

**DETERMINANTS OF ADOPTION OF CLOUD PRACTICE ACCOUNTING IN  
INSURANCE FIRMS IN NORTH RIFT REGION, KENYA**

**By**

**MENG'WA AMOS KWEMBOI**

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## DECLARATION

This project is my original work and has not been submitted for examination in any other University.

Signature.....

Date.....19-11-2020.....

**MENG'WA AMOS KWEMBOI**

**D61/21648/2019**

### Declaration by the supervisor

This research project has been submitted for examination with my approval as the university supervisor.



Signature: .....

Date: ...19-11-2020.....

**Dr. Nixon Omoro**

**Department of Finance and Accounting**

**University of Nairobi**

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## **DEDICATION**

This research work is dedicated to my family including my wife and children.

# TABLE OF CONTENTS

<b>DECLARATION.....</b>	<b>ii</b>
<b>ACKNOWLEDGEMENT.....</b>	<b>iii</b>
<b>DEDICATION.....</b>	<b>iv</b>
<b>TABLE OF CONTENTS .....</b>	<b>v</b>
<b>LIST OF TABLES .....</b>	<b>viii</b>
<b>LIST OF FIGURES .....</b>	<b>ix</b>
<b>ABBREVIATIONS AND ACRONYMS.....</b>	<b>x</b>
<b>ABSTRACT.....</b>	<b>xi</b>
<b>CHAPTER ONE .....</b>	<b>1</b>
<b>INTRODUCTION.....</b>	<b>1</b>
1.1 Background of the Study .....	1
1.1.1 Cloud Practice Accounting .....	2
1.1.2 Determinants of Adoption of Cloud Practice Accounting .....	3
1.1.3 Cloud Practice Accounting in Insurance Firms .....	4
1.2 Research Problem .....	6
1.3 Research Objectives.....	7
1.4 Value of the Study .....	7
<b>CHAPTER TWO .....</b>	<b>9</b>
<b>LITERATURE REVIEW .....</b>	<b>9</b>
2.1 Introduction.....	9
2.2 Theoretical Literature Review .....	9
2.2.1 Technology, Organization and Environment Theory .....	9
2.2.2 Innovation Diffusion Theory .....	10
2.3 Determinants of Adoption of Cloud practice accounting .....	11
2.4 Summary of Literature Review and Research Gaps .....	13
2.5 Conceptual Model.....	13
Figure 1: Conceptual Model .....	15

<b>CHAPTER THREE .....</b>	<b>16</b>
<b>RESEARCH METHODOLOGY .....</b>	<b>16</b>
3.1 Introduction.....	16
3.2 Research Design.....	16
3.3 Target Population.....	16
3.4 Sampling Design.....	16
3.5 Data Collection Instruments .....	17
3.6 Data Analysis .....	17
<b>CHAPTER FOUR.....</b>	<b>18</b>
<b>DATA ANALYSIS, RESULTS AND DISCUSSION.....</b>	<b>18</b>
4.1 Introduction.....	18
4.2 General Information of the Respondents .....	18
4.2.1 Department in the Insurance Firm .....	18
Table 4.1: Department in the Insurance Firm .....	18
4.2.2 Years of Experience of Insurance firms.....	19
Table 4.2: Years of Experience of Insurance Firms .....	19
4.3 Analysis of the Specific Objectives .....	19
4.3.1 Availability of Technology and Adoption of Cloud Practice Accounting .....	19
Table 4.3: Availability of Technology and Adoption of Cloud Practice Accounting .....	20
4.3.2 Cost Savings and Adoption of Cloud Practice Accounting .....	21
Table 4.4: Cost Savings and Adoption of Cloud Practice Accounting.....	21
4.3.3 Regulatory Support and Adoption of Cloud Practice Accounting.....	23
Table 4.5: Regulatory Support and Adoption of Cloud Practice Accounting .....	23
4.3.4 Top Management Support and Adoption of Cloud Practice Accounting .....	24
Table 4.6: Top Management Support and Adoption of Cloud Practice Accounting.....	24
4.4 Correlation Analysis .....	25
Table 4.7 Overall Correlation Analysis .....	26
Table 4.8 ANOVA Model.....	27
4.5 Discussions of Findings .....	27
<b>CHAPTER FIVE .....</b>	<b>30</b>

<b>SUMMARY, CONCLUSION AND RECOMMENDATIONS .....</b>	<b>30</b>
5.1 Summary of Findings.....	30
5.2 Conclusions.....	31
5.3 Recommendations.....	32
5.4 Limitations of the Study.....	33
5.5 Suggestion for Further Studies.....	33
<b>REFERENCES.....</b>	<b>35</b>
<b>APPENDICES.....</b>	<b>39</b>
<b>APPENDIX I: QUESTIONNAIRE .....</b>	<b>39</b>
<b>APPENDIX II: LIST OF INSURANCE FIRMS IN NORTH RIFT REGION.....</b>	<b>42</b>

## LIST OF TABLES

Table 4.1: Department in the Insurance Firm .....	18
Table 4.2: Years of Experience of Insurance Firms .....	19
Table 4.3: Availability of technology and Adoption of Cloud Practice Accounting.....	20
Table 4.4: Cost Savings and Adoption of Cloud Practice Accounting.....	21
Table 4.5: Regulatory Support and Adoption of Cloud Practice Accounting .....	23
Table 4.6: Top Management Support and Adoption of Cloud Practice Accounting.....	24
Table 4.7 Overall Correlation Analysis .....	26
Table 4.8 ANOVA Model.....	27



## LIST OF FIGURES

Figure 1: Conceptual Model .....	15
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## **ABBREVIATIONS AND ACRONYMS**

ANOVA	Analysis of Variance
IFA	Insurance firms Act
COK	Constitution of Kenya
DOI	Diffusion of Innovation
IDT	Innovation Diffusion Theory
IT	Information Technology
NOREB	North Rift Economic Bloc
PFMA	Public Finance Management Act
SMEs	‘Small and Medium Enterprises’
SPSS	‘Statistical Package for the Social Sciences’
TOE	‘Technology-Organization-Environment’
UK	United Kingdom

## ABSTRACT

Administrations in the insurance firms need to take advantage of cloud expertise to appreciate augmented efficiency and improved efficiency in organizational operations. However, insurance firms in North Rift Region of Kenya are reluctant to embrace cloud technology wholly; the developing drift is the non-core applications deployment such as email on the cloud. The study objective was to establish the determinants of adoption of cloud practice accounting among insurance firms in North Rift Region of Kenya. Technology-Organization-Environment (TOE) Framework and Diffusion of Innovation (DOI) Theory were adopted in this study. A descriptive survey design was adopted. The targeted population was insurance firms in North Rift Region of Kenya. The target population was 31 insurance firms. The study used survey. The research mainly gathered primary data. This type of data was gathered using a questionnaire. Data analysis was done with the aid of SPSS (Version 20.0). Descriptive (percentages, frequencies, mean as well as standard deviation) as well as inferential statistics were adopted to analyse the data. ANOVA was used to examine the influence of the identified determinants on cloud practice accounting adoption among insurance firms. The findings of the study indicated that there was a significant statistical effect of availability of technology ( $r=0.574$ ,  $p=0.000$ ); cost savings ( $r=0.536$ ;  $p=0.000$ ); regulatory support ( $r=0.348$ ;  $p=0.000$ ) and top management support on adoption of cloud practice accounting of insurance firms ( $r=0.422$ ;  $p=0.000$ ). ANOVA model predicted the adoption of cloud practice accounting among insurance firms in North Rift Region significantly well ( $p=0.000^a$ ). The study concluded that availability of technology affects adoption of cloud practice accounting among insurance firms. Since cloud practice accounting is an equally new technology, availability of supporting technologies affects adoption of cloud practice accounting. Cost savings has a significant relationship with adoption of cloud practice accounting. There is a correlation between regulatory support and cloud practice accounting adoption. Top management support affects adoption of cloud practice accounting. The top management of the insurance companies offer the vision and commitment for innovation and creates environments that foster this modernization. The study recommended that top management ought to invest in IT technologies that will aim towards the advantage of their insurance firms. Insurance firms in their desire to adopt new technologies should ensure they comply with regulations governing adoption of new technologies. Insurance firms should invest in information technology that will work towards the benefit of their organization.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the Study

Accounting practices are important to guarantee that a firm's financial resources are utilized efficiently and effectively in the attainment of profitability (Dimitriu, A new paradigm for accounting through cloud practice accounting, 2014). Information about the execution of a venture specifically its utilization of resources, is required with the end goal to evaluate potential changes in the expenditures that it can control later on. Information about costs helps anticipate the limit of the endeavor to effectively and efficiently utilize resources from the activities undertaken by the organization (Prichici, 2015). It is likewise valuable in shaping judgment about the control measures adopted with which the institution may incur extra spending (Sobhan, 2019). In cloud-based accounting, workers can obtain applications software remotely via the internet or additional networks via a provider of service of cloud application (Khanom, 2017).

Technology-Organization-Environment (TOE) Framework and Diffusion of Innovation (DOI) Theory were adopted in this study. DOI describes the adoption of innovation at both administrative and individual level. This theory main focus is on the organizational-level decisions of adoption. The major distinction between TOE and DOI is that TOE theory puts into consideration environmental aspects. The dependent variables of the TOE are the decision to adopt, the likelihood of adoption, the adoption intention and the adoption extent of the new technology. The TOE model enhances the ability of the DOI to describe the intra-organizational diffusion of innovation (Racherla, 2008). DOI is based predominantly on the technological characteristics and the perceptions of the users on innovation. According to TOE framework, technologies presently in use by the organizations and those technologies available in the market and not utilized by the organization influences the decisions of adoption (Khanom, 2017).

The insurance sector in Kenya comprises of 25 general insurers, 13 life insurers and 11 composite insurers. Other players include 29 medical insurance providers (MIPs), 108 motor assessors, 24 insurance surveyors 198 licensed insurance brokers, 5,155 insurance agents, 25 loss adjusters and 133 investigators (AKI Report, 2014). There are two main associations - AIBK and AKI, while the body regulating the industry being the Insurance Regulatory Authority (IRA) (AKI Report,

2014). Until lately, the insurance sector operated in a stable setting. The products provided were competition and standardized was comparatively low (Gitau, 2013). Nevertheless, with the increase in the total players in the sector, to 39 in 2001 from 15 in 1978 to 49 as at end of 2014, compression has been applied on insurers to formulate successful approaches that facilitate pre-emptive response to these changes in the reasonable environment. Insurers have thus turned their focus on innovation to facilitate them react to and effectively compete in the marketplace.

### **1.1.1 Cloud Practice Accounting**

Cloud accounting is the act of utilizing the accounting system that's gain access to via the internet. Because of cloud accounting, one can right to use the accounts from wherever and on any expedient that has a connection on internet through a web browser or an app. Along with this, it also supports multi-users with which data can be accessed by different users simultaneously (Venters & Whitley, 2019). Accounting practices on the cloud permits the use of computing technologies as services via the internet while the users have no own computing devices. Amid the development of cloud accounting, different categories have been utilized to incorporate its layers of services. These layers have been regarded as the models of cloud service (Sriram & Khajeh-Hosseini, 2010), models of cloud institution, and cloud architectural layers (Stanoevska-Slabeva, 2010). This deployment of cloud accounting models are categorized on the basis of two features: physical distribution and location; and the owner of the cloud data centre (Garg, 2011). Consequently, there are three deployment cloud models: public, private, as well as hybrid.

Nonetheless, the significance of the cost-benefit is not reinforced by all investigations. In the context of Asia-Pacific, Gupta *et al.*, (2013) showed that cost was the third greatest significant element, with privacy, and security and ease of use observed to be more significant than cost. Similarly, while Yazn *et al.*, (2013) acknowledged that the low expenditure of capital stimulated smaller organizations to adopt cloud practices, predominantly start-up micro organizations, and the conversation of the cost characteristic of cloud accounting was very narrow. A probable description for this dissimilarity could be due to diverse organizational environments. Yazn *et al.*, (2013) investigated organizations in service industries based on information, for example IT, organizations services, as well as education.

The ability to change the number of resources of computing delivered permits organizations to regulate their procedures as well as IT infrastructure effectively, and considerably minimize the

improvement time to issue novel products (Morgan & Conboy, 2013). Nevertheless, the scalability benefit seems to be reliant on the nature of the institution and the industry. Some organizations, such as those based on information in service industries, did not recognize scalability to be an advantage. Simplicity of use was additional significant element that can possibly hinder or assist adoption of cloud practices. It is becoming a prospect that cloud practices are easily used than their predecessors of desktop (Yazn *et al.*, 2013). Gupta *et al.*, (2013) revealed that ease of use was additionally significant than reduction of cost, though the ease of use definition in that examination comprised the mobile devices' experience.

Regardless of the cloud adoption benefits, there are numerous challenges of managerial, technical, as well as nature of regulation (Dimitriu, 2014). Technical challenges comprise the availability and reliability of cloud services, sub-categorization of the several elements of the cloud, a lack of satisfactory tools for incorporation and narrow customization scope to suit the precise organizational needs (Wozniak & Stanoevska-Slabeva, 2010). Managerial challenges rise since the information that an association has to contract with numerous facility suppliers and infrastructure suppliers, a state that may result to problems of data security (Kim, 2009). The infrastructure provision and services by a supplier increases the supplier lock-in fear (Kim, 2009). Users of cloud services also face administrative apathy, as moving to a cloud setting may alter the IT departments' role and the means operations are generally conducted (Morgan, 2013). Problems of regulation are due to providers of cloud service and users may not be working within the same regulatory or legal jurisdiction, which results into regulatory or compliance uncertainty (Young, 2011).

### **1.1.2 Determinants of Adoption of Cloud Practice Accounting**

The term cloud accounting incorporates substantial ambiguity, since cloud accounting relates to a large quantity of forms and applications (Dimitriu, 2014). Cloud accounting for accounting organizations is characterized into two parts: cloud accounting provided as customer service; and cloud accounting for management practice. The difference between the two parts is based on the externally and internally intensive applications suggested by Clemons (1986). Applications focused externally contribute value by conveying real advantages to the organization's customers, as well as the organization itself. Applications which are internally intensive are regularly imperceptible to the organization's clients and bring in value by offering benefits to the

organization only. This difference is significant for examining how information systems add to competitive advantage of an organization, as the features, purpose, and benefits of an application that is externally focused vary significantly from that of a system that is focused internally (Sobhan, 2019).

The role of the client service on cloud accounting stresses the capacity of an accountant as organization consultants for their clients. Organization advisory necessitates wide information involvement between the client and the accountant, and accountants may be straightly involved in management of their accounting information system of the clients (CCH, 2013; WorkflowMax, 2013). In this part, cloud accounting denotes to the software based on the cloud bundles that sustains the accounting system of the client, which may be overseen by the accounting organization. The accounting software applications based on the cloud are envisioned to add value for the client, and the accounting organization does not spring any advantage from implementing the system other than charges from its clients. Xero is the greatest regularly utilized accounting software that is cloud-based (Prichici, 2015).

The management practice role emphasizes on the utilization of cloud accounting by the accountant organization to accomplish its processes internally. The management practice system is focused internally, which implies it does not directly interact with the clients and that the accounting organization adopts the management practice system as the final user (Prichici, 2015). This difference between management practice and client service is predominantly significant, because while both can be termed as cloud accounting, the dissimilarities in their envisioned determination mean that the elements that inspire their implementation are probable to be very dissimilar. This difference is also an influence to the literature, as adoption of the current cloud accounting investigations do not seem to clearly distinguish between the two parts (Dimitriu, 2014).

### **1.1.3 Cloud Practice Accounting in Insurance Firms**

Cloud accounting has added a modern trade within the accounting field. Amid the improvement of know-how, nations round the sphere have begun to attain the advantages of cloud offerings (Dimitriu, 2014). Consistent with statistics, the wide variety of cloud-based carrier customers round the globe has augmented from 4in 2013 to 6b in 2018. This magnificent growth of cloud carrier customers indicates the significance of cloud offerings in lifestyles today. Except, consistent with accounting these days, cloud accounting is used by fifty-eight% of huge groups

around the sector. It is anticipated that the wide variety will boom to 78% in 2020. There exist are lots of motives at the back of the cumulative reliance on cloud accounting. A current survey carried out by Xero, one of the main cloud accounting software organizations, has observed that the groups that use cloud accounting offerings add five times the wide variety of customers as matched to businesses that do not use cloud accounting offerings. The survey has additionally determined that groups using 100% cloud-primarily based accounting offerings have experienced a 15% growth in sales year-to-12 months (Hsu, 2016).

However, the cloud services usage isn't the same round the arena (Prichici, 2015). The developed international locations are distant ahead from developing nations in terms of usage or adoption of cloud services. One of the motives in the back of that is the variety of web customers is considerably higher in international locations which are developed (ICPAK, 2019). The share of the population having access to the net in developing international locations is 41.3% as compared to eighty-one% within the advanced international locations in 2017 (Prichici, 2015). Except, maximum of the clouds accounting offerings are used by establishments located in developed nations. Emerging nations are facing some external and internal limitations to cloud accounting services adoption. Some of the inner barriers are personnel's attitudes closer to cloud practice accounting, executive concerns concerning safety, reliability of offerings, location of records, apprehensions concerning statistics migration, lack of understanding and competencies, amongst others (Dimitriu, 2014). A number of the outside obstacles are inadequacy of infrastructure, lack of good enough governing and custodial framework concerning cybersecurity, lack of awareness and competencies for efficiently the usage of ICT amongst others (Rajpoot, 2020).

In insurance firms in Kenya, several accountants have a profound grasp on money, but deficient of professional experience in parts such as marketing, information technology, and human resource management (ICPAK, 2019). To prosper, accounting practices' owners' need to have the ability to function in a setting of technological changes, progressively challenging clients, and rising economic pressure. Cloud accounting helps to get real-time reporting throughout the institution. Institutions have achieved maximum benefit from cloud-based services mainly with their accounting and financial services (Waga, 2014). Accountants need to understand and be receptive on the upcoming and current digital technologies, so that they can capitalize their probable



advantages. Neither sceptics of technology, nor idealists can forecast the forthcoming with any certainty degree. However, by remaining knowledgeable around IT inventions and accepting new tools as they come up, accountants can aid insurance firms develop and exploit the achievements guaranteed by the digital period (Kituku, 2012).

## **1.2 Research Problem**

As any other new prototype, cloud accounting is facing substantial barriers. The fear of unknown and the lack of knowledge are the greatest important hurdles in the implementation of applications that are cloud-based (Kituku, 2012). The examination of cloud accounting has also been accredited with varying structural expectations, and native accountants are modifying their responsibilities to shoulder new practices that are destined to meet sensitive demands of organizations (Mungo, 2019). Moreover, the loss of internet connection, security issues, and thus, the disruption of the organizational operations are quoted with respect to cloud accounting. Despite the countless cloud accounting benefits, several organizations and other developing nations are working hard to maneuver through the prompt variations of the market. Administrations find it challenging to meet client expectations together with developing requirements of operations (Omar *et al.*, 2015).

Insurance industry has always been in the business of collecting data since its inception. Data management in insurance is crucial because the data collected has impact on revenue, growth and profitability. Data and information gathered in the claims process through email or other forms will help in guiding the claims team in deciding whether the claim is valid or not and the amount to be settled. It's estimated that up to 40% of all insurance costs arise from fraudulent claims and this cannot be proved in the event of data loss such as an email loss (Mburu, 2014). Administrations in the insurance firms need to take advantage of cloud expertise to appreciate augmented efficiency and improved efficiency in organizational operations. However, insurance firms in North Rift Region of Kenya are reluctant to embrace cloud technology wholly; the developing drift is the non-core applications deployment such as email on the cloud. Security, loss of a clear value proposition, loss of standardization, funding and coping with complexity are the principal obstacles to adopting cloud practices, this also limits the extent to which insurance companies adopt cloud practice accounting. The adoption rate of cloud practice accounting facilities has been little notwithstanding the fact high number of insurance firms have familiarized in their structures.

Several studies have previously been done in this area. One important study “Improving Claims Management Through Cloud practice accounting” by James DeRosa highlighted that performance benefits of the cloud include reliability, agility and cost savings and its does not make business sense building core systems internally (DeRosa, 2014). Another important study done in the area is “Cloud practice accounting Adoption in Insurance Companies in Kenya” by Akhusama Meshack and Moturi Christopher highlighted that 58% indicated that platforms they were using included SaaS (database access, email, back-up etc.) and PaaS (software’s systems) (Akhusama & Moturi, 2016). They also noted that additional investigation is required in the insurance industry on Cloud practice accounting impact (Akhusama & Moturi, 2016). Another important study “e-Insurance Trend with Benefit Illustration in a Cloud practice accounting Environment” by Prachi Sontakke highlighted that a central location known as the cloud is where information such as policies, plans and website details of insurance companies is gathered (Sontakke, 2014). According to Prachi cloud storage can be used to keep very enormous data amounts which can be accessed by users through queries. Using SaaS an application is provided to end users connected to the cloud (Sontakke, 2014). None of the above studies look at adoption of cloud services and Insurance firm’s performance. The current study will be different from these studies because it will be focus on adoption in insurance firms in Kenya. It is evident that studies have been conducted focusing on cloud practice accounting benefits but none has been done particularly on adoption of cloud practice accounting in insurance firms. This scenario warranted a study to understand whether the contextual determinants of cloud practice accounting in Kenya. Therefore, this study sought to answer the question, what determines the adoption of cloud practice accounting among insurance firms in Kenya?

### **1.3 Research Objectives**

The objective of this study was to establish the determinants of adoption of cloud practice accounting among insurance firms in North Rift Region of Kenya.

### **1.4 Value of the Study**

The research is significant to the insurance firms’ management since this study may be of absolute importance to their organizations if the recommendation contained is embraced for execution. The suggestion may enable the association to beat a portion of its operational and board issues. This research will also help other insurance firms, and institutions to evaluate their accounting practices

and systems and do management improvement where necessary. The research work will also augment the policy makers' and regulators' design of suitable policies, which improve the management and execution of accounts, general performance, and good decision-making. The study is also important because it will provide management with information that will help them to enhance measures of management and execution of accounts, especially in the public sector.

The research will be of unlimited importance to insurance firms as it provides information on policy-making on cloud practice accounting and the financial effect the practices have on insurance firms' management and execution of accounts. Insurance firms will be in a position to boost their management and execution of accounts by using the findings of the research.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This section shows the review of literature pertinent to the purpose and research objectives. It starts with the theoretical literature review; technology, organization and environment theory and innovation diffusion theory have been focused. In addition, the chapter presents information on the review of empirical literature, summary of reviewed literature, gaps and the conceptual framework.

#### **2.2 Theoretical Literature Review**

A review of the theoretical literature consists of concepts, their definitions and reference to relevant existing scholarly literature. The theoretical framework describes and introduces theories which clarify why the problem of the research under investigation exists. The study will be guided by Technology, Organization and Environment theory and Innovation Diffusion theory.

##### **2.2.1 Technology, Organization and Environment Theory**

This theory will be employed in this investigation to justify the elements determining the cloud accounting adoption and organizational, environmental, and technological aspects. According to Fleischer and Tornatzky (1990) initial Technological, Organizational, and Environmental (TOE) framework was established for the innovations' adoption. TOE is an exemplary that suggests three aspects of administrative context that influence or affects application or adoption of inventions. The context of technology means to the technologies group which are external or internal to an association concerning their pilot test, apparent compatibility, usefulness, and difficulty in the knowledge curve (Tornatzky, 1990).

The Technological, Organizational, and Environmental (TOE) model reveals that organizational technology adoption is determined by environmental, organizational, as well as technological contexts. Organizational issues include the enterprise's operational scope, the organizational size and the quality of human capital. For insurance firms, the organizational size and the quality of human resource are key features that determine the wish to integrate and acquire cloud practice accounting. Environmental elements comprise of government support, supplier support and readiness, and technology sustenance infrastructures. Environment issues for instance support

from the government are an important instigator of Insurance firms' adoption of technology. Technological setting describes the accessibility of external and internal know-hows relevant to the organization, such as the community availability and public services related to cloud accounting.

The inter-organizational nature of the relationship between the suppliers cloud accounting and insurance firms must emphasize on their shared benefits. The supplier ought to address any matters connecting to lack of knowledge on the way to implement and acquire cloud accounting services by insurance firms and be ready to direct the organization in the process of obtaining and incorporating the technology. The desire of any management of insurance firms is to have the cloud practice accounting dealers to adapt and sustain their contracts to suit the ICT infrastructure of the organization's support needs. Adequate user and technical support by the suppliers of cloud accounting is vital for the adoption of the cloud practice accounting to insurance firms.

### **2.2.2 Innovation Diffusion Theory**

This theory will be utilized in this investigation to elucidate the cloud accounting adoption and administrative factors. The Innovation Diffusion Theory was initially deliberated traditionally in 1903 by Tarde Gabriel (Toews, 2003) planned the initial S-shaped circulation curve, shadowed by (Gross and Ryan, 1943) presented the adopter classes that were advanced employed in the present philosophy promoted by Rogers Everett and was then presented in 1962; the model was perfected by (Rogers 1995). The model emphasizes on comprehending why, how, and the degree innovative technologies and ideas range in a communal system (Rogers, 1962).

In expressions of modification philosophies, this model precedes a conflicting method to investigate dynamics. Rather than concentrating on inducement of persons to alter, it views change as mainly concerning the reinvention or evolution of behaviors and products so they develop better hysteries for the individuals' needs and collections. In innovations diffusions, it is not persons who alter, but the inventions themselves (Les Robinson, 2009).

Conversely, distribution is the procedure by which an invention is transferred through definite networks over time amongst the shared system members (Rogers, 2003). Fichman (2000) outlines distribution as the procedure by which know-how extents through an organizational population. The diffusion idea of innovations typically denotes to the ideas spread from one group to another

or via institution or focus inside a community to other portions of that group. The entire innovation theory diffusion can be shared into 4 key fundamentals (Sahin, 2006).

Innovation of diffusion model argues that relational exchanges deliver information that determines an opinion or judgment of a person. This framework encompasses four components: social networks diffusion, invention, consequences, and time. Information sieves through the systems and contingent on the kind of the systems and the parts of its judgment leaders, original innovations are either rejected or adopted.

### **2.3 Determinants of Adoption of Cloud practice accounting**

Global studies that have been conducted related to the current study include; Lumsden, Boukrami and Gutierrez (2015) examined the determinants of managers' decision on cloud accounting adoption in United Kingdom. Their study gathered data via a self-generated questionnaire on the basis of a survey which was filled by 257 middle and senior level information technologies and operations experts charged with making decisions. The resulting propositions were verified using numerous techniques of data analysis comprising logistic regression and principal component analysis. The investigation revealed that 4 of the total issues studied had a substantial effect on the choice of the adoption of cloud accounting services. These key elements include technology readiness, complexity, competitive pressure, as well as exchange partner pressure.

Odisha (2015) studied challenges of data security and their resolutions in cloud accounting describe how safety is an important element as far as acceptance of cloud is apprehensive. The investigation established that some of the inner boundaries are personnel' attitudes toward cloud accounting, executive issues concerning safety, services reliability, area of data, issues concerning facts relocation, lack of skills and knowledge, amongst others. A number of the outside boundaries are inadequacy of infrastructure; lack of good enough legal and regulatory frameworks concerning cyber-security, lack of skills and expertise for efficiently the usage of ICT among others.

Khairudin, Herry and Hassan (2016) in their study of organizational cloud accounting specified that there is a surge in investigations that have been carried out concerning adoption of cloud accounting in organizations with important issues being environmental, technological, as well as organizational factors. Numerous factors determine organizations' decision to adopt cloud

accounting. These include organizational scope, size, market share, the quantity of resources available, and market capitalization.

Scholtz, Govender, and Gomez, (2016) in their examination revealed that information about costs helps anticipate the limit of the endeavor to effectively and efficiently utilize resources from the activities undertaken by the organization. It is likewise valuable in shaping judgment about the control measures adopted with which the institution may incur extra spending (Sobhan, 2019). In cloud-based accounting, workers can obtain applications software slightly via the internet or additional networks via a service provider of cloud application (Khanom, 2017).

Haslinda et al., (2017) carried out an investigation to scrutinize the elements that influence cloud accounting adoption by the SMEs and revealed that external pressure considerably influences adoption of cloud accounting. The study indicated that revealed that outside pressure considerably affects adoption of cloud accounting. Wang *et al.*, (2017) distinguished that numerous issues affect the decision on adoption of cloud services as barriers and drivers. Managerial challenges ascend from the information that an association has to contract with numerous suppliers of the service and suppliers of infrastructure, a state that may result to problems of data security. The infrastructure provision and services by a supplier increases the supplier lock-in fear.

Ajowi and Reuben (2019) studied organizational, technological, as well as environmental aspects on the cloud accounting adoption in Kenyan insurance firms. Their investigation adopted a descriptive survey design and chose stratified random technique. From results, the context of technology means to the technologies group which are external or internal to an association concerning their apparent compatibility, usefulness, pilot test, and difficulty in the knowledge curve. Organizational issues include the enterprise's operational scope, the organizational size and the human capital resources' quality. For insurance firms, the size of the organization and the human resources' quality are key features that determine the wish to integrate and acquire cloud practice accounting. Environmental elements comprise of government support, supplier support and readiness, and technology sustenance infrastructures.

Locally, Wanjiku and Moturi (2016) studied cloud practice accounting with an aim of transforming middle and high technological businesses in Kenya. This study showed that cost was the greatest significant factor, with privacy, and security and ease of use observed to be more significant than cost. Similarly, it was acknowledged that the low expenditure of capital stimulated smaller

organizations to adopt cloud practices, predominantly start-up micro organizations, and the conversation of the cost characteristic of cloud accounting was very narrow. A probable description for this dissimilarity could be due to diverse organizational environments.

Munguti and Opiyo (2018) examined influencers of adoption of cloud computing in software development corporations in Kenya and discovered that factor inherent to the organization (worker attitudes, commitment by top management and right skills) environmental (trading partner pressure and industry competition) technological elements (apparent complexity, benefits, and compatibility) determined the cloud practice accounting technology adoption in the organization. The investigation also concluded that organizational and policy risks, legal risk and technical risks influenced cloud practice accounting technology adoption in the organizations.

## **2.4 Summary of Literature Review and Research Gaps**

Most of the investigations carried out in this region concentrated on cloud practice accounting. There exists most effective a handful of researches carried out on cloud accounting utmost of which attempted to give an explanation for the theoretical troubles of cloud accounting. The discovery of cloud generation has undoubtedly exaggerated the accounting sector. The usage of the offerings of cloud exercise accounting has advanced itself to a new generation called cloud practice accounting. As superior and new software program are delivered, human beings are step by step moving from the old-fashioned accounting device to the cloud practice accounting device. The advent of cloud practice accounting has added extra paces in normal organizational operations. At present-day, adoption of cloud practice accounting is being done not only in the non-public sector however additionally in authorities' workplaces, academic institutions and hospitals. The price of adoption of cloud practice accounting structure is better in advanced international locations as compared to the growing ones. The growing international locations want to recognize the significance of adopting this gadget so that you can live to tell the tale and develop in this aggressive global village. Despite the fact that some of those nations are looking to shift to the cloud accounting device, maximum of these nations are nevertheless jabbing to the old-fashioned accounting technique due to hindrances to the adoption of cloud practice accounting.

## **2.5 Conceptual Model**

The study seeks to find out the determinants of adoption of cloud practice accounting. The independent variables will be; availability of technology cost savings, regulatory support, and top



management support while the dependent variable will be cloud practice accounting as demonstrated in Figure 2.1.

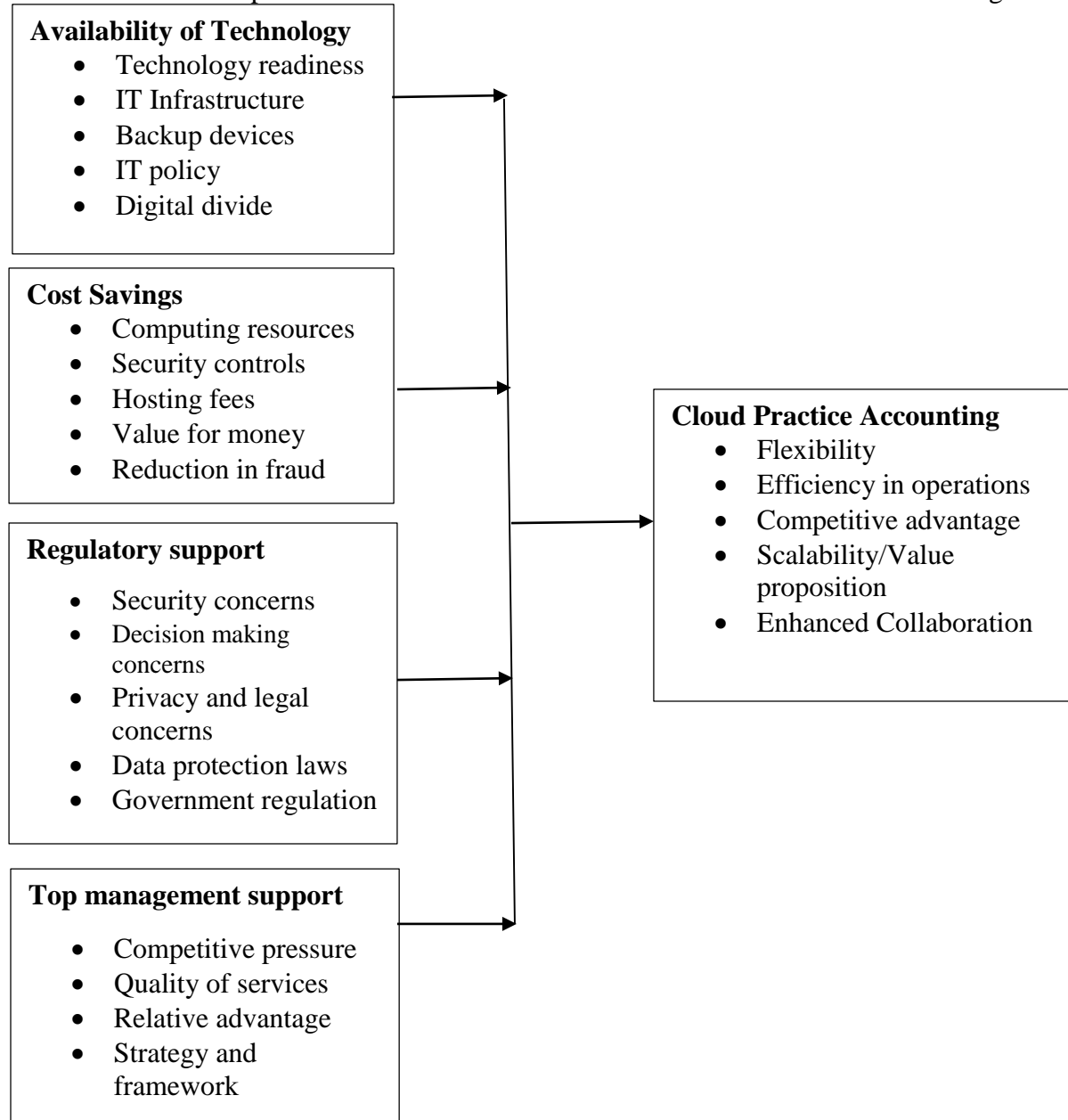
**Figure 1: Conceptual Model**

Independent Variable

Dependent Variable

Determinants of Adoption

Cloud Practice Accounting



The conceptual model above shows the relationship between cloud practice accounting and its determinants of adoption.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

Research methodology is the technique utilized to gather records and statistics with the aim of settling on a given outcome. This section of the study shows the design adopted in the study; population targeted; instruments of collection of data and analysis of the data.

#### **3.2 Research Design**

A descriptive survey design was adopted. This research design aims to solicit information which explains prevailing phenomena by probing persons about their attitudes, perceptions, behaviors and values (Mugenda & Mugenda, 2003). This design of research was considered the finest design to the objectives of study. A design is the overall strategy of the way the researcher goes about responding the questions of the research (Lewis, Saunders, & Thornhill, 2000). A descriptive survey design was reflected suitable for the kind of purpose of this investigation as it allowed the investigator to define the variables as they are devoid of elements' manipulation which is the intention of the investigation.

#### **3.3 Target Population**

The targeted population was insurance firms in North Rift Region of Kenya. Accessible population is the part of the population targeted which the investigator can essentially access and is the subclass of the population targeted. The accessible population for this investigation was insurance firms in North Rift Region. In North Rift Region, there are 31 insurance firms and therefore the study will target these insurance firms. Therefore, the target population was 31 insurance firms (Appendix II).

#### **3.4 Sampling Design**

The study used survey. Survey is a technique of research utilized for gathering information from a pre-demarcated cluster of participants to obtain insights and data into numerous themes of interest. The study was interested to collect information on the knowledge of the respondents on cloud accounting, their current practices of accounting and what determines the adoption of cloud practices computing in insurance firms. Therefore, the sample size was 31 insurance firms.

### **3.5 Data Collection Instruments**

The research primarily gathered primary data. This type of data was gathered using a questionnaire. A questionnaire is a research instrument whose determination is to link to the researcher what is required and draw out anticipated reactions in terms of experiential data from participants to achieve the desired objective. Debois (2016) noted that a questionnaire is a tool for gathering data, and nearly continuously comprises asking a specified theme to answer to a set of written or oral questions. Primary data was collected using questionnaires.

### **3.6 Data Analysis**

Collected data was first scrutinized, categorized and coded to ease its examination. Furthermore, solicited data was evaluated using descriptive and inferential statistics. Data analysis was done with the aid of SPSS (Version 20.0). The investigation primarily collected quantitative data and hence, quantitative analysis was employed to attain the study objectives. Descriptive (frequencies, percentages, standard deviation as well as mean) and inferential statistics were adopted to analyse the data. ANOVA was used to examine the influence of the identified determinants on cloud practice accounting adoption among insurance firms. The ANOVA test permits an association of more than two sets at the same time to define whether an association exists between variables (Cardinal & Aitken, 2006). Data was presented using mainly tables.

## CHAPTER FOUR

### DATA ANALYSIS, RESULTS AND DISCUSSION

#### 4.1 Introduction

The study purpose was on determinants of adoption of cloud practice accounting in insurance firms in North Rift Region, Kenya. It was carried out among insurance companies in North Rift Region, Kenya. The examination targeted 31 insurance companies in North Rift Region, Kenya. The examination sampled respondents and was able to collect data from 62 participants. This study chapter comprises of the data analysis and results' discussion.

#### 4.2 General Information of the Respondents

Here, the investigation sought to establish the background information of the participants including the years of experience of insurance firms and the results were as follows;

##### 4.2.1 Department in the Insurance Firm

**Table 4.1: Department in the Insurance Firm**

Department	Frequency	Percent
Claims & Underwriting	17	27.4
Accounts & Finance	21	33.9
Marketing	10	16.1
Agency	8	12.9
Reinsurance	6	9.7
<b>Total</b>	<b>62</b>	<b>100</b>

Source: Research Data (2020)

The results of the study revealed that 27.4% of the participants were from the claims and underwriting department, 33.9% were from accounting and finance department, 16.1% were from marketing, 12.9% were from agency department and 9.7% were from the reinsurance department. This suggests that most of the participants were from the accounting and finance department.

## 4.2.2 Years of Experience of Insurance firms

**Table 4.2: Years of Experience of Insurance Firms**

<b>Years of Experience of Insurance Firms</b>	<b>Frequency</b>	<b>Percent</b>
Less than 5 years	10	15.9
5-10 years	29	46.9
11-15 years	6	9.3
15 years and above	17	27.9
<b>Total</b>	<b>62</b>	<b>100</b>

Source: Research Data (2020)

The findings showed that 15.9% of the participants had less than 5 years of experience, 46.9% of the participants had 5-10 years of experience, 9.3% of the participants had 11-15 years of experience and 27.9% of the participants had 15 years and above experience. This revealed that investigation gathered data from several years of experience and therefore the investigation results echo the opinions of the several durations of experience of insurance firms.

## 4.3 Analysis of the Specific Objectives

In this section, this investigation sought to analyze the specific study objectives which included determining the effect of availability of technology; cost savings, regulatory support and top management support on adoption of cloud practice accounting of insurance firms. The findings of the study were as presented as follows.

### 4.3.1 Availability of Technology and Adoption of Cloud Practice Accounting

The investigation aimed to establish the effect of availability of technology on Adoption of Cloud practice accounting of insurance firms. The responses of study were as in table 4.3.

**Table 4.3: Availability of Technology and Adoption of Cloud Practice Accounting**

Statements		SD	D	U	A	SA	Total	Mean	Std Dev
Technology readiness determines the rate of adoption of cloud practice accounting in the insurance firm	F	3	5	10	26	17	62	4.52	1.165
	%	5	8.6	15.9	42.4	28.1	100	90.4	
IT infrastructure enables quicken the adoption of cloud practice accounting in the insurance firm	F	3	7	9	25	19	62	4.51	0.275
	%	5	10.8	14.4	39.6	30.2	100	90.2	
Availability of backup devices is a key determine in the cloud practice accounting in the insurance firm	F	0	1	8	38	14	62	4.48	0.450
	%	0	2.2	13.7	61.8	22.3	100	89.6	
The availability of an IT policy influences the cloud practice accounting in the insurance firm	F	3	5	11	17	26	62	4.28	0.262
	%	5	7.9	17.3	28.1	41.7	100	85.6	
Appreciation of the digital divide is an importation consideration in plans to adopt cloud practice accounting in the insurance firm	F	0	1	9	27	24	62	3.80	1.047
	%	0	2.2	15.1	43.2	39.5	100	76.0	
<b>Overall Mean</b>								<b>4.32</b>	

Source: Research Data (2020)

**Key:** SA = Strongly Agree; A = Agree; U = Undecided; D= Disagree; SD = Strongly Disagree; F = Frequency

The study results on the effect of availability of technology on adoption of cloud practice accounting showed that (mean=4.52) 90.4% opined that technology readiness determines the rate of adoption of cloud practice accounting in the insurance firm, 90.2% (mean=4.51) were of the opinion that IT infrastructure enables quicken the adoption of cloud practice accounting in the insurance firm, 89.6% (mean=4.48) were of the opinion that availability of backup devices is a key determine in the cloud practice accounting in the insurance firm, 85.6% (mean=4.28) were of the opinion that the availability of an IT policy influences the cloud practice accounting in the insurance firm while 76.0% (mean=3.80) were of the view that appreciation of the digital divide is an importation consideration in plans to adopt cloud practice accounting in the insurance firm.

The results of the study showed that majority of the participants viewed that availability of technology helps the company to plan, direct and control operating costs. Technological factors along with compatibility, perceived benefits, and complexity prompted the adoption of cloud practice accounting era within the firms. Cloud practice accounting ends in strategic as an instance, assisting firms to create aggressive benefit and organizing useful links with different organizations and informational for example, less complicated get admission to records and enhance accuracy of the information. The difficulty of assimilating unique cloud services with the prevailing arrangement is an actual undertaking to many firms and that expanded compatibility among a novelty and needs of the adopters facilitate a clear integration of the technology in the firm and enterprise features.

These investigation results are in accordance with results by Munguti and Opiyo, (2018) who indicated that technology-related issues such as complexity, apparent advantages, as well as compatibility affected the cloud practice accounting adoption in firms. Considering the manner wherein cloud computing adoption can revolutionize the firms’ scenario in exclusive innovations technologically, its resources and facilities can be accessed on demand (Tuncay, 2010).

#### 4.3.2 Cost Savings and Adoption of Cloud Practice Accounting

The study determined the effect of cost savings on adoption of cloud practice accounting of insurance firms. The study findings were as tabulated in 4.4.

**Table 4.4: Cost Savings and Adoption of Cloud Practice Accounting**

Statements		SD	D	U	A	SA	Total	Mean	StdDev
Affordability of computing resources is an important determinant of adoption of cloud practice accounting	F	3	7	8	25	19	62	3.80	1.047
	%	5.3	10.6	13.5	40.1	30.5	100	76.0	
Adoption of cloud practice accounting needs to include the amount and level of hosting fees	F	3	8	9	37	5	62	3.79	1.074
	%	4.4	12.2	15.1	60.4	7.9	100	75.8	
Adoption of cloud practice accounting should consider the value for money for insurance firms	F	3	9	9	34	7	62	4.04	0.342
	%	4.9	14.2	14.1	55.6	11.2	100	80.8	
Cloud practice accounting may only be adopted if it leads to reduction in frauds	F	7	10	12	31	1	62	4.28	0.262
	%	10.8	16.5	20.1	50.4	2.2	100	85.6	



Source: Research Data (2020)

**Key:** SA = Strongly Agree; A = Agree; U = Undecided; D= Disagree; SD = Strongly Disagree; F = Frequency

The results of the study discovered that 76.0% (mean=3.80) viewed that affordability of computing resources is an important determinant of adoption of cloud practice accounting, 75.8% (mean=3.79) were of the view that cloud practice accounting adoption ought to include the amount and level of hosting fees, 80.8% (mean=4.04) were of the view that adoption of cloud practice accounting should consider the value for money for insurance firms and that 85.6% (mean=4.28) were of the opinion that cloud practice accounting may only be adopted if it lead to reduction in frauds.

These results indicated that most of the respondents believed that cloud practice accounting may only be adopted if it leads to reduction in frauds. The specific function of cloud exercise accounting is its cost saving in operations and management. By using switching to cloud exercise accounting, the need for installing servers and hardware which reduces the enterprise's fee considerably. Furthermore, cloud upgrades and continues itself on a regular foundation without making an effort to it which results in availability of programs whenever it is wanted. Because of much less suspension enterprise can experience improved productivity, greater sales and greater opportunities.

These results are in consonance with results by Buyyaa *et al.*, (2009) who observed novel developments have restricted resources: majority of the agencies frequently undertake new services to their clients with solutions that are innovative for higher satisfaction and gain marketplace percentage. With restricted it resources, its miles always tough to create savings on such projects. By selecting services related to cloud for those new projects, the up-front investment to begin out develops negligible, and there exists not any consequences due to infrastructure disasters.

At the same time as cloud computing has been mentioned as a new generation increase which could offer numerous advantages, each operational and strategic, to those seeking to adopt, the cloud exercise accounting adoption fee is not always developing as speedy as anticipated

(Banerjee, 2009). Surveyed exclusive companies from one of a kind business that have developed convention cloud packages and examined the impact of cloud computing on firms' operations in protection of areas of integration (Hayes, 2008).

### 4.3.3 Regulatory Support and Adoption of Cloud Practice Accounting

The study aimed to survey the effect of regulatory support on adoption of cloud practice accounting of insurance firms. The findings of study were as revealed in table 4.5.

**Table 4.5: Regulatory Support and Adoption of Cloud Practice Accounting**

Statements		SD	D	U	A	SA	Total	Mean	Std Dev
Regulatory support ought to provide the necessary security and eliminate all security concerns.	F	3	4	6	27	22	62	4.00	1.187
	%	4.2	6.5	9.2	44.2	35.9	100	80.0	
The entire regulatory support exercise in insurance firms considers the information usage of all internal users and decision-making concerns.	F	2	7	4	23	26	62	3.55	0.969
	%	3.8	11.1	6.1	36.4	42.6	100	71.0	
Privacy and legal concerns minimize the worry on adoption of cloud practice accounting.	F	3	4	8	30	17	62	3.75	0.764
	%	5.6	6.3	12.6	48.5	27.0	100	75.0	
Data protection law is the main determinant of the adoption of cloud practice accounting.	F	7	10	8	19	19	62	3.56	0.606
	%	10.8	15.9	12.4	30.5	30.4	100	70.2	
Regulatory support is done mainly with an aim of adhering to government regulations.	F	1	4	5	13	39	62	3.80	1.047
	%	2.2	6.3	8.6	20.3	62.6	100	76.0	
<b>Overall Mean</b>								<b>3.73</b>	

Source: Research Data (2020)

**Key:** SA = Strongly Agree; A = Agree; U = Undecided; D= Disagree; SD = Strongly Disagree; F = Frequency

The investigation results on the effect of regulatory support on adoption of cloud practice accounting discovered that 80.0% (mean=4.00) opined that regulatory support ought to provide the necessary security and eliminate all security concerns, 71.0% (mean=3.55) opined that the entire regulatory support exercise in insurance firms considers the information usage of all internal users and decision making concerns, 75.0% (mean=3.75) were of the opinion that privacy and

legal concerns minimize the worry on adoption of cloud practice accounting, 70.2% (mean=3.56) were of the opinion that data protection law is the main determinant of the adoption of cloud practice accounting and that 76.0% (mean=3.80) were of the view that regulatory support is done mainly with an aim of adhering to government regulations.

These findings revealed that majority of the respondents believed that regulatory support ought to provide the necessary security and eliminate all security concerns. It's far important to ensure earlier than getting the cloud provider from company that it meets the compliance necessities wherein both guarantees the fulfilment of security requirements, protection of client facts and shield guidelines which asserts that statistics protection programmes and controls should be evolved to guard financial information. A few of the carriers fail to meet this compliance so it's far vital to keep take a look at if cloud service company meets this compliance or not.

These findings were supported by Amini (2014) who found that relative benefit, compatibility, protection concerns, value financial savings; generation readiness, pinnacle supervisor aid, aggressive pressure and regulatory assist had been located to have full-size have an influence on cloud computing adoption by SMEs.

#### 4.3.4 Top Management Support and Adoption of Cloud Practice Accounting

The study determined the effect of top management support on adoption of cloud practice accounting of insurance firms. The study responses were as in table 4.6.

**Table 4.6: Top Management Support and Adoption of Cloud Practice Accounting**

Statements		SD	D	U	A	SA	Total	Mean	Std Dev
Competitive pressure has led to the adoption of the latest technologies in the insurance firm	F %	3 4.1	2 2.6	5 7.6	25 40.4	28 45.3	62 100	4.52 90.4	1.165
Top management support is geared toward controlling a firm's cost to improve quality of services	F %	3 4.3	7 11.9	5 7.8	20 32.5	27 43.5	62 100	4.51 90.2	0.275
Top management support have increased the relative advantage as far as the adoption of technology is concerned	F %	2 2.9	1 2.3	3 5.2	23 36.4	33 53.2	62 100	4.48 89.6	0.450

The insurance firm uses strategy and framework principles in assessing its technology adoption processes	F	7	10	12	31	1	62	4.28	0.262
	%	10.8	16.5	20.1	50.4	2.2	100	85.6	
<b>Overall Mean</b>								<b>4.45</b>	

Source: Research Data (2020)

**Key:** SA = Strongly Agree; A = Agree; U = Undecided; D= Disagree; SD = Strongly Disagree; F = Frequency

The study results on the effect of top management support on adoption of cloud practice accounting showed that 90.4% (mean=4.52) opined that competitive pressure has led to the adoption of the latest technologies in the insurance firm, 90.2% (mean=4.51) were of the opinion that top management support is geared toward controlling a firm's cost to improve quality of services, 89.6% (mean=4.48) were of the opinion that top management support have increased the relative advantage as far as the adoption of technology is concerned, 85.6% (mean=4.28) were of the opinion that the insurance firm uses strategy and framework principles in assessing its technology adoption processes.

The results showed that majority of the participants viewed that competitive pressure has led to the adoption of the latest technologies in the insurance firm. By using adopting cloud accounting, firms gain significantly from improved understanding of marketplace reflectivity, operational efficiency, and greater accurate collection of data. Whilst large firm suffers from the various equal constraints, the impact on small corporations is more full-size. The abilities, time, and personnel essential for making plans aren't most important problems in big companies, but these same troubles represent most of the problems in small companies. Resource scarcity effects from numerous conditions precise to small companies, together with working in an exceedingly aggressive environment, monetary constraints, loss of expert understanding, and vulnerable to outside forces. These assessment results are according to results by Wang *et al.*, (2010) who posited the significance of top management in crafting a suitable situation for new technologies adoption by offering sufficient resources.

#### 4.4 Correlation Analysis

In this section, Pearson correlation analysis was used to test the association between the dependent and the independent variables. The findings of the study were presented in Table 4.7.

**Table 4.7 Overall Correlation Analysis**

		Availability of technology	Cost savings	Regulatory support	Top management support
Availability of technology	Pearson Correlation	1	.512**	.664**	.732**
	Sig. (2-tailed)		0.000	0.000	0.000
Cost savings	Pearson Correlation	.512**	1	.554**	.300**
	Sig. (2-tailed)	0.000		0.000	0.000
Regulatory support	Pearson Correlation	.664**	.554**	1	.500**
	Sig. (2-tailed)	0.000	0.000		0.000
Top management support	Pearson Correlation	.732**	.300**	.500**	1
	Sig. (2-tailed)	0.000	0.000	0.000	
Adoption of cloud practice accounting	Pearson Correlation	.574(**)	.536(**)	.348(**)	.422(**)
	Sig. (2-tailed)	0.000	0.000	0.000	0.000
	N	62	62	62	62

Source: Research Data (2020)

The study findings indicated that there was a significant statistical effect of availability of technology on Adoption of cloud practice accounting of insurance firms ( $r=0.574$ ,  $p=0.000$ ). The results of the investigation showed that there was a significant statistical effect of cost savings on Adoption of cloud practice accounting of insurance firms ( $r=0.536$ ;  $p=0.000$ ). The results of the study showed that there was a significant statistical effect of Regulatory support on adoption of cloud practice accounting of insurance firms ( $r=0.348$ ;  $p=0.000$ ). The results showed that there was a significant statistical effect of top management support on adoption of cloud practice accounting of insurance firms ( $r=0.422$ ;  $p=0.000$ ).

**Table 4.8 ANOVA Model**

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15.338	4	3.835	72.125	.000 <sup>a</sup>
	Residual	4.302	58	0.057		
	Total	19.640	62			

<sup>a</sup>Predictors: (Constant), Availability of technology, Cost savings, Regulatory support, Top management support

<sup>b</sup>Dependent Variable: Adoption of cloud practice accounting

The linear regression's F-test comprised of the null hypothesis that the model clarifies zero variance in adoption of cloud practice accounting ( $F=72.125$ ,  $p=0.000^a$ ). The F-test is highly significant; thus, it is assumed that the model explained a significant amount of the variance in adoption of cloud practice accounting. This implies that the ANOVA model was fit for the data and hence availability of technology, cost savings, regulatory support, and top management support determined adoption of cloud practice accounting among insurance firms in North Rift Region.

ANOVA model predicted the adoption of cloud practice accounting among insurance firms in North Rift Region considerably well ( $p=0.000^a$ ). This showed the statistical implication of the ANOVA model that was run statistically considerably projected the cloud practice accounting adoption among insurance firms in North Rift Region.

#### **4.5 Discussions of Findings**

Scholtz, Govender, and Gomez, (2016) in their examination revealed that information about costs helps anticipate the limit of the endeavor to effectively and efficiently utilize resources from the activities undertaken by the organization. It is likewise valuable in shaping judgment about the control measures adopted with which the institution may incur extra spending (Sobhan, 2019). In cloud-based accounting, workers can acquire applications software remotely via the internet or additional networks via a service provider of cloud application.

Haslinda *et al.*, (2017) revealed that external pressure considerably influences cloud accounting implementation. The study indicated that revealed that exterior force considerably influences

adoption of cloud accounting. Wang *et al.*, (2017) observed that numerous issues affect the choice on adoption of cloud services as barriers and drivers. Managerial challenges ascend from the information that an association has to contract with numerous service suppliers and infrastructure suppliers, a state that may result to problems of data security. The infrastructure provision and services by a supplier increases the supplier lock-in fear.

Ajowi and Reuben (2019) indicated that the context of technology means to the technologies group which are external or internal to an association concerning their apparent compatibility, usefulness, pilot test, and difficulty in the knowledge curve. Organizational issues include the enterprises' operational scope, size of the organization and the human capitals' quality. For insurance firms, the size of the organization and the human capital' quality are key features that determine the wish to integrate and acquire cloud practice accounting. Environmental elements comprise of government support, supplier support and readiness, and technology sustenance infrastructures.

Wanjiku and Moturi (2016) showed that cost was the greatest significant factor, with privacy, and security and ease of use observed to be more significant than cost. Similarly, it was acknowledged that the low expenditure of capital stimulated smaller organizations to adopt cloud practices, predominantly start-up micro organizations, and the conversation of the cost characteristic of cloud accounting was very narrow. A probable description for this dissimilarity could be due to diverse organizational environments.

Munguti and Opiyo (2018) discovered that factor inherent to the organization (worker attitudes, commitment by top management and right skills) environmental (trading partner pressure and industry competition) technological elements (apparent complexity, benefits, and compatibility) determined the cloud practice accounting technology adoption in the organization. The investigation also concluded that organizational and policy risks, legal risk and technical risks influenced cloud practice accounting technology adoption in the organizations.

Wanjiku (2014) examined the cloud computing adoption in medium as well as high tech industries in Kenya. The study shows that 70% of Medium and High Tech Industries have adopted cloud computing as a technological operation to facilitate service delivery. The users and providers recognize Cloud computing is a driving force that is re-shaping ICT and driving innovation. The study found out that cost, performance and reliability of The Cloud applications are major factors

influencing the adoption of cloud computing. Users believe it would be much better if they were aware of the most appropriate prototype for the cloud computing adoption.



## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.1 Summary of Findings

The examination outcomes on the effect of availability of technology on adoption of cloud practice accounting showed that 90.4% (mean=4.52) opined that technology readiness determines the rate of adoption of cloud practice accounting in the insurance firm, 90.2% (mean=4.51) were of the opinion that IT infrastructure enables quicken the adoption of cloud practice accounting in the insurance firm, 89.6% (mean=4.48) were of the opinion that availability of backup devices is a key determine in the cloud practice accounting in the insurance firm, 85.6% (mean=4.28) were of the opinion that the availability of an IT policy influences the cloud practice accounting in the insurance firm while 76.0% (mean=3.80) were of the view that appreciation of the digital divide is an importation consideration in strategies to implement cloud practice accounting in the insurance firm. The results showed that most of the participants viewed that availability of technology helps the company to plan, direct and control operating costs.

The findings of the study discovered that 76.0% (mean=3.80) viewed that affordability of computing resources is an important determinant of adoption of cloud practice accounting, 75.8% (mean=3.79) were of the view that needs of adoption of cloud practice accounting to include the amount and level of hosting fees, 80.8% (mean=4.04) were of the view that adoption of cloud practice accounting should consider the value for money for insurance firms and that 85.6% (mean=4.28) were of the opinion that cloud practice accounting may only be adopted if it lead to reduction in frauds. These results indicated that most of the participants believed that implementation of cloud practice accounting should consider the value for money for insurance firms.

The results on the effect of regulatory support on adoption of cloud practice accounting discovered that 80.0% (mean=4.00) opined that regulatory support ought to provide the necessary security and eliminate all security concerns, 71.0% (mean=3.55) opined that the entire regulatory sustenance exercise in insurance firms considers the information usage of all internal users and decision making concerns, 75.0% (mean=3.75) were of the opinion that privacy and legal concerns minimize the worry on adoption of cloud practice accounting, 70.2% (mean=3.56) were of the

opinion that data protection law is the main determinant of the adoption of cloud practice accounting and that 76.0% (mean=3.80) were of the view that regulatory support is done mainly with an aim of adhering to government regulations.

The investigation results on the effect of top management support on adoption of cloud practice accounting showed that 90.4% (mean=4.52) opined that competitive pressure has led to the adoption of the latest technologies in the insurance firm, 90.2% (mean=4.51) were of the opinion that top management support is geared toward controlling a firm's cost to improve quality of services, 89.6% (mean=4.48) were of the opinion that top management support have increased the relative advantage as far as the adoption of technology is concerned, 85.6% (mean=4.28) were of the opinion that the insurance firm uses strategy and framework principles in assessing its technology adoption processes.

The examination further revealed that there was a significant correlation between availability of technology and adoption of cloud practice accounting ( $p=0.000$ ); there was a significant correlation between cost savings and adoption of cloud practice accounting ( $p=0.000$ ); there was a significant correlation between regulatory support and adoption of cloud practice accounting ( $p=0.000$ ) and that that there was a significant correlation between top management support and adoption of cloud practice accounting ( $p=0.000$ ).

## **5.2 Conclusions**

It was concluded that availability of technology affects adoption of cloud practice accounting among insurance firms. This was attributed to the apparent cloud computing usefulness the insurance companies. The attitude change of the insurance firms is the most predominant factor for adoption of cloud computing. Since cloud practice accounting is an equally new technology, governmental regulations and no rules are available to fix the limits and rules concerning the data storage by firms that are pooled with others.

Cost savings has a significant relationship with adoption of cloud practice accounting. This is because of the perception that cloud practice accounting reduces cost of operations among insurance firms. Cost is a very important aspect and prospect in cloud practice accounting. Cost benefits are the robust driver influencing IT executives' insights of adoption opportunities. The distinguishing feature of cloud practice accounting is its saving of costs in management and

operations. By substituting to cloud practice accounting, the necessity for installing hardware and servers which minimizes the firm's IT cost significantly.

The study concluded that regulatory support is significantly correlated to adoption of cloud practice accounting. It is crucial to ensure before getting the cloud service from provider that it meets the compliance necessities where each ensures the fulfillment of security requirements, protection of patron information and safeguard regulations which assert that facts security programmes and controls should be developed to defend monetary data.

Lastly, the study concluded that top management support affects adoption of cloud practice accounting. The top executives of the insurance firms offer the vision and commitment for new technologies and create situations that foster these new technologies.

### **5.3 Recommendations**

The researcher recommends that top management ought to invest in IT technologies that will aim towards the advantage of their insurance firms. The study recommends for top management the adoption of cloud practice accounting systems will enhance performance of the insurance firms and for industry investigation on adoption of cloud computing enhances the contribution to awareness and knowledge on adoption of cloud practice accounting.

Insurance firms want to adopt unique kinds of packages from distinct cloud carriers and those programs may want to have interaction with every different. On the same time, some firms would possibly undertake a fusion approach of cloud results as unrestricted clouds have unique traits from that of personal clouds. Therefore, the incorporation between the records from these distinctive presentations requirements to be executed and this trouble carries many business and technical demanding situations for cloud vendors as well as adopters.

The study recommends that top management of insurance firms should invest in information technology that will work towards the benefit of their organization. This shows that top management attitude in insurance firms towards new technologies such as cloud computing will determine the direction which the insurance firms will take in terms of adoption. The top executives can act as champions of a technology to enable other staff and employees in adopting the innovation. This is because insurance firms work through their employees who are also assumed to be using the cloud computing technology in their day to day duties.

Diffusion of cloud computing has emerged as a substantial research subject matter as it permits corporations to implement information connections along value chain sports (for instance, distribution, inclusive of finance, customer support, sales, statistics sharing and partnership with buying and selling partners). Non-middle operations of IT are customized: several IT services that may be commoditized consisting of archiving, e-mail, storage, and so on are ideal candidates for cloud offerings. Via outsourcing those offerings to a cloud carrier issuer will regularly results in a condensed IT infrastructure spending as well as operational overheads to uphold and achieve such services.

#### **5.4 Limitations of the Study**

This study faced a number of limitations. First, the entire study scheduled was affected the corona virus pandemic which struck the whole country in March, 2020 hence distracting learning activities and subsequently the process of collecting data for this study. Moreover, the study was limited by the respondents withholding information during the data collection process, however, the researcher assured them that the study was conducted purposely for academic purposes.

In adopting cloud computing services, the major limitation during the study was that insurance firms were reluctant to trust some services or trust more sensitive data to off-site computers. This has resulted in the insurances firms' slow adoption of the cloud practice accounting services. In adoption of the cloud practice accounting services, such obstacles are to be considered in the processes of adoption. Major challenges affecting the adoption of cloud practice accounting services should be considered in any study relating to the cloud practice accounting services.

Lastly, the study was affected by the inability to access other insurance firms due to strict procedures and protocols which needed to be adhered to first before being allowed to administer questionnaires or even get approval for data collection. Some staff in the insurance firms only accepted to respond to the questionnaires without showing which insurance firm they worked for.

#### **5.5 Suggestion for Further Studies**

This study focused on determinants of adoption of cloud practice accounting of insurance firms in North Rift Region, Kenya. Further study should be conducted on determinants of adoption of Cloud practice accounting of other firms such as microfinance institutions, and banks so that contrast can be developed from the results. This investigation looked at availability of technology,

cost savings, top management support and regulatory support. Further research should be carried out concentrating on other determinants.

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# APPENDICES

## APPENDIX I: QUESTIONNAIRE

### Introduction

I am a masters’ degree student of the University of Nairobi. Presently undertaking a research as part of the requisite for the masters’ degree award titled; **Determinants of Adoption of Cloud practice accounting in insurance firms in North Rift Region, Kenya**. You have been designated as a participant in this investigation. You are invited to answer this questionnaire to the best of your knowledge. The data given will be preserved with the greatest discretion and will be utilized only for this study.

### SECTION A: Background information

1. Name of the Insurance firm .....
2. Department in the Insurance firm .....
3. Years of experience in the Insurance firm .....

### SECTION B: AVAILABILITY OF TECHNOLOGY

**Key: SA- Strongly Agree, A- agree, U- undecided, D-Disagree, SD- Strongly Disagree,**

4. Please mark the statements which best matches your view on availability of technology on adoption of cloud practice accounting by insurance firms

Availability of technology	SD	D	U	A	SA
Technology readiness determines the rate of adoption of cloud practice accounting in the insurance firm					
IT infrastructure enables quicken the adoption of cloud practice accounting in the insurance firm					
Availability of backup devices is a key determine in the cloud practice accounting in the insurance firm					
The availability of an IT policy influences the cloud practice accounting in the insurance firm					
Appreciation of the digital divide is an importation consideration in plans to adopt cloud practice accounting in the insurance firm					

## SECTION C: COST SAVINGS

Please mark the statements which best matches your view on adoption of cloud practice accounting by insurance firms

Cost savings	SD	D	U	A	SA
Affordability of computing resources is an important determinant of adoption of cloud practice accounting					
Installation of security controls					
Adoption of cloud practice accounting need to include the amount and level of hosting fees					
Adoption of cloud practice accounting should consider the value for money for insurance firms					
Cloud practice accounting may only be adopted if it leads to reduction in frauds					

## SECTION D: REGULATORY SUPPORT

Please mark the statements which best matches your view on regulatory support on adoption of cloud practice accounting by insurance firms

Regulatory support	SD	D	U	A	SA
Regulatory support ought to provide the necessary security and eliminate all security concerns					
The entire regulatory support exercise in insurance firms considers the information usage of all internal users and decision-making concerns					
Privacy and legal concerns minimize the worry on adoption of cloud practice accounting					
Data protection law is the main determinant of the adoption of cloud practice accounting					
Regulatory support is done mainly with an aim of adhering to government regulations					

## SECTION E: TOP MANAGEMENT SUPPORT

Please mark the statements which best matches your view on top management support on adoption of cloud practice accounting by insurance firms

Top management support	SD	D	U	A	SA
Competitive pressure has led to the adoption of the latest technologies in the insurance firm					
Top management support is geared toward controlling a firm's cost to improve quality of services					
Top management support have increased the relative advantage as far as the adoption of technology is concerned					
The insurance firm uses strategy and framework principles in assessing its technology adoption processes					

## APENDIX II: LIST OF INSURANCE FIRMS IN NORTH RIFT REGION

1.	AAR Insurance Co. Limited
2.	Africa Merchant Assurance Limited
3.	Allianz Insurance Company of Kenya Limited
4.	APA Insurance Limited
5.	Barclays Life Assurance Kenya Limited
6.	Invesco Assurance Co. Limited
7.	Directline Assurance Co. Limited
8.	CIC General Insurance Co. Limited
9.	Geminia Insurance Co. Limited
10.	Fidelity Shield Insurance Limited
11.	Intra Africa Assurance Limited
12.	ICEA Lion General Insurance Limited
13.	Britam General Insurance (K) Limited
14.	Kenindia Assurance Company Limited
15.	Kenya Orient Insurance Limited
16.	Kenya Reinsurance Corporation Limited
17.	Liberty Life Assurance Kenya Limited
18.	Madison Insurance Kenya Limited
19.	Mayfair Insurance Co. Limited
20.	Old Mutual Assurance Co. Limited
21.	Resolution Insurance Co. Limited
22.	Sanlam General Insurance Co. Limited
23.	Takaful Insurance of Africa Limited
24.	Tausi Assurance Co. Limited
25.	The Heritage Insurance Co. Limited
26.	The Jubilee Insurance Co. of Kenya Limited
27.	The Monarch Insurance Co. Limited
28.	Trident Insurance Co. Limited
29.	UAP Insurance Co. Limited
30.	UAP Life Assurance Co. Limited
31.	Xplico Insurance Co. Limited