CLOUD COMPUTING AND COMPETITIVE ADVANTAGE AMONG INSURANCE FIRMS IN KENYA

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THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF
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UNIVERSITY OF NAIROBI

DECLARATION

I hereby declare that this research project is my original work and has not been presented in any
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DEDICATION

I dedicate this research project to my dad, Daniel Mwaura Kimani, my children, Shelmith Wambui, Megan Njeri and Henry Kariuki for their support and encouragement throughout the



to read and edit my work in the middle of other academic obligations. I also want to express my gratitude for the constructive comments and insightful feedback they provided. Throughout my time at the University of Nairobi, my fellow students and lecturers have been instrumental in helping me achieve academic success. In addition, I would want to convey my appreciation to my family, friends, and colleagues for their support and encouragement during my academic career.

I pray that God would bless you all because of your generosity.

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ABBREVIATIONS AND ACRONYMS

IBM-International Business Machines

IDT-Innovation Diffusion Theory

IRA-Insurance Regulatory Authority

IT-Information Technology

PaaS-Platform as a Service

SaaS-Software as a Service

ABSTRACT

Insurance companies in Kenya are now battling fierce competition due to the usage of outdated ICT systems that slow down the performance of their workers. The sensitive nature of insurance company documents has sparked concerns about the security of the legacy systems in place. These firms require new ICT advancements to increase their performance. It was determined in this study that insurance companies depend heavily on cloud computing hosting services as well as the advantages and disadvantages of employing cloud computing hosting services. Technology Acceptance Model (TAM), Resource Based View, and Innovation Diffusion Theory were used in this research. It was a cross-sectional survey that was employed. All of Kenya's 52 insurance firms were the focus of this study. Multiple linear regression was employed to conduct the research. It was established that most insurance firms use cloud computing to great extent. This was followed by platform as a service. Hardware as a service was the least then by application as a Service to be used. It was established that insurance companies have benefited to great extent on use of cloud computing through access to data enabling you to work at any time. On the other hand, it was established that most of insurance face challenges when it comes to using cloud computing since some of its components require an internet connection to function, difficult to keep up with changing feature set. The regression analysis was used however the results were not conclusive. According to the findings, insurance companies in Kenya should make use of cloud computing services in order to acquire a competitive edge.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Traditionally many firms rendered their services internally from on-premises (abbreviated as "on-prem") environments using on-premises software that was installed locally on the organizations own computers and servers (Madden, 2014). On-premises software is software that is installed locally on the organizations server or computers that exist in the building or premises where the organization is located as opposed to a remote location such as the cloud(Sherpa, 2018). New technologies are forcing insurance companies in Kenya to enhance their operations and expand their clientele, resulting in an increase in profitability (Hayes, 2008). The advancement of information and communications technology (ICT) applications is altering the way corporate operations are now carried out. Organizations are being compelled to accept emerging technologies that are upsetting established methods of working; nevertheless, owing to limited resources, they are confronted with the challenge of revamping their networks in order to stay up with the fast technological developments.

Cloud hosting offers a variety of options for businesses that want to stay on top of the newest technological developments at a reasonable price. Many businesses are wary of keeping computer data on the cloud because of the high value placed on this resource. Studies have shown that cloud security procedures have been strengthened to ensure that client hosted computing is effectively safeguarded, as indicated by many studies (Andrei, 2009). It is possible to outsource your processing and storage demands to a third-party service provider via cloud hosting (Erl, Mahmood & Puttini, 2013). Storage, backup, and recovery of computer resources are all included in cloud hosting, as are web hosting, e-mail services, ondemand delivery of software, and computational analysis. With the help of senior

management, cloud hosting has been driven by achieving organizational goals and keeping up with industry difficulties. Cloud computing offers benefits including scalability and reduced operating expenses. Scalability can support increased transaction volume and storage capacity. Organizations are increasingly turning to cloud computing hosting to meet the demands of both their workers and consumers for real-time access to information. In 2017 (Gangwar, 2017).

A total of three theories drove this investigation, namely, the Technological Acceptance Model (TAM), the Resource-Based View, and the Innovation Diffusion Theory. TAM explains the factors that impinge on the adoption of technology by its intended utilizers, such as apparent utility and ease of utilize. Since digital marketing methods are easy to implement and real estate owners believe they are valuable, their adoption is influenced by these factors. The IDT states that the choice to utilize a novelty is on the basis of its supposed benefits, complexity, compatibility with the current systems and ease of utilize as well as noticeability of the outcomes. Wernerfelt's resource-based perspective (Wernerfelt, 1984) posits that enterprises make conscious attempts to achieve a long-term competitive advantage.

1.1.1 Cloud Computing

Virtualization with a pool of computer resources is known as Cloud computing (Pan, 2018). Different workloads can be hosted by cloud, allowing the workloads to be scaled-out ondemand or deployed by provisioning the physical or virtual machines rapidly. Cloud computing allows recovery of the workloads in the event of software or hardware failures and rebalances allocations (Pan, 2018). The idea behind cloud computing is moving computing from on-premises desktop platforms to a service-oriented platform using the vendors datacenters and server clusters. Services provided by cloud computing may be divided into utility SaaS, managed services, computing, web services and PaaS (Kim, 2009).

A virtual instance of cloud computing hosting ensures the availability of computer resources on a vast underlying infrastructure, increasing computing resource resiliency (CSA, 2011). It is possible to restore workloads in the case of software or hardware failures, and cloud computing rebalances workloads and allocations. (Pan et al., 2018). The idea behind cloud computing is moving computing from on-premises desktop platforms to a service-oriented platform using the vendor's computing centers and server clusters. Services provided by cloud computing may be divided into utility SaaS, managed services, computing, web services and PaaS (Kim, 2009). A "cloud" service is one that may be accessed through a browser and an Internet connection by anybody (Kim, 2009).

Cloud computing provides numerous benefits amongst its users. Some of the benefits include users being able to access their files and documents at any time and from where they want, as opposed to being tied down to their office setting(Badidi, 2013). Amount of storage is bigger, and people can keep huge amounts of computing in the cloud as opposed to on laptops or personal computers (Badidi,2013). A user's files and documents are stored permanently in the cloud and they exist even if something happens to a user's computer systems, such as if it gets stolen or it crashes. Another benefit is that Cloud computing enables collaboration and people from diverse regions can co-author and work on the same documents together at reduced costs (Cetrom, 2018). Companies whether big or small can take advantage and benefit from cloud infrastructure by just subscribing to the service without the implementation and headache of administering it directly.

Cloud computing is facing an adoption challenge as user are afraid of its authenticity. Some of the major challenges preventing SaaS adoption include Security, whereby users tend to be weary of computing loss, phishing and botnets. SaaS is a service model whereby users need a good reliable and fast internet connection, thus in places where there is no good internet

connection this can be a disadvantage (Kumar, 2014). Another challenge is that at times the expenses incurred in moving organizational computing from and to the cloud can be quite enormous. It's important for costumers to get commitments from service providers on delivery of services and this is usually through SLAs between cloud providers and customers, whereby SLAs are not in place it could lead to service delivery challenges (Mburu,2014).Cloud interoperability issue amongst various vendors which hinders development of cloud ecosystems and forces vendor locking thus subsequently prohibiting users the ability to choose from alternative vendors.

1.1.2 Competitive Advantages

An organization or country's ability to provide services or products at a competitive price and in accordance with consumers' needs and preferences constitutes a competitive advantage (Wagner, 2014). Competitive advantage can be described as a set of activities, mechanics and abilities that enable a company to consistently provide or offer its products and services in a manner that satisfies its customers (Coyne, 2016). Product and service quality may also be characterized as a company's ability to meet or exceed the expectations of its consumers (Garth et al.,2014). According to Porter (1985), the primary goal of a company's competitive strategy is to master deeper insights into a certain market and establish better mechanisms for outperforming the competition. In order to succeed in today's market, a firm must strike a creative balance between the external and internal elements at play (Barney, 2011). An organization that is able to consistently outperform its competitors and provide its services and products in a manner that satisfies its customers is said to have a competitive advantage.

There are three generic strategies of dealing with the above competitive forces. The Cost leadership strategy involves tight control on costs so that an organization can produce at lower costs than its competitors. It is expected that by lowering costs, the firm can earn higher

profit margins. The differentiation strategy involves creating products or services that can be considered unique in the industry. This strategy allows a firm to earn above average returns because it creates a defensible position for the firm against competitive rivalry and also creates customer loyalty. The focus strategy is made up of 2 variants which are differentiation focus and cost focus. This strategy, in general, involves focusing on a narrow segment and serving it extremely well. The cost focus variant seeks to gain cost advantage in its target segment. On the other hand, the differentiation focus seeks to establish differentiation in its target niche. (Porter, 2008).

Financial and nonfinancial metrics may be used to assess a financial institution's competitive advantage. The financial indicators used include profit, ROE, and (ROA. A company's nonfinancial competitive advantage may be assessed by service quality, cost efficiency, the attainment of organizational core competency, and responsiveness to client demands (Harada & Mdnoor, 2017). Over the last few years, the financial services sector has experienced a major disruptive force –fintech (financial technology). Insurance companies are using cloud computing hosting to compete against mainstream banks. Insurance companies have also come with new models of operations. These developments are causing a major transformation in the insurance industry.

1.1.3 Insurance in Kenya

Preceding the implementation of new laws in 2013, the insurance market in Kenya was one of the fastest growing. Growth and influx have been due to increased easy income through the uninformed market, limited regulations and increased demand for insurance services among Kenyans. Since regulations, growth had been witnessed not only necessary in terms of new entries but in terms of substantial services and reliability from the public point of view. Kenya's insurance industry is controlled by the Insurance Regulatory Authority (IRA). It is

made up of 44 insurance companies that provide not only insurance services but has diversified in various services such as investment services, banking, and asset management. The creation of many employment by insurance companies has been a significant factor in the growth of the country. People have been able to participate in the local market via insurance products, which has encouraged other international investors to engage in Kenya (Ayishashe, 2015).

A study conducted by Kwach (2018) identified that just like any other industry in Kenya; the insurance industry faces challenges such as increased fraudulent activities which have been influenced by flooding of insurance companies with a high level of brokers whose aim is to provide unreliable information and misguide clients. Due to the fierce competition and outdated IT systems, many insurance companies are suffering in the current economic climate. Slow and poorly functioning systems are causing delays in processing claims and reports because of the lack of IT resources to maintain the computing infrastructures of customers, workers and suppliers, resulting in repeated outages Sosinky (2011). Other challenges include lack of trained personnel due to changing technology and globalization of services and products and the inability to honor genuine claims. Likewise, Insurance unlimited (2013) listed various challenges facing the insurance industry such as lack of saving culture among Kenyans as a result of poor economic conditions, low disposable income and perceived crisis in the industry. Kenyans assume that just like in real estate, the insurance industry is a bubble burst and there is a likelihood of losing value in the future.

1.2 Research Problem

Insurance businesses in Kenya are now battling fierce competition due to the usage of outdated ICT systems that slow down the performance of their workers. In light of the sensitive nature of insurance company documents, the legacy systems in existence have

sparked a concern of computer security. These businesses can't function effectively without advances in information and communications technology. An investigation by Ernst & Young (2016) and Oxford Economics suggests that insurers that embrace technology like cloud computing are best positioned to lead the market in developing innovative solutions. The growing availability of technology allows for faster and more accurate data processing and reporting. ICT and digitalization are altering the insurance sector in Kenya as customer habits continue to shift. With the use of Cloud computing hosting, they may accomplish this goal. There has been little utilization of cloud computing in Kenyan financial institutions according to a report by Mungai (2012).

Cloud computing adoption rates in Taiwanese high-tech companies are determined by senior management support, firm size, competitiveness, and corporate advantages. (Cinnyao, Yahsueh and Mingchang, 2011). Benlian and Hess (2011) conducted a research to look at the barriers to cloud adoption and found that security was the primary factor holding back adoption. This may not apply to Kenya since the research was conducted in a different setting. "Cloud computing adoption depends on business, human and technology assets; regulatory frameworks; and supplier support," adds Gangwar (2017).

Munguti (2018) reported that 94 percent of the 33 Kenyan insurance companies questioned felt security was a major obstacle to cloud adoption. In order for a service to be adopted more quickly, enterprises must be confident in the security and integrity of their computers. Cloud computing use by SMEs in Nairobi has resulted in higher organizational performance, according to a report by Wangeci. Lumbuku (2017) examined the big computing analytics and the firm's gains of insurance within the country. It was asserted that new revenue

opportunities, improved decision making, improved risk management initiatives, customer retention in commercial banks were a consequence of using big computing analytics.

Previous research on Cloud Computing Hosting in Kenya had information gaps since the studies lack a guideline that insurance companies may utilize to establish cloud computing hosting. Cloud computing hosting and competitive advantage have received limited research in the insurance industry. Cloud Computing Hosting and Insurance Firm Competitive Advantage will be the topic of this study. It addressed the following question; what influence does cloud computing hosting have on the competitive advantage of Insurance Companies in Kenya?

1.3 Research Objective

General objective of this study was to investigate adoption of cloud computing hosting and competitive advantage among Insurance firms in Kenya. Specifically, to:

- a. Determine the degree with which Insurance companies have adopted cloud computing hosting services.
- b. Establish the benefits of using cloud computing hosting services.
- c. Determine the challenges of using cloud computing hosting services.
- d. Establish the relationship between the cloud computing hosting and competitive advantage among Insurance firms in Kenya.

1.4 Value of the Study

The study's findings influenced the Kenyan and worldwide insurance markets. Essentially this is attributed to the fact that customers are demanding better and more efficient services, internet access is becoming readily available, technology is changing at a very rapid pace and there's more stiff competition in the insurance industry than ever before as fresh players are entering the market. Insurance companies that strategically position themselves for this

transformation reaped big in leaps and bounds. By tackling the challenges of on-premises legacy systems and applications as well the adoption of cloud computing services and its benefits, industry leaders will gain insights as to whether to adopt cloud computing strategies for their organizations or decide to stick to traditional on-premises line of business systems and application software.

Researchers and academics used the study's findings to contribute to their understanding on the sharing economy business model. It also helps academics explore new areas of interest that have yet to be explored. Research on the effects of the sharing economy business model has been welcomed by academics. It also act as an impetus for further studies to enhance as well as extend the current study particularly in Kenya.

Following this investigation, lawmakers have established and implemented protocols to guarantee that marketers are adhering to ethical standards while they carry out their daily duties. The government, on the other hand, utilized the aforesaid research to get insight into the insurance industry's current tendencies. There are several issues that insurance companies face in Kenya, and our study helps the government deal with them.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Cloud computing and its competitive benefits are examined in this paper. The chapter evaluated the challenges of cloud computing hosting and the research gaps on cloud computing hosting and competitive advantage.

2.2 Theoretical Framework

The research used three concepts: TAM, Resource-Based View, and Innovation Diffusion Theory.

2.2.1 Technology Acceptance Model (TAM)

The approach takes into account the usefulness and simplicity of use of technology as two of the factors. The usability of a new technology determines its worth in the marketplace. When it comes to new technology, simplicity of use is the most important factor (Apulu, 2012). Since its inception, the TAM model has been revised to include newer considerations, such as the perception of risk, personal experience, peer pressure, and cognitive processes (Park, 2009).

The concept has been criticized because it fails to take into account the overlapping impacts of the several contexts and domains in which almost all new technology works (Hall & Khan, 2003). So although the boxes describe one major non-adoption reason, they do not explain how this relates to other causes. Although this is valuable in the tradition of innovation research, sociologists may find such explanations unduly simple without a study of the sequential system. The model is based on a comparison of current theory with historical facts on non-adoption of technology.

Several researchers have used the TAM in their work on ICT adoption. The TAM was used by Xiong, Qureshi, and Najjar (2013) to examine how several aspects of ICT adoption, such as anticipated value, attitude, and effort, differed throughout China's population. It was found that the perceived simplicity of use and usefulness of ICTs are major factors in Chinese SMEs' adoption of ICTs, according to the TAM model. TAM theory was utilized by Alam and Noor (2009) to investigate the adoption of ICT in Malaysia's service industry. According to the findings, ICT adoption is more likely when the benefits of the technology are greater.

2.2.2 Resource Based Theory

Back in 1984, Birge came up with this notion. According to this idea, organizations examine their competitive advantage by conducting strategic advantage evaluations. RBVs state that firms have unique physical and intangible resources, as well as the capacity to utilise those resources. Because of this, there is a distinct distinction between them. When a company's resources are properly developed, they may become a source of competitive advantage for that company (Alvarez & Busenitz, 2001). The strategic strategy and organizational performance of a company are greatly influenced by the resources it has at its disposal.

An organization's competitive advantage may be gained via the improvement of scarce resources, as proposed by Barney (1996). Rare, valuable, and distinctive resources provide a business a competitive advantage that is ingrained in the organization's structure. Identifying and separating a company's strengths and weaknesses is critical. As a result, what the company may do is not only to use the time it has, but also the finances it has available. A company's capacity to cultivate unique talent is critical to its success, according to Learned et al. (1969). RBV says successful companies have well-designed organizational structures. This is due to the fact that their expenses are cheaper, and their products and services are better (Das & Teng2000).

Research in this area relies on the notion of resource-based perspective, which helps explain how the aggregation of resources across time leads to cloud computing and competitive advantage. Resources of a firm facilitate adequate implementation of the various cloud computing by firms leading to competitive advantage.

2.2.3 Diffusion of Innovation Theory

Rodgers (1962) developed Diffusion of Innovation theory after he conducted research on Innovation. It is noted in the research that an idea or product nature perceived can gain momentum and diffusion (spreading) takes place within a particular population or social structure. People who are a part of society's social structure adopt new ideas, behaviors, or products as a result of the diffusion activity described above. Individuals are critical in the adoption process if they perceive an idea or behavior as novel and innovative. Thus Diffusion is made possible in the circumstances. It is argued in the study of Hager (2006) that in the social system innovation does not take place con currently. The process displays differences in people's appetite to innovation. The theory is primarily focused on the way prospective adopters view innovations in regard to correlative favorable or unfavorable conditions.

Therefore Innovativeness, complexity, compatibility and relative advantage are some of the factors that are formed in DOI approach framework. The cardinal candidates for early adoption are firms that intensively use particular technology in pursuit of next generation of that technology. Li and Atuagene-Gima (2011) noted that the theory of diffusion in its endeavor to explain new ideas or innovation adoption puts across five factors which play vital role in the process of innovation adoption. These are comparative advantage, compatibility, complexity, trial ability and observability. In the theory it is suggested that innovations that clearly have advantage over the earlier approach will be easy in adoption and implementation. If Innovation is viewed by key players to be easy in use then adoption process will be

facilitated (Greenhalgh et al., 2004). The diffusion of innovations approach in this study is significant to comprehending the changes that takes place in the adoption process and usage of innovations in digital marketing. In the study of Hager, (2006) it is noted that there are discussions going on between organizations and individuals about adoption.

2.3 Cloud Computing

SaaS is a software delivery and licensing model that provisions software services on demand and users are billed based on usage (Rajegore & kadam). It is possible to think of software as a service in which cloud customers may obtain software from the web browser without having to worry about installation, deployment, or maintenance (Kumar, 2014). Once a cloud application is started, documents are based on the cloud servers and appear as though they are available on the desktop as normal applications (Badidi, 2013).

Services provided by cloud computing may be divided into utility PaaS, managed services, computing, web services and PaaS (Kim, 2009). The idea behind cloud computing is moving computing from on-premises desktop platforms to a service-oriented platform using the vendor's computing centers and server clusters. Services provided by cloud computing may be divided into utility SaaS, managed services, computing, web services and PaaS (Kim, 2009).

Hardware as a Service (HAAS) provides several benefits for businesses like this. It is because of this that organizations may lease network equipment like server systems and obtain fast updates to the most recent technology available. Any computer, tablet, or smartphone with Internet connectivity may access the cloud. Computing may now be done on smartphones and tablets in addition to PCs. The idea behind cloud computing is moving computing from onpremises desktop platforms to a service-oriented platform using the vendors datacenters and server clusters.

Application Service Providers (ASPs) employ the SaaS model to store software and data in the cloud (2014). Amount of storage is bigger, and people can keep huge amounts of computing in the cloud as opposed to on laptops or personal computers (Badidi,2013). A user's files and documents are stored permanently in the cloud and they exist even if something happens to a user's computer systems, such as if it gets stolen or it crashes. SLAs are not in place it could lead to service delivery challenges (Mburu,2014). Cloud interoperability issue amongst various vendors which hinders development of cloud ecosystems and forces vendor locking thus subsequently prohibiting users the ability to choose from alternative vendors.

2.3.1 Challenges of Cloud Computing

Cloud computing is facing an adoption challenge as user are afraid of its authenticity. Some of the major challenges preventing Cloud computing adoption include Security, whereby users tend to be weary of data loss, phishing and botnets (Rajegore & kadam). Cloud computing is a service model whereby users need a good reliable and fast internet connection, thus in places where there is no good internet connection this can be a disadvantage (Kumar, 2014). Another challenge is that at times the expenses incurred in moving organizational data from and to the cloud can be quite enormous (Rajegore & kadam). It's important for costumers to get commitments from service providers on delivery of services and this is usually through SLAs between cloud providers and customers, whereby SLAs are not in place it could lead to service delivery challenges (Rajegore & kadam). Cloud interoperability issue amongst various vendors which hinders development of cloud ecosystems and forces vendor lock in thus subsequently prohibiting users the ability to choose from alternative vendors.

2.3.2 Benefits of Cloud Computing

Cloud Computing provides numerous benefits amongst its users. Some of the benefits include users being able to access their files and documents at any time and from where they want, as opposed to being tied down to their office setting(Badidi, 2013). Amount of storage is bigger, and people can keep huge amounts of data in the cloud as opposed to on laptops or personal computers (Badidi, 2013). A user's files and documents are stored permanently in the cloud and they exist even if something happens to a user's computer systems, such as if it gets stolen or it crashes. (Badidi, 2013). Another benefit is that Cloud computing enables collaboration and people from diverse regions can co-author and work on the same documents together at reduced costs (Badidi, 2013).

Companies whether big or small can take advantage and benefit from cloud infrastructure by just subscribing to the service without the implementation and headache of administering it directly (Badidi, 2013). Multiple and numerous computing centres can be accessed by companies from all over the world and huge amounts of computing can be stored in the cloud as opposed to on-premise environments (Kagwe 2012). Cloud hosting guarantees that personnel in the organizational setting no longer have the headache of maintaining the systems, routine maintenance and upgrading of the system is not required and thus are able to concentrate on the core of their businesses (Watts, 2017). Another benefit is that the vendor includes software updates so that the organization will always be running the latest versions of software. With cloud deployments the vendor guarantees uptime and usually has systems in place to ensure quick recovery thus preventing downtime. With cloud hosting, the vendor conducts automatic backups and replicates it across several Computing Recovery Sites (DRs) for recovery, meaning that the organization does not have to worry about backups.

Cloud Computing benefits can be divided into two groups and they are cloud provider benefits and cloud user benefits(Kumar, 2014). The user benefits include lower costs, ability to customize, decentralization and on the fly pay as you go. On the other hand, provider benefits include cost flexibility which is normally based on consumption, applications being scalable and maintenance being easy.

2.4 Cloud Computing and Competitive Advantage

Research in this area has already been place. Khoorasgani (2016) found that cloud computing has a substantial influence on corporate competition and may even increase the performance of firms that employ it. Outsourcing of technology systems to cloud vendors improves financial performance of the organization and decreases support costs of technology sector. Cloud computing offers a simple and fast way to access resources through a browser, helps in saving costs and offers flexibility thus reducing various concerns like scalability (Khoorasgani, 2016).On the other hand, Algrari(2017) highlighted that information systems that are based in the cloud usually are of a very important role in its performance and business value. Improvements in information system processes that were perceived as indicated by performance of the organization were a representation of perceived value.

Griffith (2005) found that the adoption of ICT breakthroughs has a positive correlation with the growth of competition. Cloud computing has reduced ICT fixed costs, improved computer processing and reporting, expanded visibility, improved resource management, and boosted revenues for all enterprises. India, Srivastava & Gopalkrishnan, (2015) Indian Banks are making efforts to catch up with their international counterparts in big computing analytics although a lot of scope remains. A study was carried out in 2016 on what Indian banks can learn from the best big computing analytics practices by other banks globally. The study's goal was to find out how Indian banks were employing computers in areas such as fraud

control, customer profiling, channel utilization, feedback analysis, monitoring consumer spending, and product cross-selling. Secondary computing from a certain bank in the Middle East was used. The study found that computing analytics was being used in different banking operations to help the institution deliver better services to customers. The study recommends further research to link financial and non-financial benefits to the implementation of computing analytics in the given bank.

In Rwanda, Ndambo (2016) conducted research on analytics and economical advantage of banking and insurance firms operating within Kigali. The study found that many of the institutions surveyed were at their early stages of adopting big computing. The inferential analysis revealed that big computing analytics adoption accounted for 60 percent of the respondents' competitive advantage. One of the recommendations of the study was that banks and insurance companies needed prioritize Big computing analytics investments and adopt the test and learn mentality to help them determine how fast and deep to go in adopting business intelligence. Nderi (2014) did a study on the usage of occupational analytics and its effect on bank outcomes in the country. The main goal of the research was determining areas in which banks were applying business analytics and the factors driving the adoption. The study found that business analytics was the key to performance. Using multiple regression analysis, the research found a link between bank performance and analytics.

2.5 Summary of Literature and Knowledge Gaps

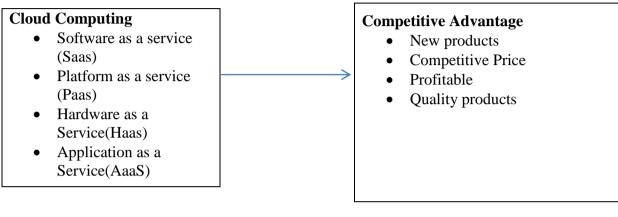
The theoretical basis, problems, and advantages of cloud computing, as well as empirical investigations of cloud computing and competitive advantage, were examined in this chapter. The study highlights three key theories, which are Technological Acceptance Model (TAM), Resource based view and the innovation diffusion theory. The bulk of empirical studies evaluated in the literature appear to support the idea that cloud hosting has a favorable impact

on competitive advantage. However, several of these studies were conducted in different places, so it's hard to say which ones covered which industry. It is impossible to apply the conclusions from this study outside of Kenya due to the vast differences in the local environments in other countries. Instead of looking at how this effects business behavior, the local research examined other factors. Therefore, knowledge gap which the research will seek to address.

2.6 Conceptual Framework

Research or survey questions may be addressed by using conceptual frameworks, which are representations of particular research or survey questions (McGaghie, 2001).

Figure 2.1: Conceptual Framework



Independent variable

Dependent variable

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This section discusses the research approach. Its primary focus is the study's design, followed by methods for data analysis, and finally the data collecting and presentation tactics that will be used as a part of this research.

3.2 Research Design

A research design helps researchers answer research questions by condensing several aspects of a research project into one (Kombo & Tromp 2006). The descriptive survey approach will be employed in this study. To characterize a subject, descriptive research analyzes data and creates a profile of a given collection of challenges, persons, or events (Cooper & Schindler, 2007). It is possible to implement a descriptive strategy by creating an image of the market environment at a key moment in relation to the factors under consideration. The approach ensures that it can do analyze what, when, who, and the place regarding a certain relevant and the degree of within the variables.

3.3 Population of the study

Zikmund et al. (2010) define a population as an unique group of individuals living in a city or state. A sample of 52 insurance firms operating in Kenya as of December 31st, 2019 was the target audience for this study (AKI Report, 2019). It used a census-based methodology for the investigation.

3.4 Data Collection

Primary sources were used to acquire data for this study. The bulk of the information was gathered using a well-structured questionnaire. Close-ended questions were included in the

questionnaire. In all, it featured three sections: a basic section on cloud computing, a section on competitive advantage, and a section for general information. One questionnaire was sent to each company as part of the study. As a consequence of strict health restrictions on social distance due to the Coronavirus Disease, the surveys were delivered through Google form (COVID-19). Targeted respondents included ICT managers.

3.5 Data Analysis

Surveys were re-examined to make sure they were consistent after data collection. Cleaning up the data, identifying any inconsistencies in the replies, and entering precise numerical values for future investigation were all accomplished via the use of editing, tabulation, and coding. Average and standard deviation were calculated using descriptive statistics. The data was graphed as a pie chart. The variables were connected using the model below.

$$Y = a + \beta 1X_1 + \beta 2X_2 + \beta 3X_3 + \beta 4X_4 + e$$

Y=Competitive advantage

 α = constant term

 $X_1 =$ Software as a service (Saas)

X₂=Platform as a service (Paas)

X₃=Hardware as a Service (Haas)

 X_4 =Application as a service (AaaS)

e= Error term

a= y-Intercept $\beta 1...\beta 5$ = Parameters

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND DISCUSSION

4.1 Introduction

The relationship between variables was established using the model of multiple linear regressions presented in the following figure.

4.2 Response Rate

The results had a 67%, with 35 out of 52 questionnaires being returned to the researchers for data processing. A rate of more than 50% is considered good in the study of Mugenda (2013) and Mugenda (2013). Also, according to Babbie (2010), a return rate of 60% is acceptable, while a return rate of 70% is great. The results were sufficient for the analysis of the data that was conducted. So the researcher was allowed to continue analyzing data.

4.3 General Information

Respondent information is addressed in this section. The information is useful in gaining insight into the backgrounds of the people being studied. Information about the person's age, work history and education level was requested.

4.3.1 Age of the Respondents

The age of the individuals was inquired of . Table 4.1 is a summary of their responses.

Table 41: Age of the Respondents

Years	Frequency	Percentage		
21 -30	6	17.1		
31 -40	15	42.85		
41 -50	10	28.57		
51 -60	4	11.42		
Total	35	100		

Respondents aged 31 to 40 comprise 42.85%; those age 41 to 50 include 28.57 %; and those ages 51 to 60 comprise 11.42% of those surveyed, according to Table 4.1. In other words, most insurance workers are young, particularly in ICT divisions.

4.3.2 Respondent's Years of Experience

The responders were asked how many years of experience they had. Table 4.2 displays their replies.

Table 4.2: Respondent's number of years worked

Years	Frequency	Percentage	
Below 3 years	8	22.85	
4-6 years	12	34.28	
7-10 years	15	42.85	
Total	35	100.0	

A large majority of respondents (42.85%) have worked for the firm for 4-6 years, followed by 34.28% for 7-10 years, and lastly 22.85% for less than 3 years. This means 87.5% had worked in insurance for four years or more, demonstrating they had trustworthy and accurate knowledge about the topic.

4.3.3 Highest level of Education

In order to find out what their highest degree of education is, the respondents were questioned. Table 4.3 shows their replies.

Table 4.3: Respondents Academic Qualifications

Academic Qualifications	Frequency	Percent
Diploma	12	34.28
Degree	15	42.85
Post Graduate Degree	8	22.85
Total	35	100.0

As shown in Table 4.3, 42.85 % had a degree and 34.28 % had a diploma. 22.85% of those polled held a postgraduate degree, which was the next highest group. People that are knowledgeable about the topic matter and can provide accurate information are included in this group. Many of those surveyed had enough education and experience for managerial positions. This indicates that most employees understood the study's goal and hence supplied credible data.

4.4 The Extent to which Cloud Computing has been Adopted

Participants were asked how much cloud computing they utilized on a regular basis. "Very large extent," "significant extent," "moderate amount," "tiny extent," and "not at all," according to the Likert scale replies. According on how favorable or negative a response was, each question was given a score of one to five, with the highest score earning five points and the lowest score receiving four. The mean score for this research was estimated as 4.0<5.0 big extent, 3.0<4.0 moderate extent, 2.0<3.0 small extent, and 1.0<2.0 did not agree, with the most positive earning 5 points and the least positive receiving 4 points, respectively. Table 4.4 shows the findings.

Table 4.4: Extent of Cloud Computing Adoption

							Std.
Extent of adopted cloud computing	1	2	3	4	5	Mean	Deviation
Software as a service(Saas)	1	0	5	8	21	4.3714	.94202
Platform as a service(Paas)	0	0	10	17	8	3.9429	.72529
Hardware as a Service(Haas) e.g							
network servers	1	1	7	18	8	3.9429	.83817
Application as a Service(Aaas)	0	2	7	17	9	3.8857	.90005

Source: Field Data (2020)

Table 4.3 shows that Software as a Service, which has an average of (4.3714) across insurance companies, has a substantial share. Following are Platform as a Service (3.9429) and Hardware as a Service (3.9429), with Application as a Service (3.9429) coming last (3.9429). (3.8857).

4.5 Benefits of Cloud Computing

Those who replied praised the advantages of cloud computing. People who completed the Likert scale were expected to respond in one of five ways: "very large degree," " great extent," moderate amount," " small extent," and "not at all." Respondents to each single question were awarded points depending on how positive or negative their responses were, with the most positive responses earning 5 points and the least positive receiving 4, 3, 2, and 1 point, respectively. The mean score for this research was calculated using an average of 4.0<5.0 for vast extent, 3.0<4.0 for moderate extent, 2.0<3.0 for little extent, and 1.0<2.0 for didn't agree as the mean score.

Table 4. 5 Benefits of Cloud Computing

The benefits of using cloud services 1	2	3	4	5	Mean	Std. Deviation
You have anytime and anywhere0 access to data enabling you to work at any time and from anywhere on the go	0	6	13	16	4.2857	0.75035
It is safe, secure and privacy is0 guaranteed	2	8	15	11	4.0286	.82197
It offers free updates and upgrades0 whereby users are always running the latest version of software	2	8	13	12	4.0000	.90749
Provides a financially backed Service0 Level Agreement (SLAs) that guarantees uptime	1	10	13	11	3.9714	.85700
Users are able to collaborate and work0 on the same documents together	1	9	15	10	3.9714	.82197
It offers a per user-based licensing0 model and pay as you go service so that you only pay for what you need	3	7	13	12	3.9714	.95442
Provides larger mailboxes for storage0 of emails	3	21	13	12	3.9714	.95442
Users get larger storage for backing0 up of documents	2	9	13	11	3.9429	.90563
Routine maintenance and upgrading0 of the system is not required thus organizations are able to concentrate on the core of their business	3	7	14	11	3.9429	.93755
Support is readily available 0	2	10	13	10	3.8857	.90005
The human resource is well-versed in 0 the administration of cloud computing (IT) services.	4	7	14	10	3.8571	.97446

Source: Field Data (2020)

Listed below are some main advantages of moving to the cloud. There was a 4.2857 average and a 0.75035 standard deviation for remote working. It is safe with an of aAverage 4.0286, standard deviation .82197. A 3.8571 average and a standard deviation of .97446 were discovered for cloud computing (IT) human resource training, and a similar average and standard deviation for support.

The Challenges Facing Cloud Computing

The survey asked participants to identify barriers to adopting cloud computing. The projected answers from the individuals who completed the Likert scale were "very large extent," "great extent," "moderate extent," "small extent," and "not at all." Responses to each single question were assigned points based on how positive or negative they were, with the most positive receiving 5 points and the least positive receiving 4, 3, 2, and 1. The mean score for this study was calculated as 4.0 < 5.0 for large extent, 3.0 < 4.0 for moderate extent, 2.0 < 3.0 for small extent, and 1.0 < 2.0 for did not agree, with the most positive receiving 5 points and the least positive receiving 4. This information is shown in Table 4.6.

Table 4. 6 Challenges Facing Cloud Computing

						Std.
The challenges facing cloud computing adoption 1	2	3	4	5	Mean	Deviation
Some of its components require an internet connection0 to function	0	6	13	16	4.2857	0.7503
It can be difficult to keep up with changing feature set 0	0	4	18	13	4.2571	0.6572
Users only use a given percentage of the product and0 not the full functionality	0	7	13	15	4.2285	0.7702
It is not secure, and privacy is not guaranteed 1	0	6	13	15	4.2	0.8331
Migrating to the cloud is very expensive 1	0	7	13	15	4.1714	0.9230
Lack of a Service Level Agreement (SLA) leads to1 poor service delivery	0	7	13	14	4.1142	0.9321
Cloud interoperability issue with other vendors leads to 1 vendor lock in	0	7	13	14	4.1132	0.9321

Source: Field Data (2020)

The following are the problems confronting cloud computing adoption based on the Mean: Some of its components require an internet connection to function had the highest mean(4.285714) and It can be difficult to keep up with changing feature set with an average of 4.2571 and mean of 0.6572. Cloud interoperability issue with other vendors leads to vendor lock in had the lowest mean of 4.1132 and S.D 0.9321, followed by Lack of a Service Level Agreement (SLA) leads to poor service delivery with an average of 4.1142 and S.D 0.9321.

4.6 Competitive Advantage

The study's dependent variable was competitive advantage. Knowing the respondents' perceptions of their company's competitive advantage was essential. The following analysis has been adopted to distinguish the extent: mean value of 4.0<50.0 to a large, a moderate extent of 3.0<4.0, a small extent of 2.0<3.0 and an average score of 1.0<2.0 to a small degree. 3 statements were used to evaluate Competitive advantage.

The results are shown on Table 4.7

Table 4.7 Competitive Advantage

Competitive Advantage						Std.
						Deviati
	1	2	3	4	5	on Mean
We are first in the market to introduce new service	s0	1	1	9	24	4.6000.69452
We offer a competitive price for our services	0	1	2	8	24	4.5714.73907
Our company is profitable	0	1	1	11	22	4.5429.70054
Our services are of a high quality	0	1	2	9	23	4.5429.74134
Our services are highly reliable	0	1	1	11	22	4.5429.70054
We can alter our services to meet client needs	0	1	2	9	23	4.5429.74134
We cater to customer needs for new features	0	1	2	9	23	4.5329.74134

Source: Field Data (2020)

From Table 4.7, insurance firms focus on new products with an average of 4.600 and S.D of 0.6954 on the other hand, insurance firms offer competitive pricing at an average of 4.5714 and S.D of 0.73907.On the lowest means, insurance firms do not focus on new features so much to meet customer need at mean of 4.5429 and S.D 0.7413 and lastly insurance firms do not alter to meet client needs at mean of 4.5329 and S.D 0.74134.

4.7 Relationship between Cloud Computing and Competitive Advantage.

Respondents were asked to indicate their level of agreement or disagreement. Table 4.6 shows the findings.

4.7.1 Model Summary

Multiple regressions were used to investigate predictor-dependent variable relationships.

Table 4.8 provides the model summary.

Table 4. 8: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.820 ^a	.672	.552	.482

a. Predictors: (Constant), Predictors: (Constant), Aaas, Saas, Haas e.g network servers, Paas.

Source: Field Data (2020)

In Table 4.8 at significance level of 0.005, the outcomes show that R and R² were 0.820 and 0.767 respectively. R=0.672 shows that there is a strong correlation between cloud computing and competitive advantage. More than 67.2% of service delivery variance can be explained by the model's predictors, whereas only 32.8% of variation can be attributed to other variables that are not included in the model.

4.7.2 Goodness of Fit of the Model

For the data, the researcher utilized a suitable regression model and did Analysis of Variance (ANOVA). As shown on Table 4.9

Table 4. 9:ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.	
1	Regression	8.090	4	.056	1.697	.018 ^b	
	Residual	2.460	30	.033			
	Total	10.550	34				

Application as a Service(Aaas), Software as a service(Saas), Hardware as a Service(Haas) e.g network servers, Platform as a service(Paas)

Source: Field Data (2020)

Table 4.9 shows the results of the ANOVA. The f statistic is 1.697 at a significance level of 5%, according to this Table. P values of 0.05 are considered statistically significant. Using cloud computing's properties to anticipate competitive advantages is a huge step forward.

4.7.3 Model Regression Coefficients

Table 4.10 displays significant values, t-statistics, and standardized and unstandardized coefficients.

Table 4.10: Regression Coefficients

Coefficients^a

Mode	el	Unstanda	rdized	Standardized	T	Sig.
		Coefficients		Coefficients		
		В	Std. Error	Beta	_	
1	(Constant)	2.000	.646		3.097	.004
	Software as	a006	.137	008	046	.964
	service(Saas)					
	Platform as a	.285	.293	.295	.973	.338
	service(Paas)					
	Hardware as a	.200	.229	.239	.873	.390
	Service(Haas)	e.g				
	network servers					
	Application as	a.085	.254	.110	.336	.739
	Service(Aaas)					

a. Dependent Variable: Y Competitive Advantage

Source: Field Data (2020)

T able 4.10 the results on don't show any relationship, since the t values are below the critical value of 1.96 and the p-values are higher than the recommended 0.001 or below meaning that

Cloud computing has no relationship with competitive advantage. The problem could have been in the data. The research that does not use lickert scale in the regression model should be conducted for conclusive results. The resulting regression equation was:

$$OP = 0.2 - 0.006X1 + 0.285 X2 + 0.200 X3 + 0.085 X4$$
 equation (1)

Y = Competitive Advantage

X1 Saas= Software as a service(Saas)

X2 Paas=Platform as a service(Paas)

X3 Haas=Hardware as a Service(Haas)

X4 Aaas=Application as aservice(AaaS)

4.8 Discussion of Findings

The significant majority of respondents were under 35 and worked in ICT departments. 87.5 percent of respondents have worked in the insurance industry for four years or more, providing reliable information. Finally, the majority of respondents possessed a degree certificate, indicating that they had the necessary education to be in management.

Most insurance businesses rely heavily on service, according to a study. Platform as a Service (PaaS) was then introduced. After Hardware as a Service, Application as a Service was established. Kumar (2014) claims that cloud customers may access software through a web browser without installation, deployment, or maintenance concerns.

It was found out that insurance companies have benefited to large extent on use of cloud computing through access to data enabling you to work at any time and from anywhere on the go, safe, secure and privacy is guaranteed and lastly it offers free updates and upgrades whereby users are always running the latest version of software. The findings agree with Badidi (2013) SaaS provides numerous benefits amongst its users. Some of the benefits include users being able to access their files and documents at any time and from where they want, as opposed to being tied down to their office setting. Amount of storage is bigger, and people can keep huge amounts of data in the cloud as opposed to on laptops or personal computers. Karanja(2015) SaaS guarantees that personnel in the organizational setting no longer have the headache of maintaining the systems, routine maintenance and upgrading of the system is not required and thus are able to concentrate on the core of their businesses.

It was found out that most of insurance face challenges when it comes to using cloud computing since some of its components require an internet connection to function, difficult to keep up with changing feature set, Cloud interoperability issue with other vendors leads to vendor lock and Lack of a Service Level Agreement (SLA) leads to poor service delivery. The findings agree with Mburu, (2014) SaaS is a service model whereby users need a good reliable and fast internet connection, thus in places where there is no good internet connection this can be a disadvantage. Kumar, (2014) cloud interoperability issue amongst various vendors which hinders development of cloud ecosystems and forces vendor lock in thus subsequently prohibiting users the ability to choose from alternative vendors.

As per Resource-based a company has unique productive resources that may be used to optimize productivity and execute a plan effectively. According to the findings, insurance companies have made the most efficient use of their resources in order to deploy cloud computing. A company's ultimate purpose in product development is to maintain its market share, according to Ittner and Larcker (2016). These data support this assumption. Similarly, Lee and Grewal (2015) claimed that the management tries to promote a new product to present consumers in order to improve firm performance while following a product development plan.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMEDATIONS

5.1 Introduction

In this chapter, the study's findings and suggestions are presented in line with its objectives.

5.2 Summary

The survey found that 62.5 percent of respondents strongly agreed that cloud services allow you to access your data at any time and from any location, allowing you to work from anywhere and at any time. The fact that cloud offers a per user-based licensing model and pay as you go service so that you only pay for what you need, was not perceived as a very crucial benefit of using cloud services. Majority of the respondents considered the fact that some cloud components require an internet connection to function as being a very crucial challenge to cloud adoption. Security and privacy was disregarded as a challenge of cloud services as most respondents consider cloud as being very secure and privacy is guaranteed.

5.3 Conclusion

According to the findings of this research, the advantages of using cloud services exceed the disadvantages. Majority of the Insurance firms in Kenya have adopted the use of cloud services and only a small percentage of the firms are still using legacy on-premises solutions/ platforms. The use of cloud services and the competitive advantage of Kenyan insurance organizations were the focus of this research.

The analysis found that the vast majority of insurance businesses rely heavily on service. After then, Platform as a Service came into play. Application as a Service was the next most popular option after Hardware as a Service.

The report concluded that cloud computing has greatly helped insurance businesses by allowing customers to work from anywhere at any time, while maintaining security and privacy, and by providing free software updates and upgrades. Simlarly, insurance face challenges when it comes to using cloud computing since some of its components require an internet connection to function, difficult to keep up with changing feature set,

5.4 Recommendations

Companies in Kenya's Insurance industry must employ cloud computing services in order to stay ahead of the curve as technology continues to advance at an incredibly fast rate. The research would recommend that the firms select a cloud steward that will be responsible for guiding the firm towards cloud adoption. Management should be involved as they are the decision makers and thus need to be involved in the entire process.

The firms need to identify the operations and data that will be migrated to the cloud and select the best cloud and vendor to achieve their goals. Consideration must be made in selecting a vendor that offers a Service Level Agreement (SLA) that offers guarantees that are sufficient. The Information Technology team should create policies that will ensure compliance for usage of cloud services across the entire firm. Adoption of cloud services isn't a one-time effort, its crucial to ensure that processes and economic modeling are established, which should be constantly revisited.

5.5 Limitations of the study

One of difficulties was that mid-level management personnel were the target respondents for the study. Many were extremely busy and strained due to the pressure at work, therefore there was not enough time to answer the surveys when the researcher provided them with the questionnaire. To guarantee that the questionnaire was properly completed, the instrument validity was checked to make sure aims of investigation are clear, brief and addressed before distributing them by email.

The onset of covid 19 necessitating people working from home and maintaining social distance limited the interactions the researcher could have with the respondents. Follow up questions had to be done remotely via a phone call or zoom meetings. These limitations further made it harder to adequately validate some of the responses as would have been the case in face to face meetings. The research also has a further disadvantage because it focuses solely on strategic responses tactics. However, other variables are extremely important in obtaining a company's service delivery edge.

5.6 Recommendation for Further Studies

As a cross-sectional study, it was conducted using a quantitative technique to gather respondents' thoughts and feelings. It was decided to conduct a cross-sectional research using a quantitative technique because of the limited time and resources available. There is a need to do a comparable study using qualitative methods like interviews.

Further research should be done on cloud computing and competitive advantage insurance sector to determine the relationship between the variables since in our study the results did not show any relationship. This would help to provide accurate data that reflects current occurrences across all economic sectors.

It is essential to do more study to identify other random variations and elements that impact the competitive advantage of insurance companies and how these aspects would connect to cloud computing and practices development. It is possible to incorporate comparable factors or even additional variables in order to get a more solid confirmation or decrease in the error term.

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APPENDICES

APPENDIX I: Research Questionnaire

SECTION A: DEMOGRAPHIC INFORMATION

- 1. Name of the insurance company (Optional).....
- **2.** What is your age bracket?

3. For how long have you been working in this Company?

4. Highest level of Education?

5-Very Large Extent

High School [] Diploma [] Degree [] Post Graduate

SECTION B: EXTENT TO CLOUD HOSTING ADOPTION

what extent does your organization use cloud computing to support the following functions? Kindly indicate using the scale: 1-no extent; 2-Little Extent; 3-Moderate Extent; 4-Large Extent;

Solutions	No extent	Little extent	Moderate extent	Large extent	Very large extent.
Software as a service(Saas)					
Platform as a service(Paas)					
.Hardware as a Service(Haas)					
Application as a Service(Aaas)					

Any other please specify.....

SECTION C: THE BENEFITS OF USING CLOUD COMPUTING

To what extent do you agree with the following as the benefits of using cloud computing hosting. Kindly indicate using the scale: 1-no extent; 2-Little Extent; 3-Moderate Extent; 4-Large Extent; 5-Very Large Extent

Solutions	No extent	Little extent	Moderate extent	Large extent	Very large extent.
You have anytime and anywhere access to data enabling you to work at any time and from anywhere on the go					
It is safe, secure and privacy is guaranteed					

It offers free updates and upgrades whereby users are always running the latest version of software			
Provides a financially backed Service Level Agreement (SLAs) that guarantees uptime			
Users are able to collaborate and work on the same documents together			
It offers a per user-based licensing model and pay as you go service so that you only pay for what you need			
Provides larger mailboxes for storage of emails			
Users get larger storage for backing up of documents			
Routine maintenance and upgrading of the system is not required thus organizations are able to concentrate on the core of their business			
Support is readily available			

SECTION D: CHALLENGES OF USING CLOUD COMPUTING HOSTING.

To what extent do you agree with the following as the challenges of using cloud computing hosting. Kindly indicate using the scale: 1-no extent; 2-Little Extent; 3-Moderate Extent; 4-Large Extent; 5-Very Large Extent

Solutions	No extent	Little extent	Moderate extent	Large extent	Very large extent.
Some of its components require an internet connection to function					
It can be difficult to keep up with changing feature set					
Users only use a given percentage of the product and not the full functionality					
It is not secure, and privacy is not guaranteed					
Migrating to the cloud is very expensive					
Lack of a Service Level Agreement (SLA) leads to poor service delivery					
Cloud interoperability issue with other vendors leads to vendor lock in					

SECTION E: COMPETITIVE ADVANTAGE

To what extent do you agree with the following attributes on competitive advantage exhibited by your firm? Kindly indicate using the scale: 1-No extent; 2-Little Extent; 3-Moderate Extent; 4-Large Extent; 5-Very Large Extent

Component	No extent	Moderate Extent	Large Extent	Very Large Extent
We are first in the market to introduce new services				
We offer a competitive price for our services				

Our company is profitable			
Our services are of a high quality			
Our services are highly reliable			
We can alter our services to meet client needs			
We cater to customer needs for new features			

Thank You

Appendix II: List of Insurance Firms in Nairobi Kenya

- 1. AAR Insurance Kenya Limited
- 2. AIG Kenya Insurance Co Ltd
- 3. Africa Merchant Assurance Co. Ltd
- 4. Allianz Insurance Co of Kenya Ltd
- 5. APA Insurance Limited
- 6. APA Life Assurance Limited
- 7. Barclays Life Assurance K Ltd
- 8. Britam General Ins. Co. (K) Ltd.
- 9. British-American Insurance Co. Ltd.
- 10.Cannon Assurance Ltd
- 11. Capex Life Assurance Limited
- 12. CIC General Insurance Limited
- 13. CIC Life Assurance Ltd
- 14. Corporate Insurance Co. Ltd
- 15. Directline Assurance Co Ltd
- 16. Fidelity Shield Insurance Co Ltd
- 17. First Assurance Company Ltd
- 18. GA Insurance Limited
- 19. GA Life Assurance Ltd
- 20. Geminia Insurance Company Ltd
- 21I. CEA LION General Insurance Co Ltd
- 22. ICEA LION Life Assurance Co Ltd

- 23. Intra Africa Assurance Co Ltd
- 24. Invesco Assurance Company Ltd
- 25. Kenindia Assurance Co Ltd
- 26. Kenya Orient Insurance Ltd
- 27. Kenya Orient Life Assurance Ltd
- 28. Liberty Life Assurance Kenya Ltd
- 29. Madison Insurance Company Ltd
- 30. Mayfair Insurance Company Ltd
- 31. Metropolitan Cannon Life Ass Ltd
- 32. Occidental Insurance Co Ltd
- 33. Old Mutual Life Assurance Co Ltd
- 34. Pacis Insurance Company Ltd
- 35. Pioneer Life Assurance Company Ltd
- 36. Pioneer General Insurance Ltd
- 37. Phoenix of EA Assurance Co Ltd
- 38. Prudential Life Assurance K Ltd
- 39. Saham Assurance Company K Ltd
- 40. Sanlam General Insurance Ltd
- 41. Sanlam Life Assurance Ltd
- 42. Tausi Assurance Company Ltd
- 43. The Heritage Insurance Company Ltd
- 44. Trident Insurance Company Ltd
- 45. Resolution Insurance Company Ltd

- 46. UAP Life Assurance Limited
- 47. UAP Insurance Company Limited
- 48. Takaful Insurance of Africa Limited
- 49. The Jubilee Insurance Co. Ltd
- 50. The Monarch Insurance Co. Ltd.
- 51. The Kenyan Alliance Insurance Co Ltd
- 52. Xplico Insurance Limited

Source: IRA (2019)