalder et al, 2005). A formally defined business model has many uses for a firm, including understanding and sharing the business logic, analyzing the business logic, managing the business logic, describing possible future of the firm, and patenting of business model from legal perspective (Li & Liu, 2014), Globalization, technological changes and

decreased levels of information asymmetry have intensified competition (Christensen et al, 2015). This has called for strategic realignment and change of business operational guidelines to avoid likelihood of business extinction. There is no harmonious definition of business model because of emergence of alternative business structures (ABS) which may have customized its definition to legal disciplinary practices (LDPs).

In the legal profession dominant models are partnerships, individual and limited companies all which have heterogeneous delivery capacity. Generally, a business model is an organization's capacity to develop logical framework which will lead to value additions of its economic, social and strategic capacity (Teece, , 2010). Further, a successful business model is characterized by its capacity to identify competitive and strategic advantage; capacity to identify and create interrelationships geared towards promotion of its operational capacity, enhances consistency in allocation and utilization of its resources and has capacity to make explicit and strategic choices that will create competitive advantage of their operations (Teece, 2014).

To achieve optimal benefits from a business model it ought to be characterized by value creation capacity which devise measures for customers, market position and pricing strategies which will not only optimize resources generation capacity but also lead to competitive advantage (Li & Liu, 2014). Secondly, the model ought to identify, allocate and minimize resources spillage either through internal and external strategies. Thirdly, the model should have investment components, which will itemize methodological approach deployed by an organization secure, finance and execute investment opportunities. Finally, a business model should forecast its return capacity the period of investment (Berry, 1994). It should also identify risk opportunities and measures adopted to minimize likelihood of losses.

2.3.2 Information Technology Adoption Levels by Organizations

Information technology adoption is not harmoniously adopted by all, but hierarchical approach is followed. Each level has unique characteristics which can be distinguished amongst firms. Although, law firms can be distinguished according to the time they adopted IT, it may be tedious. Hence, IT adopters are mostly classified as per their innovation level (Dube & Gumbo, 2017).

Recently the business environment has turned to be sporadic and there is no guaranteed competitive advantage in void of incorporating information technology (Vukšić, Bach, & Popovič, 2013). This have been mitigated through adoption of business models which can evaluate performance on real time basis courtesy of dynamic technological development. Even though, there are alternative approaches business intelligence (BI) has dominated recent business innovation and adoptions. Wixom and Watson (2010) argued that successful adoption of BI have significant implication on organization operational procedures, Dinter (2011) argued that mature BI model have significant impact on business strategy adopted by corporations. BI is heterogenous composition of applications which are geared towards gathering, consolidating, managing, analyzing and presenting data as per specific managerial need (Chen, Chiang & Storey, 2012). Courtesy of business intelligence organization effectiveness can be easily noted and any alignment deserved is addressed timely to optimize organization operations. Success of BI is anchored on organization competitive intelligence, human capital and knowledge management capacity.

Technology development has enabled organizations to make programmed and non-programmed decisions through competitive intelligence aided mechanisms. Competitive intelligence aids in speculative, strategic and informed risk management which enhances likelihood of exploiting business opportunities (Yap, Rashid & Sapuan, 2011). Competitive intelligence can be practiced through strategy, tactics, technology and target orientations. Optimal benefits of competitive intelligence can be achieved by corporations through market, organization and cultural alignment. Coherent interrelationship in these facets would not only create competitive advantage but also maximize shareholders wealth (Protiviti, 2011).

Globalization, problem complexity and amplification of business transformation needs have altered organization structures and strategic positioning (Oltra & Vivas-Lopez, 2013). Moreover, the need for firm efficiency and effectiveness through knowledge management criterions have demanded incorporation of knowledge resources gathering and sharing platforms. Knowledge management capability can be perceived as organization capacity to consolidate, knowledge acquisition, conversion, storage and sharing as a tool for sustainable and competitive advantage in sporadic business environment (Kuo, 2011). Successful business model is dependent on organization capacity to synchronize its knowledge management capacity with its business strategic need. Thus, it can be implied that

firm's capacity to identify its knowledge resources should be in line with its operational procedures, business strategy and its customer need.

2.3.3 Effect of Information Technology Adoption and Business Operations of Organizations

Murad and Amer (2014) investigated the effect information technology adoption on employee productivity in non-governmental organizations in Yemen. Specifically, the study explored the effect on information technology infrastructure, information technology infrastructure and information technology knowledge management. Cross sectional research design was applied and convenience sampling used to select 138 respondents who were administered questionnaires. Descriptive statistics, bivariate and multivariate techniques were adopted for data analysis. Strong positive effect of IT infrastructure, IT innovation, IT knowledge management and employee productivity were reported. These findings could not be generalized in Kenyan law firms since NGOs are meant specific objectives as compared to law firms which may be engaged into heterogenous business activities.

Juer (2016) evaluated the effect of information technology adoption on Small and Medium Enterprises performance in South Sudan. Descriptive research design was applied and sample of 40 SMEs were selected. Primary data was collected through use semi structured questionnaires. Quantitative data was analyzed through use univariate, bivariate and multiple linear regression approach. Results of the study revealed positive and strong effect of information technology adoption on SMEs performance. These findings cannot be generalized in Kenya since the two economies are different stages of economic development and exposed to varying levels of political risks.

Attar and Sweis (2016) evaluated the relationship between information technology adoption and job satisfaction amongst contracting companies in Jordan. Descriptive research design was applied and simple random sampling used to select 51 respondents who were issued with questionnaires. Gathered data was analyzed through use descriptive statistics, bivariate and multivariate statistics. Strong positive and significant effect of information technology on job satisfaction was reported. It was concluded that increased adoption of information technology uses reduced time used to perform routine tasks due to automation consequently it amplified employee satisfaction levels. There are different operational

procedures and organization structure adopted by law firms this may alter the demand for use of information technology thus these findings may not be generalized in law firms in Kenya.

Agwe (2018) evaluated the role of information technology on effective management of small and medium enterprises in Nigeria. Cross sectional research design was adopted and questionnaires were distributed amongst 100 managers of SMEs. Univariate, correlation and multiple regression analysis were applied for data analysis. Positive and significant effect of information technology on organization productivity and market share were reported. To amplify adoption of information technology it was recommended on the need to develop information technology E-literacy programme. These findings drew respondents from different SMEs sectors thus they may be true representative of sample gathered purely amongst law firms in Kenya. Also, some law firms may be multinationals as compared to SMEs which are mostly confined to single economic set up.

2.3.4 Relationship between IT Adoption and Business Models in Organizations

Chukwunonso, Omoju, Ikani and Ribadu (2011) investigated the role of management information system on competitive advantage in Nigeria. Cross sectional research design was adopted and primary data gathered through use of questionnaires. Descriptive statistics, correlation and multiple regression analysis were applied for data analysis. It was found that information technology adoption had positive significant effect on innovation which impacted positively on competitive advantage of firms. These findings explored only mediated effect of information technology adoption on competitive advantage. The current study breached the gap through exploration on the effect of ITA on business models adopted by organization.

Ahmad (2014) investigated on the role of information technology in creation of competitive advantage amongst Golestan food companies. Descriptive research design was applied and simple random sampling adopted to select 130 respondents. Univariate, bivariate and structural equation modelling was adopted for data analysis. Results of the study revealed that IT adoption was dependent on organization culture, industry of operations and technological capability. Secondly, IT adoption had significant positive effect on market capabilities and entrepreneurial capabilities. These attributes contributed significant to sustainability of business performance within an organization.

Seif and Nofan (2016) investigated the effect of information communication technology on competitive advantage of Jordanian commercial banks. Cross sectional research design was applied and primary data gathered through use of questionnaires. Descriptive statistics, correlation analysis and structural equation modelling were adopted for data analysis. Adoption of information technology had positive significant effect on competitive advantage of commercial banks and its application on enhanced accounting effectiveness. These findings may not be generalized in law firms since its organization structure and business environment differs from banking institutions.

Ameria, Umar, Moch and Sri (2014) investigated the effect of strategic direction, innovation and information technology adoption on competitive advantage of small and medium enterprises in food and beverage sector of Bandug Raya. Cross sectional research design was adopted and primary data collected through use of questionnaires. Univariate, bivariate and multiple regression analysis were applied to analyze the data. Positive and significant effect on information technology on competitive advantage of food and beverage companies was reported. These findings may fail to reflect actual implication in law firms since chain of distribution in food and beverage sector differs with legal practice.

Njuki, et al., (2013) investigated the effect of information technology adoption on service innovation and competitive advantage of commercial banks in Kenya. Cross sectional research design was adopted and primary data collected through issue of semi structured questionnaires. Descriptive statistics, correlation analysis and multiple linear regression were applied to analyze the data. It was reported that information technology adoption had significant positive effect on service orientation and competitive advantage of commercial banks in Kenya. Kenyan banking sector is faced by different industry risk exposure as compared to law firms. This study failed methodical due to its failure to report on diagnostic tests prior to fitting regression models. This may have amplified possibilities of drawing biased findings and fitting of spurious model.

2.4 Research Gaps

The likelihood of an organization surviving is anchored on its strategic choices in globally competitive and sporadic business environment. Technological development and its incorporation into business ventures has altered business models and created alternative competitive grounds. Currently, technological threats, strengths, opportunities and weakness

may create market competitive or cannibalize existing market share owing to strengths and opportunities exploitation or threats and weakness business suppression. Organizations which are quick to incorporate technology in their businesses are better placed in discovery of blue ocean market. This would fast reshape their business strategy and harmonize internal changes with dynamic business environments (Giarrantana & Torrisi, 2010; Centobelli, Curchione & Esposito, 2018).

There is contextual difference since most studies have been documented in banking and bigger corporations. These findings cannot be generalized in law firms owing to their differences in business operations which may impact demand of technologically supported service provision. Further, the nature of their operations differs and it may be relied on nature of products and service provision as well as degree and extent of risk exposure.

There are geographical variations on existing documented evidence which may be attributed to differing levels of economic and technological development. This have joint or individual influence on demand for information technological adoption in different sectors. There are global, regional and local difference on policy and degree of information technology adoption which may influence IT adoption may different sectors and law firms in the aforementioned sectors.

There are timely gaps which emanates from changes in technological development which have enabled corporate to adopt IT in their practices. Initially, it was not possible to practice law virtually, IT has supported while globalization have accelerated it. Locally, there are several efforts undertaken by government and telecommunication companies have supported interlinking of organization operations which are geared towards efficient service delivery. This may have influenced adoption of alternative information technology which have impacted business models.

2.5 Conceptual Framework

Conceptual framework is a schematic representation of the relationship between independent and dependent variables Kothari, 2011). In this study there is a hypothesis that information technology adoption has influenced business model of law firms in Nairobi County. Information technology adoption will be operationalized as early adopters, early maturity, later maturity and laggards. The level of IT adoption will affect operations of law

firm operations through its activities such as case management, information management, client account management, communication and networking and the day-to-day administrative tasks and this will ultimately affect the choice of business model. Also, information technology adoption will have direct effect on business model. The dependent variable will be business model operationalized such as market and customer share, business strategy, perceived benefits and service life cycle within a firm. Figure 2.1 depicts the conceptualized direct and indirect relationship between Information technology adoption and business model.

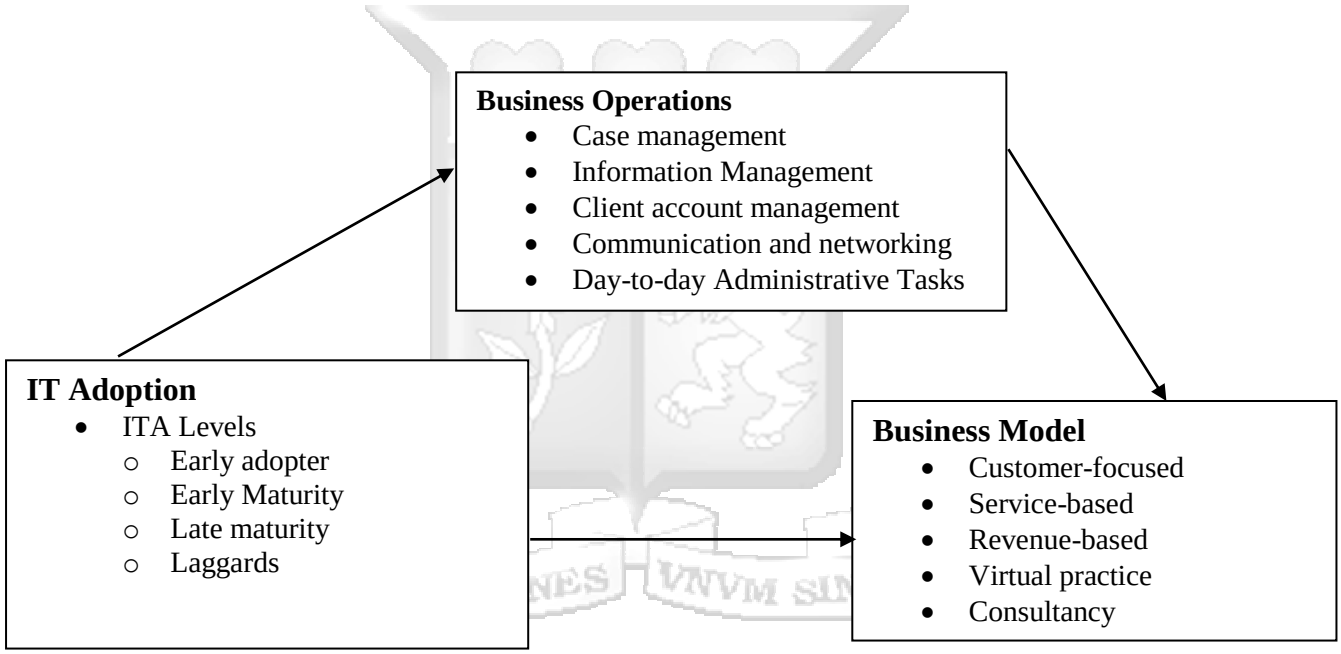


Figure 2.1 Information Technology Adoption and Business Model Conceptual Framework

Table 2.1 Operationization of Variables

Objectives	Research Questions	Indicators	Analysis	Testing
To review the business models adopted by law firms in Kenya	What are the business models adopted by law firms in Kenya?	• Customer focused • Service based • Revenue based • Virtual practice • Consultancy	Descriptive Statistics	
To analyse the IT adoption levels by law firms in Kenya	What are the IT adoption levels by law firms in Kenya?	• Early adopters • Early maturity • Late maturity • Laggards	Descriptive statistics	
To determine the effect of IT adoption on the business operations in the law firms in Kenya	Which effect(s) does IT adoption have on the business operations in the law firms in Kenya?	• Case management • Information Management • Client account management • Communication and networking • Day-to-day Administrative Tasks	Descriptive statistics and Inferential statistics	If P value will be less than 0.05 then ITA will have significant effect on operations of law firms in Kenya
To establish the relationship between IT adoption and the business models adopted by a law firm in Kenya	What is the relationship between IT and the business models adopted by a law firm in Kenya?	• IT adoption • Business operations • Business model	Descriptive statistics and Inferential statistics	If P value will be less than 0.05 then ITA will have significant effect on business models of law firms in Kenya

2.6 Summary of the Literature

This chapter have discussed theoretical and empirical foundations of the current study. The study was based on diffusion innovation theory, technology acceptance model and disruptive innovation theory. Empirical review was carried out in line with study objective and existing gaps identified. The forthcoming section will discuss research methodology adhered to in the study.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This section present research methodology that was adopted in the study. Research methodology is discussed on research design, target population, sampling frame, sample and sampling technique, data collections instruments, data collection procedures and data analysis and presentations.

3.2 Research Design

Research design is a schematic framework detailing how research study was executed as guided by research objectives (Saunders, Thornhill & Lewis, 2014). The choice of research design is anchored on research problem, ethical compliance, motivation of the study and research endowment (Sekaran & Bougie, 2013).

This study was based on descriptive research design. According to Saunders et al., (2014) descriptive research design seeks to explain implication of changes adopted prior to execution of current study. The key issues to be addressed by descriptive research design are what the state of technology adoption by law firms is, how technology adoption implicates operations and business models adopted by law firms.

The design was appropriate for the study since research demonstrated the state of ITA and business models adopted by law firms in Kenya. ITA was expected to alter operations amongst laws firms in Nairobi County and change their respective business model.

3.3 Population of the Study

Target population refers to complete collection of individuals or objects with homogeneous characteristics under investigation Cooper & Schindler, 2014). The target population constituted approximately 3000 law firms in Nairobi County (Law Society of Kenya, 2018). This was in line with Saunders, et al., (2014) who argued that target population should be constituted of individuals that have unique characteristics under examination.

Kothari (2011) cemented it by arguing that target population mainly constitutes individual, social groupings and elements who are studied to draw conclusions on subjects under examination. The target population of the study were managing partners of law firms in Nairobi County. They were identified due to their role in decision making in the implementation of information technology.

3.4 Sample and Sampling Technique

Research execution is limited by optimal resources and time; hence it is not possible to draw respondents from the whole set of sampling frame (Sekaran & Bougie, 2013). Consequently, a subset of sampling frame is drawn as true representative of target population (Saunders et al., 2014). Selection of respondents can be either probabilistic or non-probabilistic (Cooper & Schnindler, 2014). Probabilistic approaches equal likelihood to all respondents while non-probabilistic have inclusion and exclusion procedures (Saunders et al., 2014).

Simple random sampling was used to select respondents. Out of 3000 law firms operating in Nairobi County, a sample of 97 was considered in the study. This was estimated using sampling estimating formula (Yamane, 1968) since the sampling frame was finite.

$$n = {}^{N}/_{1 + N_{e^2}}$$

Where, n=sample size, N= population size, e= the error of sampling. This formula was used to calculate the sample size.

Thus n= 3000/1+ $3000_{(0.10)^2}$ = 97.

3.5 Data Collection Instruments

Primary data was used to achieve study objective. Structured questionnaires will be used to collect primary data. Sekaran and Bougie (2013) argued in favour of using questionnaires due to their ease in distribution and flexibility of measures used. Also, targeted respondents can respond to questionnaires on their own since they have clear instruction on how each segment is responded to. Cooper and Schnidler (2014) argued that questionnaires creates convenience for respondent and the researcher, thus maximize capacity to gather

requisite information. Further, it is reliable for researchers constrained by time and budgetary allocations. Data was collected with assistance from research assistants who were trained on procedure to be adhered to during data collection.

3.6 Research Quality

Reliability of the questionnaire was tested using Cronbach Alpha. According to Sekaran and Bougie (2013) Cronbach Alpha coefficient ranges between 0 to 1 and the higher its coefficient the more reliable a research instrument is, they purported that a coefficient greater than or equal to 0.7 shows that the research instrument is reliable. Research instrument was valid since IT adoption levels had Cronbach coefficient of 0.821, IT adoption effect on business operations had 0.782 and IT adoption on business models had 0.789.

According to Cooper and Schnidler (2014) validity is premised on the assumption that what is being studied can be measured and captured. It is the degree to which a research instrument is able to measure what was intended to measure. In this study, content, face and discriminant validity were tested. Content validity was tested through intensive enquiry from managers hailing from law firms in Kiambu County. In addition, the supervisor's and statistician's input were considered in improving research instrument.

Face validity refers to the extent to which the measured variable appears to be an adequate measure of the conceptual variable scales to measure the variables where derived from existing literature with a few modifications done.

3.7 Data Analysis

Data analysis involves data manipulation to facilitate computation of data (Sekaran & Bougie, 2013). In this study, data was obtained from the questionnaires were adequately checked for correctness and thereafter was edited, coded and analyzed qualitatively and quantitatively using descriptive and inferential statistics by use of Statistical Package for Social Sciences [SPSS] version 22.0. Quantitative data was presented in tables showing frequencies, means, and standard deviation while qualitative data was analyzed on the basis of the contents of responses.

Inferential statistics including correlation and regression analyses were adopted in the study to examine the implication of technology on business models by law firms in Nairobi

County. Pearson correlation showed the strength of the implication of technology on business models in law firms in Nairobi County. Regression analysis was used to examine direct relationship between information technology adoption, business operations and business model by law firms in Nairobi County.

$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$……..……...Equation 3.1

Y= Business Model; α = constant; $\beta_1 \ldots \beta_3$= the slope; x_1= IT adoption; x_2= Operations; and

ε = error term

Classical regression model was based on linearity, normality, heteroskedasticty, multicollinearity and serial correlation.

Linearity Test

Classical modelling assumes that there is linear relationship between independent and dependent variables. To examine linearity scatter plot between each independent and dependent variable was drawn.

Normality Test

Normality of study variables can be examined through graphical or statistical approach. Dominant statistical normality tests are Kolmogorov-Smirnov test, Jarque Berra test amongst others. They assume that the data is normally distributed against an alternative that it's not normally distributed. If p value is less than 0.05 then data is not normally distributed and requisite transformation should be carried out prior to classical modelling. Graphical approaches include box plots, stem and leaf, PP plots, QQ plots and histograms. In this study histogram was adopted to test for normality.

Multicollinearity

Multicollinearity is associated with high correlation between independent variables. To test this assumption, this study uses Variance Inflation Factor (VIF) values to determine whether there is multicollinearity. In addition, tolerance limits were used to test for multicollinearity. According to Baltagi (2005), if VIF is greater than 10 then there is multicollinearity and if tolerance limits is less than 0.1 then there is multicollinearity.

3.8 Ethical Considerations

Research introductory letter was obtained from Strathmore university school of post graduate studies and it was used to seek research permit from National Commission for Science Technology and Innovation (NACOSTI). Further, recruitment and training of research assistant was executed. Questionnaires was either be self-administered or drop and pick method was adopted to ensure maximum efficiency and response rate. Questionnaires were administered to managers of law firms and advocates based in Nairobi County. The strength of selecting this group of respondents is pegged on their active involvement in technology implementation and adoption in their respective law's firms. To ease data collection exercise the respondents were notified through human resources department on the intention of executing the study in their organization.

The researcher solicited for consent of the participants to undertake the exercise. The participants were made aware of their rights and liberties relating to their participation in the study. Necessary consent form was signed before the research. This was done in order to conform to the principle of voluntary consent (Saunders et al., 2014) by letting respondents to willingly participate in the research. While undertaking this study, the researcher guarded against violating non-disclosure agreements, breaking respondent confidentiality, misrepresenting results and deceiving people. Identity of respondents were guarded and their real names were not used. Information and data confidentiality were upheld throughout the study period.

Finally, the researcher as far as possible respected the intellectual property by avoiding plagiarism (Kothari, 2011). That means that all materials which were used or referred to in this work was acknowledged accordingly. For credibility, materials from the different books, journal articles, magazines, theses and dissertations were cited properly and direct quotes from the interviews were acknowledged. The researcher was responsible for publishing an authentic report and any errors or omissions are upon herself.

CHAPTER FOUR: FINDINGS AND DISCUSSION

4.1 Introduction

In this chapter data analysis, interpretation and discussion of findings will be presented. Study findings will be presented commencing with response rate, descriptive statistics as per research objectives and inferential statistics; correlation and regression analysis. Descriptive statistics adopted was mean, standard deviation, frequency and percentage.

4.2 Response Rate

As shown in Table 4.1, the response rate was 86.6 percent, which comprised of questionnaires which were completely filled and returned. The remaining percentage were either not returned or incorrectly filled. This response rate was excellent since it is more than 80 percent which have been described as excellent in social sciences. Although, the main managing partners were anticipated to be the main respondents. The situation was altered to accommodate senior advocates and advocates who were working in the respective firms which were selected. This was owing to the nature of their work which required some managing partners to be away during the period of data collection.

Table 4.1 Response Rate

	Frequency	**Percent**
Returned and correctly filled questionnaires	84	86.6
Non-returned or not correctly questionnaires	13	13.4
Total	**97**	**100.0%**

4.3 Background Information

The study sought background information amongst respondents. Specifically, the study sought gender, age, highest level of education, department and position. As shown in Table 4.2, 57.1 percent were male and 42.9 percent were female. This shows majority of those practicing law in Nairobi are male. Regarding respondents age majority, 42.9 percent aged between 30 to 39 years, followed by 23.8 percent who aged between 20 to 29 years and

19 percent aged 40 to 50 years. It was important to note that the least number of those practicing law aged above 51 years (14.3 percent).

Concerning highest level of education attained by respondent's majority 57.1 percent were post graduate diploma graduates, followed by 33.3 percent with master's qualifications and 9.5 percent who were doctorate graduates. This shows that modal education qualification is postgraduate qualification which is the minimum requirements for admission as high court advocate. Further, most lawyers were practicing as commercial litigants and conveyance, 42.8 percent, followed by 28 percent where were in general legal practice and compliance, 19 percent of respondents served as ICT experts in their respective firms which depicts adoption of information technology in their business operations. Regarding position held by respondents in their respective firm's majority 60 percent reported that they were advocate, followed by 9.5 percent who were legal counsels and 4.8 percent who were associate, lead advocate, legal counsel and senior advocate.

Table 4.2 Background Information

Gender	**Frequency**	**Percent**
Male	48	57.1
Female	36	42.9
Total	**84**	**100**
Age	**Frequency**	**Percent**
20 – 29 years	20	23.8
30 –39 years	36	42.9
40 – 50 years	16	19
51 years and above	12	14.3
Total	**84**	**100**
Highest level of education	**Frequency**	**Percent**
Post graduate diploma	48	57.1
Master Degree	28	33.3
Doctorate	8	9.5
Total	**84**	**100**
Department	**Frequency**	**Percent**
Commercial Litigation & Conveyance	36	42.8
Corporate Secretary	4	4.8
ICT	16	19
Intellectual Property	4	4.8
Legal Practice and Compliance	24	28.6
Total	**84**	**100**
Position	**Frequency**	**Percent**
Advocate	60	71.4
Associate	4	4.8
Lead advocate	4	4.8
Lead Associate	4	4.8
legal counsel	8	9.5
Senior Advocate	4	4.8
Total	**84**	**100**

4.4 Business Models Adopted by Law Firms in Nairobi County

The first objective of the study examined types of business models adopted by law firms in Nairobi County. To achieve, the respondents were requested to indicate dominant form of business model in their respective firms, what guides them in selection of business model and elements of their respective business model.

4.4.1 Forms of Business Models on Law Firms in Nairobi County

As shown in Table 4.3, forms business models adopted by law firms in Nairobi County were customer focused model and service-based model which were reported by all respondents. This was followed 90.5 percent who practiced as management consultants and 81 percent who adopted revenue-based model. The least common business model was virtual practice at 47.6 percent, this clearly depicts heterogeneity in adoption of information technology across law firms in Kenya.

Table 4.3 Forms of Business Models on Law Firms in Nairobi County

	Frequency	Percent
Customer focused model	84	100
Service Based model	84	100
Revenue Based model	68	81
Virtual Practice	40	47.6
Management Consultancy	76	90.5

4.4.2 Guides of Law Firms Business Models in Nairobi County

As shown in Table 4.4, 100 percent reported that their product development is guided by their line of business, product development, service life cycle and feedback from clients respectively. This was followed by 95.2 percent who reported that their business models were guided by revenue logic, market penetration strategy and service implementation respectively. Further, 90.5 percent reported that their business models were guided by either sales strategy or perceived reception by clients. It was important to note that 57.1 percent of respondents reported that their business was guided by alignment with technological advancements.

Table 4.4 Guides of Law Firms Business Models in Nairobi County

	Frequency	Percentage
Product development	84	100
Line of business	84	100
Revenue logic	80	95.2
Market penetration strategy	80	95.2
Sales strategy	76	90.5
Service life cycle	84	100
Service implementation choice	80	95.2
Perceived reception by clients	76	90.5
Feedback from clients	84	100
Alignment to technological changes	48	57.1

4.5 Information Technology Adoption by Law Firms in Nairobi County

The second objective of the study examined IT adoption levels by law firms in Nairobi County. To achieve the same, respondents were requested to indicate their levels of agreement on five-point Likert scale on how they observed several attributes of early adopters, early maturity, late maturity and laggards in their respective legal practice.

4.5.1 Early Adopter of Information Technology Adoption in Law Firms in Nairobi County

Results in Table 4.5 revealed that on overall majority neither agreed nor disagreed that they were early adopters of information technology as accounted by mean of 3.4 and standard deviation of 1.2. Majority agreed, mean =3.7 that they believe that their firm resistance to innovation is entirely irrational or their firm have no fear for high-tech a little bit. Further, majority neither agreed nor disagreed that their firm is always the first to incorporate information technology supporting legal operations or their firm is never a suspicious agent to change (mean =3.2). Moreover, majority, mean = 3.4 neither agreed nor disagreed that no new IT adoption fails after its incorporation in their firms, their decision making is relatively short and their approach to innovation is less skeptical and cautious air respectively. This shows that most law firms are not early adopters of information technology in Kenya.

Table 4.5 Early Adopter of Information Technology Adoption in Law Firms in Nairobi County

	Mean	Std. Deviation
Our firm is always the first to incorporate information technology supporting legal operations	3.2	1.2
Our firm is never suspicious agent of change	3.2	1.3
Our firm is certain that no new IT that fails after we adopt	3.4	1.0
Our firm believes that resistance to innovation is entirely irrational	3.7	1.1
Our firm decision-making process is relatively short	3.4	1.3
We approach innovation in less skeptical and cautious air	3.4	1.0
Our firm never fear high-tech a little bit	3.7	1.2
Overall average	**3.4**	**1.2**

4.5.2 Early Maturity of Information Technology Adoption in Law Firms in Nairobi County Kenya

Also, the study examined the state of early maturity of IT adoption amongst law firms in Nairobi County. As shown in Table 4.6, on overall majority neither agreed nor disagreed that their firms state of IT adoption depicted features of early maturity (mean = 3.4, standard deviation = 1.2). Majority mean = 3.9, agreed that their firm was certain that new IT that they adopt were stable. They too agreed that their resistance to innovation was meant to seek feedback from end users (mean = 3.6) and their decision-making process agree with their needs (mean = 3.5). In contrast, majority neither agreed nor disagreed that their firm is exposed to steep competition due to IT adoption (mean = 2.7) and they have no competitive advantage even after adoption of IT (mean = 3.4).

Table 4.6 Early Maturity of IT Adoption in Law Firms in Nairobi County

	Mean	Std. Deviation
Our firm is exposed to steep competition due to IT adoption	2.7	1.2
Our firms have no competitive advantage even after adoption IT.	3.4	1.2
Our firm is certain that new IT that we adopt are stable	3.9	1.0
Our firm believes that resistance to innovation is meant to seek feedback from users	3.6	1.3
Our firm decision-making process agrees with our needs	3.5	1.1
Overall average	**3.4**	**1.2**

4.5.3 Late Maturity of Information Technology Adoption in Law Firms in Nairobi County

Regarding late maturity level of IT adoption amongst law firms in Nairobi majority neither agreed nor disagreed (mean = 3.2) on this state of IT adoption. It was agreed that most IT firms do not like the variety of trying new IT applications (mean = 3.5). There was no agreement nor disagreement that they firms tries IT applications after others have (mean = 3.1), their firms have preference on tried and tested IT applications (mean = 3.0), their firms do not like being able to tell others about new IT applications they have tried (mean = 2.8), they are more comfortable to use IT applications which they are comfortable with (mean =3.4) and their firms wait until they hear about others' experiences before they try new IT applications (mean = 3.2).

Table 4.7 Late Maturity of Information Technology Adoption in Law Firms in Nairobi County

	Mean	Std. Deviation
Our firm usually try new IT applications after others do	3.1	1.2
Our firm prefer my tried and trusted IT applications	3.0	1.1
Our firm do not like being able to tell others about new IT applications I have tried	2.8	1.3
Our firm do not like the variety of trying new IT applications	3.5	1.2
Feel more comfortable using familiar IT applications	3.4	1.2
Our firm wait until I hear about others' experiences before I try new IT applications	3.2	1.3
Overall average	**3.2**	**1.2**

4.5.4 Laggards Maturity of Information Technology Adoption in Law Firms in Nairobi County

Results shown in Table 4.8 revealed that majority of respondents agreed that their firms believes that resistance to innovations is entirely rational (mean =3.5). Secondly, majority mean = 3.4 neither agreed nor disagreed that their firms is certain that now new IT that firms fails before they adopt and their decision-making process is relatively long, their firm often fear high-tech a little bit respectively. Further, majority neither agreed nor disagreed that either their firm is always the last to incorporate information technology supporting legal operations or they approach innovation with skeptical and cautions air (mean

=3.2). Majority, neither agreed nor disagreed their firm is suspicious agent of change (mean = 3.1), their firm is stubborn in resistance to buying new IT products (mean = 2.9) and they prefer to incorporate IT when it's extremely mature and prices are cheaper (mean = 2.8).

Table 4.8 Laggards Maturity of Information Technology Adoption in Law Firms in Nairobi County

	Mean	Std. Deviation
Our firm is always the last to incorporate information technology supporting legal operations	3.2	1.4
Our firm is suspicious agent of change	3.1	1.4
Our firm is certain that no new IT that fails before we adopt	3.4	1.1
Our firm believes that resistance to innovation is entirely rational	3.5	1.3
Our firm decision-making process is relatively long	3.4	1.4
We approach innovation with skeptical and cautious air	3.2	1.3
Our firm often fear high-tech a little bit	3.4	1.4
Our firm is stubborn in resistance to buying new IT products	2.9	1.3
We prefer to incorporate IT when it's extremely mature and prices are cheaper	2.8	1.1
Overall average	**3.2**	**1.3**

4.6 Effect of Information Technology Adoption on the Business Operations in Law Firms in Nairobi County

The third objective of the study examined the effect of IT adoption on the business operations in law firms in Nairobi County. Results in Table 4.9, revealed that IT adoption had effect on business operations of law firms in Kenya (mean = 4.1, standard deviation = 1.0). Majority agreed (mean = 4.4) agreed that ITA have enhanced management of my time, ITA have eased findings on client's information and ITA has enabled our firm to keep track of our client's records. Secondly, majority agreed that IT adoption have increased efficiency of their daily work (mean = 4.0), ITA has eased interaction with our firm documentation (mean =4.1) and ITA has improved their client support (mean = 4.1). Further, majority agreed (mean = 4.3) either that ITA has eased communication and sharing information amongst different stakeholders and it aids in our organization decision making. Moreover, majority agreed

(mean = 4.2) IT adoption has enhanced reliability of our research and it have a way of controlling revenue spillage. Finally, it was agreed (mean = 3.8) that ITA enhance on alignment with international law practices.

Table 4.9 Effect of IT Adoption on the Business Operations in Law Firms in Kenya

	Mean	Std. Deviation
ITA has increased efficiency of my daily work	4.0	1.2
ITA has enabled our firm to keep track of our client records	4.4	0.9
ITA has enhanced management of my time	4.4	0.8
ITA have eased findings on client's information	4.4	0.7
ITA has eased interaction with our firm documentation	4.1	1.1
ITA has eased communication and sharing information amongst different stakeholders	4.3	1.0
ITA has provided clients confidentiality	3.6	1.3
ITA has enhanced reliability of our research	4.2	1.1
ITA has promoted safety of our documentation	3.5	1.4
ITA has improved our client support	4.1	1.1
ITA aids in our organization decision making	4.3	0.9
ITA aids in controlling revenue spillage	4.2	1.1
ITA enhance on alignment with international law practices	3.8	1.1
Overall average	**4.1**	**1.0**

4.7 Relationship between IT Adoption and the Business Models in the Law Firms in Kenya

The fourth objective of the study examined the relationship between IT adoption and the business models in the law firms in Nairobi County. The respondents were requested to indicate their level of agreement on a five-point Likert ranging from strongly agree to strongly disagreed. As shown in Table 4.10, majority agreed that there was relationship between IT adoption and business models in the law firms in Kenya (mean = 4.0, standard deviation = 1.1). Majority agreed (mean = 4.4) agreed that their business model address critical issues of our clients' needs. Secondly, agreed (mean = 4.0) that their business model influenced buying decisions of our clients, its anchored-on prospects of addressing current and future clients' needs, has capacity and capability to address clients' needs optimally and business model provokes clients to seek alternative services in their firms. Moreover, majority (mean = 4.2) agreed that their model have optimized resources allocation to the lowest cost providers. Finally, majority neither agreed nor disagreed that their business

models have created value proposition and unfair advantage to their competitors (mean = 3.4).

Table 4.10 Relationship between IT Adoption and the Business Models in the Law Firms in Nairobi County

	Mean	Std. Deviation
Our business model address critical issues of our clients' needs	4.4	0.8
Our business model has influenced buying decisions of our clients	4.0	1.0
Our business model is anchored on prospects of addressing current and future clients' needs	4.0	1.1
Our business model has capacity and capability to address clients' needs optimally	4.0	1.1
Our business model is open to prospective ways of addressing client needs	3.9	1.3
Our business model provokes clients to seek alternative services in our firm	4.0	1.1
Our business model has created value proposition and unfair advantage to our competitors	3.4	1.4
Our model has optimized our resources allocation strategy to be the lowest cost service provider	4.2	0.9
Overall average	**4.0**	**1.1**

4.8 Correlation Analysis

Pearson correlation coefficient was adopted to show the strength of the relationship between IT adoption and business models of law firms in Nairobi County. As shown in Table 4.11, there was positive and significant relationship between IT adoption and business model (rho = 0.791, p value <0.05). Secondly, there was positive and significant relationship between business model and business operations (rho = 0.792, p value <0.05). Thirdly, IT adoption had positive and significant relationship with business operations of law firms in Nairobi County (rho = 0.779, p value <0.05).

Table 4.11 Correlation Analysis

		Business Model	IT Adoption	Business Operations
Business Model	Pearson Correlation	1		
IT Adoption	Pearson Correlation	.791**	1	
	Sig. (2-tailed)	0.000		
	N	84	84	84
Business Operations	Pearson Correlation	.792**	.779**	1
	Sig. (2-tailed)	0.000	0.000	
	N	84	84	84

** Correlation is significant at the 0.01 level (2-tailed).

4.9 Regression Analysis

Ordinary least square model was adopted to examine the relationship between IT adoption, business operations and business models of law firms in Nairobi County. Prior to fitting regression model, classical regression assumptions on normality, linearity, autocorrelation, multicollinearity and heteroskedasticty were carried out as shown below.

4.9.1 Regression Diagnostic Tests

Normality

The data was normally distributed since the error term for model had mean of zero and standard deviation 1 as per pictorial presentation shown in figure 4.1.

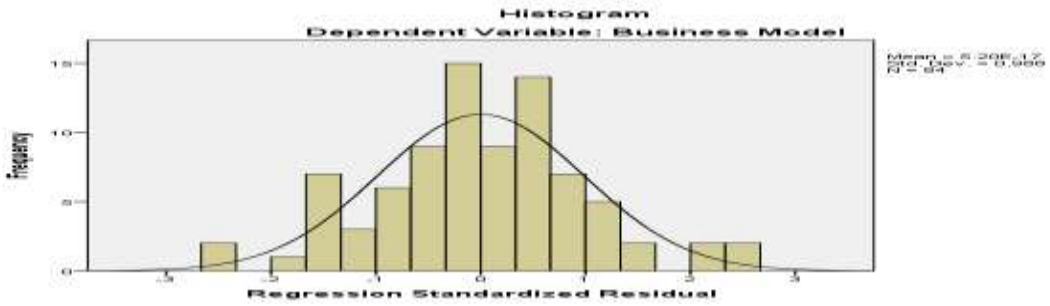


Figure 4.1 Normality

Linearity

Linearity was tested using scatter revealed that IT adoption had positive relationship with business model. Secondly, there was positive relationship between business operations and business model as shown in Figure 4.2.

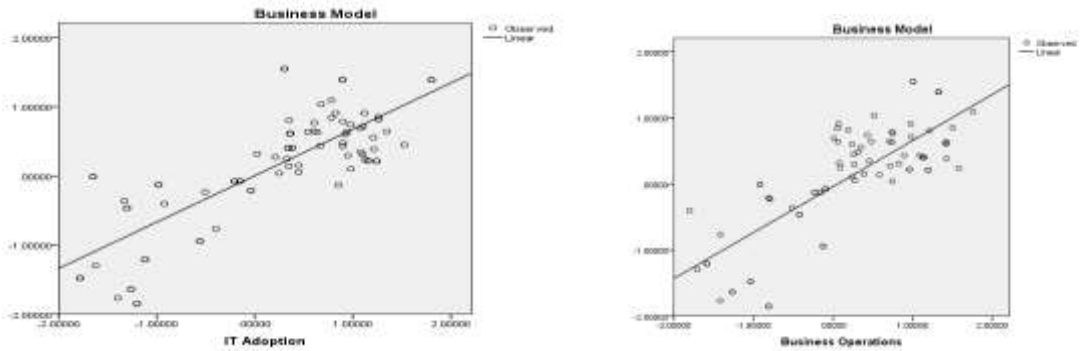


Figure 4.2 Linearity

Multicollinearity

Multicollinearity was tested using tolerance limits and variance inflation factors. As shown in Table 4.12, there was no multicollinearity between IT adoption and business operations since none of VIF was greater than 10 or tolerance limits was less than 0.393.

Table 4.12 Multicollinearity

	Collinearity Statistics	
	Tolerance	**VIF**
IT Adoption	0.393	2.542
Business Operations	0.393	2.542

4.9.2 Model Summary for the Relationship between Information Technology Adoption and Business Model in Law Firms in Nairobi County

Regression model summary in Table 4.13 had an R squared of 0.704, that revealed that 70.4 percent of business model in law firms in Kenya is accounted for by business operations and IT Adoption while the remaining percentage can be accounted for by other attributes which are excluded in the model.

Table 4.13 Model Summary for the Relationship between Information Technology Adoption and Business Model in Law Firms in Nairobi County

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.839a	0.704	0.697	0.445615

a Predictors: (Constant), Business Operations, IT Adoption
b Dependent Variable: Business Model

4.9.3 ANOVA for the Relationship between Information Technology Adoption and Business Model in Law Firms in Nairobi County

Analysis of variance results in Table 4.14 revealed that there was significant relationship between IT adoption and business model in law firms in Kenya (F = 96.343, p value <0.05). This shows at least of the slope coefficients is not zero.

Table 4.14 ANOVA for the Relationship between Information Technology Adoption and Business Model in Law Firms in Nairobi County

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	38.262	2	19.131	96.343	.000b
	Residual	16.084	81	0.199		
	Total	**54.346**	**83**			

a Dependent Variable: Business Model
b Predictors: (Constant), Business Operations, IT Adoption

4.9.4 Regression Coefficients on the Relationship between Information Technology Adoption and Business Model in Law Firms in Kenya

Regression coefficients results in Table 4.15 shows the nature of the relationship between IT adoption, business operations and business models of law firms in Kenya. It was found that there was positive and significant relationship between IT adoption and business model in law firms in Kenya (β =0.38, p value <0.05). This shows that unit increase in IT adoption increases business model by 0.38 units while holding business operations constant. Secondly, there was positive and significant relationship between business operations and business model in law firms in Kenya (β =0.39, p value <0.05). This shows that unit increase in business operations increases business model by 0.39 units while holding constant IT adoption.

Table 4.15 Regression Coefficients on the Relationship between ITA Adoption and Business Model in Law Firms in Kenya

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-0.04	0.05		-0.74	0.46
	IT Adoption	0.38	0.08	0.44	4.60	0.00
	Business Operations	0.39	0.09	0.45	4.63	0.00

a Dependent Variable: Business Model

CHAPTER FIVE: DISCUSSION CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes major findings, conclusion and recommendations emanating from the study. This study mainly examined the implication of IT adoption on business models in law firms in Nairobi County. Specifically, it examined the types of business models adopted by law firms, levels of IT adoption by law firms, effect of IT adoption on business operations and the relationship between IT adoption and business model.

5.2 Discussion

The study stemmed forth from theoretical, empirical, methodological, timely and contextual gaps. Empirically, there have been no consensus on implication of IT adoption in business model owing to sporadic business environments. Different studies had adopted alternative data analysis procedures, gathered data through use of descriptive statistics only and some had gathered qualitative and quantitative data. There are changes in the business models, which has been necessitated by technological advancement and globalization. They have implications on business models adopted by different enterprises. It is against this backdrop that the current study was adopted to establish the implications of IT adoption on business model of law firms in Nairobi County. Descriptive research design was adopted and simple random sampling applied to select 97 law firms from Nairobi County. Descriptive and inferential statistics were adopted to analyze the data.

5.2.1 Types of Business Models Adopted by Law Firms in Kenya

The first objective examined types of business models adopted by law firms in Nairobi County. It was found that dominant business models were customer focused and service-based models, which were common amongst all firms. This was followed by those who practised as management consultants and the least dominant model was virtual practice. It was reported that the choice of business model was based on client's feedback, product development and service development cycle. Further, it was found that most firms were not relying on scientific research to develop new products and services.

From the literature, there are several business models that can be adopted by business to propagate and grow to their vision while accomplishing their mission. Among the law firms that responded do practice fully customer focused model and service-based model. Besides, majority firms were also using management consultants combined with revenue-based model. This is true for many firms even in other industries that practice heterogeneity on IT adoption (Bigda, 2018). Various academics advised that the adoption of a good business model is based on the ability to identify, allocate and minimizes firms' resources losses by developing strategies that will enable it succeed (Cohn & Hull, 2009).

Adoption of the different business model can be attributed to the line of business, product development, service life cycle and feedback from clients to a large extent. According to Hussyin's (2019) article on selection of profitable business model, documents that when at the market place ensure whatever you offer is cool, new and unique to attract enough attention from the target clients else regardless of how innovative or big the idea is, it will quickly fade away. This is strange and according to Zwilling (2015) who advises that elegant solution to the business should be matched with elegant business model that contains right price, messaging and translated through the appropriate channel to the right customers. This would only be possible if the feedback from customer are taken into consideration. In contrast the study recorded that adoption of the business model is least guided by the alignment to the technological changes as depicted by the studied law firms in Nairobi.

Interestingly, most participating firms service and product development are driven by client feedback This means that clients' feedback is seriously considered in such firms. Rammandala (2016) in an exploration of the importance of scientific research to the present-day managers found that for a properly designed strategy it must put into consideration critical information received from the clients and thus this research was necessary.

5.2.2 Information Technology Adoption Levels by Law Firms in Kenya

The second objective of the study examined levels of IT adoption amongst law firms in Nairobi County. It was found that there was no agreement or disagreement on whether level of IT adoption amongst law firms in Kenya can be classified as early adopters, early maturity, late maturity and laggards since their average scores were less than four. Based on four IT adoption levels (early adopters, early maturity, late maturity and laggards), it was easy to note that most firms fall under the early maturity level. Young (2011) observed

that then duration of executing technology adoption is longer for early adopter and thus have time experimenting on several things. This was true even when adopters are grouped as per the innovation level in the case studied by Dube and Gumbo (2017). The degree into IT adoption is seen to heavily rely on number of factors including geographical location, political environment, social cultural practices, state of economic development and globalization (Glanz et al., 2002).

5.2.3 Effect of Information Technology Adoption on Business Operations of Law Firms

Thirdly, the study examined the effect of IT adoption on business operations of law firms in Kenya. It was found that majority agreed that IT adoption had effect on law firm's business operations. IT adoption had affected time management, file and client's information management, enhanced client's interactions and increased efficiency within a law firm.

The study confirms the presumption that ITA has greatly improved business operation. Critical analysis of the law firms saw that ITA is associated with increased efficiency where clients' records are properly tracked thus saving on management time. ITA has also improved documentation and its safety plus sharing of information among the law firms and other stakeholders. In addition, it's now easier to control firm resources from spillage while ensuring reliability of research done by firm for presentations in their litigation. IT adoption has enabled standardization of services among firms thus international law can now be practiced with ease. Overall, ITA has greatly improved the business activities. In same vein, Baker-Eveleth and Stone, (2015) postulated that technology incorporation in firm amplify job performance.

On its part, technology adoption finds its relevance not only in blending human capital, skills and knowledge but also optimizes value addition to be aligned business models even with sporadic business environments. Zawislak, et.al., (2012) observed that ITA give strides on the competitive edge of any business especially where competency is appreciated in value addition. On their parts employees' enjoyment with the technology come with the knowledge and competency of using it (Sun & Zhang, 2008).

5.2.4 Relationship between Information Technology Adoption and Business Models of Law Firms in Kenya

The fourth objective examined the relationship between IT adoption and business models of law firms in Nairobi County. Regression and correlation analysis revealed positive and significant relationship between IT adoption and business model. Further, business operations had positive and significant relationship with business model in law firms in Nairobi County.

Regression results have shown IT explain significantly a large proportion of the business model chosen. This concurs with Wixom and Watson (2010) study of business intelligence (BI) where it was established that BI powered by IT significantly implicates the business ways of doing things. Chen et al., (2012) adds that IT adoption helps in realization of organization efficiency and effectiveness where operations are optimized. Yap et al., (2011) avers that in addition to managing the business affairs, ITA aids in exploiting business opportunities. Through the exploration, firms are able to obtain concrete organization structure and strategy for strategic position in the market place. Just like the majority participants of the study stated, that through strong and fast ITA clients present and future needs can be sorted within the capacity and capability enabled by the technology advancement. While this is possible, the firm will thus achieve optimal resource allocation and thus are able to enable low cost services or product.

5.3 Conclusion

Based on the study findings it can be concluded that, most law firms in Nairobi County have not adopted virtual legal practice. This can be attributed to different levels of IT adoption. Since business models are customer based and service based it can be concluded that business model adopted by any law firm is anchored on their desire to promote customer satisfaction and enhance their revenue capacity.

From the second objective which examined the levels of IT adoption amongst law firms in Nairobi County, it can be concluded that most law firms are either early adopters or early maturity IT adopters since they had an average of 3.4. Further, there was dominance of late maturity and laggards amongst law firms as accounted for by mean of 3.2. This calls of

adoption of information technology penetration strategies amongst law firms to enhance their business performance and competitive advantage.

Thirdly, it was established that business operations were affected by IT adoption amongst law firms. This calls for examination on the state of IT adoption by respective law firms to optimize on benefits associated with respective business model adopted by law firms. There is need for law to optimize on benefits to be accrued within legal practice courtesy of incorporating information technology in their business operations.

The fourth objective revealed positive and significant relationship between IT adoption and business model adopted by law firms in Nairobi County. There is need for law firms to align their IT adoption with business models, which they have in place. This would not only enhance their service delivery but enhance clarity of communication amongst several stakeholders who are involved in provision of law services in a specific firm.

5.4 Recommendations of the Study

Based on the study findings the following recommendations may be drawn. It is recommended that law firms in Nairobi should align their business models according to their customer needs with the help of information technology adoption. This cannot be achieved in absence of information technology adoption since there are dynamic changes in technological fronts, which have implication on clients demands for law services. Failure to respond to them would trigger shifts on customer satisfaction and alter service delivery model.

Secondly, there is need for law firms in Kenya to streamline their business operations and decision-making process in addition to revaluating their risk management since failure to adopt IT would force client to seek services from law firms providing virtual legal services. There is need for embracement of IT adoption-enabled research since it will fasten and ease access to requisite information for decision-making.

Thirdly, IT adoption had effect on business models adopted by law firms therefore, there is need for law firms to customize it as per customer needs. This would be achieved through adoption of heterogenous mechanism of gathering customers feedback and discovery of their needs. There is need for law firms to use IT to align their law services in line with internationally acceptable standards.

Finally, there was positive and significant relationship between IT adoption and business model adopted by law firms in Kenya. To sustain this relationship law firms should be prepared on response mechanism to be adopted depending on technological changes and advancement, which have influence on state of technology adoption by specific law firms.

5.5 Suggestions for Further Study

From the foregoing findings on the implication of IT adoption on business models in law firms in Kenya. The study drew respondents from Nairobi County, there is need for national wide study to evaluate the implication of IT adoption on business models of law firm's country wide. There is for adoption of alternative data analysis procedure instead of descriptive and regression analysis. It would be appropriate to fit structural equation model using confirmatory factor analysis. Thirdly, there are no classification of law firms in Kenya as per tiers, comparative analysis on level of IT adoption dependent on size of law firm. There is need for examination on the implication of IT adoption on service delivery amongst law firms. Since there are different types of legal practice there is need for specific examination on implication of IT adoption as per type of legal practice.

REFERENCES

Adams, D. A. (1992). Perceived usefulness, ease of use, and usage of information technology: A replication. *MIS quarterly,*, 227-247.

Agwe, M., (2018). Relevance of information technology in the effective management of selected SMEs in Lagos state Nigeria. *Academy of Strategic Management Journal, 17*(1), 1-15.

Ahmad, A., (2014). Impact of using information technology on creating a sustainable competitive advantage for companies; (case study: Golestan food companies). *Indian Journal of Fundamental and Applied Life Sciences, 4*(5), 1595-1603.

Ameria, S., Umar, N., Moch, Z., & Sri, K. K., (2014). Effect of Strategic Decision, Innovation, and Information Technology Adoption on Competitive Advantages and MSME Performance Studies at MSME Food and Beverage Industry Sector in Bandung Raya. *European Journal of Business and Management, 6*(35), 52-57.

Ashley, K. (2017). Artificial Intelligence and Legal Analytics: New Tools for Law Practice in the Digital Age. . *Cambridge: Cambridge University Press. doi:10.1017/9781316761380*.

Attar, G. A., & Sweis, R. J., (2016). The relationship between information technology adoption and job satisfaction in contracting companies in Jordan. *Journal of Information Technology in Construction, 15*(10), 43-64.

Baker-Eveleth, L. &. (2015). Usability, expectation, confirmation, and continuance intentions to use electronic textbooks. . *Behaviour & Information Technology, 5(15),* , 1-13.

Ben-Ari, D., Frish, Y., Lazovski, A., Eldan, U., & Greenbaum, D. (2017). Artificial intelligence in the practice of law: An analysis and proof of concept experiment. . *Richmond Journal of Law Technology 23(2), 2.*

Berry, L. L. (1994). *Five imperatives for improving service quality.* . Sloan Management.

Bigda, J. (2018). The legal profession: From humans to robots. *Journal of High Technology Law 18(2*, 396-428.

Bowman, W. (2010). Governance, technology, and the search for modernity in Kenya. . *William Mary Policy Review 1(1)*, 87-120.

Chen, H. C. (2012). Business intelligence and analytics: From big data to big impact. . *MIS Quarterly: Management Information Systems, 36(4),* , 1165-1188.

Christensen, C. M. (2015). What is disruptive innovation. . *Harvard Business Review, 93(12),* , 44-53.

Chukwunonso, F., Omoju, J. O., Ikani, D., & Ribadu, M. R., (2011). Management of information technology for competitive advantage: A Savvy case study. *Journal of Scientific Research, 1*(2), 121-129.

Cohn, D. &. (2009). Business artifacts: A data-centric approach to modeling business operations and processes. . *IEEE Data Eng. Bull., 32(3),* , 3-9.

Cooper, D. R. (2014). Business Research Methods (12th Ed.). New York: McGraw-Hill/Irwin.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. . *MIS quarterly,* , 319-340.

Dessler, G. (2009). *A framework for human resource management.* . Pearson Education India.

Dinter, B. (2011). The Maturing of a Business Intelligence Maturity Model. . *Retrieved from https://pdfs.semanticscholar.org*.

Dube, C. &. (2017). Diffusion of Innovation and the Technology Adoption Curve: Where Are We? The Zimbabwean Experience. . *Business and Management Studies, 3(3),*, 34-52.

Dyer, L. &. (1976). The determinants of pay satisfaction. . *Journal of Applied Psychology,* , 61(5), 596.

Giarratana, M., & Torrisi, S. (2010). Foreign entry and survival in a knowledge-intensive market: Emerging economy countries' international linkages, technology competences, and firm experience. . *Strategic Enterprise Journal, 4(10),* , 85–104.

Glanz, K. R. (1992). Factors influencing acceptance of mammography: implications for enhancing worksite cancer control. . *American Journal of Health Promotion, 7(1), .*, 28-36.

GOK. (2010). *A Strategy For Performance Improvement In the Public Service.* Nairobi: : Government Printer.

Holmlid, C. (2007). *"Relevance regained: From Manufacturing to Service Production".* New York, NY,: The Free Press.

Horwitz, R. (2007). *Performance Mnaagement: Best Practices.* KWELA: Leadership & Talent Management.

House, R. J. (1971). A path goal theory of leader effectiveness. *Administrative science quarterly, ,* 321-339.

Hussyin, S. (2019). How to choose the most profitable business model for your startup. GIST, 3(2).

Hwang, J. &. (2008). Disruptive innovation in health care delivery: a framework for business-model innovation. . *Health Affairs, 27(5).*, 1329-1335.

Jackson, S. (2009). *Managing Human Resources, 10th Edition, Ohio USA:*. Cengage Learning, Mason.

Jewel, L. A. (2014). The indie lawyer of the future: How new technology, cultural trends, and market forces can transform the solo practice of law. . *SMU Science and Technology Law Review 17(3),* 325-386.

Juer, D. L., (2016). *Factors Influencing Information Technology Adoption and the Effects on the SMEs: The Case of South Sudan.* Unpublished Masters of Business Administration Thesis, United States International University, USIU-Africa.

Karahanna, E. S. (1999). Information technology adoption across time: a cross-sectional comparison of pre-adoption and post-adoption beliefs. . *MIS quarterly,,* 183-213.

Katz, M. L. (1986). Technology adoption in the presence of network externalities. . *Journal of political economy, 94(4), ,* 822-841.

Kenya, L. S. (2018). *Annual Report.* Nairobi: Law Society of Kenya.

Kothari, C. R. (2011). Research Methodology. Methods and Techniques. . *New Age International Publishers. New Delhi. India.*

Kuo, T. (2011). How to improve organizational performance through learning and knowledge. . *International Journal of Manpower, 32(11),*, 581-603. .

Li, D. Y. (2014). Dynamic capabilities, environmental dynamism, and competitive advantage: Evidence from China. Journal of Business Research, 67(1),. 2793-2799.

Lings, I. N. (2004). Internal market orientation: Construct and consequences. . *Journal of Business Research, ,* 57(4), 405-413.

Locke, E. A. (1990). *A theory of goal setting & task performance.* Prentice-Hall, Inc.

Locke, E. A. (1990). Work motivation and satisfaction: Light at the end of the tunnel. . *Psychological science, ,* 1(4), 240-246.

Martins, M. F. (2011). Literature review of information technology adoption models at firm level. . *Electronic Journal of Information Systems Evaluation, 14(1),*, 110.

Mbui, M. M. (2014). Transforming Legal Processes through Technology: The Reality, Possibility and Promise. *The Law via Internet Conference* . Capetown, South Africa.

Mburugu. (2005). Public Sector Performance Contracts? Another Management Fad will they Work? . *Journal of the Institute of Certified Public Secretaries of Kenya.*

McGinnis, J. O., & Pearce, R. G. (2014). The great disruption: How machine intelligence will transform the role of lawyers in the delivery of legal services. . *Fordham Law Review 82(6),* 3041-3066.

McKamey, M. (2017). Legal Technology: Artificial Intelligence and the Future of Law Practice. . *Appeal: Review of Current Law and Law Reform 22*, 45-58.

McKelvey, B. (1999). Complexity theory in organization science: Seizing the promise or becoming a fad? *Emergence, ,* 1(1), 5-32.

McKelvie, A. a. (2009). From resource base to dynamic capabilities: an investigation of new firms. . *British Journal of Management, 20*, , S63-S80.

Mun, Y. Y. (2003). Predicting the use of web-based information systems: self-efficacy, enjoyment, learning goal orientation, and the technology acceptance model. *International journal of human-computer studies, 59(4)*, , 431-449.

Murad, A., & Amer, R. (2014). The impact of information technology adoption on employee productivity in nongovernmental organizations in Yemen. *International Journal of Social Sciences and Humanities Research, 3*(2), 32-50.

Njogu, R. (2004). Survey of Significance on Team Work among Employees in Commercial Banks Based in Nairobi . *unpublished MBA Project*.

Njuki, H. M., Othoth, N. O., Mutua, M., & Mwangombe, C. W., (2013). Analysis of Information and Communication Technology on Service Innovation and Competitive Advantage: A case of Commercial Banks in Kenya. *European Journal of Business and Management, 5*(17), 1-7.

Nzuve, S. &. (2012). Human Capital Management Practices and Firms Performance: A Survey of Commercial Banks in Kenya. . *Available at SSRN 2144691*.

Obong'o, S. O. (2009). Implementation of performance contracting in Kenya. *International Public Management Review, 10(2)*, 66-84.

Odhiambo-Mbai, C. (2003). Public service accountability and governance in Kenya since independence. *African Journal of Political Science, 8(1)*, 113-145.

OECD. (1999). In Search Of Results: Performance Management Practice. . Paris France.

Oliveira, T. &. (2011). Literature review of information technology adoption models at firm level. *Electronic Journal of Information Systems Evaluation, 14(1)*, 110.

Oltra, V. &.-L. (2013). Boosting organizational learning through team-based talent management: What is the evidence from large Spanish firms. . *International Journal of Human Resource Management, 2(4),*, 1853-1871.

Osterwalder, A. P. (2005). Clarifying business models: Origins, present, and future of the concept. *Communications of the association for Information Systems, 16(1),* , 1.

Peteraf, M. A. (1993). The cornerstones of competitive advantage: a resource- based view. . *Strategic management journal, 14(3),*, 179-191.

Pisano, G. T. (1997). Dynamic capabilities and strategic management. . *Strategic management journal, 18(7),* , 509-533.

Rammandala, C. (2016). A study understands the importance of scientific research and its impact to management decision making process (master thesis), . *California Intercontinental University*.

Rogers, E. M. (2003). *Diffusion of Innovations, (5th Ed.).* New York: Free Press.

Rogers, E.M. (2003). *Diffusion of innovations* (5th Ed.). New York: Free Press.

Rolfsen, J. (2011). *The service creation Theory; Good Service Bad Service. In B. M. Staw and L. L. Cummings (Eds.).* Research in Service Design, Vol. 12: 43–72. Greenwich, CT:JAI Press.

Saunders, M. L. (2014). Research Methods for Business Students (7th Ed.). Pitman Publishing.

Scotti, D. J. (2007). Links among high-performance work environment, service quality, and customer satisfaction: an extension to the healthcare sector/practitioner application. *Journal of Healthcare Management,*, 52(2), 109.

Seif, O. A., & Nofan, H. A., (2016). Impact of Information Technology on Competitive Advantage in Jordanian Commercial Banks. Accounting Information System Effectiveness as a Mediating Variable. *International Journal of Academic Research in Accounting, Finance and Management Sciences, 6*(3), 202-211.

Sekaran, U. &. (2013). Research Methods for Business (6th Ed.). John Wiley & Sons Ltd.

Shafer, S. M. (2005). The power of business models. . *Business horizons, 48(3),* , 199-207.

Skinner, J. &. (2005). Technology adoption from hybrid corn to beta blockers (No. w11251). . *National Bureau of Economic Research*.

Steiner, G. A. (1983). Formal strategic planning in the United States today. . *Long Range Planning,* , 16(3), 12-17.

Stewart, J. &. (1994). Performance measurement: when performance can never be finally defined. . *Public Money & Management,*, 14(2), 45-49.

Szajna, B. (1996). Empirical evaluation of the revised technology acceptance model. *Management science, 42(1),* , 85-92.

Teece, D. J. (2010). Business models, business strategy and innovation. . *Long range planning 43(2-3),* , 172-194.

Teece, D. J. (2014). A dynamic capabilities-based entrepreneurial theory of the multinational enterprise. *Journal of International Business Studies, 45(1),* , 8-37.

Teece, D. J. (2014). A dynamic capabilities-based entrepreneurial theory of the multinational enterprise. *Journal of International Business Studies, 45(1),* 8-37.

Venkatesh, V. &. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. . *Management science, 46(2),* ., 186-204.

Vroom, V. (1964). *Work and Motivation,* . New York: : John Wiley & Sons.

Wekesa, A. N. (2011). Factors affecting effectiveness of teamwork at the National Bank of Kenya. *University of Nairobi*.

Williams, J. C., Platt, A., & Lee, J. (2015). Disruptive innovation: New models of legal practice. . *Hastings Law Journal 67(1),* 1-84.

Wixom, B. &. (2010). A theoretical integration of user satisfaction and technology acceptance. . *Information Systems Research, 16(1),* , 85-102.

Yap, C. S. (2011). Competitive Intelligence Practices and Firm Performance. *Libri, 61(3),*, 175-189.

Yu, D. &. (2010). A reflective review of disruptive innovation theory. . *International journal of management reviews, 12(4),* , 435-452.

Zawislak, P. Z. (2013). Types of innovation in lowtechnology firms of emerging markets: an empirical study in Brazilian Industry. . *Revista de Administração e Inovação, 10(1),* , 212-231.

Zawislak, P., & Alves, A. T.-G. (2012). Innovation capability: from technology development to transaction capability. *Journal of Technology Management and Innovation, 7(2),* , 14-27.

Zwilling, M., (2015). 7 steps for establishing the right business model. . *Enterpreneur Review 4(2),* , 125-137.

APPENDICIES

APPENDIX I: LETTER OF INTRODUCTION

I am the undersigned, currently undertaking a Master's degree in Business administration at Strathmore Business School. I am conducting a study that involves collecting data for writing and compiling the final thesis as a partial requirement for the award of the degree. The research entails a study on **Implication of Information Technology Adoption on Business Models adopted by Law Firms in Nairobi, Kenya.** The information collected will be used solely for academic purposes and will be handled with utmost confidentiality.

Please direct any enquiries to: **Katumbi Mailu**

mpkatumbi@gmail.com

APPENDIX II: INFORMED CONSENT FOR LAW FIRMS IN NAIROBI COUNTY

Study title:

Implication of Information Technology Adoption on Business Models adopted by Law Firms in Nairobi, Kenya.

Institutions and Investigators

Researchers	**Institution**	**Contact**
Miss. Katumbi Mailu	Strathmore University	+254 707967004
Dr. Vincent Omwenga	Strathmore University	+254 703034000

Introduction

My name is Katumbi Mailu, a Master's student at Strathmore University. I am the principle researcher in the study on the **Implication of Information Technology Adoption on Business Models Adopted by Law Firms in Nairobi, Kenya.**

You are being asked to participate in this study because you are eligible. The interview will last approximately 25 minutes only. You can ask any questions you have at any time.

This is a consent form that gives you information about the purpose, procedure, risks, benefits, confidentiality/privacy and the process that was expected during the study. If you agree to take part, please sign your name at the bottom of this form.

Purpose of the study

The purpose of the study is to establish the Implication of Information Technology Adoption on Business Models Adopted by Law Firms in Nairobi, Kenya.

Procedure of Study

If you decide to join the study, you will be asked questions regarding background information, information technology adoption, business operations and business models in your law firm.

Voluntariness

Study participation will be voluntary. Participation or non-participation would not affect any relationship you have with research institution. Partial participation is allowed and if you wish not to respond to all questions, just inform the research and no-consequences will affect you.

Risks of study participation

Although we shall write your details on paper, every effort was made to protect your privacy and confidentiality while you are participating in the study. The information that you will provide cannot be identified as belonging to you. The interviews will take place in private. Information that will need to be assessed by other persons will be coded such that you are not identified.

Benefits of participating in the study

You may get no direct benefit from the information you provide for this study. However, the information you provide will be used to assist in formulating policies and advise law firms on the relationship between information technology adoption and business models.

Study Costs

There are no costs to you for participating in this study apart from your precious time.

Research Related Injury

It is unlikely that any form of injury could happen to you as a result of being part in this study. It is important that you tell the study staff if you feel that you have been irritated or annoyed because of taking part in this study.

Confidentiality

Every effort was made to keep the information you provide confidential. You will only be identified by a code and the personal information from the interview will not be released without your written permission. The information in the questionnaire cannot be identified as belonging to you. You will not be personally identified in any publication about this study.

Contacts and questions

This research will be approved and reviewed by the Strathmore Ethical Review Committee. This committee will review this study in order to help protect participants. If you have any questions about your right as research participant you may contact the researcher Katumbi Mailu on her email address: mpkatumbi@gmail.com and the Strathmore Ethical Review Committee P. O. BOX 59857, 00200, Nairobi, email ethicsreview@strathmore.edu Tel number: +254 703 034 375.

Your statement of consent and signature:

The above information has been read and explained to me. I have asked questions and received answers. I consent voluntarily to participate in this study. You will be given a copy of this signed form to take with you.

……	……..
Participant's initials	Signature/Thumb print and date
……	……..
Interviewer's name	Interviewers' signature and date
……	……..
Researcher's name	Researcher's signature and date

APPENDIX III: QUESTIONNAIRE

Kindly assist in responding to the questionnaire on the "**Implication of Information Technology Adoption on Business Models of Law Firms in Nairobi County, Kenya".** Information gathered will be treated with utmost confidentiality and it is purely meant for academic purposes. Kindly do not disclose your identity.

SECTION A: DEMOGRAPHIC INFORMATION

1. Kindly state your title in practice……..
2. Gender: Male ( ) Female ( )
3. Age (please tick which bracket you fall)

Below 20 years	20 – 29 years	30 –39 years	40 – 50 years	51 years and above

4. Please tick your highest education level
   a) Undergraduate ( )
   b) Post graduate diploma ( )
   c) Master Degree ( )
   d) Doctorate ( )
5. Name of department……
6. Position… ……..……...
7. How long have you practiced law? ……

Section B: Types of Business Models Adopted by Law Firms

Kindly select the dominant forms of business models your law firm have adopted. Select as many as possible.

	Yes	**No**
Customer focused model		
Service Based model		
Revenue Based model		
Virtual Practice		
Management Consultancy		

B2: What guides your law firm's business model. (Select as many options as possible)

Product development	
Line of business '	
Revenue logic	
Market penetration strategy	
Sales strategy	
Service life cycle	
Service implementation choice	
Perceived reception by clients	
Feedback from clients	
Alignment to technological changes	

B3: On a five-point Likert scale, kindly rate the following elements as observed in your business model. The scale ranges from 1-Strongly disagree 2-Disagree 3-Neutral 4-Agree 5-Strongly agree.

	1	**2**	**3**	**4**	**5**
Our service and product development are based on scientific research					
Our firms perform validity and reliability to authenticate our scientific researchers					
We rely on client feedback to improve on our product and services					
Our revenue stream is based on service delivery assessment					
We complement our revenue through involvement on alternative client's legal needs					
Our litigation team are our key marketers					
Our firms coordinate direct marketing to our potential clients					
We coordinate service promotion events to attract multinational clients					
We continuously assess our service delivery model					
We align our service delivery model to our clients' needs					

Section C: Information Technology Adoption Levels by Law Firms

C1: On a five-point Likert scale, how do you rate law firm current adoption of ITA in the following attributes. 1- Strongly disagree, 2- Disagree, 3- Neutral, 4- Agree, 5- Strongly agree.

Early Adopter	**1**	**2**	**3**	**4**	**5**
Our firm is always the first to incorporate information technology supporting legal operations					
Our firm is never suspicious agent of change					
Our firm is certain that no new IT that fails after we adopt					
Our firm believes that resistance to innovation is entirely irrational					
Our firm decision-making process is relatively short					
We approach innovation in less skeptical and cautious air					
Our firm never fear high-tech a little bit					
Early Maturity					
Our firm is exposed to steep competition due to IT adoption					
Our firms have no competitive advantage even after adoption IT.					
Our firm is certain that new IT that we adopt are stable					
Our firm believes that resistance to innovation is meant to seek feedback from users					
Our firm decision-making process agrees with our needs					
Late Maturity					
Our firm usually try new IT applications after others do					
Our firm prefer my tried and trusted IT applications					
Our firm do not like being able to tell others about new IT applications I have tried					
Our firm do not like the variety of trying new IT applications					
Feel more comfortable using familiar IT applications					
Our firm wait until I hear about others' experiences before I try new IT applications					
Laggards					
Our firm is always the last to incorporate information technology supporting legal operations					
Our firm is suspicious agent of change					
Our firm is certain that no new IT that fails before we adopt					
Our firm believes that resistance to innovation is entirely rational					
Our firm decision-making process is relatively long					
We approach innovation with skeptical and cautious air					
Our firm often fear high-tech a little bit					
Our firm is stubborn in resistance to buying new IT products					
We prefer to incorporate IT when its extremely mature and prices are cheaper					

Section D: Effect of IT adoption on Business Operations of Law Firms

D1: On a five-point Likert scale, describe how information technology adoption have affected business operations in your law firm. The scale ranges from 1-Strongly disagree 2-Disagree 3-Neutral 4-Agree 5-Strongly agree.

	1	2	3	4	5
ITA has increased efficiency of my daily work					
ITA has enabled our firm to keep track of our client records					
ITA has enhanced management of my time					
ITA have eased findings on client's information					
ITA has eased interaction with our firm documentation					
ITA has eased communication and sharing information amongst different stakeholders					
ITA has provided clients confidentiality					
ITA has enhanced reliability of our research					
ITA has promoted safety of our documentation					
ITA has improved our client support and account management					
ITA aids in our organization decision making					
ITA aids in controlling revenue spillage					
ITA enhances our alignment with international law practices					

Section D: Information Technology Adoption on Business Operations of Law Firms

D1: On a five-point Likert scale, describe how information technology adoption have affected business operations in your law firm. The scale ranges from 1-Strongly disagree 2-Disagree 3-Neutral 4-Agree 5-Strongly agree.

	1	2	3	4	5
ITA has increased efficiency of my daily work					
ITA has enabled our firm to keep track of our client records					
ITA has enhanced management of my time					
ITA have eased findings on client's information					
ITA has eased interaction with our firm documentation					
ITA has eased communication and sharing information amongst different stakeholders					
ITA has provided clients confidentiality					
ITA has enhanced reliability of our research					
ITA has promoted safety of our documentation					
ITA has improved our client support and account management					
ITA aids in our organization decision making					
ITA aids in controlling revenue spillage					
ITA enhances our alignment with international law practices					

Section E: Information Technology Adoption and Business Models of Law Firms

E1: On a five-point Likert scale, kindly indicate how ITA has affected your law firm business model. The scale ranges from 1-Strongly disagree 2-Disagree 3-Neutral 4-Agree 5-Strongly agree.

	1	**2**	**3**	**4**	**5**
Our business model address critical issues of our clients' needs					
Our business model has influenced buying decisions of our clients					
Our business model is anchored on prospects of addressing current and future clients' needs					
Our business model has capacity and capability to address clients' needs optimally					
Our business model is open to prospective ways of addressing client needs					
Our business model provokes clients to seek alternative services in our firm					
Our business model has created value proposition and unfair advantage to our competitors					
Our business model has optimized our resources allocation strategy to be the lowest cost service provider					

……*Thank you for your participation*……

VT OMNES
VNVM SINT