

**DETERMINANTS OF ACCOUNTING INFORMATION SYSTEMS ADOPTION  
AMONG STATE OWNED CORPORATIONS IN KENYA**

**By**

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**MASTERS OF SCIENCE (FINANCE AND ACCOUNTING)**

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## DECLARATION

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

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I do hereby confirm that I have examined the master's dissertation of  
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## ABSTRACT

Running an organization successfully requires effective management of organizational and financial data with quality information systems. Though state corporations in Kenya are working in an increasingly digitized knowledge economy, they have been slow on adopting information systems in general and accounting information systems (AIS) in particular. The purpose of this study was to investigate the determinants of accounting information systems adoption among state owned corporations in Kenya. Specifically, the study sought to establish the effect of perceived usefulness, top management support, employee competence and the perceived ease of use on adoption of accounting information systems among state owned corporations in Kenya. The study was anchored on the technology acceptance model, diffusion of innovations theory and the unified theory of acceptance and use of technology. The study applied a descriptive research design. The study population in this study was 187 state corporations in Kenya. Multistage sampling was used to select 65 state corporations. The study used a structured questionnaire addressed to the senior accountants in the state corporations. Collected data was analysed using descriptive statistics (percentages, frequencies, means and standard deviations) and multiple regression analysis. The results were presented in figures and tables. The study results show that top management support ( $\beta = 0.318$ ,  $p = 0.012$ ) and employee competence ( $\beta = 0.438$ ,  $p < 0.05$ ) had a significant positive effect on adoption of AIS in state corporations in Kenya. However, perceived ease of use ( $\beta = -0.032$ ,  $p = 0.801$ ) and perceived usefulness ( $\beta = 0.093$ ,  $p = 0.124$ ) did not have a significant effect on adoption of AIS in state corporations in Kenya. Based on these results, the study recommends that the attitudes and perceptions of accountants regarding any information system should be considered in the adoption process. The study also recommends that in seeking to support employees in the adoption process, top managers should always seek the opinions and suggestions of the employees. They should also involve them in the decision making. Lastly, the study recommends that before any AIS is implemented in an organization, employees should be sensitized on how to use it in order to get maximum benefit on any adopted system.

**Keywords:** Adoption, Accounting information systems, State owned corporations

## **DEDICATION**

I dedicate this project to my family. Without their moral support, tolerance and understanding, this project could not have been possible in my academic journey and I highly acknowledge their assistance and prayers.

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## TABLE OF CONTENTS

<b>DECLARATION.....</b>	<b>ii</b>
<b>ABSTRACT.....</b>	<b>iii</b>
<b>DEDICATION.....</b>	<b>iv</b>
<b>ACKNOWLEDGEMENT.....</b>	<b>v</b>
<b>TABLE OF CONTENTS .....</b>	<b>vi</b>
<b>LIST OF FIGURES .....</b>	<b>ix</b>
<b>ACRONYMS AND ABBREVIATIONS.....</b>	<b>x</b>
<b>OPERATIONAL DEFINITION OF TERMS.....</b>	<b>xi</b>
<b>CHAPTER ONE .....</b>	<b>1</b>
<b>INTRODUCTION.....</b>	<b>1</b>
1.1 Background of the Study .....	1
1.2 Statement of the Problem.....	6
1.3 Objectives of the Study.....	7
1.4 Research Questions.....	8
1.5 Significance of the Study.....	8
1.6 Scope of the Study .....	10
<b>CHAPTER TWO .....</b>	<b>11</b>
<b>LITERATURE REVIEW .....</b>	<b>11</b>
2.1 Introduction.....	11
2.2 Theoretical Review .....	11
2.3 Empirical Review.....	14
2.4 Knowledge Gaps.....	38
2.5 Conceptual Framework.....	40
2.6 Operationalization of Variables .....	40
<b>CHAPTER THREE .....</b>	<b>42</b>
<b>RESEARCH METHODOLOGY .....</b>	<b>42</b>
3.1 Introduction.....	42
3.2 Research Design.....	42
3.3 Target Population.....	42
3.4 Sampling Technique and Sample Size.....	43
3.5 Instrumentation .....	45
3.6 Data collection Procedure.....	45
3.7 Pilot testing .....	46
3.8 Data Analysis and Presentation .....	48
3.9 Diagnostic Tests.....	49
<b>CHAPTER FOUR.....</b>	<b>52</b>
<b>DATA ANALYSIS, FINDINGS AND DISCUSSION .....</b>	<b>52</b>
4.1 Introduction.....	52
4.2 Response Rate.....	52
4.3 Demographic Information.....	52
4.4 Study Variables.....	54
4.5 Diagnostic Tests.....	63
4.6 Model Fitting .....	68
4.7 Discussion of Findings.....	71

<b>CHAPTER FIVE .....</b>	<b>73</b>
<b>SUMMARY, CONCLUSIONS AND RECOMMENDATIONS .....</b>	<b>73</b>
5.1 Introduction.....	73
5.2 Summary .....	73
5.3 Conclusions.....	76
5.4 Recommendations.....	77
5.5 Limitations of the Study.....	78
5.6 Recommendations for Future Research .....	78
<b>REFERENCES.....</b>	<b>79</b>
<b>APPENDICES .....</b>	<b>88</b>
Appendix I: Questionnaire to Senior Accountants in State corporations .....	88
Appendix II: List of Kenyan State-Owned Corporations .....	92
Appendix III: Sample of State-Owned Corporations.....	97

## LIST OF TABLES

Table 1 Operationalization Framework .....	41
Table 2 Study Population.....	43
Table 3 Study Sample .....	44
Table 4 Reliability of the Questionnaire .....	47
Table 5 Perceived ease of use of IAS .....	55
Table 6 Top Management Support Regarding AIS .....	57
Table 7 Perceived Usefulness of AIS .....	59
Table 8 Employee Competence towards AIS .....	60
Table 9 Adoption of AIS in State Corporation .....	62
Table 10 Test of Multicollinearity .....	64
Table 11 Test of Linearity.....	65
Table 12 Autocorrelation Test .....	66
Table 13 Tests of Normality .....	68
Table 14 Summary of the regression Model.....	68
Table 15 Analysis of Variance of the Model .....	69
Table 16 Significance of Independent Variables in the Model.....	70

## LIST OF FIGURES

Figure 1 Conceptual Framework .....	40
Figure 2 Gender of the Respondents.....	53
Figure 3 Years of Service in the State Corporation .....	54
Figure 4 Tests of heteroscedasticity.....	67

## **ACRONYMS AND ABBREVIATIONS**

<b>AIS</b>	Accounting Information System
<b>Cap</b>	Chapter
<b>ICT</b>	Information and Communications technology
<b>IFMIS</b>	Integrated Financial Management Information System
<b>SME</b>	Small and Medium Enterprise
<b>SPSS</b>	Statistical Package of Social Sciences
<b>UTAUT</b>	Unified Theory of Acceptance and Use of Technology
<b>WHO</b>	World Health Organization

## OPERATIONAL DEFINITION OF TERMS

**Accounting information system** – A technology-based application used to collect, store, and process accounting and financial data which is then used by decision makers in an organization (Zaini, Hamad, & Najim, 2020)

**Adoption** - Acceptance and use of a new technology, innovation, product or service by an individual, organization or community (Dmour, 2016).

**Ease of use** – The degree to which a person believes that using a particular system would be free from effort. If the system is easy and user friendly, then no barrier to its adoption but if it's not and the interface is also complicated, then users will not have positive attitude towards it (Wongsim, 2016).

**Employee competence** - Capacity of employees to effectively use the AIS; relates to their self-efficacy, training provided, their educational qualifications and their ICT technical competence (Gwangwava, Manuere, Mabvure, & Kuadakwashe, 2012).

**Perceived usefulness** - Extent that the management, accountants and other stakeholders expects the AIS to enable job performance; also relates to the extent that system is expected to be beneficial to the organization (Fitriati & Mulyani, 2015).

**State owned corporations** – Enterprises established to pursue commercial activities and other affairs where the government has significant control through significant minority, majority or full ownership (Inspectorate of State Corporations, 2020).

**Top management support** - Commitment of the organization's executives towards the AIS; relates to devoting time to the AIS project planning, leading adoption as an AIS champion, devoting time for follow-up and allocating adequate resources (Kaluarachchi, 2017).

# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1 Background of the Study**

In the information age, an organization must adopt systems that enable it to enhance efficiency and functionality. Running an organization successfully requires effective management of organizational and financial data and statistics with quality information systems (Kamanga & Alexandra, 2019). Without effective information systems, organizations can experience a drastically slowed workflow due to data problems related to accuracy and reliability (Mkonya, Jintian, Nanthuru, & Jinyevu, 2018). To be successful in the information age, implementation and utilization of information systems in an organization is essential.

Various information systems that an organization can adopt to assist in its operations include but are not limited to inventory management systems, sales management systems, budgeting systems, human resource management systems, management reporting systems and accounting information systems. According to Tilahun (2019), adoption of accounting information systems (AIS) have advantages of increasing functionality of accounting departments within the organization. This helps enhance faster processing of information and improved accuracy that enables organizations to enhance cost control and improve their internal and external financial reporting.

In Australia, there is a high adoption rate of AIS among the public and private entities. Alamin, Yeoh, Warren and Salzman (2015) established that Australian public sector was at the forefront in AIS adoption to improve information management and use in operations and evidence-based decision-making. Factors that have been considered instrumental in adoption of AIS in the

country include coercive pressure from regulators and organizations, facilitating conditions, effort expectancy, perceived technology fit and self-efficacy.

In Vietnam, Huy and Phuc (2020) observed that AIS is acknowledged as an effective tool to deal with the internal and external changes through transaction and data processing to generation of useful information for operations, planning, control and other critical organizational activities. Moreover, AIS facilitates decision-making and organizational performance. However, the adoption rate of AIS in the country among both private and public entities is low. Factors that influence adoption of AIS in Vietnam included resource limitations, performance expectancy and the organization's strategies.

In the gulf countries, Hammour, Househ and Razzak (2017) observe that AIS implementation and adoption is high among public hospitals. In these facilities, use of information and communication technologies (ICT) has provided accounting systems the ability to help the organizations to use and develop computerized systems to record and track financial transactions. AIS has permitted the healthcare sector in the Gulf regions to produce reports that can support the decision-making process. One of the most critical aspects in adoption of AIS include training to accountants who use the systems, top management support and adequacy of financial and human resources.

In Ethiopia, Tilahun (2019) reported a moderate adoption of AIS in public hospitals in the country. Most of the motivation to implement and adopt AIS is from government, which has encouraged public hospitals to adopt AIS to enable them use information for strategic planning and operational decision-making. The main factors influencing adoption of AIS include size of the hospital, competence of human resources, perceived ease of use, cost-benefit perception and top management commitment. A similar study in Zimbabwe by Gwangwava and Mabvure (2012)

established that small and medium enterprises have low adoption of AIS. The factors that influenced adoption of AIS in these enterprises include financial constraints, lack of government support, performance expectancy, complexity of AIS and lack of competent human resources.

In Kenya, Rotich (2017) studied the impact of AIS on effectiveness of manufacturing firms in Kenya by analysing availability of reliable human resources, good management leadership and internal controls. The study concluded that, AIS increases processing speed, reporting timeliness, accuracy and quality of reports generated thus affecting the firm's efficiency in its operations. The study thus recommended that in order to ensure that firms have quality, timely and accurate financial reports for decision-making, they should invest in AIS since it is seen to affect financial reporting to a great extent. However, this study did not look at other factors like system ease of use and perceived usefulness of AIS, which this study intends to look at.

### **1.1.1 Determinants of Accounting Information Systems Adoption**

According to Fontinelle (2019), AIS is a structure that a business uses to collect, store, manage, process, retrieve and report its financial data so that it can be used by management, consultants, business analysts, chief accounting officers and auditors among other stakeholders for decision making. Specially trained accountants work in-depth with AIS to ensure the highest level of accuracy in a company's financial transactions and record keeping as well as making financial data easily available to those who legitimately need access to it.

AIS have various advantages to entities. According to VanBaren (2017), well-customized AIS generates financial reports without human calculations thus minimizing errors. The system also has the capability to produce instant reports for any period as required. Year-end closing being one of the most complicated, time consuming and tedious process for an accountant where adjusted

trial balance is calculated and closing entries made, the adoption of AIS is of essence since the computer does most of the work so long as data is correctly captured. However, most organizations, especially public entities, are lagging behind in their adoption and use.

There are various factors that influence adoption of AIS which include top management support (Mkonya et al., 2018), performance expectancy and perceived ease of use (Xu, 2015). Moreover, other factors influencing adoption include technical competence of employees, IT readiness of top management, compatibility with other systems, competition and availability of human resources (Wongsim, 2016). For public entities, Kamanga and Alexandra (2019) indicated the influencing factors of adoption to be government support, top management support, legal and policy framework, financial reporting, linkage of government agencies and IT readiness. Others include employee competence and perceived ease of use.

This study focused on four factors that have been indicated to be essential for AIS adoption in government agencies, departments and ministries. These include perceived ease of use, top management support, employee competence and perceived usefulness (Alamin, Wilkin, Yeoh, & Warren, 2019; Odeh, 2019; Tilahun, 2019; Wongsim, 2016; Ismail & King, 2014). Perceived usefulness is the extent that the management, accountants and other stakeholders expects the AIS enable job performance. It also relates to the extent that system is expected to be beneficial to the organization (Fitriati & Mulyani, 2015). Perceived ease of use relates to the assessment of the intrinsic characteristics of the system such as ease of learning, flexibility and clarity of its interface (Gefen, 2000). It's the degree to which a person believes that using a particular system would be free from effort. If the system is easy and user friendly, then no barrier to its adoption but if its not and the interface is also complicated, then users will not have positive attitude towards it. Top management support relates to the commitment of the organization's executives towards the AIS.

This involves devoting time to the AIS project planning, leading in adoption as an AIS champion, devoting time for follow-up and allocating adequate resources (Kaluarachchi, 2017). Employee competence relates to the capacity of employees to effectively use the AIS (Gwangwava et al., 2012). This requires their self-efficacy, training, educational qualifications and ICT technical competence. Adoption relates to having the entire organization embrace the AIS, wrap it into its workflow and become more effective as a result.

### **1.1.2 State Owned Corporations in Kenya**

State owned corporations also known as state enterprises, are body corporates established through an Act of parliament under the laws of Kenya. A state corporation is either established under the Companies Act (Cap 486), act of parliament or Section 3 of the State Corporations Act (Cap 446). The 187 state corporations are categorized into eight broad classifications depending on their core functions. These categories are regulatory, service, regional development authorities, financial, tertiary education and training, commercial/manufacturing, public universities and training and research (Inspectorate of State Corporations, 2020). These state corporations are vital as they are aimed at providing public goods and services that the government feel are not well catered for by private enterprises.

Most of the state corporations have been performing poorly which jeopardizes the attainment of their objectives. There are various factors responsible for the poor performance of state corporations including poor corporate governance practices, inefficiency, weaknesses in strategic planning and implementation and inefficiency in structures, processes and systems. Moreover, though the state corporations are working in an increasingly digitized knowledge economy, they have been slow in adopting information systems in general and AIS in particular

(Opanyi, 2016). Adoption of AIS in state owned corporations could be essential to improve public sector accounting, which is critical in the context of new public management. This is because AIS is pivotal in reporting and recording management acts and transactions, assisting managers in these public institutions to accomplish their objectives regarding external and internal reporting for the purposes of accountability. This study will hence seek to assess the determinants of accounting information systems adoption among state owned corporations in Kenya.

## **1.2 Statement of the Problem**

Accounting information system (AIS) is one of the most critical systems in any organization. Data quality plays a critical role in a data-intensive, knowledge-based economy. Quality financial information plays significant role in accountability of government to their citizens and how it meets its financial management responsibilities (Wang & Miraj, 2018). Adoption of AIS in government entities is an important part of public sector reforms and follows a global trend in government accounting in response to calls for greater government financial accountability and transparency, which is a fundamental principle of democracy.

Despite the importance of AIS, state owned corporations in Kenya continue to lag behind in adoption of AIS (Opanyi, 2016). This could be seen in how most of them struggle in providing relevant and timely financial reports for internal financial management and external reporting. It is not clear on what are the determinants of AIS adoption among state owned corporations in Kenya.

Various attempts have been made to establish the factors influencing adoption of AIS. Tilahun (2019) established that perceived ease of use, government support, performance expectancy, human resource and top management support influenced adoption of AIS in hospitals

in Ethiopia. This study was however, on public hospitals and not state-owned corporations, which will be the focus of the current study. Kaluarachchi (2017) determined that financial resources, technical competence and top management support influenced adoption of AIS by SMEs. This study however, was conducted on SMEs in Sri Lanka which is a different context to Kenya. Another study by Al-Hiyari et al. (2013) established that employee competence and top management support significantly influenced adoption of AIS. However, this study failed to consider government support and performance expectancy, which will be considered in the current study. Gwangwava, Manuere, Mabvure and Kuadakwashe (2012) established that financial constraints, lack of government support and complexity of AISs significantly influenced adoption of AIS. This study was conducted on SMEs in Zimbabwe and thus the findings may not relate to state owned corporations in Kenya. This study therefore assessed the factors determining adoption of AIS in state corporations in Kenya.

### **1.3 Objectives of the Study**

#### **1.3.1 General Objective**

The general objective of the study is to investigate the determinants of accounting information systems adoption among state owned corporations in Kenya

#### **1.3.2 Specific Objectives**

- i) To assess the effect of perceived ease of use on adoption of accounting information systems among state owned corporations in Kenya
- ii) To determine the influence of top management support on adoption of accounting information systems among state owned corporations in Kenya

- iii) To establish the effect of employee competence on adoption of accounting information systems among state owned corporations in Kenya
- iv) To determine the influence of perceived usefulness on adoption of accounting information systems among state owned corporations in Kenya

#### **1.4 Research Questions**

- i) What is the effect of ease of use on adoption of accounting information systems among state owned corporations in Kenya?
- ii) How does top management support influence adoption of accounting information systems among state owned corporations in Kenya?
- iii) How does employee competence affect adoption of accounting information systems among state owned corporations in Kenya?
- iv) What is the influence of perceived usefulness on adoption of accounting information systems among state owned corporations in Kenya?

#### **1.5 Significance of the Study**

State corporations are a key aspect of the government tasked with the responsibility of delivering key services and products for the achievement of the government's strategies. Adoption of AIS in government agencies, ministries and departments is low (Wang & Miraj, 2018). Due to the continued use of technology in public and private entities, it is essential for organization to adopt AIS to enhance data and information quality. Data quality plays a critical role in today's data-intensive, knowledge-based economy. The findings from this study will be critical, as they will unearth the key factors that determine adoption of AIS in state owned corporations in Kenya and

hence inform evidence-based interventions that could enhance AIS adoption in state corporations. The findings will hence be valuable to policy makers, management of state corporations and government agencies, ministries and departments, scholars and researchers.

### **1.5.1 Policy Makers**

The policy makers such as ministry of Information and communication and ICT authority could use these findings as input to policymaking or policy amendments. The study will establish the influence of perceived ease of use, top management support, employee competence and perceived usefulness on AIS adoption in state corporations. The results of this study could therefore, be used by the policy makers to design effective policies that incorporate the key determining factors and hence improving adoption of AIS in state corporations. Most importantly, the influence of government and management support on AIS adoption is relevant to the policy makers as they have the capacity to influence this key aspect.

### **1.5.2 Management in Government Ministries, Agencies and Departments**

The findings may also be significant to the management in the state corporations, other government ministries, agencies and departments. Most importantly, the findings regarding top management support, perceived usefulness and employee competence are critical to management in these entities. This will inform the interventions necessary to these factors so as to enhance success in adoption and use of AIS in these organizations. Moreover, the study will establish areas of weaknesses which management in these entities can improve on.

### **1.5.3 Scholars, Researchers and Academicians**

Lastly, the study will be valuable to scholars and research. For research, the study will have recommendations for further which future researchers can explore to advance research in the subject area of AIS adoption. Further, the study will have limitations which could be used by future researchers as learning points when conducting future research. Besides, the study findings will add to the existing research on determinants of AIS adoption in public entities. This will be useful to scholars and students in accounting.

### **1.6 Scope of the Study**

This study sought to establish the determinants of accounting information systems implementation among state owned corporations in Kenya. Though there could be many determinants of implementation of AIS, the study focussed on four factors. These are the factors were indicated in previous studies to be critical for AIS adoption in public entities. These include system ease of use, top management support, employee competence and perceived usefulness. The study covered the entire country since state corporations are dispersed in various parts of the country. The accountants in the state corporations were the respondents.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter presents the literature review related to the determinants of AIS adoption. Specifically, the chapter provides the theoretical review that discusses the three theories that anchor the study and the empirical review which discusses global, regional and local studies on factors influencing adoption of AIS. The empirical review is presented in relation to the study variables, which are; perceived ease of use, top management support, employee competence and perceived usefulness. The chapter also presents the identified knowledge gaps that the current study sought to fill. Further, the conceptual framework and operationalization of variables are presented in this chapter.

#### **2.2 Theoretical Review**

This section presents theoretical review, which gives a theoretical framework to base the study upon. The three theories applied in this study include technology acceptance model (TAM) diffusion of innovations theory and the unified theory of acceptance and use of technology (UTAUT). The proponents of these theories, the years they were developed and their application to the study are as discussed in the ensuing sections.

##### **2.2.1 Technology Acceptance Model**

The technology acceptance model (TAM) by Davis (1989) explains why individuals and entities adopt technology. It assumes that perceived usefulness, self-efficacy and perceived ease-of-use influences the decision of the users to adopt a certain technology. TAM is considered one of the

most influential theories in innovation or technology adoption. This theory informs technology adoption in every organization is mostly influenced by two primary factors; perceived usefulness and perceived ease of use. The individual or organization must consider the technology to be useful for them to adopt it. However, if the individual perceives the technology as not useful, they will neither adopt nor use it (Stone, 2016). The theory has faced some criticisms as it fails to explain what influences the perceptions of the potential adopters (Wilkening, 2011). However, this theory serves as an essential framework that has been proven consistent in various empirical studies on factors that influence adoption and use of technology by individuals and organizations.

The TAM could be applicable to explain how perceived usefulness of the AIS could influence the adoption decision by the state corporations. When employees, top management and leaders in government perceive AIS to be useful for the organization, they will be able to champion and support the adoption. However, when they perceive AIS as not useful, they will be reluctant to adopt it (Iskandar, 2015). This theory has been used in various studies on adoption of technology, innovation and information systems (Tilahun, 2019; Smith & Puasa, 2016; Iskandar, 2015; Padachi, 2012). It was thus, used in this study to explain how perceived usefulness and ease of use are expected to influence the decision to adopt AIS in state corporations.

### **2.2.2 Diffusion of Innovations Theory**

Diffusion of innovations theory by Rogers (1962) explain the rate, why and how new technology and ideas are accepted and spread through an organization or social system. This theory explains an innovation to be a practice, object or idea or a technological innovation (Wilkening, 2011). It indicates that, there are various factors that determine diffusion of innovation. These include the innovation itself, channels of communication, the decision process about the innovation and the

innovativeness of the individual or the organization engaging in the adoption process (Tilahun, 2019). Moreover, other influencing factor is the social system in place where the innovation is being introduced.

The theory of diffusion of innovations further postulates that the speed of the diffusion is influenced by the attributes of the technology, the diffusion network, and support from change champions, and stakeholders (Wilkening, 2011). The decision to adopt an innovation is made by the individual or an organization's decision-making unit. The decision-making process starts with knowledge of an innovation, forming an attitude towards the innovation and decision making regarding whether to reject or accept the innovation and executing the decision (Stone, 2004). The theory indicates that there are optional innovation decisions made by individuals, collective innovation decisions made collectively by groups and authority innovation decisions made for organizations or groups by people in positions of authority (Stone, 2000). The theory was used in the study to explain how decisions made by top management in positions of authority in state owned corporations can influence adoption of AIS. These are decision that are influenced by the attitudes of top management and government officials regarding importance of AIS. These decisions can influence the resources allocated to AIS and the commitment of the leadership to AIS adoption.

### **2.2.3 Unified Theory of Acceptance and Use of Technology**

The unified theory of acceptance and use of technology (UTAUT) was developed by Venkatesh and Davis (2000) and it's a theory that explains the process of technology adoption and use. This theory explains that the intentions to use, and subsequent use of technology is influenced by facilitating conditions, social influence, effort expectancy and performance expectancy (Sumak,

Pusnik, Hericko, & Sorgo, 2017). Further, the theory was later tested by Park, Son and Kim (2012) and established that 50% of variance in actual uses and 70% of variance in intention to use was explained by the theory. Facilitating conditions, effort expectancy and performance expectancy are the cornerstone of the factors that influence technology adoption according to the UTAUT (Kim, Lee, & Rha, 2017). This theory has been applied in various research studies on factors influencing technology adoption.

This theory was used to explain how employee competence could explain the adoption of AIS in state corporations in Kenya. The theory indicates that facilitating conditions and effort expectancy are key in influencing adoption of technology (Šumak & Šorgo, 2016). The organization can facilitate adoption by imparting the necessary skills to employees through training. Further, when employees are trained, they become competent in use of the technology which enhances their self-efficacy and reduces the effort expectancy (Kabra, Ramesh, Akhtar, & Dash, 2017). When employees are not well equipped with the knowledge required, resistance towards adoption of the technology is increased. This theory was therefore, used to explain how employee competence could influence adoption of AIS in state corporations.

### **2.3 Empirical Review**

This section provides a review of empirical studies conducted globally, regionally and locally on factors influencing adoption of accounting information systems. The review of the empirical studies is provided in relation the study objectives.

### **2.3.1 Ease of Use and Adoption of Information Systems**

Dewi, Dewi, Kustina and Prena (2018) study investigated the impact of ease of use perception of accounting information system in business. The quantitative research that involved 1068 participants from Small and Medium enterprises used stratified sampling method to select a sample population of 305 institutions. The objective of the study was to assess the ease of use perception has a relationship between culture and adoption of AIS within firms. The independent variables included ease of use and perception of ease while the dependent variable was adoption of AIS in SMEs. From the study findings, the researchers affirm that ease of use strengthens the culture of adopting and using AIS within business. According to Turner, Weickgenannt and Copeland (2020), human factors such as the perception of ease of use play a vital role in application of AIS within the business environment.

Daoud and Triki (2013) posit that perception of users regarding AI systems is crucial in ensuring effective application and utilization within firms. A study by Mustapha, Obid, & Bt (2015) investigated the mediating impact of perceived ease of use on the association between online tax system and tax service quality. The research involved 206 self-employed taxpayers within Nigeria. A questionnaire with 21 questions was administered to collect the data. The study independent variable included the perception of ease of use while the dependent variable was the relationship between quality and application of tax system. From the research findings, Mustapha, Obid and Bt (2015) affirms that perceived ease of use has a significant effect on the application of accounting information systems to manage the taxation. This finding resonates with Daoud and Triki (2013) argument that perception of users has a positive impact on the adoption and effectiveness of AIS within firms.

Almahamid, Mcadams, Al Kalaldehy and Motaz (2010) research explored the relationship between perceived ease of use, usefulness, quality, and intention on the adoption of e-government to gather data in Jordan. The study findings show that the perceived ease of use has a positive relationship with the application of technological system by the Jordanian government. This supports the argument Rono (2014) research that investigated the relationship between perceived ease of use, behavioral intention, as well as usefulness and adoption of mobile banking services among commercial banks in Kenya. The descriptive study incorporated 43 commercial banks in Kenya where a sample of 12 institutions was selected for the research. According to the study findings, perceived ease of use highly influences the intention and willingness to apply the system. It is conclusive to state that ease of use perception among users enhances the adoption of accounting and technological information systems within institutions.

Nyang'au, Okibo, and Nyanga'u (2015) study investigated the impact of constraints of adoption of computerized accounting system by coffee societies within Nyeri County in Kenya. The study objectives included users' perception on AI systems and its influence on adoption of technology. A total of 515 participants from Nyeri County were involved in the study. The study findings show that there is an insignificant relationship between perceived ease of use and adoption of accounting information systems. The research affirms that ease of use perception does not affect adoption of AIS (Nyang'au, Okibo, & Nyanga'u, 2015). A corresponding study by Permatasari and Prajanti (2018) investigated the acceptance of AIS within schools. The objective of the research was to examine the impact of perceived ease of use toward adoption of AIS by school financial managers. From the study, findings affirm that perceived ease of use has a significant influence on attitude toward using AIS. Permatasari and Prajanti (2018) differs from Nyang'au,

Okibo, and Nyanga'u (2015) who concluded that perceived ease has insignificant impact on application of AIS within institutions.

A research by Nyoro et al. (2015) examined the factors that influence adoption of e-commerce systems. One of the objectives included assessing the impact of perceived ease of use on the adoption of technology systems within institutions. The research involved 25 e-commerce publications to derive the findings. From the results, Nyoro et al. (2015) affirms that perceived ease of use is a major aspect influencing the adoption of accounting systems within institutions. A similar study by Permatasari and Prajanti (2018) examined the factors influencing the acceptance of technology within schools supports the concept that perceived ease of use has a positive relationship to application and acceptance of AIS within firms. According to their research, perceived ease of use is an essential element that determines the users' friendliness to advanced systems within business (Nyoro et al., 2015). From study findings, it is imperative to note that perceived ease of use influences behavior and attitude among users.

Cherono (2016) examined the effect of Integrated Financial Management Information Systems (IFMIS) to enhance accounting operations within government agencies in Kenya. The descriptive study involved a total of 59 government agencies within the Kenya. One of the independent variables included the perceived ease of use on the AIS among users. According to Cherono (2016), perceived ease of use establishes the needed effort that users need to apply while utilizing innovation. Mustapha (2013) research investigated the impact of perceived ease of use on the adoption of online tax system. According to the researcher, user's perception is an information technology based factor that impacts on the implementation process. From the findings, it is evident that perceived ease of use influences the adoption of online tax systems as an accounting information system.

King'ola (2011) investigated usage of information system within multinational and marketing firms in Kenya. The study was conducted through an explanatory design which target 8 institutions. From the research, perceived ease of use is a strategic factor influencing the adoption of technology information systems within firms. King'ola (2011) posits that ease of use can impede the adoption or support of AIS and its implementation process. It is therefore a critical element while assessing the adoption of AIS within firms. A corresponding study by Zhang (2017) examined the relationship between perceived ease of use as well as usefulness and the usage of computerized accounting system among SMEs in Shaan Xi and Xi an of China. Data was collected through a questionnaire where a total of 400 participants were involved. From the study findings, perceived ease of use has a significant impact on the adoption of computerized accounting systems among SMEs.

Turner, Weickgenannt, and Copeland (2020) supports the concept that perceived ease of use enhances the adoption and implementation of AIS within institutions. This argument has been exemplified by various scholars that affirm the role of perceived ease of use on the introduction of computerized accounting systems within institutions (Almahamid, Mcadams, Al Kalaldehy, & Mo'taz, 2010). A different concept is exemplified by Nyang'au, Okibo, and Nyanga'u (2015) in their study that posit that perceived ease of use does not have a significant impact on adoption of technology information systems within firms.

Njahi (2017) investigated the impact of implementation of financial information systems on performance of county governments in Kenya. The target population included 47 counties in Kenya where secondary data from financial statements was recorded. According to Njahi (2017), the perceived ease of use plays an important role in enhancing the counties' ability to implement and adopt financial systems. The argument is exemplified by Kowo (2012), that perceived ease of

use influences financial systems adoption and corporate governance in state-owned institutions. Kim and Ali (2017) posits that the government has triple responsibilities of enforcing regulations, regulator, and owner of assets within the corporations. Efficiency gains within state-owned firms is dependent on the commitment by government to adopt newer systems, overcome bureaucratic issues, delineating goals, and enhancing transparency (Kim & Ali, 2017). Perceived ease of use of the systems by the management and employees of these entities plays a critical role in the implementation process. From the literature, there is a consensus that perceived ease of use plays a significant role of ensuring that modern systems are adopted in the various agencies within state-owned corporations.

Wakhungu (2014) examined the influence of financial systems adoption on the financial performance of commercial state-owned enterprises in Kenya. The descriptive study incorporated 30 institutions and secondary techniques were used to collect data. The findings of the research showed that perceived ease of use and budgetary support for modern systems has a significant impact on financial performance. A report by international monetary fund (IMF) (2016), states that government has a role of oversight of public corporations. Allen and Vani (2013), noted that though government is a major stakeholder in fiscal management of state-owned corporations, the implementation and adoption of accounting systems is very dependent on perceived ease of use. According to IMF (2016), when employees and managers perceive accounting systems as easy to use, they are more likely to accept the systems and this enhances the process of adoption. For the firms to achieve sustainability, the government, through effective choice of technology and corporate governing boards can improve financial management (Kowo, 2012).

Karanja (2015) affirms that perceived ease of use of information systems affects the process of implementation and adoption of these systems in state corporations. The objective of

this study was to understand the role of perceptions of employees and the treasury as a government agency in supporting governance and adoption of modern processes in state-owned firms. Another study by Karanja (2015) established that though Kenya state corporations are expected to implement and adopt AIS, the perceptions of managers regarding ease of use of these systems influence the implementation. Training is critical to enable managers and employees to understand the systems so that they enhance their attitudes towards these systems. This concept is augmented by Gitari's (2008) study that examined corporate governance and financial performance of state corporations through a case of New Kenya Cooperative Creameries. The researcher exemplifies that the perceptions of staff regarding the ease of use of installed systems affects the implementation and institutionalization process.

Hamisi (2010), noted that the governments' initiative to initiate financial management reforms and processes is critical in responding to the increasing demand for accountability and transparency has enabled it to have a policy to implementation information systems. Kamau and Simiyu (2019) investigated the factors that influence adoption and implementation of information systems in commercial government owned enterprises in Kenya. The research sought to determine how perceived ease of use, budgeting, financial reporting, tracking and risk management, as well as internal control influences adoption process. The descriptive study had the five independent variables and one dependent variable which was adoption. The target population included 29 commercial state-owned institutions where 111 financial directors were selected as respondents. According to Kamau and Simiyu (2019), more state-owned organizations have challenges associated with negative attitudes amongst staff and management regarding ease of use of the systems.

### **2.3.2 Top Management Support and Adoption of Information Systems**

Suratman and Ridwan (2017) affirm that knowledge and commitment of accounting managers contributes to successful adoption of accounting information systems (AIS). The study objective was to assess the adoption of AIS within state-owned corporations in West Java, Indonesia. A survey was conducted among 33 public institutions. From the findings, the top management has a significant role in the implementation and adoption process of AIS. A research by Ouko (2013) examined the determinants of information systems in business operations in Kenya through a case of Tea Companies in Nandi County. A sample population of 67 senior managers was involved in the study. The findings demonstrate that top management contribute towards the success of AIS within firms. From the research, senior managers have a burden of ensuring effective adoption of AIS within firms. Suratman and Ridwan (2017) and Ouko (2013) agree that the top management support on adoption of AIS enhances effectiveness.

Magutu, Lelei, & Borura (2010) noted that one of the challenges affecting managers in public corporations is the implementation and adoption of AIS. Odoyo and Ojera (2020) research investigated the impact of top management support on the accounting information system. The study involved three institutions where a questionnaire was administered. From the findings, realization of full potential of managerial support in adopting AIS is critical in enhancing effectiveness. According to Odoyo and Ojera (2020), the role of senior management is to enhance successful adoption of computer-based systems within firms. Ali, Mohamad, Talib, and Abdullah (2018) investigated the role of top management in information system planning. Researchers have a consensus that top management have a distinct role in enhancing adoption of Information technology based as a way of promoting effectiveness within corporations.

A study by Komala (2012) investigated the impact of accounting managers' knowledge and top managements' support on AIS and its influence on quality through a case study of Zakat institutions in Bandung. The research consisted of 31 respondents selected from managerial positions. From the findings, completeness, consistency, timeliness, and accuracy were influenced by the managers' knowledge and ability to enhance support. A corresponding research by Anggadini (2015) examined the impact of top management support and internal control practices on the AIS quality. A survey that involved 47 respondents was conducted in West Java Indonesia. Anggadini (2015) findings show a significant relationship between the independent variables and dependent variables. Both Komala (2012) and Anggadini (2015) agree that accounting information results depend on the senior managers' capacity to adopt the system effectively. The capacity to support execution of AIS is paramount to achieving information quality.

Shien (2015) investigated the impact of top management support and user ability on the quality of AIS and its influence on information. The research that involved 55 participants from Bandung-Indonesia show that effective adoption of AIS depends on the knowledge and expertise exhibited by the senior managers. According to Shien (2015) the quality of AIS can be enhanced through senior management support and improvement of user ability. Al-Hiyari, Al-Mashregy, Mat, and Alekam (2013) examined the factors that influence the implementation process of accounting information system. A survey that involved 119 respondents was conducted with the independent variables being management commitment. The findings of the research show that the top management has a significant role in enhancing the quality of AIS within institutions. The concept is supported by Fitrius (2016) study that states that managerial support and abilities to implement AIS is critical for effectiveness.

Lundu and Shale (2015) notes that top management determines the effectiveness of accounting systems by ensuring strategic implementation of the IFMIS in Kenya. The study sought to investigate the impact of top management support on the implementation of IFMIS in Nairobi County Kenya. According to the researchers, the management support acts as a pivotal factor that enables implementation process through providing necessary resources and encouragement to staff members. From the findings, top management support is considered as a determinant of strategic choices within public institutions. It therefore has an impact on the performance of Nairobi County in relation to implementation of IFMIS. Lundu and Shale (2015) affirm that top management has a positive effect on resolving complex problems during implementation process and ensuring team performance. Research exemplify the importance of top management support in the implementation process of an AIS especially within public institutions.

Magutu, Lelei, and Borura, (2010) investigated the adoption of information technology as a tool to enhance transparency within State Corporations in Kenya. The study objective was to examine the practice of IS implementation and establish the challenges faced by parastatals within the country. The descriptive study involved a total of 53 respondents where a questionnaire was administered for data collection. From the findings, strategic leadership is paramount to achieve successful implementation of IS within State Owned firms. According to Magutu, Lelei, and Borura, (2010), top management support in parastatals aid in developing suitable structures and resources to enable the implementation process. The results exemplify that top management support is an important factor to consider during adoption of information technology as a tool to promote transparency and accountability (Magutu, Lelei, and Borura, 2010). This argument resonates with Lundu and Shale (2015) that note the need for top management support as a pillar to ensure sustainable adoption of AIS within firms.

Njihia and Mwirigi (2014) examined the impact of resource planning systems on institutions' performance through a case of commercial banks in Kenya. One of the study objectives was to assess the impact of top management support on effective implementation of computerized resource planning systems. The research used a descriptive design to examine the relation between the independent variables; top management support, employees' perception, resource availability, as well as regulatory requirements and dependent variable; effective implementation of ERP system. From the study findings, top management support influences the effective implementation of technology-based systems within commercial banks. Njihia and Mwirigi (2014) affirm the need to ensure top management support as a strategic factor to enhance performance and execution of IS projects. From the research, top management support is necessary to enhance sustainable development and adoption of computerized information systems within firms.

Micheni (2017) study assessed the factors influencing the adoption of IFMIS in county governments within Kenya. The objective of this research was to examine the success aspects while implementing an AIS project within public institutions. The study independent variables included top management commitment, human capital development, perceived benefits, and change management while the dependent variable was effective adoption of IFMIS within county governments. The research focused on five counties within Kenya where quantitative data was obtained 45 respondents selected from Kiambu, Machakos, Nairobi, Nakuru, and Bungoma counties. From the study findings, it is apparent that top management support and commitment is a critical success factor in adopting IFMIS as an accounting information system to enhance transparency and accountability. Micheni (2017) posits that there is need for public sector

especially county governments to enhance leadership support in relation to adoption of IFMIS as a tool to promote accountability and minimize fraudulent transactions.

Kimwele (2011) examined the factors influencing the effective adoption of IFMIS within government ministries in Kenya. The study included 30 respondents selected from the different ministries. The objective of this research was to establish the aspects hampering effective implementation of IFMIS among ministries within the country. The independent variables included top management support, technical knowhow, and sabotage while the dependent variable included effective implementation and adoption of IFMIS within ministries. From the study findings, the researcher revealed that lack of top management commitment and support contributes to failure of adopting IFMIS as an AIS for the government. Bosire (2016) supports the argument that failure to inspire the users by leaders is one of the major hindrances to the implementation of the AIS project in all government ministries. Kimwele (2011) concept exemplifies that top management support has a significant impact on the usage and adoption of accounting information systems within public institutions.

Wainaina (2014) investigated the impact of using IFMIS on the financial performance of state corporations in Kenya. From the study, top management support is identified as a strategic factor influencing the adoption of IFMIS in state owned corporations in Kenya. A corresponding study by Mwangi, Kiarie, and Kiai (2016) assessed the impact of adopting IFMIS on the procurement performance within Nyeri County in Kenya. The researchers note that there is an eminent gap in top management support on implementation of IFMIS which hinders accountability and transparency in procurement processes. A similar argument by Miheso (2013) shows that top management support has a significant impact on the implementation of IFMIS by the National Government of Kenya. From the research, it is conclusive that the level of top management

commitment and support for implementation of accounting information system determines the failure and success outcome.

Qatawneh, Aldhmour, and Alfugara (2015) examined the factors influencing the adoption of electronic payment system within the Orange Telecommunication Company in Jordan. A study population of 2320 employees was involved where a Likert five-point scale questionnaire was administered. The independent variables included top management support, organizational culture, and institutional aspects. From the study findings, top management commitment and support is ranked the most influential factor affecting the adoption of computerized information system to manage payments. According to Qatawneh, Aldhmour, and Alfugara (2015), the willingness to inspire staff members by the top management accounts for a successful implementation of an AIS within institutions. This finding resonates with Micheni (2017) argument that top management is the strongest factor in the adoption of information technology within firms and agencies. It is therefore conclusive to state that top management support has a significant impact on the implementation of AIS especially within public institutions.

Wainaina (2014) affirms that top management support is among the influential factors affecting the adoption of AIS within state-owned corporates. A similar argument by Bosire (2016) posit that effective implementation of information technology as a tool to enhance accountability and transparency is achieved through top management commitment and ability to inspire users. Qatawneh, Aldhmour, and Alfugara (2015) also exemplifies that top management ability to inspire the users determines the success of adopting the AIS within public institutions. It is therefore conclusive to state that top management support and commitment determines how effectively AIS is implemented within firms, especially state-owned agencies and corporations.

### **2.3.3 Employee Competence and Adoption of Information Systems**

Koitumet, Kinanga, and Benjamin (2018) investigated the impact of employees' competencies and abilities on effectiveness of integrated financial management information system in Kajiado County. The descriptive research incorporated 84 respondents selected from the county's staff members. The independent variables included competency and skills while the dependent variable was effectiveness of IFMIS within the county. From the findings, the implementation process of IFMIS must be supported by the workers competency. Koitumet, Kinanga, and Benjamin (2018) note that organizations that project to achieve effectiveness from AIS must address the issue of employees' competencies and skills needed to facilitate the entire procedure. A comparative research by Susilawati (2016) confirms that competence is a significant element for attaining successful adoption of quality management information systems. Research is clear that employees' proficiency determines the sustainability of AIS within institutions (Koitumet, Kinanga, & Benjamin, 2018).

Nzilu (2017) examined the determinants of implementation of IFMIS within county governments in Kenya. The descriptive research incorporated the 47 counties where primary and secondary data was collected. Nzilu (2017) affirms that human resource is a critical element in business success and requires creation of enabling environment where workers can effectively apply competencies and skills. The study findings show that employees' competence influences the implementation of IFMIS in county governments. A corresponding research by Cheron (2016) explored the impact of IFMIS on accounting operations in government agencies in Kenya. From the research outcome, staff competency is a critical element in enhancing quality AIS within the public institutions. Cheron (2016) and Nzilu (2017) exemplifies that trained and proficient

public service workers aid in strengthening the adoption process of AIS. They support the management to enhance success in the implementation procedure by offering skills and expertise.

Haleem and Kevin (2018) investigated the influence of user competence in the success of adopting AIS in the banking sector in Sri Lanka. According to the researchers, competency is a critical factor for successful performance of AIS. Haleem and Kevin (2018) affirm that technical skills and experience contribute to effectiveness rather than absolute value. A comparative study by Napitupulu and Dalimunthe (2017) assessed the impact of human resource management competency on accrual accounting implementation effectiveness and quality of AIS. From the research findings, employees' competency has a significant correlation with effective implementation of AIS as a tool for managing accounting information. To establish transparent financial data, the users' proficiency is critical (Haleem & Kevin, 2018). The concept is exemplified by Iskandar (2015) study that affirms the importance of user competency and skills in promoting the adoption of AIS in business organizations.

Hendriks (2012) did a research about integrated financial management information system within the public sector of South Africa. The systematic review was based on theoretical approaches in deriving the study findings. According to Hendriks (2012), one of the major challenges for effective adoption of IFMIS is achieving employees' competence. The weak skills and abilities among the staff were attributed to failure in implementing the IFMIS structure and accuracy. This is augmented by Endrahia (2005) research that affirms the importance of user competence in influencing positive outcome in adopting AIS. According to the author, the quality of AIS can be improved by prioritizing on competence among staff members (Endrahia, 2005). The same concept is amplified by Koitumet, Kinanga, and Benjamin (2018), that accuracy in AIS

implementation relies on the ability of institutions to mobilize its employees' skills and proficiency.

The study by Koitumet et al. (2006) investigated the impact of employees' competencies and skills on effectiveness of IFMIS in Kajiado County in Kenya. According to the study, public institutions are increasingly adopting modern systems to improve financial management practices and reduce fraud. The study targeted 105 employees from the Kajiado County and selected a sample population of 84 respondents. The independent variable included staff competence and skills while the dependent variable was effective implementation of IFMIS to manage financial practices within the county. From the findings, Koitumet et al. (2006) affirm that staff competence has a significant impact on the adoption of accounting information system. The study describes employees' skills as a determinant of effectiveness during implementation of IFMIS. Koitumet, et al. (2006) recommended that to ensure sustainability in adopting AIS within public institutions, staffs must be equipped with the necessary competencies through training to be able to handle the improved financial management systems.

Toroitich, Mburugu and Waweru (2017) examined the impact of employee competence on the adoption of electronic procurement within selected county governments in Kenya. According to the researchers, information technology has been a core tool to enhance efficiency and accountability in the public sector. The descriptive study involved 5 county governments where a simple random sampling method was used to select the participants. The independent variable was employees' competence while the dependent variable was effectiveness of the e-procurement system. From the research findings, staff skills and competence have a significant influence on implementation of technology-based information system. Toroitich, Mburugu and Waweru (2017) affirm that employees' capability supports the implementation and sustainability during adoption

of electronic systems within the public sector. From the study, there is need to consider the staff skills as a determinant for ensuring effective application and implementation of a computerized information system.

Maina (2019) investigated the determinants influencing the implementation of IFMIS within Meru County in Kenya. The objective of this study was to establish the impact of staff competence on the implementation of IFMIS within national government departments. The aim of the research was to bridge the gap on knowledge about determinants affecting the implementation of IFMIS by assessing the relationship between the independent variables; management support, technological infrastructure, and staff competence and dependent variable; effectiveness of IFMIS adoption in Meru county. A target sample population of 68 employees was selected for the study. According to the findings, staff competence is appropriate for implementation of computerized information system. Research shows that knowledge and awareness among employees determine the effectiveness of an AIS project within the public sector. Maina (2019) affirms that embracing the concept of job training is essential to enhance employees' skills and competence while using accounting information systems.

Asare and Prempeh (2017) note that lack of employee competence hinders the smooth process of adopting electronic procurement within the public sector. The staff ability to use information systems play a vital role in enhancing effectiveness during implementation. Asare and Prempeh (2017) findings show a significant relationship between employees' competence and implementation of the e-procurement system within public sectors. Wasihun (2018) investigated the factors influencing the successful implementation of IFMIS at the ministry of Finance and Economic Cooperation in Kenya. A total population of 113 were selected for the study where a sample population of 88 was picked for the study. The independent variables included

technological infrastructure, change management human capital development, and top management while the dependent variable included effective implementation of IFMIS. From the study findings, human capital development has a significant impact on the effective implementation of IFMIS within the ministry. Wasihun (2018) supports Asare and Prempeh (2017) concept that employees' competence determines the successful implementation of accounting information systems within the public sector.

Mochoge (2013) examined the factors affecting implementation of IFMIS within Kenya Bureau of Standards. The research used a cross sectional analysis and descriptive design by assessing all the responses. A simple random sampling method was used to choose 158 respondents from the Kenya Bureau of Standards. The independent variables included requisite training, management commitment, and resources to support the project while the dependent variable was the effective implementation of IFMIS. From the study findings, requisite training to enhance employees' skills has a significant impact on the effectiveness of implementing the computing information system to management financial operations. Adequate training and motivation is needed to make the human capital competent towards the adoption and use of IFMIS program (Mochoge, 2013). These findings are supported by Asare and Prempeh (2017) who argued that employees' competence has a significant impact on the implementation of AIS within public institutions.

Kinoti (2013) research assessed the adoption of e-procurement program in government parastatals in Kenya. The study incorporated 78 suppliers where 62 respondents were selected. According to the study findings, training is a critical aspect to enhance the adoption of e-procurement within parastatals. This argument is exemplified by Ongaki (2013) study that investigated the factors influencing the use and adoption of information and communication

technology within government parastatals in Kenya. A target population of 240 employees from 47 county offices were involved in the research where 104 respondents were selected through random sampling. The independent variables included job performance and management while the dependent variable included effective implementation of AIS within state owned corporations. The study findings show that employees' performance has a significant impact on the adoption of ICT. Ongaki (2013) also acknowledges the role of training to enhance workers competence and skills as an approach to enhance adoption of technology-based information systems.

A study by Maisiba (2016) examined the factors affecting the implementation of ICR in parastatals by analyzing the case of National Water Conservation and Pipeline Corporation in Kenya. According to the researcher, funding, availability of facilities, staff resistance and skills are among the major factors influencing adoption of ICT within parastatals. 133 respondents were selected through random sampling technique. From the findings, employee's performance has a significant impact on the adoption of IS programs within the public sector. Maisiba (2016) argument resonates with Ongaki (2013) that training is a strategic approach to ensure employees are equipped with necessary skills and competence to use and implement IS programs within the public sector. A concept also upheld by Mochoge (2013) findings that affirms the role of employees' competence in promoting the implementation and adoption of integrated information systems to manage financial operations.

Different researchers acknowledge that staff competence has a significant impact on the implementation of AIS programs within the public sector (Asare & Prempeh, 2017). Maina (2019) posits that staff skills account for increased performance and awareness in relation to using and adopting IS projects within public institutions. From the researches, it is decisive to conclude that

employees' competence and skills influences the effective implementation of AIS programs within state-owned firms.

#### **2.3.4 Perceived Usefulness and Implementation of Information Systems**

A review done by Tilahun (2019) examined the determinants of adopting accounting information system. The study identifies perceived usefulness as a factor to consider while adopting and implementing AIS within organizations. Tilahun (2019) notes that perceived usefulness of the AIS enhances the management insight that the system has the capacity to improve effectiveness and productivity. The study findings show that performance anticipation increases the behavioural intention to implement and utilize AIS. Tilahun (2019) also acknowledges that performance expectations are not a critical aspect to consider in adoption of accounting information systems. According to Zaini, Hamad, and Najim (2020), performance expectations is a major determinant of behavioural intentions thus an essential element influencing adoption of AIS. Both Tilahun (2019) and Zaini, Hamad, and Najim (2020) agree that performance anticipation aids institutions to improve their productivity while executing accounting information system programs.

Ibrahim (2017) notes that monetary benefits within the public sector contributes to effective measures to adopt effective accounting information systems. The author affirms that the acceptance of AIS in Kenya is attributed to the projection for effective financial management in the public sector. According to a World Health Organization (2018), limited capacity to anticipate and plan has a negative impact on implementation of integrated financial systems. The report notes that perceived usefulness enhances the ability to foresee the future develop strategic plans towards success. Performance anticipation aids institutions to identify the needs and reflect on the past, while executing potential reforms to improve fiscal management and accountability (WHO, 2018).

The same concept is exemplified by Ibrahim (2017) that as the Kenya public sector anticipate to enhance performance, institutions have embraced the use of IFMIS as a strategic tool to promote financial accountability.

Zaied (2012) notes that anticipation of future performance helps public institutions to plan and integrate the success model. Through expectations for high performance and success, business is able to enhance the implementation process in a manner that future objectives are achieved. A study by Odeh (2019) examined the factors influencing adoption of financial information system founded on the UTAUT model. The research involved 322 small and medium enterprises in Jordan. From the findings, perceived usefulness significantly affects the adoption of financial information systems in business. According to Odeh (2019) the perceived usefulness plays major role in promoting behavioral attitude towards effective implementation of IS since it positively impacts user satisfaction. This augments Tilahum (2019) concept that perceived usefulness delivers the users desire to utilize technology in promoting fiscal accountability and accuracy. There is a consensus that perceived usefulness increases the success rate of AIS implementation within organizations.

Lanlan and Ahm (2018) investigated the application of computerized accounting systems business within China. The study incorporated 201 respondents randomly selected from different firms where 74% completed the survey. According to the authors, perceived usefulness as one of the independent variables have a significant influence in adoption of computerized information systems within organizations. A comparable research by Roztocki and Weistroffer (2016) examined the impact of ICT adoption on socioeconomic development. According to the authors, perceived usefulness is a significant element in user acceptance of information technology. From the literature, it is conclusive that performance expectancy is considered as the perceived

usefulness of AIS thus increases approval rates among institutions' management and staff members. Being a vital factor influencing user acceptance, Tilahun (2019) confirms that it is directly related to adoption of AIS in institutions.

Nyaga, Ndiku and Mwai (2019) investigated the impact of IFMIS on service delivery within the Kenyan public sector. According to the researchers, perceived usefulness refers to the extent to which individuals believe that using the technology enhances personal performance. The researcher links employees' performance to the perceived usefulness as a factor influencing the usability and support for shifts within institutions (Nyaga, Ndiku, & Mwai, 2019). A corresponding study by kariuki & Mwangi (2018) examined the relationship between adoption of ICT and the performance of supply chain in state owned corporations in Kenya. The researchers affirm that perceived usefulness determines how and when users adopt new innovation. This argument is also exemplified by Cheronno (2016) study that affirms the role of perceived usefulness in changing users' behavior and attitude towards implementation of new technology. As a human factor, it establishes the link and affiliation between personal responses to acceptance of new AIS programs within the public sector.

Daoud and Triki (2013) notes that perceived usefulness on the adoption of AIS within institutions increases effectiveness during implementation and application. A study by Al-Mamary, Shamsuddin and Abdul Hamid (2014) investigated the factors influencing the adoption of management information systems within organizations in Yemen. The review focused on different scholarly articles to derive the findings that relates peoples' factors and implementation of MIS. From the findings, perceived usefulness has a positive impact on the adoption of computerized systems especially within the public sector. A similar concept is supported by King'ola (2011) findings that affirms the role of perceived usefulness in implementing IFMIS as

a tool to enhance accountability and transparency. A recent study by Taherdoost (2018) affirms that perceived usefulness is a determinant for effective adoption of ICT within the public sectors. From the studies, it accounts for behavior and attitude towards the use and application of IS programs among users.

Olali (2015) investigated the adoption of IFMIS and its impact on e-procurement in Kenya's public sector. The author posits that perceived usefulness is a determinant of adopting IFMIS as a tool to manage the complex e-procurement processes within public institutions. The findings of this research show that employees' perception influences their attitude and motivation to use AIS programs to enhance accountability and transparency. A similar finding by Cheron (2016) confirms that perceived usefulness of the IFMIS program enhances the employees' desire to use and implement it to manage financial operations. Research shows that it is a determinant of effort required by users to apply while implementing innovation within the public sector (Mustapha, 2013). Perceived usefulness is a people-related factor that influences the implementation of AIS in institutions. King'ola (2011) also supports the concept that perceived usefulness among users is a critical aspect in ensuring sustainable implementation of computerized accounting systems.

Almahamid, Mcadams, Al Kalalkeh and Mo'taz (2010) examined the relationship between perceived usefulness and intention to adopt e-government systems in Jordan. According to the research findings, there is a positive relationship between the two variables. Findings show that users tend to support the implementation and adoption process when they have a perception of its usefulness. A similar study by Zhang (2017) investigated the relationship between perceived usefulness and usage of AIS among SMEs in Shann Xi and Xian in China. The study that incorporated 400 respondents affirms that perceived usefulness has a significant impact on the

adoption of computerized accounting systems within institutions. This exemplifies the previous study by Almahamid, Mcadams, Al Kalalkeh and Mo'taz (2010) that perceived usefulness is a determinant of how employees respond to shifts to technology-based systems to manage financial operations within firms both in the private and public sector.

Lundu and Shale (2015) investigated the impact of IFMIS program on the supply chain management in devolved governments, Kenya. From the study findings, perceived usefulness is one of the human factors influencing the adoption of IFMIS to enhance transparency in e-procurement processes in Kenya's public sector. According to Lundu and Shale (2015), perceived usefulness determines the users' ability to adopt to the changes and support the implementation process by accepting the shifts. Murathi (2016) examined the success on user adoption of electronic procurement systems (IFMIS) in Kenya's government ministries. A total of 96 respondents were involved in the study and selected from government employees. From the research, perceived usefulness is a motivating factor for adopting e-procurement systems to manage financial operations within the public sector. This idea is supported by Taherdoost (2018) study that affirms the role of perceived usefulness in enhancing effective use and application of computerized accounting systems in institutions.

Ngetich and Choge (2018) examined the extent which human capital and technological infrastructure influences effective implementation of IFMIS in county government of Kenya. According to the authors, perceived usefulness is a human factor that determines the reaction towards new technology as a change process. The findings of this research show a significant relationship between perceived usefulness and effective implementation of IFMIS as a tool to enhance performance and transparency. Sarisar (2015) examined the factors influencing the implementation of e-government in Narok County, Kenya. The findings of this research show that

perceived usefulness among users controls behavior and acts as a utility. Technology usefulness ensures a positive attitude towards usage and implementation of IS programs within the public sector. According to Murathi (2016) research, perceived usefulness ensures users acknowledge the adoption of new technology as a tool to promote efficiency and performance in firms.

Njagi (2019) notes that acceptability of AIS within the public sector relies on the perceived usefulness among users. The research examined the challenges of adopting IFMIS within public organizations and acknowledges the role of perceived usefulness of innovation in enhancing adoption process. The argument is supported by Nyaga, Ndiku and Mwai (2019) study that exemplifies the importance of the variable in determining the attitude among users in relation to new technology. This is also augmented by Wainaina (2014) findings that show a significant relationship between perceived usefulness of innovation in enhancing accountability and users' performance. From the research, it is evident that user's perception has a major role in determining how new AIS are acknowledged and accepted as sources of personal satisfaction at the workplace. A study by Osir (2016) examined the role of e-procurement adoption on performance of state corporations in Kenya. From the findings, perceived usefulness among suppliers and employees initiates a culture of success in implementation process.

## **2.4 Knowledge Gaps**

The review of literature on the determinants of adoption of information systems have established several theoretical, contextual and conceptual gaps which the current study will seek to bridge. For instance, the studies by Lanlan and Ahm (2018) in China, Haleem and Kevin (2018) in Sri Lanka, Hendriks (2012) in South Africa and Komala (2012) in Indonesia were conducted in countries whose political economic, social and technological environments are different from the Kenyan

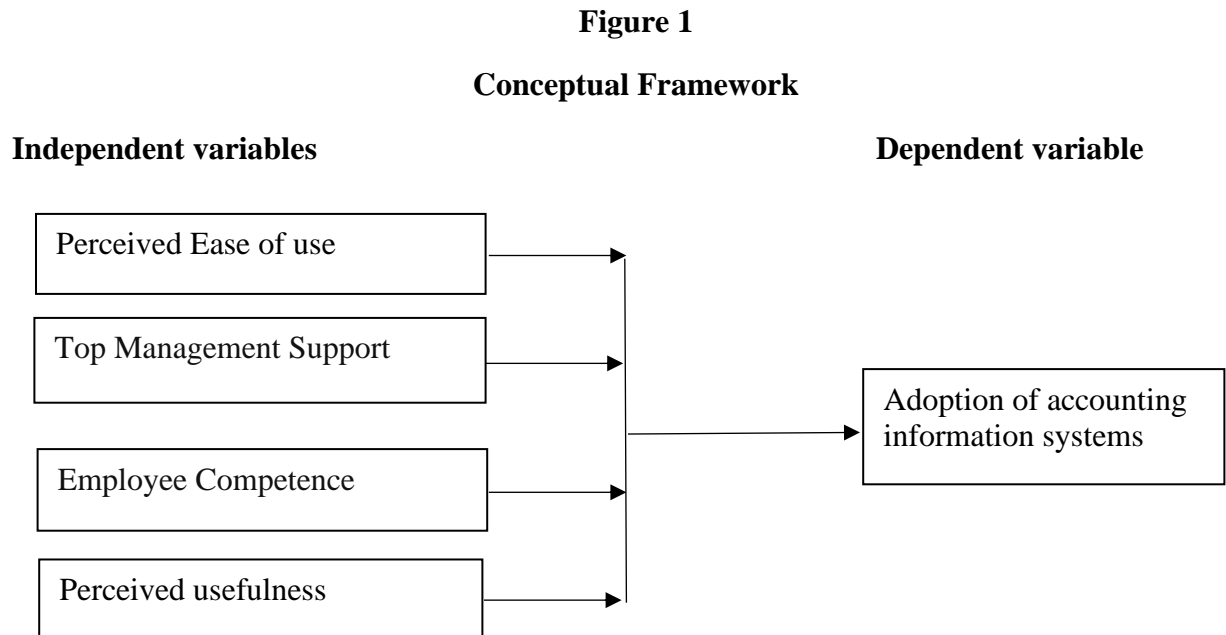
environment. Therefore, the findings from these studies may not be generalizable to the Kenyan context. Moreover, the reviewed studies like Odeh (2019) on SMEs, Haleem and Kevin (2018) conducted on the banking sector and Lanlan and Ahm (2018) on manufacturing companies were conducted in private sectors that are not comparable with state owned corporations, which are the focus of the current study.

There are several methodological gaps identified in the literature review which justified the current study. First, various studies were conducted through a case study or focused on specific sectors and hence the findings cannot be generalized to other institutions. For instance, the study by Ouko (2013) only focussed on selected Tea Companies in Nandi County of Kenya while the study by Wakhungu (2014) focussed only on state-owned enterprises in the commercial sector in Kenya. Further, Wongsim (2016) focussed on manufacturing firms in Thailand while Tilahun (2019) focussed on hospitals in Ethiopia. Due to the difference in methodologies adopted, the findings cannot be generalizable to state owned corporations in Kenya which justifies this study.

The study also sought to bridge the conceptual gaps identified. For instance, Tilahun's (2019) study focussed on perceived usefulness and top management support but did not consider ease of use and employee competence. Besides, Shien (2015) focussed on top management support, ease of use and perceived usefulness but excluded employee competence. Further, Zaied (2012) focussed on effort expectancy and top management support but failed to include perceived usefulness and employee competence. This hence justified the current study to establish how ease of use, top management support, perceived usefulness and employee competence interlink to influence adoption of AIS in state corporations in Kenya.

## 2.5 Conceptual Framework

The conceptual framework that guided the study is presented in Figure 1.



**Source: Author (2020).**

The conceptual framework (Figure 1) provides the hypothesized relationship between the independent variables (ease of use, top management support, employee competence and perceived usefulness) and adoption of AIS in state owned corporations. According to Saunders, Lewis and Thornhill (2015), developing a rigorous conceptual framework is vital in research since it provides the study with focus on the critical aspects of the variables under study. The conceptual framework in Figure 1 shows the variables under study and the expected relationships.

## 2.6 Operationalization of Variables

This section provides a framework that shows how the study variables were operationalized. Easterby-Smith, Thorpe, Jackson and Lowe (2018) consider operationalization as a process that

entails definition of the variables and indicating how the variables will be measured. This entails defining the fuzzy concepts and indicating clearly the empirical and quantitative measures. The operationalization framework is provided in Table 1.

**Table 1**  
**Operationalization Framework**

<b>Variable</b>	<b>Indicators (measures)</b>	<b>Level of measurement</b>
Ease of use	<ul style="list-style-type: none"> <li>• Ease of use of AIS</li> <li>• Flexibility of the system</li> <li>• AIS working as expected</li> </ul>	Ordinal (likert scale questions)
Top Management Support	<ul style="list-style-type: none"> <li>• AIS Leadership</li> <li>• Resource allocation</li> <li>• IT readiness</li> <li>• Mentorship around AIS</li> <li>• Enforcement</li> </ul>	Ordinal (likert scale questions)
Employee Competence	<ul style="list-style-type: none"> <li>• Self-efficacy</li> <li>• Technical AIS expertise</li> <li>• User training</li> <li>• Level of education</li> <li>• General IT competence</li> </ul>	Ordinal (likert scale questions)
Perceived usefulness	<ul style="list-style-type: none"> <li>• Expected efficiency</li> <li>• Expected relevance</li> <li>• Expected improvement in work quality</li> </ul>	Ordinal (likert scale questions)
Adoption of AISs	<ul style="list-style-type: none"> <li>• Universal use in reporting</li> <li>• Use in recording transactions</li> <li>• Capacity of accountants to apply AIS</li> </ul>	Ordinal (likert scale questions)

*Source: Author (2020).*

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

The chapter presents the methodology that the study applied to attain the research objectives and answer the test the research questions. The chapter provides a discussion of the research design and the study population. Additionally, the chapter provides the sampling technique and sample size. Data collection instruments and procedures are further presented in the chapter. Lastly, the chapter presents the pilot test and the procedures that were applied in data analysis.

#### **3.2 Research Design**

The study applied a descriptive research design which enabled the study to assess the factors that determine adoption of AIS in state corporations in Kenya. The design enabled the study to establish whether there is any influence of perceived ease of use, top management support, perceived usefulness and employee competence on adoption of AIS in state corporations in Kenya. According to Fisher (2017), a descriptive study assists in providing an account of the study variables and can also assist in determining the relationship between variables. This design was selected for the study as it enabled the study to achieve the research objectives by establishing the link between the study variables. A descriptive design is a quantitative method that is used in collecting quantitative data that is used in answering the research questions.

#### **3.3 Target Population**

Study population is the group of individuals, entities, units or items that are subject of a research (Saunders et al., 2015). The study population in this study was 187 state corporations in Kenya

where a senior accountant was targeted for each state corporation since they are the key users of AIS (Inspectorate of State Corporations, 2020). The 187 state corporations are categorized into eight broad classifications depending on their core functions. These categories are regulatory, service, regional development authorities, financial, tertiary education and training, commercial/manufacturing, public universities and training and research (Table 2). These state corporations are vital as they are purposed to provide public services and goods which the government feel is not well catered for by private enterprises. The unit of analysis was the state corporation while the respondents were the senior accountants in the state corporations. Senior accountants were targeted since they are the ones expected to have in-depth knowledge on AIS and are also the ones who use AIS on a regular basis.

**Table 2**  
**Study Population**

<b>Category</b>	<b>Corporations</b>	<b>%</b>
Executive agencies	62	33
Public universities, research institutions, tertiary and vocation training institutes	45	24
Commercial agencies	34	18
Regulatory agencies	25	13
Agencies with strategic functions	21	11
<b>Total</b>	<b>187</b>	<b>100</b>

*Source: Inspectorate of State Corporations (2020)*

### **3.4 Sampling Technique and Sample Size**

Sampling technique is the method or strategy applied to select members from the study population who will participate in the study (Zikmund, Babin, Carr, & Griffin, 2013). The study applied stratified random sampling technique to select state owned corporations in Kenya that participated

in the study depending on their different strata. The stratified random sampling technique was applied since the number of state corporations was known and a sampling frame was readily available. Moreover, the chance of each state corporation to be selected in the sample is equal. This reduces sampling error and bias (Fisher, 2017). The formula used in selecting the sample size is as indicated below:

$$n = \frac{N}{1+N(e)^2}$$

In the formula;

n = Selected Sample

N = Total population

e = significance level (10%)

Using the formula, the selected sample will be:

$$65 = \frac{187}{1+187(0.1)^2}$$

The total population of 187 state corporations in Kenya was applied in the formula. Using the formula, 65 state corporations were the sample size and were selected as indicated in Table 3.

**Table 3**  
**Study Sample**

<b>Category</b>	<b>Corporations</b>	<b>%</b>	<b>Sample</b>
Executive agencies	62	33	22
Public universities, research institutions, tertiary and vocation training institutes	45	24	16
Commercial agencies	34	18	12
Regulatory agencies	25	13	8
Agencies with strategic functions	21	11	7
<b>Total</b>	<b>187</b>	<b>100</b>	<b>65</b>

*Source: Author (2020).*

### **3.5 Instrumentation**

A data collection instrument is the tool applied by the researcher to collect information required in a study (Sharp, Peters, & Howard, 2017). The study used a structured questionnaire to collect the quantitative data required. Questionnaire were applied because according to Fisher (2017), it is suitable in gathering quantitative data as it espouses clarity and can be filled at the convenience of the respondents. The questionnaires were directed to the senior accountant in each state corporation. It was designed in line with the conceptual framework and in conformity with the research questions to be able to meet the objectives of the study. The questionnaire was used to gather information on perceived ease of use, top management support, employee competence, perceived usefulness and adoption of AIS.

The research questionnaire was divided into six sections (A-F). Section A sought general information regarding the employees and the state corporation. These questions were meant to prepare the respondents psychologically before they proceed to the main issues which were under study. Section B to E sought information relating to perceived ease of use, top management support, perceived usefulness and employee competence. Each of these sections had closed questions. The closed questions were designed on a five-point rating scale (1-Strongly disagree, 2-Disagree, 3-Neutral, 4-Agree and 5-Strongly agree). Section F sought information on adoption of AIS in the state corporation.

### **3.6 Data collection Procedure**

The process of data collection started after drafting of the final data collection instruments and receipt of permission from all the relevant authorities. The first activity was to sample the 65 state corporations from the 187 state corporations using random numbers from each cluster. This was

followed by locating the headquarters of the state corporation and targeting the lead accountants in each of the state corporation. The drop-and-pick method was used to administer the questionnaire. The study also supplemented physical administration with google forms which facilitated electronic and paperless administration of the questionnaires. This ensured that physically delivering the questionnaires to the accountants in their places of work was minimized.

### **3.7 Pilot testing**

Prior to the final data collection, the questionnaire to be used in this study was drafted and a pilot test conducted on 5 state corporations which were excluded from the main study. The pilot test was done to ensure that the data collection instrument was suitable for collection of useful data. The test was done to ensure that the data that was to be collected by the final instruments was reliable and valid. Further, the data collection instruments were tested for validity and reliability.

#### **3.7.1 Reliability Testing**

Reliability according to Saunders et al. (2015) is the ability of a test to have similar results from repeated administration. Cronbach alpha was used to test the reliability of the questionnaire. The test was performed on all the responses received from the pilot test. This alpha test the internal consistency of the various responses in a single questionnaire. It is computed using the average inter-item covariance among the items in relation to the average variance. Cronbach alpha of 0.6 or above is required for the scales to be considered as reliable (Zikmund *et al.*, 2013). All items had a Cronbach's alpha above 0.6 as indicated in Table 4.

**Table 4**  
**Reliability of the Questionnaire**

Variable	Number of items	Cronbach's alpha
Perceived ease of use	6	0.677
Top management support	6	0.713
Perceived usefulness	5	0.824
Employee competence	7	0.842
Adoption of IAS in state corporations	6	0.774

*Source: Author (2020).*

### 3.7.2 Validity Testing

Collis and Hussey (2013) explain that validity refers to whether the test is measuring the variable that it is expected to measure. Two types of validity are important in the questionnaire used in data collection. These are content and face validity. Content validity assesses the level and extent to which the test relates to the variables under study. It is a test that seek to establish whether the instruments in the study have the capacity to measure the factors that determine adoption of AIS. In order to ensure this type of validity, some expert reviewers were consulted for their input. The experts assisted to assess the questionnaires and make their recommendations which were used to make amendments to the instruments. The pilot test was also used to assess whether the respondents clearly understood the questions. To ensure that they understood the items, participants in the pilot test were required to comment on the suitability, clarity and design of the questions.

Face validity, according to Easterby-Smith et al. (2018), is a test regarding whether the data collection instrument serves the purpose at hand. This is a common-sense approach where issues such as the possible time to be spent on a questionnaire, its design and size of the

questionnaire come into play. The experts were able to advise on face validity of the questionnaire. The questionnaire was amended based on the recommendations from the experts.

### **3.8 Data Analysis and Presentation**

Data analysis started after the questionnaires had been collected from the field. Data analysis is a process that involves inspecting, cleaning, coding and transforming data to change it into information that can be useful (Babbie, 2011). The data collected was quantitative. Throughout the period of collection, the data was checked for consistency and completeness and cleaned. This ensured that any incompletely filled questionnaires were not used in data analysis. The cleaned data was then coded and entered into Statistical Package for Social Sciences (SPSS) which aided in analysis.

The analysis of quantitative data was done using descriptive statistics including frequencies and percentages. Mean and standard deviations were also used to describe the distribution of the various responses. The quantitative data collected through the questionnaires was used in answering the research questions. Questions were answered using multiple regression analysis. Multiple regression, as noted by Easterby-Smith et al. (2018) is a powerful tool when one seeks to establish the influence of independent variable(s) on the dependent variable. Multiple regression analysis was used to establish the influence of the four independent variables on the dependent variable. The multiple regression model (equation 1) was used to test the effect of perceived ease of use, top management support, perceived usefulness and employee competence on adoption of AIS in state corporations in Kenya.

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon \quad (1)$$

Whereby;     Y = Implementation of AIS in state corporations

          X<sub>1</sub> = Perceived ease of use

          X<sub>2</sub> = Top management support

          X<sub>3</sub> = Perceived usefulness

          X<sub>4</sub> = Employee competence

          B<sub>i</sub> = Coefficients

          ε = Error Term

### **3.9 Diagnostic Tests**

Before conducting regression analysis, the study conducted model specification tests. These are conducted to ensure that the data is appropriate to be analysed through regression analysis. The study tested whether the data and the resulting model satisfy the regression assumptions. The tests that were conducted were the test of linearity, multicollinearity, homoscedasticity and normality of residuals.

#### **3.9.1 Test of Normality**

In testing normality, the null hypothesis is that the residuals of the multiple regression model are normally distributed; against the alternative hypothesis the residuals are not normally distributed (Hilmer & Hilmer, 2013). Normality of residuals is critical since lack of normality means that the estimates and significant levels of the results are inefficient and are not reliable. In this research, the researcher used Shapiro Wilk test to test for normality of the residuals. If the p-value (significant value) > 0.05, then the residuals are normally distributed, otherwise if the value is < 0.05, then the null hypothesis is rejected, implying that the residuals are not normally distributed.

### **3.9.2 Test of Linearity**

Linearity was tested using analysis of variance (ANOVA) to determine the relationship between independent and dependent variables. If the linearity is less than 0.05, then the dependent and independent variables are linearly dependent. Otherwise, if it is greater than 0.05, then, there is no linear relationship (Pischke & Angrist, 2014). Test of linearity is essential since it ensures that the appropriate model is fitted to the data. When this assumption is violated fitting the non-linear data to a linear model will provide unreliable results and that lead to invalid conclusions. If this assumption is violated, the study should conduct a linear transformation to the independent and dependent variables.

### **3.9.3 Test of Multicollinearity**

Multicollinearity test was conducted to test whether there is high relationship between any two independent variables. If the independent variables have any high relationship, then there is a very strong multicollinearity (Hilmer & Hilmer, 2013). Multicollinearity was tested using variance inflation factors (VIF). A VIF value of 1-10 indicates no to low multicollinearity (Pischke & Angrist, 2014). When the assumption of multicollinearity is violated, the collinear variables can cause inflation of significant levels which can lead to the model showing high significance while in reality, the significance is less. When multicollinearity exists, one of the variables should be excluded from the model.

### **3.9.4 Test of Homoscedasticity**

Homoscedasticity describes a situation in which the error term (that is, the “noise” or random disturbance in the relationship between the independent variables and the dependent variable) is the same across all values of the independent variables (Hilmer & Hilmer, 2013). This assumption means that the variance around the regression line is the same for all values of the predictor variable (X). The assumption of homoscedasticity (meaning “same variance”) is central to linear regression models (Pischke & Angrist, 2014). Heteroscedasticity has implications for linear regression because it leads to biasness of the standard errors. Since standard errors are central to conducting significance tests and calculating confidence intervals, biased standard errors lead to incorrect conclusions about the significance of the regression coefficients (Hilmer & Hilmer, 2013). If heteroscedasticity is present, this bias should be corrected by use of robust standard errors.

### **3.9.5 Autocorrelation Test**

Autocorrelation is the extent of relationship or degree of similarity between the values of the same variables across diverse observations or across different individual responses (Chandra & Sharma, 2013). Observations of the same variable from different entities or respondents have an association. When performing ordinary least squares regression, autocorrelation can cause estimators to be inefficient. Autocorrelation was tested through Durbin-Watson test. In SPSS, this test ranges from 0 to 4 with values close to 2 suggesting less autocorrelation, and values closer to 0 and 4 indicate greater positive or negative autocorrelation respectively.

## **CHAPTER FOUR**

### **DATA ANALYSIS, FINDINGS AND DISCUSSION**

#### **4.1 Introduction**

This chapter presents the analysis of data, the study findings and discussion of the findings. The chapter first provides the response rate and then presents the demographic information of the study respondents and studied state corporations. Besides, the chapter provides the descriptive statistics of the study variables and also presents the diagnostic tests that were conducted before fitting of the model. Lastly, the chapter presents the multiple regression model.

#### **4.2 Response Rate**

The study targeted a sample of 65 state owned corporations and the response was received from 53 state corporations. This was a response rate of 82%. This high responses rate in the midst of the COVID-19 pandemic was achieved through a combination of drop and pick method and electronic google forms in administering the questionnaires. Creswell and Creswell (2017) argue that a response rate of 60% or above is considered adequate and the results from such a study can be taken as a representative of the population if the sampling was conducted appropriately. This hence informed the opinion about the adequacy of the response rate in this study.

#### **4.3 Demographic Information**

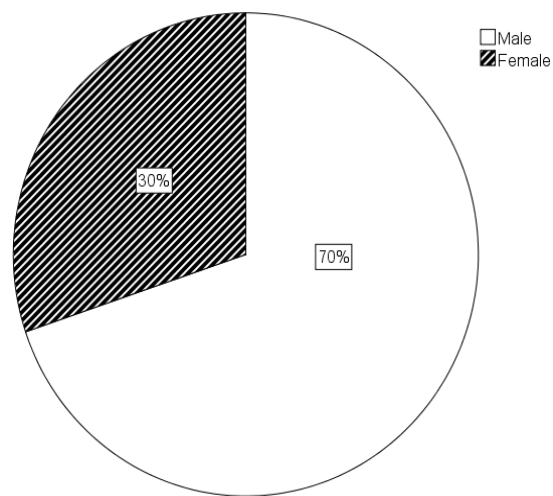
The study investigated various demographic and general information regarding the study participants and the state-owned corporations that were included in the study. That information included gender of the respondents, the number of years the respondents had worked in the state

corporations, and whether the state corporations had adopted an accounting information system. The results are provided hereunder.

#### 4.3.1 Gender of the Respondents

The study investigated the gender of respondents to establish the distribution and gender diversity of senior accounting positions in the state corporations. The results are presented in Figure 2.

**Figure 2 Gender of the Respondents**



*Source: Author (2020).*

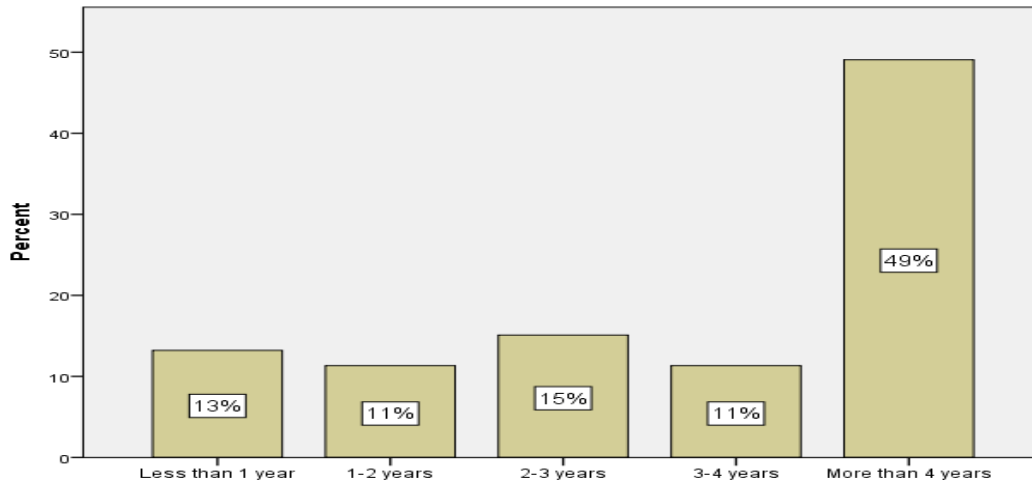
The results in Figure 2 show that male respondents were 70% while female were 30%. This shows that senior accounting positions in the state corporations have very few female occupants. This implies that state corporations in Kenya may be yet to adhere to a third minimum gender representation in senior accounting positions as stipulated in the laws of Kenya.

#### 4.3.2 Years of Service in the State Corporation

The study investigated the number of years that the senior accountants had been working in the state corporation. This was aimed at establishing their capacity to provide in-depth information

and insight regarding adoption of IAS in the state corporations. The results are provided in Figure 3.

**Figure 3**  
**Years of Service in the State Corporation**



*Source: Author (2020).*

The study results presented in Figure 3 indicate that 49% of the study respondents had worked in the state corporations as senior accountants for more than four years. Those who had worked in the state corporations as senior accountants for less than one year were 13%. This shows that most of the study respondents had much experience and insights regarding the state corporations and their adoption of IAS. Regarding adoption of IAS in state corporations, the respondents indicated that all state corporations had implemented IAS as a matter of policy by the government.

#### **4.4 Study Variables**

The purpose of the study was to establish the determinants of accounting information systems adoption among state owned corporations in Kenya. The study's four objectives sought to assess

the effect of perceived ease of use, top management support, employee competence and perceived usefulness on adoption of AIS among state owned corporations in Kenya. This section provides the descriptive statistics (means and standard deviations) on the study variables.

#### 4.4.1 Perceived Ease of Use

The study investigated the perceptions of accountants in the surveyed state corporations regarding ease of use of the AIS. This was assessed on a five-point liker scale that ranged from 1 to 5 (strongly disagree - Strongly agree) respectively. The responses were analyzed using means and standard deviations. The results are presented in Table 5.

**Table 5**  
**Perceived ease of use of IAS**

<b>Statements</b>	<b>Mean</b>	<b>Std. Deviation</b>
Accountants in this state corporation feel that accounting information system is easy to use and operate	3.62	1.004
Accountants in this organization are not afraid of making errors when using accounting information system	4.43	.721
Accountants in this organization find interacting with the accounting information system easy	4.11	.891
Accounting information system is regarded by accountants as flexible to use	4.32	.850
Use of accounting information system does not require a lot of mental effort from the accountants in this organization	3.75	1.191
Accountants in this organization find it easy to perform tasks using the accounting information system	3.91	1.024

*Source: Author (2020).*

The results presented in Table 5 show that the study participants agreed that accountants in these organizations are not afraid of making errors when using accounting information system (mean = 4.43, Std. deviation = 0.721). Besides, results show that AIS is regarded by accountants as flexible to use (mean = 4.32, Std. deviation = 0.850). The results further show that accountants in the state

corporations find interacting with the AIS easy (mean = 4.11, Std. deviation = 0.891). Moreover, results showed that the respondents agreed that accountants in the state corporations find it easy to perform tasks using the accounting information system (mean = 3.91, Std. deviation = 1.024). The respondents also agreed that use of AIS does not require a lot of mental effort from the accountants in these organizations (mean = 3.73, Std. deviation = 1.191). Additionally, results indicated that the respondents agreed that accountants in the state corporations felt that accounting information system is easy to use and operate (mean = 3.62, Std. deviation = 1.004). Perceived ease of use is indicated as one of the critical factors for adoption and use of technology according to the UTAUT by Venkatesh and Davis (2000). Moreover, Njahi (2017) established that perceived ease of use plays an important role in enhancing the ability of an organization to implement and adopt financial systems. The above results therefore show that perceived ease of use of AIS by the respondents has a significant influence of adoption of AIS in state corporations in Kenya.

#### **4.4.2 Top Management Support Regarding AIS**

The study assessed the support of top management in the surveyed state corporations regarding AIS. This was assessed on a five-point liker scale that ranged from 1 to 5 (strongly disagree - Strongly agree). The responses were analyzed using means and standard deviations. The results are presented in Table 6.

**Table 6**  
**Top Management Support Regarding AIS**

<b>Statements</b>	<b>Mean</b>	<b>Std. Deviation</b>
Top management in this corporation provides support to the accounting department by providing adequate funding for accounting information system	3.91	.861
Top management in this corporation act as champions leading adoption of information systems	3.81	1.039
The accounting department is pressured by management to adopt and institutionalize use of accounting information systems	3.60	.947
Top management allocate resources for training of staff regarding use of accounting information system	3.91	.986
Top management allocate adequate resources for maintenance of accounting information system	3.77	1.368
Top management in this organization support use of information systems in most of the organizational functions	4.00	.855

*Source: Author (2020).*

The results in Table 6 show that respondents agreed to all the statements provided. Specifically, respondents agreed that top management in the state corporations supported use of information systems in most of the organizational functions (mean = 4.00, Std. deviation = 0.855) and also agreed that top management allocate resources for training of staff regarding use of accounting information system (mean = 3.91, Std. deviation = 0.986). Besides the findings indicate that the respondents agreed that top management in the state corporations provide support to the accounting department by providing adequate funding for accounting information system (mean = 3.91, Std. deviation = 0.861) and also agreed that top management in the state corporations act as champions leading adoption of information systems (mean = 3.81, Std. deviation = 1.039). Further, the results indicate that top management allocate adequate resources for maintenance of accounting information system (mean = 3.77, Std. deviation = 1.368) and that the accounting

department is pressured by management to adopt and institutionalize use of accounting information systems (mean = 3.60, Std. deviation = 0.947).

These findings indicate that top management in state corporations supported adoption of IAS through championing the adoption, support of AIS use in various accounting functions and allocating enough financial resources for training and maintenance of AIS. This support from top management is indicated as one of the most critical authority decisions that support adoption of innovations in the diffusion of innovations theory by Rogers (1962). This study therefore, affirms the research by Odoyo and Ojera (2020) who noted that top management support acts as a catalyst in the adoption and continued use of accounting information system.

#### **4.4.3 Perceived Usefulness of AIS**

The study assessed the perception of the accountant in the state corporations regarding the usefulness of adopted AIS in the state corporations that participated in the study. This was assessed on a five-point liker scale that ranged from 1 to 5 (strongly disagree - Strongly agree). The responses were analyzed using means and standard deviations. The results are presented in Table 7 below.

**Table 7**  
**Perceived Usefulness of AIS**

<b>Statements</b>	<b>Mean</b>	<b>Std. Deviation</b>
Accountants in the corporation feel that implementation of accounting information system enhances accounting information accuracy and quality in the organization	3.58	1.184
Accountants in the corporation feel that implementation of accounting information system enhances financial reporting quality in the organization	3.77	1.120
Top management in this corporation feel that implementation of accounting information system has enhanced their decision making	3.30	1.353
Accountants in this corporation feel that their efficiency could improve due to use of accounting information system	3.91	.966
Management feels that use of accounting information systems enables them to access relevant information efficiently	3.08	1.299

*Source: Author (2020).*

Table 7 presents study results showing that the respondents agreed to the statements that accountants in the state corporations feel that their efficiency could improve due to use of accounting information system (mean = 3.91, Std. deviation = 0.966) and also agreed that accountants in the state corporations feel that implementation of accounting information system enhances financial reporting quality in the organization (mean = 3.77, Std. deviation = 1.120). The respondents agreed that accountants in the state corporations feel that implementation of accounting information system enhances accounting information accuracy and quality in the organization (mean = 3.58, Std. deviation = 1.184). These results imply that accountants in the state corporations had the perception that IAS is useful and can enable them to improve their productivity. This is considered essential for the successful adoption and use of AIS as confirmed by Zaini et al. (2020), who indicate that performance expectation is a major determinant of behavioural intentions influencing adoption of AIS.

The study findings presented in Table 7 indicate that the respondents were neutral to the statement that top management in the state corporations feel that implementation of accounting

information system has enhanced their decision making (mean = 3.30, Std. deviation = 1.353). Similarly, the respondents were neutral to the statement that management feels that use of accounting information systems enables them to access relevant information efficiently (mean = 3.08, Std. deviation = 1.299). These results indicate that though some top managers in the state corporations perceived AIS as an enabler to their decision-making process, there were some who had some misgivings. Such misgivings according to Lanlan and Ahm (2018) can hinder adoption and institutionalization of AIS in the public sector organisations.

#### 4.4.4 Employee Competence towards AIS

The study assessed the competence of employees in the state corporations regarding the use and application of AIS in accounting operations. This was assessed on a five-point liker scale that ranged from 1 to 5 (strongly disagree - Strongly agree). The responses were analyzed using means and standard deviations. The results are as presented in Table 8.

**Table 8**  
**Employee Competence towards AIS**

<b>Statements</b>	<b>Mean</b>	<b>Std. Deviation</b>
Accountants in this corporation have the requisite technical capacity to use accounting information system	3.66	.831
Accountants in this corporation believe that they have the capacity to use accounting information system	4.25	.918
Employees in this organization have been adequately trained to use accounting information system	4.04	.999
When information systems are installed in this corporation, employees are effectively coached on how to use them	4.28	.968
When employees have difficulties in using information systems in this organization, they are adequately supported	4.08	1.053
The organization regularly invites external trainers to provide training to the staff on accounting information systems	3.68	1.268
Employees in the organization are sponsored to attend external training sessions on accounting information systems	3.81	1.194

*Source: Author (2020).*

Table 8 presents results, which reveal that the study respondents agreed to all the statements provided. This shows that the extent of employee competence towards use of IAS was high. The results indicate that the respondents agreed to the statement that when information systems are installed in the state corporations, employees are effectively coached on how to use them (mean = 4.28, Std. deviation = 0.968). Respondents also agreed that accountants in the state corporations perceive to have the capacity to use accounting information system (mean = 4.25, Std. deviation = 0.918) and also agreed that when employees have difficulties in using information systems in this organization, they are adequately supported (mean = 4.08, Std. deviation = 1.053). Besides, respondents agreed that employees are adequately trained to use AIS (mean = 4.04, Std. deviation = 0.999), employees are sponsored to attend external training sessions on AIS (mean = 3.81, Std. deviation = 1.194), the state corporations regularly invites external trainers to provide training to the staff on AIS (mean = 3.68, Std. deviation = 1.268) and that accountants have the requisite technical capacity to use AIS (mean = 3.66, Std. deviation = 0.831). These findings show that employees are empowered by the state corporations to use AIS.

The findings indicate that the state corporations have adopted various approaches to enhance the competence and skills of employees on IAS. These include sponsoring them for external training, sponsoring on the job training and providing adequate ongoing support. These approaches are aimed at enhancing employee competence which has been indicated by Susilawati (2016), to be a significant element for attaining successful adoption and diffusion of information systems in the organization. Besides, Cheronno (2016) and Nzilu (2017) established that trained and proficient employees aid in strengthening the adoption process of AIS and thus from the above results it is clear that employee competence significantly affects adoption of AIS in state corporations in Kenya.

#### 4.4.5 Adoption of AIS in State Corporations

The study's dependent variable was adoption of AIS in state corporations in Kenya. The study assessed the degree to which AISs are adopted and used in state corporations by providing various five-point Likert scale statements that respondents were required to respond to regarding implementation, diffusion and application of AIS in state corporations. The results are as presented in Table 9.

**Table 9**  
**Adoption of AIS in State Corporation**

<b>Statements</b>	<b>Mean</b>	<b>Std. Deviation</b>
This corporation has effectively implemented a reliable accounting information system used by all accountants	3.81	.900
The implemented accounting information system has been embedded and every accountant performs tasks using it	4.13	.878
The implemented accounting information system is used by all accountants for all financial reporting purposes	4.04	.960
The accounting information system is well integrated with other information systems in the organization	4.08	1.035
The accounting information system in place in this organization is well compatible with the needs and plans of the accountants	3.94	.864
The accounting information system is generally accepted by the accountants in the organization	4.00	.734

*Source: Author (2020).*

The results provided in Table 9 indicate that there was a high degree of adoption and use of AISs in state corporations in Kenya. The results specifically indicated that implemented AIS had been embedded and every accountant performed tasks using it (mean = 4.13, Std. deviation = 0.878). The results also indicate that respondents, agreed that AIS is well integrated with other information systems in the state corporations (mean = 4.08, Std. deviation = 1.035). AIS is used by all accountants for all financial reporting purposes (mean = 4.04, Std. deviation = 0.960), that AIS is generally accepted by the accountants in the state corporations (mean = 4.00, Std. deviation =

0.734) and also agreed that AISs put in place in the state corporations are compatible with the needs and plans of the accountants (mean = 3.94, Std. deviation = 0.864). Similarly, the respondents agreed that the state corporations had effectively implemented reliable AISs used by all accountants (mean = 3.81, Std. deviation = 0.900).

These findings show that AISs have been institutionalized, are compatible with the needs of the corporations and have been well integrated with other information systems in the state corporations. These findings agree with the findings by Alamin et al. (2015) who reported a high adoption rate of AIS in Australian public sector. This was because of the expected benefits that accrue from AIS adoption. However, the findings contradict those Huy and Phuc (2020) in Vietnam who established that the adoption rate of AIS in the country among both private and public entities is low. Factors that explained low adoption include resource limitations, negative perception of AISs and organization's strategies that were different from the factors considered in this study.

## **4.5 Diagnostic Tests**

The study applied multiple linear regression analysis to answer the research questions. To conduct this analysis, the collected data had to satisfy the various linear regression assumptions. The tests conducted were the test of linearity, multicollinearity, homoscedasticity and normality of residuals.

### **4.5.1 Test of Multicollinearity**

Multicollinearity test was conducted to test whether there is high relationship between any two independent variables. This was tested using VIF. A VIF value of 1-10 indicates no multicollinearity (Pischke & Angrist, 2014). If the independent variables have any high

relationship, then there is a very strong multicollinearity (Hilmer & Hilmer, 2013). The independent variables were perceived ease of use (PEOU), top management support (TMS), perceived usefulness (PU) and employee competence (EC). The results of the multicollinearity test are as presented in Table 10.

**Table 10**  
**Test of Multicollinearity**

<b>Variables</b>	<b>Collinearity Statistics</b>	
	<b>Tolerance</b>	<b>VIF</b>
PEOU	.370	2.705
TMS	.336	2.978
PU	.716	1.397
EC	.521	1.918

*Source: Author (2020).*

The results in Table 10 indicate that all the VIF were below 3. The lowest was perceived usefulness with a VIF of 1.397 while top management support had the highest VIF of 2.978. However, these figures indicate no multicollinearity. Therefore, it was concluded that no two independent variables have a high association.

#### **4.5.2 Test of Linearity**

Linearity was tested using analysis of variance (ANOVA) to determine the relationship between independent and dependent variables. If linearity is below 0.05, then the dependent and independent variables are linearly dependent. However, if linearity is above 0.05, then there is no linear relationship between the variables (Pischke & Angrist, 2014). Adoption of AIS (AAIS) was the dependent variable. The results are presented in Table 11.

**Table 11**  
**Test of Linearity**

			Sum of	df	Mean	F	Sig.
			Squares		Square		
AAIS *	Between Groups	(Combined)	14.375	14	1.027	7.221	.000
PEOU		Linearity	7.735	1	7.735	54.399	.000
			Sum of	df	Mean	F	Sig.
			Squares		Square		
AAIS *	Between Groups	(Combined)	16.282	14	1.163	12.642	.000
TMS		Linearity	10.539	1	10.539	114.568	.000
			Sum of	df	Mean	F	Sig.
			Squares		Square		
AAIS *	Between Groups	(Combined)	13.834	11	1.258	8.675	.000
PU		Linearity	5.854	1	5.854	40.378	.000
			Sum of	df	Mean	F	Sig.
			Squares		Square		
AAIS *	Between Groups	(Combined)	16.951	14	1.211	16.274	.000
EC		Linearity	12.724	1	12.724	171.018	.000

*Source: Author (2020).*

The results presented in Table 11 indicate that all the linearity tests for all the independent variables were significant ( $p < 0.05$ ). This shows a strong linear association between all the independent variables and the dependent variable. This meant that fitting a multiple linear regression model to the data was appropriate.

#### **4.5.3 Autocorrelation Test**

Autocorrelation is the extent of relationship between the values of the same variables across diverse observations or across different individual responses (Chandra & Sharma, 2013).

Autocorrelation in the study was tested using Durbin Watson statistic. This test ranges from 0 to 4

with values close to 2 suggesting less autocorrelation, and values closer to 0 and 4 indicate greater positive or negative autocorrelation respectively. The results are presented in Table 12.

**Table 12**  
**Autocorrelation Test**

Std. Error of the Estimate	Durbin-Watson
.33166	2.523

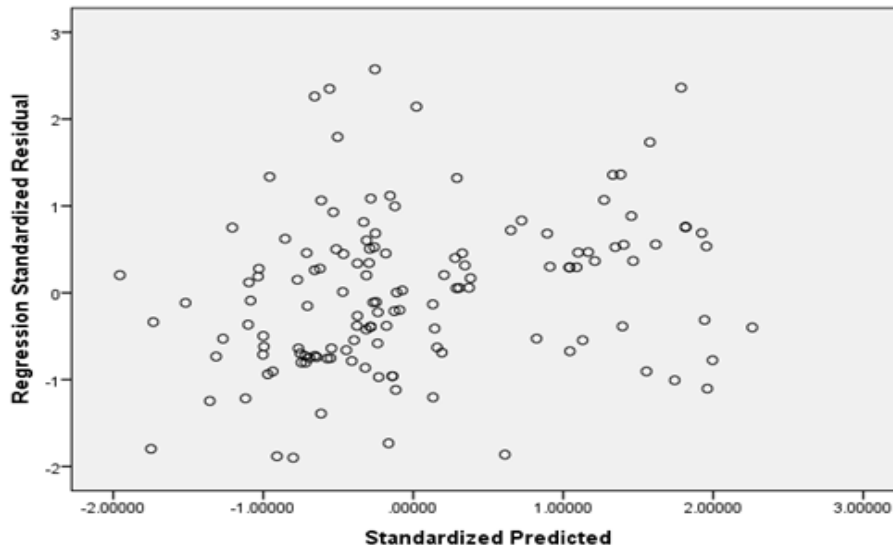
*Source: Author (2020).*

The results indicate that the Durbin-Watson statistic was 2.523 (Table 12). This value is close to 2 indicating that there was no significant autocorrelation. This implies that the observations from the different respondents did not have an association. This indicated that linear regression was an appropriate model for the data.

#### **4.5.4 Test of Homoscedasticity**

Homoscedasticity is when the variance of the residuals is constant amongst all values of the independent variables (Hilmer & Hilmer, 2013). In this study, homoscedasticity was assessed by plotting the residuals against the predicted values. When homoscedasticity is present, there should be no pattern in the plots. However, plots have a funnel shape in instances of heteroscedasticity. The results are presented in Figure 4.3.

**Figure 4**  
**Tests of heteroscedasticity**



*Source: Author (2020).*

The results in Figure 4 show no pattern to the visual plots of the residuals against the predicted values. This indicated that there was no significant heteroscedasticity. Therefore, the implication of the results is that the linear regression model that was fitted was reliable.

#### **4.5.5 Test of Normality**

The last test conducted was the test of normality of the residuals. In testing normality, the null hypothesis is that the residuals of the multiple regression model are normally distributed; against the alternative hypothesis the residuals are not normally distributed (Hilmer & Hilmer, 2013). The Shapiro Wilk test was used to assess normality of the residuals. The residuals from the regression were saved and their normality tested. If the p-value (significant value) is greater than 0.05, then the residuals are normally distributed, otherwise if the value is less than 0.05, then the null

hypothesis is rejected, implying that the residuals are not normally distributed. The results are provided in Table 13.

**Table 13**  
**Tests of Normality**

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Unstandardized Residuals	.057	53	.200*	.991	53	.960

*Source: Author (2020).*

The findings indicate that the null hypothesis of normal distribution could not be rejected as the p-value of the Shapiro-Wilk test was 0.960 (Table 13). This indicates that the residuals were normally distributed and hence, the fitted model was efficient and reliable.

#### **4.6 Model Fitting**

This section reports the results of the fitted multiple linear regression model. The variables used as input in the model were derived by having a mean of the items (variable indicators). A multiple linear regression was then conducted with results as indicated in Table 14, 15 and 16. The results presented in Table 14 provides a summary of the regression model.

**Table 14**  
**Summary of the regression Model**

<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
.856	.733	.711	.33166

*Source: Author (2020).*

The results in Table 14 show that the correlation coefficient (r) was 0.856 implying that the combined independent variables had a positive association with the dependent variable. The results

also indicate that the r squared was 0.733 indicating that 73.3% of the variation in adoption of AISs in state corporations was explained by the four independent variables included in the model. This leaves an unexplained variance of 26.7% which could be explained by variables that were not include in the model. This indicates that the model has a good explanatory power. The adjusted r squared indicated that after adjusting for the number of independent variables in the model, the model explained 71.1% of the variation in adoption of AIS in the state corporations.

The study also assessed the significance of the model using the f test (analysis of variance test). This was to assess whether any of the four independent variables could be used to predict adoption of AISs in state corporations. The results of the ANOVA test are presented in Table 15.

**Table 15**  
**Analysis of Variance of the Model**

<b>Source of variance</b>	<b>Sum of Squares</b>	<b>Df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Regression	14.498	4	3.624	32.949	.000
Residual	5.280	48	.110		
Total	19.778	52			

*Source: Author (2020).*

Table 15 presents the results which show that the model was significant ( $f = 32.949$ ,  $p < 0.05$ ). This indicates that at least one of the independent variables had a significant effect on the dependent variable. The findings also imply that the model had some significant predictive power.

The study sought to establish which specific independent variables were significant in influencing adoption of AIS in state corporations in Kenya. T tests were conducted to establish the significance of the independent variables. The results are presented in Table 16.

**Table 16**  
**Significance of Independent Variables in the Model**

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	.863	.320		2.694	.010
PEOU	-.032	.127	-.031	-.253	.801
TMS	.318	.121	.338	2.626	.012
PU	.093	.060	.138	1.564	.124
EC	.438	.084	.537	5.199	.000

*Source: Author (2020).*

The study findings provided in Table 16 indicate that variables that had significant coefficients and those that were not significant. These variables with p values above 0.05 were not significant and those with p values below 0.05 were significant. Top management support ( $\beta = 0.318$ ,  $p = 0.012$ ) and employee competence ( $\beta = 0.438$ ,  $p < 0.05$ ) had a significant positive effect on adoption of AIS in state corporations in Kenya. However, perceived ease of use ( $\beta = -0.032$ ,  $p = 0.801$ ) and perceived usefulness ( $\beta = 0.093$ ,  $p = 0.124$ ) did not have a significant effect on adoption of AIS in state corporations in Kenya.

The fitted model was of the form;

$$Y = 0.863 - 0.032X_1 + 0.318X_2 + 0.093X_3 + 0.438X_4 \quad (2)$$

Whereby;     Y = Adoption of AIS in state corporations

                  X<sub>1</sub> = Perceived ease of use

                  X<sub>2</sub> = Top management support

                  X<sub>3</sub> = Perceived usefulness

                  X<sub>4</sub> = Employee competence

However, since perceived ease of use and perceived usefulness were not significant, the model could be optimally reduced to;

$$Y = 0.863 + 0.318X_2 + 0.438X_4 \quad (3)$$

#### **4.7 Discussion of Findings**

The findings (Table 16) indicate that perceived ease of use (PEOU) did not have a significant influence on adoption of AIS in state corporations in Kenya ( $\beta = -0.032$ ,  $p = 0.801$ ). These findings indicate that perceived ease of use was not instrumental in adoption of AIS in the state corporations. These findings contradict the findings by Kowo (2012) whose study established that perceived ease of use influences financial systems adoption in state-owned institutions. Other studies that contradict the findings from this study include Kim and Ali (2017) and Karanja (2015). However, the findings support the results by Kamau and Simiyu (2019) who established that perceived ease of use does not play a significant role in adoption of information systems in commercial public entities. This is because the decision to adopt such a system in public entities mostly comes from external sources.

The study results presented in Table 16 show that top management support (TMS) had a positive and significant influence on adoption of AIS in state corporations in Kenya ( $\beta = 0.318$ ,  $p = 0.012$ ). The findings imply that a unit improvement in top management support is expected to improve AIS adoption rating by 0.318. These findings support the diffusion of innovations theory by Rogers (1962) which explains that the decision makers in an organization make a critical contribution towards adoption of an innovation through their championing and resource support. The findings also support the results by Suratman and Ridwan (2017) which affirmed that knowledge and commitment of accounting managers contributes to successful adoption of AIS. Other studies with comparable findings include Odoyo and Ojera (2020) and Ali et al. (2018) who

also affirms the fact that top management support has significant influence on adoption of Information systems.

From the same results it is also evident that perceived usefulness did not have a significant effect on adoption of AIS in state corporations in Kenya ( $\beta = 0.093$ ,  $p = 0.124$ ). These findings contradict the TAM which explains that individuals in an organization must consider a technology to be useful for them to adopt it. This could be explained by the fact that employees in the public sector are not the ones who make decisions regarding adoption of AIS and hence their perception may not be a key factor explaining adoption. The findings contradict other findings such as Zaini et al. (2020), Odeh (2019), Ibrahim (2017) and Zaied (2012) all of which found that perceived usefulness has a significant effect on adoption of information systems.

The results clearly show that employee competence had a significant positive effect on adoption of AIS in state corporations in Kenya ( $\beta = 0.438$ ,  $p < 0.05$ ). These results suggest that a one-unit improvement in employee competence is expected to result to an improvement of 0.438 in the rating of adoption of AIS in state corporations. This study findings concur with findings by Koitumet et al. (2018) who established that employee competencies and abilities play an essential role in adoption of IFMIS. Besides, the findings support previous results by Susilawati (2016), Napitupulu and Dalimunthe (2017) and Haleem and Kevin (2018). All these studies establish that competence of employees is critical in adoption of technology-based systems in the organization.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter presents the summary of the study findings, the study conclusions and the recommendations made after considering the study results. The summary of findings are provided in relation to the study objectives. The conclusions are also presented based on the study objectives while the recommendations relate to the areas that can be improved. Lastly, the chapter provide suggestion for future research in the subject area.

#### **5.2 Summary**

The summary of the findings from the study are provided in this section. This is provided in line with the study objectives.

##### **5.2.1 Effect of Perceived Ease of Use on Adoption of AIS in State Corporations**

The study established that perceived ease of use did not have a significant influence on adoption of AIS in state corporations in Kenya. The results further showed that accountants in the state corporations were not afraid of making errors when using accounting information system. Besides, results showed that AIS was regarded by accountants as flexible to use and accountants in the state corporations found interacting with the AIS easy. Additionally, results indicated that the accountants in the state corporations found it easy to perform tasks using the accounting information system and perceived use of AIS not requiring a lot of mental effort.

Further results on ease of use indicated that accountants in the state corporations felt that accounting information system is easy to use and operate. These findings suggested that accountant

generally found AIS easy to use. Since perceived ease of use has been indicated to be one of the critical factors influencing adoption and use of AIS, it was expected that ease of use would have a significant effect on adoption and use of AIS in the state corporations. However, despite their perception that AIS is easy to use, perceived ease of use did not have a significant effect on adoption of AIS in state corporations in Kenya.

### **5.2.2 Influence of Top Management Support on Adoption of AIS in State Corporations**

The study established that top management support had a positive and significant influence on adoption of AIS in state corporations in Kenya. The study established that support of top management regarding AIS adoption was high. Specifically, top management in the state corporations supported use of information systems in most of the organizational functions, allocated resources for training of staff regarding use of accounting information system and provided support to the accounting department by providing adequate funding for accounting information system.

Top management in the state corporations was reported to act as champions leading in adoption of information systems. They assist in allocating adequate resources for maintenance of accounting information system. The study also established that most of the accounting departments in the state corporations were pressured by management to adopt and institutionalize accounting information systems. The findings indicated that top management in state corporations supported adoption of IAS through allocation of adequate resources, championing the adoption, support of AIS use in various accounting functions and allocating enough financial resources for training and maintenance of AIS. This support from top management had a significant positive influence on adoption of AIS in state corporations in Kenya.

### **5.2.3 Effect of Employee Competence on Adoption of AIS in State Corporations**

The results determined that employee competence had a significant positive effect on adoption of AIS in state corporations in Kenya. The study established that employee competence towards use of IAS was high. Employee competence is enhanced by effectively changing and training them on how to utilize any information systems installed in the state corporations. Besides, knowledge and skills of employees enable them to have the capacity to effectively use the installed accounting information system. The state corporations also provided adequate support to the employees in case they encountered any issues or problems when using the installed AIS.

Employees in the state corporations are adequately trained to use AIS. This was done by sponsoring them to attend external training sessions on AIS or regularly inviting external trainers to provide training to the staff on AIS. This enables the employees to amass the required knowledge and skills to use AIS. This has enabled employees in state corporations to be adept in using AIS. This culminated in employee competence having a significant effect on adoption of AIS in state corporations in Kenya.

### **5.2.4 Influence of Perceived Usefulness on Adoption of AIS in State Corporations**

The study established that perceived usefulness did not have a significant effect on adoption of AIS in state corporations in Kenya. This was despite accountants in the state corporation's feeling that their efficiency could improve due to use of accounting information system and that implementation of accounting information system enhances financial reporting quality in the organization. Findings also established that accountants in the state corporations felt that implementation of accounting information system enhances accounting information accuracy and

quality in the organization. These results imply that accountants in the state corporations had the perception that IAS is useful and can enable them to improve their productivity.

The study findings however, indicated that top management in the state corporations were not fully convinced that implementation of accounting information system had enhanced their decision making. Similarly, the results indicated that some managers did not feel that management use of accounting information systems had enabled them to access relevant information efficiently. These results indicate that though some top managers in the state corporations perceive AIS as an enabler to their decision making, there were some who had some misgivings.

### **5.3 Conclusions**

Based on the findings of the study, the study makes the following conclusions. These conclusions are provided based on the objectives of the study. First, the study concludes that perceived ease of use was not instrumental in the adoption of AIS in state corporations in Kenya. Though most accountants perceived IAS to be easy to use, their perception was not a determining factor in AIS adoption. The study also concludes that top management support is essential in the process of AIS adoption in the public sector in Kenya. Support by top management relating to championing the adoption process, providing required resources and putting positive pressures on accounting and finance departments is critical to enhance adoption and embed AIS in the organization. Besides, the study concludes that employee competence was the most critical factors determining adoption and use of AIS in the state corporations in Kenya. Though a decision can be made by top or external organs regarding implementation of AIS in state corporations, employee competence remains essential in embedding AIS and integrating it in the day-to-day accounting and reporting operations. Lastly, the study concludes that perceived usefulness is not vital in AIS adoption in the

state corporations in Kenya. The perceptions of accountants regarding the usefulness of AIS is not material in the adoption process. This is because they play a peripheral role in making decisions on the adoption process since most of the decision making regarding AIS adoption is made by top management or by external policy organs.

#### **5.4 Recommendations**

The study makes the following recommendations. To policy makers such as ministry of Information and communication and ICT authority, they should devise policy that focus on providing support and finances for employee training to enhance employee competence. Regarding top management support, the study recommends that leaders in state corporations should always seek views, suggestions and involvement of all employees when adoption systems such as AIS. When employees are involved in the adoption decision-making, they are more likely to assist and be an asset in the adoption process, rather than being a hindrance.

The study also recommends to leaders, directors and management team members in government ministries, departments and agencies that before any AIS is implemented in any of the institutions, employees should be sensitized on how to use it so as to get maximum benefit on any adopted system. Besides, employees should be given an opportunity to nominate themselves for training programs which they feel are beneficial to them. Further, the state corporations should have a flexible approach to on the job training that would enable employees to informally train each other on new accounting technologies and systems.

### **5.5 Limitations of the Study**

This study has some limitations that should be considered when interpreting and generalizing the findings. First, the study was on AIS adoption in state corporations. State corporations are public entities and hence the findings may only be generalizable to public entities and have limited generalization to private entities. Besides, the study relied on self-reporting by senior accountants in the state corporations which could be affected by subjective bias. Though the study used this approach to collect data on perceptions and feelings about AIS in the state corporations, the application of the study findings to practice and the interpretation of the findings should be conducted with these limitations in mind.

### **5.6 Recommendations for Future Research**

This study focussed on the determinants of AIS adoption in state corporations in Kenya. State corporations are just a small part of the ministries, departments and agencies (MDAs) that form the entire public sector. The study recommends a study to be conducted focussing on the factors that determine adoption and integration of AIS in these organisations. Besides, such a study should investigate whether the MDAs that have adopted AIS have experienced any benefits in financial reporting and accountability.

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**APPENDICES**

**Appendix I: Questionnaire to Senior Accountants in State corporations**

Kindly provide correct and useful data and fill appropriately as logically guided. (This questionnaire can be provided as a google form that can be filled out in soft copy and electronically filled).

**SECTION 1: GENERAL INFORMATION**

1. What is your gender

Male  Female

2. How many years have you been working in this state corporation?

a) Less than 1 Year  b) 1-2 Years

c) 2-3 Years  d) 3-4 Years

d) 4 Years and above

3. Has this organization adopted an accounting information system

Yes  No

4. If you answered ‘Yes’ to the above question, in which year did the corporation adopt the system \_\_\_\_\_

5. If you answered “No” to question 3 above, does the organization has a plan to adopt an accounting information system in the future?

Yes  No

**SECTION B: PERCEIVED EASE OF USE**

Using a scale of 1-5, where 1= strongly disagree; 2=disagree; 3=Neutral; 4=agree; 5=strongly agree, please indicate the extent to which you agree with the following statement on perceived ease of use of accounting information system by accountants in this organization.

<b>Statements</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Accountants in this state corporation feel that accounting information system is easy to use and operate					

Accountants in this organization are not afraid of making errors when using accounting information system					
Accountants in this organization find interacting with the accounting information system easy					
Accounting information system is regarded by accountants as flexible to use					
Use of accounting information system does not require a lot of mental effort from the accountants in this organization					
Accountants in this organization find it easy to perform tasks using the accounting information system					

**SECTION C: TOP MANAGEMENT SUPPORT**

Using a scale of 1-5, where 1= strongly disagree; 2=disagree; 3=Neutral; 4=agree; 5=strongly agree, please indicate the extent to which you agree with the following statement on top management support towards accounting information system adoption in this state corporation

<b>Statement</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Top management in this corporation provides support to the accounting department by providing adequate funding for accounting information system					
Top management in this corporation act as champions leading adoption of information systems					
The accounting department is pressured by management to adopt and institutionalize use of accounting information systems					
Top management allocate resources for training of staff regarding use of accounting information system					
Top management allocate adequate resources for maintenance of accounting information system					
Top management in this organization support use of information systems in most of the organizational functions					

**SECTION D: PERCEIVED USEFULNESS**

Using a scale of 1-5, where 1= strongly disagree; 2=disagree; 3=Neutral; 4=agree; 5=strongly agree, please indicate the extent to which you agree with the following statement on perceived usefulness of accounting information system in this state corporation

<b>Statement</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Accountants in the corporation feel that implementation of accounting information system enhances accounting information accuracy and quality in the organization					
Accountants in the corporation feel that implementation of accounting information system enhances financial reporting quality in the organization					
Top management in this corporation feel that implementation of accounting information system has enhanced their decision making					
Accountants in this corporation feel that their efficiency could improve due to use of accounting information system					
Management feels that use of accounting information systems enables them to access relevant information efficiently					

**SECTION D: EMPLOYEE COMPETENCE**

Using a scale of 1-5, where 1= strongly disagree; 2=disagree; 3=Neutral; 4=agree; 5=strongly agree, please indicate the extent to which you agree with the following statement on employee competence towards accounting information system in this state corporation

<b>Statement</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Accountants in this corporation have the requisite technical capacity to use accounting information system					
Accountants in this corporation belief that they have the capacity to use accounting information system					
Employees in this organization have been adequately trained to use accounting information system					

When information systems are installed in this corporation, employees are effectively coached on how to use them					
When employees have difficulties in using information systems in this organization, they are adequately supported					
The organization regularly invites external trainers to provide training to the staff on accounting information systems					
Employees in the organization are sponsored to attend external training sessions on accounting information systems					

**SECTION E: IMPLEMENTATION OF ACCOUNTING INFORMATION SYSTEM**

Using a scale of 1-5, where 1= strongly disagree; 2=disagree; 3=Neutral; 4=agree; 5=strongly agree, please indicate the extent to which you agree with the following statement on adoption of accounting information system in this state corporation

<b>Statement</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
This corporation has effectively implemented a reliable accounting information system used by all accountants					
The implemented accounting information system has been embedded and every accountant performs tasks using it					
The implemented accounting information system is used by all accountants for all financial reporting purposes					
The accounting information system is well integrated with other information systems in the organization					
The accounting information system in place in this organization is well compatible with the needs and plans of the accountants					
The accounting information system is generally accepted by the accountants in the organization					

**Thank You for Your Time and Input**

## **Appendix II: List of Kenyan State-Owned Corporations**

### **Commercial State Corporations**

<b>No.</b>	<b>Name of State Corporation</b>
1.	Kenya Literature Bureau
2.	Chemelil Sugar Company Ltd
3.	Kenya Meat Commission
4.	Development Bank of Kenya Ltd
5.	University of Nairobi Enterprise Ltd
6.	South Nyanza Sugar Company Ltd
7.	Kabarnet Hotel Limited
8.	New Kenya Co-operative Creameries
9.	Simlaw Seeds Uganda
10.	KWA Holdings
11.	Kenya Wine Agencies Ltd
12.	Rivatex (East Africa) Ltd
13.	Kenya Reinsurance Corporation Ltd
14.	Simlaw Seeds Kenya
15.	Consolidated Bank of Kenya
16.	Nyayo Tea zones Development Corporation
17.	Kenya National Assurance Co. (2001) Ltd
18.	Agro-Chemical & Food Company
19.	Mount Elgon
20.	National Housing Ltd
21.	School Equipment Production Units
22.	Kenya National Shipping Line
23.	Nzoia Sugar company Ltd
24.	Research development Unit Company Ltd
25.	Kenya National Trading Corporation
26.	Kenyatta University Enterprise Limited
27.	Kenya Safari Lodges Ltd
28.	Simlaw Seeds Tanzania
29.	Muhoroni Sugar company Ltd
30.	Jomo Kenyatta Foundation
31.	Sunset Hotel Kisumu
32.	Golf Hotel Kakamega
33.	University of Nairobi Press
34.	Yatta Vineyard Ltd

### **State Corporations with Strategic Functions**

<b>No</b>	<b>Name of State Corporations</b>
1.	Kenya Ports Authority
2.	Kenya Airports Authority
3.	Kenya power & Lightening Company

4. Kenyatta International Conference Centre
5. Kenya Development Bank
6. Kenya Broadcasting Corporation
7. National Oil Corporation of Kenya
8. Kenya Post Office Savings Bank
9. Kenya Veterinary Vaccine Production Institute
10. Geothermal Development Company
11. Kenya EXIN Bank
12. Numerical Machining Company
13. Kenya Railways Corporation
14. Kenya Seed Company
15. Kenya Pipeline Company
16. Kenya Electricity Generating Company
17. National Cereal & Produce Board
18. Kenya Electricity Transmission Company
19. National Water Conservation & Pipeline Corporation
20. Kenya Animal Genetics Resource Centre
21. Postal Corporation of Kenya

### **Executive Agencies**

#### **No. Name of Institution**

1. National Hospital Insurance Fund
2. Kenya Medical Supplies Authority
3. Information Communication Technology Authority
4. Higher Education Loans Boards
5. Internal Revenue Service
6. Kenya Accountants & Secretaries National Examination Board
7. Investor Compensation Fund Board
8. Livestock Development and Promotion service
9. Financial Reporting Centre
10. Kenya Trade Network Agency
11. Fisheries Development and Promotion Service
12. Kenya Wildlife and Forestry Conservation Service
13. Agricultural Development Corporation
14. National Council for people with Disabilities
15. Drought Management Authority
16. Kenya Academy of Sports
17. Crops Development and Promotion Service
18. Kenya Cultural Centre
19. National Coordinating Agency for Population and Development
20. Kenya Deposits Protection Authority
21. National Aids Control Council
22. Kenya Ordnance Factories corporation
23. Anti-Female Genital Mutilation Board
24. Export Processing Zone Authority

25. Kenya Ferry Service Ltd
26. LAPSET Corridor Development Authority
27. Kenya Institute of Curriculum Development
28. Nuclear Electricity Board
29. Kenya Investment Promotion Service
30. Kenya National Examination Council
31. National Museums of Kenya
32. Kenya Film Development Service
33. Policy holders Compensation Fund
34. Kenya Law Reform Commission
35. Kenya Intellectual Property Service
36. Kenya National Bureau of Statistics
37. Custom and Boarder Security Service
38. Biashara Kenya
39. Kenyatta National Hospital
40. National Youth Council
41. Nairobi Centre for International Arbitration
42. Kenya Road Board
43. Kenya National Innovation Agency
44. Konza Technopolis Authority.
45. Kenya National Highway Authority
46. National Social security Fund Board of Trustees
47. Leather Development Council
48. Bomas Of Kenya
49. National Irrigation Board
50. Moi Teaching and Referral Hospital
51. National Quality Control Laboratories
52. Local Authorities Provident Fund
53. National Campaign Against Drug Abuse Authority
54. National Council for Law Reporting
55. Unclaimed Financial assets Authority
56. National Cancer Institute of Kenya
57. Constituency Development Fund
58. National Industrial Training Authority
59. Sports Kenya
60. Tourism Fund
61. Water Resource Management Authority
62. Water Service Trust Fund

### **State Agencies – Independent Regulatory Agencies**

#### **No. Name of Institution**

1. Water Service Regulatory Board
2. Public Benefits Organization Regulatory Authority
3. National Construction Authority
4. Technical & Vocational & Training Authority.

5. National Environmental Management Authority.
6. Livestock Regulatory Authority
7. National Commission for Science, Technology and Innovations
8. Health service Regulatory Authority
9. Communication Authority of Kenya
10. National Land Transport & Safety Authority
11. Kenya Film Regulatory Service
12. Public Procurement Oversight Authority
13. Kenya Bureau of Standards
14. Tourism Regulatory Authority
15. Kenya Civil Aviation Authority
16. Kenya Maritime Authority
17. Commission for University Education
18. A Energy Regulatory Commission
19. Agriculture, Fisheries and Food Authority
20. Kenya National Accreditation Service
21. Competition Authority of Kenya
22. Mining and Oil Regulatory Service
23. Kenya Plant and Animal Health Inspectorate Service
24. Council for Legal Education
25. Financial Supervisory Council

**Public Universities, Research Institutions, Tertiary and vocational training institutes**

**No. Name of Institution**

1. Moi University
2. Jaramogi Oginga Odinga University of Science and Technology
3. University of Nairobi.
4. Kenya Medical Training College
5. Kibabii University College
6. Meru University of Science & Technology
7. Karatina University
8. Masinde Muliro University of Science & Technology
9. Chuka University
10. Murang'a University College
11. Maseno University
12. Egerton University
13. Kenya Agriculture and Livestock Research Organization
16. Kenya Marine & Fisheries Research Institute Cooperative University college
17. Kirinyaga University College
18. Kenya Medical Research Institute
19. Kenya Utalii College
20. Kisii University
21. Kenya Institute of Mass Communication
22. Laikipia University
23. Kenya School of Government

24. Kenya Institute of Public Policy Research & Analysis
25. Garissa University College Kenya School of Law
26. Kenya Water Institution
27. Kenyatta University
28. Maasai Mara University
29. National Crime Research Centre
30. Machakos University College
31. University of Eldoret
32. Rongo University College
33. Technical University of Mombasa
34. Dedan Kimathi University
35. Kenya Multi-Media University
36. Taita Taveta University College
37. Kenya Forestry Research Institute
38. The Technical University of Kenya
39. Bukura Agricultural College
40. University of Kabianga
41. Embu University College
42. Jomo Kenyatta University of Agriculture and Technology.
43. Kenya industrial Research and Development Institute
44. Pwani University
45. South Eastern Education Science & Technology Kenya University

### **Appendix III: Sample of State-Owned Corporations**

1. Agricultural Development Corporation
2. Bomas of Kenya
3. Commission for University Education
4. Communication Authority of Kenya
5. Competition Authority of Kenya
6. Consolidated Bank of Kenya
7. Constituency Development Fund
8. Development Bank of Kenya Ltd
9. Energy Regulatory Commission
10. Export Processing Zone Authority
11. Geothermal Development Company
12. Higher Education Loans Board
13. Information Communication Technology Authority
14. Jomo Kenyatta Foundation
15. Jomo Kenyatta University of Agriculture and Technology.
16. Kenya Accountants & Secretaries National Examination Board
17. Kenya Airports Authority
18. Kenya Broadcasting Corporation
19. Kenya Bureau of Standards
20. Kenya Civil Aviation Authority
21. Kenya Deposits Protection Authority
22. Kenya Electricity Generating Company
23. Kenya Forestry Research Institute
24. Kenya industrial Research and Development Institute
25. Kenya Institute of Curriculum Development
26. Kenya Institute of Mass Communication
27. Kenya Institute of Public Policy Research & Analysis
28. Kenya Law Reform Commission
29. Kenya Literature Bureau
30. Kenya Medical Research Institute
31. Kenya Medical Supplies Authority
32. Kenya National Bureau of Statistics
33. Kenya National Examination Council
34. Kenya National Highway Authority
35. Kenya National Trading Corporation
36. Kenya Pipeline Company
37. Kenya Post Office Savings Bank
38. Kenya power & Lightening Company
39. Kenya Railways Corporation
40. Kenya Reinsurance Corporation Ltd
41. Kenyatta National Hospital

42. Kenyatta University
43. National Aids Control Council
44. National Cancer Institute of Kenya
45. National Cereal & Produce Board
46. National Construction Authority
47. National Environmental Management Authority.
48. National Housing Ltd
49. National Industrial Training Authority
50. National Irrigation Board
51. National Social security Fund Board of Trustees
52. New Kenya Co-operative Creameries
53. Postal Corporation of Kenya
54. Public Procurement Oversight Authority
55. Simlaw Seeds Kenya
56. The Technical University of Kenya
57. Tourism Regulatory Authority
58. Unclaimed Financial assets Authority
59. University of Nairobi.
60. Water Service Regulatory Board
61. National Land Transport & Safety Authority
62. Kenya Wine Agencies Ltd
63. Kenya Utalii College
64. Mining and Oil Regulatory Service
65. Kenya Academy of Sports