# INTEGRATED FINANCIAL MANAGEMENT INFORMATION SYSTEMS, ORGANIZATIONAL RESOURCES AND FINANCIAL MANAGEMENT IN SELECTED COUNTY GOVERNMENTS, KENYA

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#### **DECLARATION**

This Thesis was written by myself, with the help of just the cited materials and references,

and has not been submitted anywhere for credit toward a degree or any other honor. Signature..... Date ..... Jensen Jamgun Iravonga PBA/H/01-53345/2018 **CERTIFICATION** We, the undersigned, attest that the above thesis has been read and are recommending its approval at Masinde Muliro University of Science and Technology, "Integrated Financial Management Information Systems, Organizational Resources and Financial Management in county governments, Kenya". Date..... Signature..... **Prof. Benedict Ondiek Alala** Department of Accounting and Finance Masinde Muliro University of Science and Technology Signature..... Date..... Dr. Muli Maingi Department of Accounting and Finance Masinde Muliro University of Science and Technology Signature..... Date..... Dr. Consolata Ngala Department of Accounting and Finance

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#### **ABSTRACT**

The Kenyan public finance management arena still faces a variety of issues that are not in accordance with the principles of public finance, despite the fact that over the past six years, robust legal and institutional frameworks for Public Finance Management (PFM) have been put in place. Misuse of public money has been a persistent problem at the county level due to inefficient accounting systems and inadequate controls, which has impeded service delivery and the overall effectiveness of county governments. Despite the lack of empirical evidence, theoretical literature has cited organizational resources as a moderator between IFMIS and financial performance. The study's overal objective was to identify the extent to which Kenyan county governments' usage of the Integrated Financial Management Information System, available organizational resources, and established financial management practices are related. The study's main objective was to assess the contribution of the integrated Financial Management Information System to the financial management of Kenya's county governments. The study also aimed to evaluate the same question in terms of the Integrated Financial Management Information System budgeting system, revenue system, and payment system. Research was also conducted to determine the role that organizational resources play in the relationship between an Integrated Financial Management Information System and sound financial management practices in Kenya's county administrations. In this study, both a causal research design and a descriptive survey approach were used. The target population was 302 workers working in the Treasury Department of the county governments of Kakamega, Busia, Vihiga, and Bungoma. 44 Procurement officers, 46 auditors, 89 accountants, 87 financial officers, and 42 revenue collectors were counted. The 172 participants were chosen through stratified random sampling. Data collection was through questionnaires. Cronbach's alpha was used to measure the reliability of the data after a pilot study was conducted to check for content and construct validity. Analysis was conducted using descriptive and inferential statistics. Inferential analysis included correlation analysis and multiple linear regression analysis, while descriptive analysis was used to analyse the data into frequency, mean, standard deviation, and percentage. The threshold of significance used in the testing of hypotheses was 0.05. Data was presented in tables, and several models were developed. The findings indicated that Integrated Financial Management Information System substantially accounted for 64.2% of the difference in financial management across the County Governments in Western Kenya ( $R^2 = 0.642$ , P = 0.000). Change in ( $R^2 = 0.043$ , p = 0.001) indicates that organizational resources have a significant moderating effect on the relationship between Integrated Financial Management Information System and financial management. This implies that organizational resources and Integrated Financial Management Information System only explained 4.3% change in financial management in Western Kenya's county Governments. The study also found that organizational resources boost Integrated Financial Management Information System's effect on financial management in Western Kenya's county Governments. To guarantee feasible accomplishment, sustainability, and effective service delivery to the residents, the county governments need to automate all locations at which income is collected. The senior administration of county governments should support the adoption and usage of integrated Financial Management Information System by making enough resources available, including financial resources, technical resources, and human resources.

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# LIST OF ABBREVIATIONS AND ACRONYMS

**IFMIS** Integrated financial information system

**IPSAS** International Public Sector Accounting Standards

**PFM** Public financial Management

**CBK** Central Bank of Kenya

**COB** Controller of Budget

**KENAO** Kenya National Audit Office

ICT Information Communication Technology

**TAM** Technology Acceptance Model

**TOS** Technical Operation Skills

**LOIT** Level Of IT Infrastructure

MgtS Management Skills

**GIFMIS** Ghana Intergrated Financial Management Information System

**GDP** Gross Domestic Product

**GOK** Government of Kenya

PFM Public Finance Management

#### OPERATIONAL DEFINITIONS OF KEY TERMS

**Organizational Resources** Within county governments, is establishment of standards,

procedures, and management routines that facilitate

coordination of monetary, human, and technical resources.

**Government policies** These are some of the legal and policy frameworks that may

need to be considered when putting IFMIS into action.

**Intergrated** Financial Refers to a database that summarizes financial data and

**Management Information** records events as they occur. It's an automated system that

**System** helps the National and County Governments with budgeting,

revenue management, payment and reporting.

**Financial Management** Refers to the process through which a government entity or

agency acquires, allocates, and spends resources and/or

money in accordance with stated objectives

**Budgeting System** Its an intergrated financial Management information system

module that is used for budget prepararion, monitoring and

production of budget reports

**Reporting System** Its an intergrated financial Management information system

module used for generation of financial reports.

**Payment System** Its intergrated financial Management information system

module used for payment processing for contractors.

**Revenue System** Its intergrated financial Management information system

module used for reporting on revenue collection and usage

#### **CHAPTER ONE**

#### INTRODUCTION

## 1.1 Background of the Study

Integrated Financial Management Information System (IFMIS) is a kind of information system used to track transactions across bank accounts and aggregate financial data. According to Chado (2015), it is an automated system that makes the Kenyan National and County Governments better at planning, budgeting, procuring, expenditure management, and reporting. An organization owns, administers, or has semi-permanent access to physical or intangible production inputs (Kimiti & Kilika, 2018). Mutua and Juma (2018) describe "organization resources" as a company's assets, capabilities, organizational processes, firm qualities, information, and expertise that enable it to establish and execute efficiency and effectiveness strategies. This is because a company controls all of these aspects of its organization. According to Muthoni (2017), financial management is the managerial activity that is carried out in an organization in order to get finances and properly employ those funds in order to conduct operations in an efficient manner. According to Wagithunu, Muthee, and Thinguri (2014), the purpose of financial management is to ensure successful procurement and efficient exploitation of available financial resources.

Akinyi (2016) claims that IFMIS's ultimate purpose is to improve public service delivery by speeding and accurately sharing financial and accounting information between county governments and the national government. The IFMIS aims to improve government efficiency by increasing the availability of trustworthy financial data, bolstering

government financial controls, boosting service delivery, increasing transparency and accountability in the budgeting process, and streamlining administrative procedures (Lundu & Shale, 2015).

The particular and overarching goals of the research were shaped by task-technology fit, resource based theory, and accountability theory. According to the task-technology fit hypothesis, the effectiveness of an information system is tied to how well the system supports the user's ability to carry out the job at hand (Gebauer, Shaw, & Gribbins, 2016).

Despite all these efforts, financial management at county level has received criticisms. A recent review by the Kenya Institute for Public Policy Research and Analysis (KIPPRA) of the PFM systems in six county governments yielded mixed results. Within the framework of the devolved form of government, county administrations have, up to this point, exerted a significant amount of effort toward laying the groundwork for a robust PFM system in many different sectors. On the flip side, a lot more is required to ensure fiscal discipline, strategic allocation of resources, and efficient service delivery within the devolved units. For instance, it was notable that most county governments have very high rates of resource reallocations which lead to low levels of budget reliability. There are also inconsistencies in total expenditures and low absorption rates. On the revenue side, discrepancies arise from expensive and unreliable revenue collection systems, over-projection of non-specified revenues, low compliance rates, and corruption (Nganyi, Jagongo andAtheru, 2019).

The Controller of Budget accused County Governments' poor budgeting and planning for recurring and non-essential spending thus outweighing developmental spending. Poor

financial management may jeopardize essential County initiatives, defeating their purpose. The Auditor General's most recent report (KENAO, 2018) revealed major financial irregularities in counties that need quick action by supervisory agencies. Despite increasing levies, twenty-nine counties could not account for their budget allocations. County officials use a variety of methods to avoid accounting for public monies, according to the study. Waste, overspending, moving cash to unbudgeted activities, and outright theft are common in counties due to poor revenues. The audit inquiries mention reduced and unreported revenues. Therefore, this study examined IFMIS, organizational resources in relation to financial management in Kenya.

Most of the existing studies in regard to IFMIS and financial management focused on the direct effect of IFMIS and financial management aspects in disregard with other underlying and unobserved variables which may have effect on the relationship between these two variables (Chado, 2015; Karanja and Nganga, 2014; Njonde, and Kimanzi, 2014; Laizer and Suomi, 2017). This has resulted in inconsistencies in the findings and therefore conflicting recommendations. By introducing a moderating variable; organization resources, the study endeavored to address the existing theoretical gaps on the relationship between IFMIS and financial management. This is significantly supported by system theory which up-to-date, few studies have investigated the role of system theory and financial management practices in relation to ICT innovations. Theories related to adoption of ICT innovations such as TAM have offered little explanation regarding effective financial management practices. This implies that there is need for a comprehensive theory which is fused with IFMIS and effective financial management practices.

## 1.1.1 Global Perspective of IFMIS and Financial Management

According to Ameen and Ahmad (2016), the majority of industrialized nations have implemented an information system known as IFMIS, which is described as a system that monitors happenings in the financial world and summaries relevant financial information. It allows for auditable financial statements to be created, as well as effective management reporting, policy decisions, and the discharge of fiduciary duties. Although the breadth and functionality of an IFMIS may vary from nation to country, it is customary for an IFMIS to reflect a huge, sophisticated, and strategic reform effort (Harelimana, 2017). The United States Department of Homeland Security (DHS) uses the IFMIS as its central accounting and financial management system, as stated by Reddick (2010). The World Bank's Latin American and Caribbean region stands out for having the largest number of completed (25) and ongoing (4) IFMIS projects, according to the IFMIS Database that the World Bank maintains as of 2011. The continent of Africa follows, with 13 completed and 12 continuing IFMIS initiatives. Spending on ICTs to reimagine government is on the rise, and so is public awareness of these efforts; many high-profile initiatives have been launched during the 1990s (Hawo, 2015).

In Asia Pacific region, the common interest on IFMIS development has strengthened the cooperation among APEC economies and international organization as shown by many seminars, joint researches and trainings involving staff from many APEC economies. IFMIS which mostly developed based on best practices, in many occasions, has set up common standard of financial management practices, and proven facilitating easier standardized reporting and information exchange among APEC economies (APEC, 2015).

## 1.1.2 Africa Perspective of IFMIS and Financial Management

According to Gcora and Chigona (2019), IFMIS in South Africa is a component of the larger financial management reforms that have been implemented by the South African government since 1994, when democracy was first institutionalized in South Africa. These changes have been ongoing ever since. In order to guarantee efficient service provision, the purpose of the project was to improve both the honesty and efficiency of performance reporting and the management of expenditures. In Ghana, Aminatu (2015) investigated the effect that GIFMIS has on the country's economic growth by analyzing Ghana's gross domestic product (GDP), economic growth, and the distribution of resources across the country's most important economic sectors. According to what she gleaned from the study, some parts of the economy make significant contributions to the expansion of the GDP, while other parts of the economy have a negative influence.

As a consequence of successfully implementing IFMIS, Malawi's financial accountability report, which was included in the World Bank report in 2013, suggests that the country has a solid institutional framework in comparison to the majority of poor nations. Sound legislations that governed finances, audits, and procurements were in place in time for the Malawi budget process (Laizer and Suomi, 2017). These legislations served as the impetus for the process of adopting a sound system within the country's government. The International Financial Management Information System (IFMIS) was successfully implemented in Uganda. There was an early version of this system that was eventually scrapped since it was never going to be used. The most current one began operations in 2002 and was established with collaborative finance from the World Bank. Although it suffers from significant design flaws that need a system migration, the system, which is

built on an Oracle Financials platform, is a good system overall (Ministry of Finance, Planning and Economic Development, 2015).

# 1.1.3 Kenya Perspective of IFMIS and Financial Management

The government of Kenya has relied on the IFMIS as its main accounting system since 2005. It was determined to use this strategy because of the potential benefits it offers. It was suggested in the PFMR Strategy Paper 2001-2006 that vital government operations including human resources payroll, accounting, procurement, and budgeting be computerized and unified. The study (Mambo, Ombui, & Kagiri, 2015) lists improved reporting, financial management, and openness as some of the advantages of this suggestion.

The IFMIS system used by the Kenyan government is an instance of ERP software. In an ERP system, all of an organization's information and processes are kept in one place and are only accessible over a secure network. Because of the increased transparency and availability of data across government departments, this also aids in the battle against corruption. Since corruption is so widespread in the world today, this is really important. (Mbaka, 2017).

The National Treasury's IFMIS Department is responsible for the IFMIS development, promotion, and administration. These tasks have been delegated to this division. It wasn't until 2003 that the IFMIS was widely distributed to government agencies. In 2012, we first began sending out units to the various counties. The Strategic Plan for GoK IFMIS (2011-2015) is now being implemented, and enhanced training for those who will be using the

IFMIS system in the counties is currently underway. In light of recent research (Cheruiyot, 2018).

Several studies have examined different perspective of IFMIS such as its adoption, effect on financial management and challenges of implementing IFMIS in Kenya. The results of their findings presented mixed outcomes. In their study of the Nakuru County Government, Mburu and Ngahu (2016) discovered a significant and beneficial correlation between financial reporting and financial management. This connection was determined to be quite robust. The study's results suggest that county officials should ramp up their usage of an integrated IFMIS to better manage county finances.

Despite challenges, Njonde and Kimanzi (2014) found that the Nairobi County Government had a positive relationship between financial reporting and budgeting and public financial management. The implementation of IFMIS's internal control was judged by Makhaya and Maniagi (2020) to have greatly enhanced the performance of the Kakamega County administration. IFMIS was able to track each step of the transaction process, which resulted in an increase in both the transparency and accountability of the procedure as a result of effective networking. Additionally, the IFMIS internal controls encourage responsibility, which in turn increases transparency.

Chado (2015) discovered that there is a robust, unfavorable, and statistically significant connection between employee resistance and the deployment of IFMIS in the public sector in Kenya. It was demonstrated by Odoyo, Adaro, and Chumba (2015) that the adoption of IFMIS has not been successful as a consequence of the top-down management style that is prevalent in the majority of the public services. Njonde and Kimanzi (2014) found that

even though there were obstacles in its execution, there was a favorable association between financial reporting and budgeting and public financial management in the Nairobi County Government.

## 1.1.4 Integrated Financial Management Information System

With the use of an all-encompassing financial management system, line ministries and other spending agencies may automate their budgeting, spending, and accounting processes using a method known as IFMIS. IFMIS is an example of a computerized procedure. Public sector accounting, auditing, revenue, and reporting all benefit from the use of IFMIS. Integrating and being connected to other relevant information systems is another hallmark of a comprehensive system. In order to streamline the execution of government budgets and accounting procedures, IFMISs are adopted (USAID, 2018). An IFMIS may be as comprehensive as a general ledger or as minimal as a spreadsheet, depending on the needs of the organization. Common functions include budgeting, income, liabilities, payroll, human resources, financial reporting, accounting, consumption control, asset management, and inspection of forms. Across all levels of government, including municipal, national, and quasi-governmental entities, as well as other public sector organizations and activities.

According to the IFMIS re-engineering strategy plan (2013-2018), insufficient IFMIS support infrastructure including steady energy and computer hardware was a key issue in implementing the 2011-2013 strategy. The IFMIS re-engineering strategy plan (2013-2018) cited this as one of the key difficulties. The following are parts of the re-engineered IFMIS system: The purpose of the Re-engineering for Business Results section is to improve the company's financial management via an examination of the company's

business processes; Plan to Budget is an acronym that refers to a completely integrated process and system that combines planning, policies, and goals with the allocation of budgetary resources; Procure to Pay is the process of developing a supply chain management system that is completely integrated and automated; automated reconciliation of income and payments, as well as automated file production; Record to Report offers a secure two-way interface with the CBK for real-time report generation to deliver accurate and up-to-date financial information on the Cook Islands government. The "Communicate to Change" program at the IFMIS Academy and the "ICT to Support" initiative are both geared on strengthening institutional capabilities via training and education.

Researchers and scholars from many walks of life have been interested in the IFMIS for public financial management, and their findings have been all over the map. However, the results have not been entirely consistent with one another. Mburu and Ngahu (2016) and Njonde and Kimanzi (2014) found favorable outcomes in the County Government of Nakuru and the County Government of Nairobi, respectively. Both of these studies were conducted in Kenya. The implementation of IFMIS has failed thus far, say Odoyo, Adero, and Chumba (2014). Osano and Ngugi (2018) report that the use of IFMIS has a negative effect on the efficiency of the Kenyan government. According to research conducted by Nurwin (2018), IFMIS was shown to have a weakly negative correlation with the use of preference rules. Similar to the preceding descriptions, his results led him to this conclusion. Given this setting, this study set out to determine how much of an effect IFMIS has had on the Public Financial Management practiced by the Kakamega County

Government. Several financial systems were studied to determine their effects on the whole, including IFMIS payment system, budgeting, and revenue systems.

Kibor (2019) found a statistically significant association among the Government of the County of Nakuru's financial achievement and the use of IFMIS financial data. This was in regards to the impact that the IFMIS financial reporting system had on the management of financial resources. A different study conducted by Awino (2018) found that automated financial reporting did not have a substantial impact on performance in Homa Bay County. In addition, the assessment of the dependent variable is significantly different across the two studies. Kibor (2019) focused on financial success, whereas Awino (2018) was more concerned with service delivery. Within the context of this research, financial management was considered in relation to IFMIS financial reporting.

Ndzovu and Ng'ang'a (2019) found that electronic budgeting had a positive and significant impact on the county's financial performance. Kibunja (2017) found a similar relationship between Murang'a County Government's budgetary process and financial performance. Nevertheless, Maina (2019) revealed that there are some loop holes in IFMIS budget system which has negative impact on public financial management. According to Ndegwa and Mungai (2019), the absence of data on spending, budget planning, cost control, and reporting has a detrimental impact on financial management inside IFMIS, which deals with the administration of public monies.

Despite the majority of counties failing to fulfill income goals, few studies have examined how the IFMIS revenue system impacts county financial management. Bonface (2016) found that the IFMIS system made West Pokot County Government more effective and

efficient. The IFMIS revenue system significantly improved the organization's performance. However, Odoyo, Adero, and Chumba (2014) found that IFMIS financial management has failed since most public services use top-down management. The study did not directly associate IFMIS cash management and financial management a gap which this study seeks to fill.

Extant studies have examined IFMIS payment system and financial outcome with mixed outcome depending on the study context. Financial management in 18 Kenyan government ministries was favorably and considerably impacted by the use of IFMIS payment systems, according to research by Hawo (2015). The IFMIS payment module has been shown to have a good and substantial impact on Garissa County's financial performance, as was also found by Mohamed (2017). Simiyu and Kaplelach (2013) found no evidence that IFMIS accounts payable had a substantial and pronounced effect on Kilifi County's public financial management. Given the complexities involved, the IFMIS payment system is essential for effective financial administration.

# 1.1.5 Organizational Resources

According to Mutua and Juma (2018), a company's resources consist of everything under its control, including its possessions, capacity, procedures for organizing, firm characteristics, information, and knowledge. A firm controls these components of its organization. Financial management is an organization's managerial activity to obtain and effectively use cash to run activities, according to Brigham and Ehrhardt (2015). A well-managed budget seeks to maximize the efficiency with which resources are acquired and used. Effective financial management, as stated by Mahmood (2017), ensures that correct

standards are set to increase public confidence and that a uniform approach is used throughout procurement.

From the existing studies, several organizational resources have been identified by various authors. However, the conceptualization of organizational resources has revealed significant knowledge gaps which this study seeks to fill. For instance, Worlu et al (2016) classify resources as intangible resources, organizational capabilities, human resources, technologies, and physical assets. Locally, Kimaite (2016) identified human resources and financial resources as organizational resources while Ongeti (2014) indicated that resources include items of knowledge, information, firm attributes, organizational processes, assets, finances, names, brands, patents, skills of individual employees and capital equipment and among others. This study operationalized organizational resources into internal controls, human resources, financial resources and regulations. These resources comprise of both tangible and intangible resources and therefore, this classification is comprised of organizational resources.

Even though organizational resources have been religiously reserved for management discipline, existing studies have established that financial management fields have significant role on the influence of organizational resources on performance. Strategic management theory such as resource based theory and resource dependency theory have identified organizational resources as vital organizational resources for superior performance. However, financial management scholars have given organizational resources a wide berth resulting to a significant knowledge gap which the current study seeks to fill. Organizations can achieve superior performance if they possess organizational resources that have valuability, rareness, inimitability and non-substitutability properties.

It has been established via studies that the financial management resources available to a company matter. For instance, Mwai, Namada, and Katuse (2018) showed that NGOs in Kenya were much more successful when they had access to more internal resources. It was a startling finding that giving employees more say in how they do their jobs reduces productivity. Although this issue may be resolved by implementing positive policies and putting in a lot of work, it will not necessarily result in the most effective use of available organizational resources. According to Ongeti (2014), the connection between the resources of an organization and its overall performance is only fairly strong. This happens in the context of weak public sector performance, including devolved governance, which has delayed the realization of sustainable development goals and Vision 2030, especially in its management of public resources.

Other research has looked at how organizational factors influence IFMIS's rollout; for example, Maina (2019) found that the government has developed sufficient policies for IFMIS's rollout; however, policies alone are insufficient to ensure the system's successful rollout. According to the findings of the research, policies that are not accompanied by suitable implementation interventions are ineffective in boosting IFMIS implementation throughout national government agencies in Meru County. In a separate research, Ogachi and Muturi (2015) found that the majority of counties in Kenya did not have different resources to IFMIS implementation. This was due to the fact that most counties in Kenya had not allocated adequate resources towards the implementation of IFMIS.

Based on the studies that have come before, it is clear that there is a connection between organizational resources and financial management, as well as IFMIS and organizational resources. This connection exists not only in the framework of the local environment, but

also in the context of the regional environment and the global environment. Both Othman et al. (2015) and Anderson and Eshima (2013) highlight how important organizational resources are; nevertheless, there is a significant gap in the types of resources and how much they contribute to financial success. On the other hand, a number of research have passively recommended for the inclusion of a moderating or mediating variable given that IFMIS on its alone does not result in optimal financial management. Kimaite (2016) found that organizational resources like human resources and financial resources have a role in determining the extent to which a company's financial performance is affected by such resources. This was also stated by Tuzie (2012), who argued that having IFMIS alone does not ensure improved financial management.

## 1.1.6 Financial Management

Financial management includes accounting, financial reporting, forecasting, budgeting, and capital budgeting choices like leasing or buying and issuing debt or equity (Moyer, McGuigan and Kretlow, 2015). Financial management framework includes the department's procedures, systems, internal controls, and practices for managing revenues, costs, assets, liabilities, and contingencies, according to Moyer et al. (2015). It also comprises its risk management, financial and operational performance monitoring, budget performance, and internal and external reporting on these responsibilities. According to Diefenbach (2019), a lack of understanding in financial management makes it impossible for a firm to flourish and makes it very difficult for it to even exist. A well-managed budget seeks to maximize the efficiency with which resources are acquired and used. A methodical approach to procurement and the development of appropriate policies to boost public

confidence are hallmarks of effective financial management, as stated by Wagithunu, Muthee & Thinguri (2016).

The implementation of IFMIS affects how governments manage their public funds. Many studies have shown that IFMIS has led to the following improvements in government budget management. Financial managers, such as controllers and treasurers, are tasked with managing an organization's cash flow in the most effective and efficient way, as stated by Simiyu and Kaplelach (2015). This includes keeping track of the money coming in and going out of the business. They do this by making installment payments at the latest time permitted by the contract or by law, collecting payables as soon as practicable, and keeping a enough cash reserve for operating expenses. In addition, making the most of possibilities to accumulate the maximum return possible on funds that are not being used for the present activities. According to Visaria (2019), a review of upcoming payments is required for efficient monitoring of the government's financial flow and preventing the buildup of arrears. In addition, corrupt practices are often found in the procurement process; as a result, most procurement systems include IFMIS-based controls in order to identify and prevent instances of corrupt behavior in this area. Visaria (2019) emphasized further that in undeveloped nations, under-spending is often just as big of a problem as over-spending is routinely in most cases. The inability to provide on-time planned services is directly attributable to wasteful or improper use of assets.

There has apparently been some financial mismanagement. Few studies have made use of IFMIS and other institutional resources; Arasa and K'Obonyo (2012) being the exception.

Others have looked to IFMIS as a surefire way to rein in financial malfeasance in public bodies, such as Gyawali (2005), Kibara (2007), and Chepkorir (2010), but they've come up empty or, more likely, complicated, particularly in political systems where competing interests flourish. This study was motivated by the dearth of available empirical data on how to improve public sector financial management, specifically in Kenya's devolved government systems. Specifically, it looked at how the resources of organizations and IFMIS affected the handling of finances in the county administrations of Western Kenya.

# 1.1.7 Financial Management in Kenya's County Governments

After the general elections in 2013, when the constitution including the county government system was enacted, the county governments, which are now headed by county governors, officially began functioning. Each country has a group of officials called cabinet secretaries who oversee all of the government agencies and ministries. The county executive appoints these secretaries to their positions. Article 201 of the Constitution of Kenya (CoK) lays forth the principles that may be used to control all facets of public finance. The public finance system should promote equity by ensuring a fair tax assessment, dividing broadly raised income fairly between the national and county governments, and allocating resources to meet the needs of the most disadvantaged. Both the costs and the advantages of using assets and taking out loans must to be fairly distributed between the current generation and those who will come after it; The management of the economy should be competent, and the monetary specifics should be understandable.

Kenya's county governments are required to manage their budgets in accordance with the Public Finance administration Act (2012), which lays forth standards to promote fiscal responsibility and transparency in the handling of public funds. Public property

management is likewise governed by this statute. The following are some of the established financial principles: The county's total income cannot be more than the amount that the county spends on its ongoing expenses; Progress-related spending must comprise at least 30% of the county government's budget during the following three to five years; As allowed by the executive member for finance in rules and agreed upon by the County assembly, public officials' benefits and salary cannot exceed a percentage of County government income; On the medium term, the government's borrowings are not to be employed for ongoing consumption but are, rather, to be used in the manner of being used just for the purpose of financing development. Taking into consideration future alterations, tax bases and rates should be fairly foreseeable. The county obligation should be maintained at a level that is feasible, as approved by the county assembly. Financial risks should be maintained in a prudent manner.

Academics and researchers have focused their attention on IFMIS in public finance management from a variety of angles and at a wide range of governmental levels, with mixed outcomes. Both Njonde and Kimanzi (2014) in the County Government of Nairobi and Mburu and Ngahu (2016) in the County Government of Nakuru reported successful results. Both of these research projects took place in Kenya. Nevertheless, Odoyo, Adero, and Chumba (2014) concluded that IFMIS adoption had failed. Osano and Ngugi (2018) report that the use of IFMIS has a negative effect on the efficiency of the Kenyan government. According to research conducted by Nurwin (2018), IFMIS was shown to have a weakly negative correlation with the use of preference rules. Similar to the preceding descriptions, his results led him to this conclusion. This study thus sets out to assess IFMIS's effect on the fiscal management of Kenya's county administrations.

## 1.2 Statement of the problem

IFMIS was designed with in-built control mechanisms to help management guarantee the proper allocation and use of public funds, which should improve the overall efficiency and effectiveness of government-funded initiatives. Muthoni (2017) argues that improved accountability and openness in the budgeting process may be achieved via the monitoring of financial events using automated financial management. Information such as financial statements, allocation details, cost breakdowns, ROI calculations, cash flow projections, variances from planned expenditures, and performance summaries can all be culled from the system databases (Mutui, 2014).

Over the last six years, Kenya has enhanced its legal and institutional frameworks for PFM, but the sector still confronts several challenges. Some devolved units, for instance, have been shown to spend money irresponsibly every year since devolved systems of government were introduced in 2013 (CoB, 2017) despite repeated warnings from the Auditor General and Controller of Budgets. Since the inception of decentralized governments, this has always been the case. The results reveal that county governments get more than the statutory 15% of national revenue, with constant yearly increases; for instance, the county governments received Kshs 368 billion in fiscal year 2018/2019, which is an increase from the Kshs 341 billion they received in fiscal year 2017/2018. However, county governments' service delivery and performance have slowed owing to abuse of public money due to inadequate accounting systems and controls (CoB, 2017).

As noted by the Auditor General in his report on the County Governments' financial accounts for the fiscal year ending 30 June 2018, IFMIS data did not match those stated in the financial statements, inconsistencies between the bank statements and the accounts

payable for the deposits account, differences in the monetary totals shown on pending legislation and those listed on the schedules that accompany the notes, differences between cash and cash equivalents, as well as the bank balances that accompany them, a failure to verify a significant amount of outstanding imprests, large amounts of cash being distributed without any supporting documentation of who the authorized recipients are irregular reallocation and unaccounted for expenditures, unvouched expenditures and procurement irregularities are only two examples of the many factors that might lead to unexplained financial shortfalls; therefore demonstrating the usefulness of IFMIS in bringing to light inappropriate uses of financial resources in county governments (GoK, 2018).

According to Odoyo, Adero, and Chumba (2014), the failure of IFMIS may be attributed to the top-down management style prevalent in many government agencies. Since IFMIS performance is affected by a wide range of factors, the study urged researchers to broaden their attention in the future. Leting (2017) revealed that there is need to focus on plan to budget and revenue to cash since they have negative effect in regard to Kisumu County and further studies should focus on other county governments in Kenya. This study investigates how IFMIS and other internal variables impact the financial management of Kakamega, Busia, Vihiga, Trans Nzoia, and Bungoma counties.

# 1.3 Objectives of the Study

The broad objective of this study is to determine the effect of the relationship between integrated financial management information system, organizational resources and financial management at county governments in Kenya. The specific objectives of this study are to:

- i. Establish the effect of IFMIS financial reporting system on financial management in county governments, Kenya
- ii. Examine the effect of IFMIS budgeting system on financial management in county governments, Kenya
- iii. Determine the effect of IFMIS revenue system on financial management in county governments, Kenya
- iv. Establish the effect of IFMIS payment system on financial management in county governments, Kenya
- v. Determine the moderating effect of organizational resources on the relationship between integrated financial management information system and financial management in county governments, Kenya

# 1.4 Research Hypothesis

**H**<sub>01</sub>: IFMIS financial reporting system has no significant effect on the financial management in county governments, Kenya

**H**<sub>02</sub>: IFMIS budgeting system has no significant effect on the financial management in county governments, Kenya

**H**<sub>03</sub>: IFMIS revenue system has no significant effect on the financial management in county governments, Kenya

**H**<sub>04</sub>: IFMIS payment system has no significant effect on the financial management in county governments, Kenya

**H**<sub>05</sub>: Organizational Resources has no significant moderating effect on the relationship between IFMIS and financial Management in county governments, Kenya

# 1.5 Justification of the Study

The performance of county governments in Kenya has continued to attract attentions from various quarters. Reports from the Office of Auditor General and Controller of Budgets have indicated that financial management of county government across the country is wanting. There is low absorption rate, budget reallocation and misappropriation of public funds. If wanton financial mismanagement of public resources is not checked the gains already made in fiscal devolution and public finance management will be eroded. The consequence of this is non-attainment of County Integrated Development Plans (CIDPs), missed Sustainable Development Goals (SDGs), Big Four Agenda and delayed Vision 2030. For this reason, it is imperative that a study on IFMIS, organizational resources and financial management are undertaken. Therefore, this study has academic, policy and practical implications.

### 1.6 Scope of the Study

The study was conducted between September 2021 to December 2022, The study focused on the effect of IFMIS, Organizational resources and financial management in Kenya. In regard to content scope, IFMIS comprised of payment, revenue, budgeting and financial reporting. Organizational resources consisted of human resources, technological resources, financial resources and regulation. Financial management was measured by improved

Budget Absorption Rate, Attained Revenue Targets, Quality of Audit Report and Timely payments. In regards to geographical scope, the study covered five county governments in Western Kenya; Kakamega, Busia, Vihiga, Trans Nzoia and Bungoma. The population for study comprised of 302 employees namely: Procurement officers, ICT officers, internal auditors, Accountants, Finance officers and Revenue officers. Primary data was collected through administration of questionnaires.

# 1.7 Limitations of the Study

In an ideal scenario, this research would have been conducted in all County governments in Kenya. However, this was not the case. The study was limited to county administrations in Western Kenya, but the findings may apply to other local governments.

The participants' reluctance to divulge some information, especially that which relates to their performance, owing to the fact that the material in question is secret. The researcher assured participants that the data would only be utilized for academic research. The researcher also gave a university introduction letter and a NACOSTI study permission letter (APPENDIX VI) to reassure them that the data sought would only be utilized for academic reasons, ensuring confidentiality. This was done to allay their concerns and put an end to their worries. Some of the participants were quite busy with their schedules, which made it difficult to gather data within the allotted time. This was resolved with the implementation of the drop and select method, along with consistent remembrance over phone conversations.

#### **CHAPTER TWO**

#### LITERATURE REVIEW

### 2.1 Introduction

This chapter provides an analysis of the theoretical review, the empirical review, as well as critiques of previous studies, the conceptual framework, a synopsis of the reviewed literature, and ultimately, the research gaps.

### 2.2 Theoretical Review

A theory is a body of knowledge about the world that may be used to account for and foretell events. Theories provide light on the hidden mechanisms at work in the universe. It makes forecasts on the assumption that all other factors stay constant (Alchian, 2016). A theory is chosen based on how well it fits the study's aims, how easily it can be implemented, and how much it can explain. Theoretical frameworks provide a bridge between new information and previously established facts (Hannah, 2015). Task-Technology Fit theory (IFMIS), Accountability theory (IFMIS Financial Reporting), and Resource-based perspective theory (Organizational resources) are the theoretic frameworks examined in this investigation.

### 2.2.1 Task Technology Fit (TTF) Theory

When the TTF measure was combined with utilization, Goodhue and Thompson (1995) showed that user claims of enhanced work performance and effectiveness were strongly predicted by the system's usage. The system's usage led to these advancements. Yang, Kang, Oh, and Kim (2018) provide an analogous group-level model. In contrast, the Goodhue and Thompson (1995) paradigm analyzes individuals. For an information system

to be successful, proponents of the task-technology fit hypothesis argue, there must be a close relationship between user performance and the efficacy of the underlying technology.

According to this idea, ICT will improve performance and be used if its capabilities meet the user's tasks. Several factors may be used to assess a technology's suitability for a job. These include system dependability, human involvement, simplicity of use and training, and production speed. The model may be used to analyze a broad range of information systems, including e-commerce systems, and can be integrated into or extended by other information systems outcomes models.

Goodhue and Thompson (1995) revised their estimates of this theory to fit a specific study's aims. The association between IFMIS and the performance of the counties was investigated as part of the present research. Due to its widespread use by Kenya's county governments for fiscal management tasks including accounting, auditing, and reporting. To better collect and spend public resources in a transparent, manageable, and efficient way, and thereby accomplish effective management of public finances, this system was developed to aid Kenya's county governments and the institutions that operate under them.

#### 2.2.2 Resource Based Theory

Wernerfelt (1984) first put out the idea. The hypothesis assumes that a company's success is directly proportional to its resource endowment. Therefore, disparities in resource endowment may account for variances in company performance. Therefore, if a company has access to rare materials, it will perform better than its competitors. This concept was built on the foundation provided by Penrose (1959) and Chandler (1962). According to this notion, businesses should be seen as collections of useful things. There are distinguishing

features of a company's resources that translate into improved efficiency. To begin, companies have varying amounts of resources, and these variations persist over time (Barney, Ketchen Jr., & Wright, 2015). A company's assets are valuable since they cannot be easily replaced and have no direct competitors. These aspects of available resources contribute to enhanced productivity (Das and Teng, 2016).

The thesis goes on to criticize the disorganized handling of available resources. Resource slack is like a river to an organization's expansion as opposed to the entire quality of its resources (Bradley, Wiklund, & Shepherd, 2017). The term "slack" refers to the gap between a company's available resources and the ones it needs right now. Two companies might have the same amount of resources but have vastly different requirements for those resources based on their present business needs (Mishina, 2014).

The core thesis of RBV is that the performance of an organization is directly proportional to the resources that it has. It is more possible for an organization to establish lasting competitive advantages if it has desirable scarce resources in greater quantity. According to current research in the discipline of strategic management (Crook et al., 2018), RBV has emerged as a significant viewpoint directing investigation into the drivers of organizational success. The RBV is one of them, and it is the most prominent hypothesis that has been used in recent years to understand the connection between technology and organizational success. According to Liang, You, and Liu (2017), in order for an organizational resource to be advantageous, it must have VRIN properties, which are characteristics that technology resources have. According to this point of view, technical resources should be seen as a valuable organizational resource since they have the potential to improve organizational skills and, as a consequence, contribute to improved overall performance.

The selection of resource variables is the primary challenge that pertains to technical resources. This is due to the fact that not all resources are seen as having value in RBV. In several research, the only resources that were considered were technological factors such as investment in technology, acceptance of technology, and infrastructure for technological support. When RBV is used to assess the worth of information technology, the technical resources in question are often categorized as one category of resources.

The idea emphasizes the significance of competent resource management in achieving optimal results. The idea is relevant because it elaborates on the role that internal controls play in guaranteeing appropriate financial management, including a good budgeting process and careful monitoring and reporting of how scarce funds are being used.

# 2.2.3 Accountability Theory

This idea was proposed as a potential explanation by Tetlock and Lerner (1999). The idea of accountability outlines how the need to conceal one's behavior from another person leads one to reflect on the thought processes that went into making their decisions. The desire to provide an explanation for one's behavior and its results implies that the person has given some consideration to their usual patterns of behavior (Swift, 2016).

Answerability is best understood by separating its virtue and mechanism applications, as suggested by the first reading. The first interpretation proposes this. The willingness to accept responsibility is an admirable quality in public servants, government agencies, and corporations, and so the possession of liability is advantageous because it shows that the entity in question is prepared to do so. It's the mechanism through which a person promises to explain their conduct in the future to someone who has the authority to judge them and

to interrogate them about any punishments they could face as a result of those actions. The opposite party has the right to ask the actor about potential outcomes of his or her conduct.

They imply that a variety of different gadgets may change people's views of culpability. Among them include the presence of another person, the capacity to be identified, and the anticipation of being evaluated. Recent research has shown that the design artifacts of IT systems may influence the four core tenets of accountability theory. Among them include being able to be singled out, knowing that one is being watched, expecting to be evaluated, and having a social presence. Increased employee accountability for organizational system security is the consequence (Trevor, Anderson, & Didier, 2016) with no need for invasive interventions or training.

When a person is able to identify themselves, it means that they are aware that their actions may be traced back to them, which shows their actual identity. The expectation of assessment is the belief that another person assessed one's performance using normative ground principles and implicit implications. Users' knowledge of monitoring means they know they're being watched while completing system-related tasks. Wainaina (2015) defines social presence as awareness of system users.

Accountability is important to our inquiry because it helps us understand how IFMIS financial reporting may promote accountability. An IFMIS improves resource management (more bang for the buck), reduces fraud and corruption, and increases transparency and accountability through individualized reports, account reconciliation, financial analysis, and real-time reporting. Thus, IFMIS assists management in ensuring accountability for

public resource deployment and usage and improving program effectiveness and efficiency.

# 2.2.4 Main Theory of the Study

Task technology fit theory guided the investigation. Task technology fit theory helps identify, examine, and evaluate the IFMIS system for optimal application in financial management by Kenyan county governments. Task technology fit theory may be used to determine optimum integration scenarios. Task technology fit theory was suitable for analyzing the impact of IFMIS on county government financial management. From the perspective of Task technology fit theory, financial management and Information System are now taking on new meanings in context of various organizational setting. These developments in information systems make it seem relevant to explore how information systems simultaneously constitute a facilitator and a barrier in relation to organizational financial management. In this regard, the theory is relevant since it brought the various aspects of IFMIS such as revenue system, financial reporting system, payment system and budgeting system in relationship to financial management of county governments notably improved budget, improved absorption rate, attainment revenue targets, quality of audit report and timely payments. In regard to moderating variable, Task technology fit theory says that there are many internal and external factors that can influence the optimum organizational resources and structure. These factors include the size of the organization, technology that is in use, and how the organization can adapt to changes in strategy.

The theory enjoys unprecedented support in accounting research but it is not free from criticism. This is arising in some particular instances where its appropriate application in management accounting is challenged. According to Galunic and Eisenhardt (1994), the

task technology fit hypothesis is criticized for being static and for failing to cope with the issue of organizational change and adaptability. Many people perceive this theory to be an equilibrium theory, much in the same way as sociological functionalism is commonly thought to be an equilibrium theory. This is due to the fact that organizations are portrayed as being fit, then being in equilibrium, and therefore staying static. However, the Structural Adaptation to Regain Fit (SARFIT) paradigm of organizations is one that operates in a state of disequilibrium (Donaldson, 2006). Under the SARFIT framework, an organization only stays fit for a limited time, up to the point at which the excess resources produced by fit-based improved performance result in growth. Because of this, the contingency factors inside the company, such as growth or diversity, will rise, which will result in a mismatch with the organization's present structure. According to the SARFIT perspective, this means that fit and misfit are both transient states that occur in tandem with one another. An organization that is misfit has a greater propensity to grow into fit, which in turn prompts structural adaptation into fit, which subsequently results in even more expansion into misfit. This cycle continues to repeat itself throughout the course of time. When an organization shifts from being well-suited to its environment to being mismatched, the ensuing effect is either greater or poorer performance.

Organizations should not make the irrational decision to conform to their circumstances, it has been stated. This is because the organizational structure is being adjusted to match the circumstances, but the conditions are also changing, thus the adjustments are not producing fit (Donaldson, 2006). Organizational managers may be unaware of the fit states of the theory, making it difficult for them to make adjustments so that their company is consistent with the theory (Donaldson, 2001). This is another argument that is occasionally made

against the structural Task technology fit theory. Though with its likely shortcomings, the theory enjoys some level of acceptability among researchers in the study of leadership, accounting controls and personnel management. One of the strengths of the theory is that it has been empirically tested and found to be a valid and reliable approach to explaining how to achieve effective leadership and controls (Ginsberg and Venkatraman, 1985)

### 2.3 Conceptual Review of Variables

# 2.3.1 Financial Reporting System

The Record to Report component of IFMIS is responsible for all of the actions that are involved in maintaining and updating the general ledger, as well as closing the books and reconciling the sub ledgers to the general ledger. It also covers the documentation of fixed assets at both the national and county levels, as well as their management and reporting. A safe, two-way connection to CBK allows for the instantaneous production of legally required reports (GoK, 2015). Furthermore, it offers precise and up-to-date data about the GOK's monetary situation.

Users situated anywhere inside the IFMIS network may log in and get the specific bits of information they need. Budgeting, finance, treasury, cash flow, accounting, auditing, and general management issues may all be solved with the use of specialized reports, as stated by Hendricks (2012). According to Diamond and Khemani (2015), IFMIS is used to continuously share budget-related data among all parties participating in the process. Thus, all users must have system access to receive the data they need to perform their tasks. If it does not supply the necessary information, the FMIS is not utilized and has ceased fulfilling its basic job.

Since data input into IFMIS occurs within an integrated system using standard values, users may enter the system and retrieve the particular information they need for a broad variety of purposes and activities. Balance sheets, cash flow projections, accounts payable and receivable aging reports, cash flow predictions, variance reports, and many other types of performance reports may all be generated by the system. Each system has its own library, which contains hundreds of sample reports. Managers can use this data to plan and create budgets, compare actual results to budgets and plans, manage cash flow, keep tabs on debts and receivables, track the utilization of fixed assets, evaluate the performance of individual departments, and make any necessary adjustments (Ochieng and Muehle, 2014).

The IFMIS system's numerous advantages include better data quality assurance, higher employee performance leading to better business results, and the connection of planning, policy objectives, and budget allocations. According to the blueprint, in addition, the technology streamlines the buying procedure, permits automated file production and revenue/payment reconciliation, allows for more precise cash flow projections via automated revenue collection and provides timely, reliable data on the state's economic health. According to Mutong'wa, Rodrigues, and Liyala (2017), an IFMIS is an information system that collects data from the financial sector and keeps track of transactions. He noted that one aspect of IFMIS that applies to the public sector is the automation of PFM procedures. A centralized platform for managing line-department budgets, expenditure agencies, and other public sector activities is used to carry out tasks including creating and implementing budgets, as well as accounting and reporting. The pillars of an effective

public financial management system include well-established processes, robust legal and regulatory frameworks, and a skilled and efficient civil service.

According to the Ministry of Finance (2013), IFMIS helps to strengthen financial controls by providing access to accurate and up-to-date financial information. Article 12 of the 2012 Public Financial Management Act required the IFMIS to connect all government ministries, agencies, and departments to a central network to achieve a unified public financial management system. To improve accounting, recording, and reporting, IFMIS delivers updated computerized accounting systems, a standardized integrated financial management reporting system, and timely and accurate financial data. By providing the Auditor General, the parliament, investigative and prosecutorial agencies, and other organizations with comprehensive, reliable, and up-to-date financial information, IFMIS helps to increase the efficacy of financial controls. When working as intended, they automate the process of reconciling bank accounts and allow for more thorough tracking of overdue payments and cash on hand, as stated by Osano & Ngugi (2018).

# 2.3.2 Budgeting System

A comprehensive automated planning and budgeting system may be developed and implemented with the help of the IFMIS system's Plan to Budget module. The government's planning and budgeting process stands to benefit from the deployment of the system as a whole. Planning to Budget (P2B) is both a method and a system that works together to link strategic objectives with financial resources (GoK, 2015).

A Medium-Term Expenditure Framework (also known as MTEF) may or may not be used as the foundation for the budget planning sub-system that IFMIS provides. In addition to

this, it enables the monitoring and reporting of public income and expenditures via a budget execution and spending management subsystem. The law already makes provision for this. Payroll systems, aid and debt management systems, accounting systems, cash management systems, commitment control systems, and aid and debt management systems are all vital parts of any effective financial administration. To ensure consistency, a uniform Chart of Accounts must be implemented to record all cash inflows, cash outflows, and contractual obligations. (Rezaian, 2014) Budget and law regulate the management of public spending, thus there must be reporting and auditing subsystems in place to ensure openness, accountability, and compliance.

Odoyo et al. (2014) suggest some potential benefits of IFMIS for public financial management. However, IFMIS's overarching goal is to increase confidence in the budget by making it more open and thorough. They anticipate timely and reliable data for budget management and decision making would enhance budget planning and execution. IFMIS streamlines budget development throughout the government and improves budget execution by integrating data pertinent to budget implementation. They decentralize financial processes and procedures under Ministry of Finance direction, improving financial discipline and lowering operational expenses by decreasing administrative personnel and public employee workloads.

Since budget plans regularly exceed financing, technical talks between central and sector agency officials to analyze costing are needed for ongoing negotiations. Set inter-sectoral priorities and program and project priorities to support chosen projects within the macroeconomic framework. Throughout the budgeting process, but especially at the beginning and end, the framework should be revised often.

Micheni (2017) investigated the financial factors affecting budget implementation in Counties in Kenya with an emphasis on the selected counties i.e. Kirinyaga, Muranga, Nyeri and Nyandarua. The study found that IFMIS connectivity affect budget implementation. The study recommended that there is need to put strong and adequate infrastructure like internet connection for easy use of IFMIS platform which according to the results affects budget implementation.

# 2.3.3 Revenue System

Every County Government throughout the world relies heavily on taxation to fund the purchase of debt-free assets that are put to use expanding the local economy. Governments often levy taxes on their subjects in order to finance or improve service provision (Ringold, Holla, Koziol, & Srinivasan, 2017). It's not like a contribution in that the tax payer is giving their money voluntarily. Instead, it is a contribution to the government that is required by law (Garner, 1999). Counties consequently rely on taxation to fund infrastructure improvements, local economic growth and development, and provision of essential public services. Therefore, it is crucial for economic growth, development, and enhanced service delivery at the County level for County Governments to collect sufficient income (Okiro, 2015).

According to Ngotho and Kerongo (2014), efficient service delivery and economic growth in counties are impossible to achieve without a stable income stream for county administrations. The money collected by governments is the lifeblood for developing nations to provide basic services and make long-term investments in public goods (OECD, 2008).

The income to cash module includes tools that improve the government's ability to collect, record, categorize, and report tax and fee revenue. As part of the process of managing cash flow, revenue creation, revenue collection, revenue recording, and revenue distribution to the different ministries are all essential steps. Bank reconciliation, exchequer release, cash forecasting and cash positioning, and debt management are all areas of focus when they are rolled out and activated. In order to establish the Single Treasury, the exchequer release mechanism will also need to be redesigned (GoK, 2015).

By making it more likely that corrupt activities will be discovered, an IFMIS may reduce the likelihood of such activities occurring in the first place, making it one of the system's most significant advantages. Carefully designed IFMISs may include a number of features that aid in spotting instances of fraud, wasteful spending, and theft. The automatic cross-referencing of PINs for fraud, asset inventories with equipment procurement to identify theft, cash distribution regulations, and ghost worker detection are examples (Njihia & Makori, 2015).

Automation of revenue collecting system requires investment in current technology like ICT to integrate and share information to improve system efficiency and effectiveness. According to Owino, Senaji and Ntara (2017), each sector of the county should establish a system for the collection of money that is both effective and efficient, as well as a monitoring framework that provides proper oversight of the budgeted programs and project activities. This will increase accountability and resource utilization. Modern technologies like ICT may improve and simplify tax administration by automating revenue collecting techniques and structures.

County governments will adopt a National Treasury-designed revenue collection and administration system. County governments must comply with national financial management laws under Article 190(2) of the Constitution. The National Treasury must establish and prescribe an efficient financial management system for all levels of government under Section 12(1)(e) of the Public Financial Management Act (2012). These standards indicate integration and automation of the Counties' ICT systems. By comparing counties, integration helps the National Treasury monitor, supervise, and oversee. Automation eliminates County officials handling cash, which leaks income. Counties save money by using standardized revenue collection and administration systems. For these reasons, the National Treasury will create a revenue collecting and administration system that fulfills county requirements. National Treasury(2017).

The conversion of sales into cash requires the effective collection and distribution of cash, as well as the making of any short-term investments in cash while it is still held by the company. Opiyo (2017) claims that its principal concern is with the management of cash inflows and outflows, including internal cash outflows and cash balances maintained by the firm at any given time. Cash management might be considered a part of treasury management if we go by the definition given by Aden, Aden, and Addow (2015). Management of the company's treasury is an important support service that is provided by the HR department. The management of cash entails exercising authority over and taking care of an organization's financial assets and cash obligations.

# 2.3.4 IFMIS Payment System

In order to streamline the payment of services and commodities to suppliers, the County Government has implemented a procure-to-pay (P2P) system as part of its IFMIS reengineering (Njonde & Kimanzi, 2014). The purchase order, the invoice that matches the order, and the payment all fall within the purview of this typical payment procedure. It's a more involved process that includes things like using specific sourcing guidelines to choose suppliers, recording receipt into stock per suppliers' shipping notifications, generating invoices after an inspection, and making wire transfers directly to suppliers' bank accounts.

Through system capabilities such as automatic identification exceptions and automated cross-referencing of personal identification numbers, the IFMIS Payment system is able to identify overpayments, fraud, and theft. With this information, administration may take preventative measures against inefficient spending of public monies (Njeru, 2017). The objective of the P2P component is to construct an end-to-end automated process that begins with the creation of procurement plans and continues with the actual purchase of products and services as well as the payment of suppliers for the items or services that they have supplied. Automation has been used for the fundamental procurement procedures. The process includes the following key initiatives: Included are: purchasing organizing; vendor administration; requests administration; quote administration; purchasing order (PO) administration; receipt of goods administration; payment and invoice administration; management of inventory; contract oversight and reconciling transactions and time frame end conclusion; and the setting up of a system for managing documents. Among other things, the process also includes the implementation of a document management system (Mutua, 2014).

In order to achieve these goals, P2P seeks to standardize and streamline government procurement and payment processes at all levels, to automate these procedures, and to

increase oversight and transparency throughout the entire procurement process, from initial planning to final payment.

Bosire (2016) states that the job of a company's controller or treasurer is to maximize the efficiency with which the company's funds are managed. To achieve this goal, they prioritize the prompt collection of payables, the timely payment of all amounts due under contract or law, the maintenance of an adequate cash reserve for operating needs, and the maximization of earnings on idle funds. According to Hawo (2015), if one want to efficiently manage the cash flow of the government and forestall the accumulation of arrears, it is essential to keep an eye on the payment schedule for the foreseeable future. In addition, corruption may often be found in the procurement process; for this reason, most procurement systems have IFMIS-based controls designed to identify and discourage corrupt behavior in this area.

# 2.3.5 Organizational Resources

The writings of Gibbons & Roberts (2012) and other early academics (Kaufman, 2015) are credited as being the originators of the organizational resources effect on company performance. According to the theory put forward by these academics, the organizational resources of a company are the major driver of its success. The competitive advantage, development, and general success of an organization are almost entirely dependent on the resources that the business has. They are the pillars upon which a competitive advantage is built. The term "resources" may be broken down into three basic categories: material, intangible, and human. However, individual resources seldom result in effective outcomes. According to Walter and Vincent (2018), the inputs into the productive processes in

exclusion are never the resources themselves but rather the services that the resources themselves deliver.

According to Hsu and Ziedonis (2017), capabilities are defined as the skills to combine other resources in order to achieve greater performance. Configuring, re-configuring, coevolving, coordinating, and re-structuring one's resources from time to time is essential for maximizing their performance and gaining a competitive edge. Organizational performance suffers when businesses fail to innovate in how they present their products and services to customers. Since markets constantly collide, emerge, split, evolve, and perish (Vladova, 2017), competencies provide a sustainable competitive advantage and long-term success.

It's possible that various companies combine their resources in different ways, which contributes to their distinct levels of performance. According to Talaja (2012), a company's ability to capitalize on its resources is negated if its employees lack the knowledge and experience necessary to fully use such assets. Even if the business has assets that may provide it a strategic edge, this remains true. On the other hand, Makadok (2015) suggested that regardless of how impressive a firm's skills may be, they are unable to create economic gains for the company if the company does not buy the resources whose output would be boosted by capabilities.

The term "financial resources" refers to the money that is needed to cover the expenses of putting a plan into action. According to Ridley-Duff (2015), in order to develop, maintain day-to-day operations, and expand, every single commercial firm need sufficient financial resources. It has been determined that a company's financial situation is the single most

crucial element in determining its ability to continue existing and expanding in both established and emerging economies. Several studies point to the importance of having sufficient financial resources available when putting a plan into action. However, organizations encounter a significant number of obstacles when attempting to get access to the necessary financial resources (De la Torre, Gozzi & Schumukler, 2017).

Mugambi (2017) included cash on hand, deposits in the bank, capital, and savings as some of the many types of existing financial resources. According to the findings of the research, these financial resources might go a long way toward overseeing the execution of projects and plans. They may also have other benefits, such as boosting the performance of the company and increasing the edge it has over its competitors. The availability of sufficient financial resources ensures that everything that could be required to carry out strategic plans in an effective manner is acquired. According to Henderson (2016), finance is the most crucial factor to consider while monitoring the implementation of a strategy. Loans, savings, investments, and grants are some of the many possible avenues that may be pursued in order to get the necessary funds. According to Cardeal and Antonio (2016), financial resources play a critical role in the development of human capital resources, and both types of resources play a critical role in ensuring that businesses maintain a sustainable competitive edge.

People are the most important resource for any company, therefore it seems sense that managing those people would fall under the purview of the human resource department. The concept that management is an essential component of a competitive advantage is primarily responsible for the foundation that underpins the significance of human resources. According to Salanova, Bakker, and Llorens (2016), the majority of the most

recent research are of the belief that Human Resource functions as an element in recognizing the performance of the business. According to Maw-Shin, Yung-Lung, and Feng-Jhy (2014), the human resource aspect in strategy execution entails recruiting the correct sort of people; increasing their knowledge, skills, and talents; and human resource retention. Organizations that are successful work hard to ensure that they have sufficient numbers of the correct kinds of employees to carry out the responsibilities necessary to realize their goals. According to Herbert, Heneman, and Anthony (2016), in order for an organization to fully maximize on its potential, it must first design and provide human resource practices with a primary emphasis on essential employee performance capabilities, followed by the development of an HR system that is vertically and horizontally aligned around those competencies.

The management of a government agency implements internal control systems in the form of policies and procedures to ensure that the agency operates in accordance with all applicable external laws and regulations and achieves its stated objectives. Ndegwa and Mungai (2019) state that such protocols often include not just financial accounting and reporting but also performance tracking, asset management, and purchasing. To make more efficient use of available means, in particular so as to accomplish goals and generate results while spending as little as feasible, the following administrative tasks are facilitated by IFMIS. (Hendricks, 2012): reduce the national debt and overall expenditures; spending priorities across several policies, programs, and projects; and maximize the usage of available funds. To rephrase, the following are some of the expected benefits of implementing IFMIS: better management, less fraud, more transparency, and more accurate evaluations.

Financial managers, such as controllers and treasurers, are tasked with managing a company's funds efficiently and effectively, as stated by Kioko (2017). This is achieved by promptly collecting payables, paying within the time frame required by contract or law, keeping adequate funds on hand for day-to-day operations, and maximizing the return on investments for resources not currently in use. To effectively manage the government's financial flow and prevent the buildup of new debts, Ndegwa and Mungai (2019) argue that a tight check on the payment schedule for the foreseeable future is necessary. In addition, corruption may often be found in the procurement process; for this reason, most procurement systems have IFMIS-based controls that are designed to identify instances of corruption and dissuade others from engaging in corrupt behavior.

Bosire (2016) suggests that features for spotting wasteful expenditures, fraudulent transactions, and stolen money might be included in a well-designed IFMIS. These include, but are not limited to, automated cash distribution regulations, the cross-referencing of asset inventories with equipment procurement to identify theft, and the detection of ghost labor.

### **2.4.6 Financial Management of County Governments**

Management of finances comprises planning, leading, coordinating, and managing financial operations within an organization, such as the acquisition and usage of cash. According to Brigham Daves (2017), the process of managing resources is referred to as & financial management. Accounting and financial reporting, budgeting, receivables collection, risk management, and insurance are all part of this process. A company's "financial performance" is its ability to convert its resources into earnings. It's a way to compare similar businesses within the same industry or across industries in aggregate,

and it's a wide evaluation of an organization's complete financial health over a certain time period (Anjichi, 2015).

Kenya's government recognized the need of a robust public finance management (PFM) system as early as the year 2000. From 2006 to 2011, "Revitalization of Public Financial Management System in Kenya" (ROK, 2016) was the focus of Kenya's first PFM reform plan. Many of the changes were still unfinished at the conclusion of the implementation phase. Major institutional and legal improvements in PFM practices were also made possible by amendments to the Constitution of Kenya, 2010. These included the formation of new institutions like counties made possible by a radical devolution program. The need for PFM institutional changes has grown in response to the passage of laws like the Public Finance Management Act of 2012 and others that address PFM practices. The 2013-2018 PFM Reform Strategy was developed with these and other concerns in mind (ROK, 2016).

To complement the ongoing governmental institutional changes, the primary PFM practice improvements were renamed the "Revitalization of Public Financial Management System in Kenya": process whereby political agendas are translated into yearly budget allocations, credibility of the budget, quality, reliability and timeliness of financial data reporting, procurement, implementation of Integrated IFMIS and other PFM approaches, cutting down on tax evasion, bad methods of collecting and calculating non-tax income, institutional reforms, debt management, improvement of the external auditing system, bolstering the PFM legislative framework and dealing with the shortage of PFM professionals, among others(ROK, 2016).

All government entities have access to the same rules for handling public money thanks to the PFMA, 2012, as stated by Wang'ombe and Kibati (2017). Article 201 of the constitution outlines the norms and practices of public finance, including transparency, accountability, public participation in financial matters, and equitable allocation of resources to ensure that resources are fairly distributed between current and future generations. Furthermore, it necessitates the appropriate and cautious use of public monies for their intended objectives. Last but not least, the PFMA 2012 calls for transparent public financial reporting and management. Section 107 of the PFMA, (2012) provides greater elaboration on these fundamental foundations.

The financial health of Kenya's county governments has been the subject of little empirical research. For instance, Wamalwa (2018) said that problems with revenue mobilization, a lack of transparency, and a lack of accountability in the use of public money have been hallmarks of public financial management methods. Budget gaps, public debt, and ineffective leadership have all contributed to these crises. According to the research, implementing an IFMIS has a notable impact on the national treasury's financial management. The significance of the model used in this research is shown. In order to encourage better and more fruitful financial management practices, the study suggested that organizations develop and implement robust integrated financial systems that include clearly defined components like budgeting, internal control, and financial reporting.

According to Muthoni (2017), the Kenyan government implemented IFMIS to increase efficiency in service delivery, boost transparency, and cut waste in the public sector by addressing problems with the previous system. Financial management in government ministries and agencies was shown to benefit significantly from increased transparency and

accountability at all levels of the business, including cash management and budgeting. The research suggests implementing IFMIS and making financial data accessible and promptly available as part of a PFM reform that impacts transactions across all ministries and departments to enable decision makers make trustworthy judgments based on correct information.

County governments and fiscal management have been studied using fiscal management as a control variable. For instance, Simon and Mohamed (2017) looked at the impact of PFM on the county government's bottom line in Mombasa, Kenya. The research concluded that the Mombasa County Government does not gather enough money to properly fund its operations. The research revealed that the County Integrated Development Plan gives locals a say in which parts of the county get funding for future development. The research concluded that the Mombasa County Government has enough internal control measures in place to prevent waste, fraud, and abuse of the county's limited financial resources. Through its budgeting procedure, the research confirmed that Mombasa County Government had a budgetary strategy.

In 2017, Cheruiyot, Oketch, Namusonge, and Sakwa evaluated how public financial management practices affect Kenyan county governments' efficiency. The researchers found that county administrations with strong internal control systems fared better than those with weaker systems. This was the last conclusion the investigation arrived at. The data shows that the most successful county governments are those that strictly adhere to the highest standards of honesty and ethical behavior in their risk analysis, control measures, and oversight procedures. For the purpose of to accomplish forthcoming fiscal management adheres to and oversight in public workplaces, this study advises that

governing bodies strictly conform to their legally binding regulations concerning the preparation and delivery of accounting records, surrender and assessment, and prompt indicate of the Auditor-general to the The parliamentary system Public Account Committees. This is due to the fact that the research concluded that openness in public financial management procedures and reporting might be improved by strictly adhering to the constitutional framework.

Kibor (2019) investigated how different financial management strategies impacted the economic output of Kenya's county governments. According to the findings of the research, there is a correlation that may be considered to be statistically significant between the financial performance of the County Government of Nakuru and account payables, internal controls, internal auditing, and budgeting. This research is very helpful in that it sheds light on the significance of effective financial management methods as a means of improving the county governments' financial performance. Munyao (2018) studied the County Government of Nakuru's financial sustainability and financial management strategies. Budget management and financial sustainability were linked, although not strongly, positively, or statistically. Governance and accountability, value management, and financial controls were statistically linked to financial sustainability. Financial sustainability might be enhanced by enhancing the mentioned financial management methods. The county government should cut spending to improve its finances. The county government should also increase income to pay creditors, suppliers, and employees on time.

### 2.5 Empirical Literature

# 2.5.1 IFMIS Financial Reporting System and Financial Management

Langat (2016) aimed to investigate the question of whether or not IFMIS has an effect on the efficiency of the water infrastructure in Bomet County. The collection of primary and secondary data was accomplished via the use of a descriptive survey. The participants of the research who were employed by the Bomet County Government were the focus of the investigation. In this study, the tools that were employed were mostly questionnaires. Periodicals and administrative challenge rulings were secondary sources of information. According to the findings of the research, IFMIS has a beneficial impact on financial performance. IFMIS supports the timely production of excellent financial reporting, encourages the empowerment of workers, and promotes long-term objectives, as well as intervention targeted at promoting entrepreneurship and self-employment.

Muiruri (2018) aimed to determine whether or not the implementation of an IFMIS improved the efficiency with which County Governments managed public monies. This study used a descriptive research approach throughout its whole. The participants in the research were 134 people who used the IFMIS system in the Kiambu County Government. The sample size was calculated to be 67, and it was determined using a combination of random and stratified sampling. Because to IFMIS, government accounting has been more open and efficient, public funds have become more accountable, financial reports have become more accurate, government accounting practices have become more auditable, and auditors have easier access to financial data. All of these benefits have been realized as a direct result of the system's implementation.

Mburu and Ngahu (2016) conducted an analysis to determine how much of an impact IFMIS has had on the financial management of county governments. According to the findings of the research, the financial reporting function in the Nakuru county government has a substantial and favorable connection to the financial management function. Chado (2015) examined how Kenya's public sector finances are affected by financial reporting methods. This study employed a descriptive research technique to analyze 18 Kenyan national government ministries. Financial reporting systems improved financial management in the public sector, according to the study.

The purpose of Rangira and Mulyungi's (2017) study was to investigate the impact that implementing an IFMIS had on the level of financial success achieved by Rwandan government entities. According to the findings, using IFMIS is the best method for determining whether government organizations in Rwanda have substantial financial performance. Lamba (2018) investigated the question of whether or not real-time reporting has an effect on the performance of public financial management. The staff of Kenya Power and Lighting Company (KPLC) from all of the company's branches around the nation were given the questionnaires to fill out and return. It was discovered that a properly functioning IFMIS platform has the capability to monitor transactions on a real-time basis; this is something that is beneficial to the government as a whole owing to the quality of the financial reporting. IFMIS is a financial instrument that, in an ideal world, provides governments with a comprehensive set of capabilities for financial management that can be integrated into one suite of utilizations.

Awino (2018) wanted to find out how deploying IFMIS will affect service delivery in Homa Bay County, which is part of Kenya's Western Region. Twenty Finance Officers,

ten Procurement Officers, ten Internal Audit professionals, and five quality assurance workers participated in the study, which took place in Homa Bay County. A census survey was employed for the study because of the very small population. The information was gathered with the use of a semi-structured questionnaire. Although the null hypothesis was not rejected, it was determined that computerized financial reporting does not significantly affect service delivery in Homa Bay County.

The purpose of the study conducted by Omokonga (2014) was to evaluate the impact that implementing an IFMIS has on the efficiency of public sector companies. The research design that was adopted was descriptive. 1066 individuals who worked for the Ministry of East African Trade, Commerce, and Tourism made up the study's population. The population of interest consisted of ninety-four staff members who were employed in the departments of finance, accounting, procurement, and audit. A method called a census was carried out. In this particular research, a questionnaire served as the instrument for collecting the necessary data. There was a link that may be considered statistically significant between IFMIS and increased transparency in financial reporting.

# 2.5.2 IFMIS Budgeting System and Financial Management

Wangare, Mukanzi, and Maniagi (2016) investigated the impact that IFMIS has on the public financial management practices of the Kakamega County Government. In this study, a descriptive survey research approach was used. The finance department of the County Government of Kakamega was used as the target demographic, and census sampling procedures were used to choose a sample size of fifty participants from that group. The questionnaire method was used in the primary data collection. According to the data, IFMIS was responsible for a large amount (75.9%) of the variation in public

financial management. It was reached the conclusion that the IFMIS plan to budget has a favorable and substantial influence on the public finance management of the county government of Kakamega.

Njonde and Kimanzi (2014) conducted research on the impact that Kenya's Integrated Financial Management Information System (IFMIS) has on the country's public sector's overall performance. The data for the study were collected using a descriptive research approach. The participants in the research were workers from the Nairobi County Government, and there were a total of 150 of them. The parts of the finance department that were used to compile the sample include budgeting, procurement, and internal audits, as well as the sections of the public works department that are in charge of applying the financial systems. According to the findings of the research and the regression analysis, there is a beneficial connection between the efficiency of IFMIS on public financial management and the use of independent variable budgeting.

Dener and Young (2013) performed a study with the goals of learning how IFMIS affects the release of open budget data, proposing ways to increase budget openness, and offering tips for making the most of IFMIS tools for this purpose. Despite the widespread availability of FMIS platforms (176 used by 198 governments), the study found that only 24 nations (12%) had established standards in delivering accessible budget data from credible IFMIS systems.

The influence of the IFMIS on the Kwale County Government's budgetary output was studied by Ndzovu and Ng'ang'a (2019). According to the results, adopting computerized budgeting significantly improved the county's economic standing. An investigation of the

effects of adopting an IFMIS on Kenya's public sector budgeting was the goal of Muita and Karanja's 2018 study. We used a descriptive survey methodology for this one. The research relied mostly on original data obtained from Kenya's national government ministries and several state agencies through a structured questionnaire. These data were the major source of the information used in the study. The results emphasized the many positive effects of IFMIS implementation on the budgeting cycle, including better cash flow management, more inspection of expenditures, and stricter adherence to legal and regulatory frameworks, and the enhancement of timely decision making, all of which led to more budget accountability, efficiency, and effectiveness.

Kibunja (2017) looked at how the Budgetary Process and Financial Performance of the Murang'a County Government in Kenya were related to one another. Primary and secondary data were gathered from audited financial accounts and reports for the fiscal years 2013/2014 and 2014/2015 that were prepared by Murang'a County. This was done so that the research could accomplish its overarching goal. The findings of the study led the researchers to the conclusion that the budgeting process, which includes planning, IFMIS implementation, monitoring, and evaluation, had a connection to and substantially impacted the county government's financial performance.

The purpose of Rangira and Mulyungi's (2017) study was to investigate the impact that implementing an IFMIS had on the level of financial success achieved by Rwandan government entities. The collection of primary and secondary data was accomplished via the use of a descriptive survey. Participants working for the Ministry of Finance made up the bulk of the study's intended audience. The research tools that were used in this study were questionnaires. Periodicals and administrative challenge rulings were secondary

sources of information. According to the findings of the research, IFMIS contributes to improved financial performance. The IFMIS promotes entrepreneurship and self-employment by making high-quality data readily available in a timely manner, so empowering employees and helping them achieve long-term goals. The county's financial management system has also been improved thanks to IFMIS.

In their 2017 study, Michael, Oyewale & Oladosu analyzed the impact of Nigeria's IFMIS (IFMIS) on the performance of the public sector. The parts of the finance department that were used to compile the sample include budgeting, procurement, and internal audits, as well as the sections of the public works department that are in charge of applying the financial systems. Regression study revealed a favorable relationship between the independent variables of financial reporting, budgeting, internal controls, and projects, and the impact of IFMIS on public financial management. The research uncovered this to be the case. Unfortunately, the study did not reveal how the government's efficiency was assessed. The study's scope extended beyond financial reporting and planning to include government initiatives run using IFMIS modules.

Muthoni (2017) aimed to determine whether or not an IFMISwas successful. This study used a descriptive research strategy, and its study population comprised of all 35 Ministry State Departments in Kenya. Standardized questionnaires were sent to study participants in order to collect primary data. The study found that effective financial management in government ministries and agencies was associated with factors like transparency and accountability of the organization, effective budgeting practices, and thorough financial reporting.

Oyinlola et al. (2017) conducted research to determine whether or not the IFMIS has a significant impact on the overall performance of the public sector in Nigeria. The parts of the finance department that were used to compile the sample include budgeting, procurement, and internal audits, as well as the sections of the public works department that are in charge of applying the financial systems. Independent factors were shown to have a favorable relationship with the impact of IFMIS on public financial management. Regression results indicated that budgeting had a role in explaining this association. Implementing IFMIS in public finance was associated with better financial reporting, budgeting, and internal control, as well as better government projects, according to the study's results.

# 2.5.3 IFMIS Revenue System and Financial Management

The influence of the IFMIS on Kwale County Government's budgetary output was studied by Ndzovu and Ng'ang'a (2019). Descriptive research methods were used, and study data was collected through questionnaires filled out by 137 out of 142 employees at the Kwale County Government's finance and economic planning department. Using a process of random stratification, the staff was chosen. According to the findings, the ratio of the county's income to its cash flow had a beneficial and substantial impact on the county's overall financial performance.

From 2012 to 2016, researcher Harelimana (2017) analyzed data to determine how IFMIS's introduction influenced the efficiency of Rwanda's government agencies. Descriptive in approach, this study makes use of unprocessed data. Out of a total sample size of 197, 51 were reachable and participated in the survey. Questionnaires, observations, interviews, and archival research were just a few of the main and secondary sources of information

used. When the data collection was finished, SPSS Version 32 was used to organize and clean the results. Because of this, the overall performance of the organization was improved, and there was a link between the implementation of the IFMIS revenue to cash management module and the functioning of MINECOFIN .976 represents an absolutely perfect connection.

Omar (2017) looked at the effect IFMIS has had on the fiscal health of Kenyan counties, focusing in particular on Garissa County. This study used a descriptive research strategy. The research gathered secondary data on the financial allocations towards enhancement of a variety of IFMIS subsystems from the County finance department. The outcomes of the research indicated that the IFMIS revenue system has a favorable and substantial influence on the county of Garissa's overall financial performance. Spending more on enhancing the IFMIS system has improved the County's financial performance, as measured by the amount of money brought in by the government.

Odoyo, Adero & Chumba (2014) examined the influence of IFMIS on public sector revenue management in their study. In this study, researchers used a descriptive survey approach. Seventy workers and upper managers from the Treasury Department in the Eldoret West District participated in the study. Questionnaires and interview schedules were used as major data collection tools. The research found that IFMIS's reliability and adaptability contributed to efficient revenue management. The results also showed that a trustworthy system is one that gathers data precisely, promptly, thoroughly, and consistently. Additionally, the results showed that safeguarding the IFMIS's underlying architecture against destruction, corruption, unauthorized access, and breaches of confidentiality is necessary for efficient revenue management. The adaptability of the

regional IFMIS architecture may help mitigate cash management risks. The results also demonstrated that the majority of public sector organizations have used a top-down management style, which has prevented IFMIS from being successfully implemented.

Opiyo (2017) used the Kisumu County Government as a case study to investigate the effect that the IFMIS has on cash management in the Kenyan government. The study used primary and secondary sources to get the answers they needed. Seventy-five people who worked in the Kisumu County Government Treasury were surveyed for the study. The percentage of those that responded was 91%. The descriptive analysis approach was used in order to make sense of the data. The research came to the conclusion that the IFMIS implementation method had a favorable impact on revenue management, with 64% of the participants agreeing with this statement.

Kirimi (2015) conducted a case study of Meru County with the purpose of evaluating the impact that automating the process of revenue collecting has on the overall performance of the organization. Descriptive survey research was used for this investigation. There were 13 upper-level managers, 41 lower-level managers, and 102 entry-level managers involved in this study. Using a technique called stratified proportional random sampling, a group of 111 participants was chosen. Participants' responses were collected using a semi-structured, self-administered questionnaire. The online payment method and the automation of revenue collection activities have proven to be very beneficial for the Meru County office, as seen by the statistics. Online response systems and automated revenue collection procedures were shown to greatly increase productivity in the Meru County office.

The purpose of Akoth's (2019) study was to investigate the impact that various methods of tax collecting have on the fiscal health of the Kisumu County Government. A correlational approach to the study design was used. 577 members of staff from the Directorate of Revenue, Department of Finance and Planning in the Kisumu County Government were asked to participate in the research. A sample of 82 persons was selected using the method of stratified random sampling, and out of those 82, there were 67 individuals who responded to the survey. The research made use of both primary and secondary sources of information. The primary data was acquired via the use of a questionnaire that was self-designed, and the secondary data was obtained through the use of a data collecting sheet between the years 2014 and 2018 from the audited financial reports of the Kisumu County Government. The findings of the research indicated that different methods of revenue collection are major determinants of financial success when it comes to electronic revenue collection.

Madegwa and Namusonge (2018) investigated the effect that computerizing the process of collecting revenues has on the overall organizational effectiveness of Trans Nzoia County. This study was conducted in the form of a descriptive survey research design. This study's population included a total of forty-five revenue collectors, seven top-level supervisors, and fifteen accountants. In order to choose the sample of 62 participants, the method of stratified proportional random sampling was used. In order to acquire data from the participants, the research used a questionnaire that was only semi-structured and was self-administered. The quantitative data was subjected to descriptive analysis in SPSS, with the findings shown in the form of frequency tables. Content analysis was used to assess

the qualitative data, and the findings were written up in prose. To further investigate the connections between the study's variables, a regression analysis was conducted. According to the findings of the research, the degree to which the online procedure effects performance in the Trans Nzoia County Government office is significant. Based on the results, the research makes the recommendation that more automation should be added to the process of managing revenue in order to increase efficiency in the process of collecting money.

The purpose of the research conducted by Bonface (2016) in west Pokot County was to determine the impact an IFMIS has on the performance of organizations. The research design for this study was explanatory rather than experimental. Seventy individuals who worked for the West Pokot County Government were selected to participate in the research project. According to the findings of the research, the IFMIS system contributed to the effective and efficient performance of the organization in the following ways: the IFMIS revenue system made a 79% contribution to the company's overall performance.

### 2.5.4 IFMIS Payment System and Financial Management

Njeru (2017) looked at how the Kenyan government's use of IFMIS changed how they handled public funds. The research used a descriptive survey approach, and out of a total population of 140, 103 were randomly selected from five different ministries within the National Governments. The research showed a favorable and statistically significant connection between the IFMIS payment module and government spending oversight. Even if the research findings reveal that more integration of the system modules is needed to increase adequate monitoring controls of public spending, this demonstrates that IFMIS has considerably enhanced the management of public expenditure.

Hawo (2015) intended to investigate the impact that IFMIS has had on the efficiency of financial management in the public sector in Kenya. In this study, a descriptive research approach was used, and the population of interest consisted of 18 ministries that are part of the Kenyan national government. The questionnaire was the main collection method for the data. Past reports, such as annual budget statistics, progress reports, and internal audit reports, were used as secondary sources of information. Quantitative and qualitative methods of analysis were utilized to examine the information gathered. According to the findings of the research, organizational accountability mechanisms as well as payment methods had a favorable and substantial impact on the administration of public sector finances.

Mohamed's (2017) research aimed to measure IFMIS's effect on county governments' bottom lines in Kenya, with a focus on Garissa County. In this study, researcher used a descriptive approach. The study used secondary data collected from the County finance department to determine how much money has been allocated to improve different IFMIS subsystems. This study used a basic regression model. The study's findings suggested that the IFMIS payment module significantly boosted the county of Garissa's economic output. Spending more on enhancing the IFMIS system has improved the County's financial performance, as measured by the amount of money brought in by the government.

Olali (2015) investigated how the adoption of an IFMIS in Kenya influenced the effectiveness of government purchasing. In this study, researchers used a descriptive approach. The target population for this analysis consisted of all 19 Kenyan government departments. In light of the relatively low population, a census was suggested. The primary data for this research came from interviews and questionnaires. Data was gathered from

chief procurement officers and IT managers at the target institutions via the use of interviewer-administered questionnaires. According to the findings of the research, both buy ordering and payment have a good and substantial impact on the country of Kenya's procurement performance.

The purpose of the research conducted by Simiyu and Kaplelach (2013) was to examine the impact that an IFMIS had on the administration of public finances in Kilifi County, Kenya. The research design used in this study was a descriptive one. A count of the 67 county workers working for the county departments that make use of IFMIS was carried out. The nature of this data included both quantitative and qualitative aspects. Secondary information was derived through an audit of yearly information on IFMIS conducted in the work area over the course of three years (2015-2017). This audit included all relevant criteria. According to the findings of the research, accounts payable do not have a major and emphatic influence on the administration of the public finances in Kilifi County.

Alini (2018) looked at the effectiveness of local governments in Uganda by analyzing their integrated financial management system. The local government of Arua was the main target of the probe. This study used a cross-sectional research strategy. Combining quantitative and qualitative data, the researcher used the positivist and phenomenological approaches, often known as the combination strategy. The research included 108 people, 85 of whom were willing to fill out the survey. Most participants agreed that the government is better at keeping tabs on its financial dealings, as shown by the poll results. According to the findings of the research, both the payment module and buy ordering have a large and favorable impact on the overall performance of employees in state commissions.

### 2.5.5 Organizational Resources, IFMIS and Financial Management.

Mohamud (2018) aimed to find evidence that resources have an effect on IFMIS deployment. Sixty-five senior and mid-level managers and technical professionals from the Ministry of Finance, the Puntland bank, and the Accountant General Office were the intended audience. The research was purely descriptive. The Finance Ministry, the Accountant General's Office, and the State Bank of Puntland were evaluated as they pertain to IFMIS's implementation. Sixty-five employees from the chosen institutions provided responses to standardized questionnaires that were designed to gather data on all of the study's foci. The study found that IFMIS deployment in Puntland government agencies was unaffected by the region's lack of technical expertise. It was also found that the quantity of project financing or funding was associated to the success of implementing the IFMIS in public institutions. The report, however, did not detail how technical capability was assessed or how much of the project budget really goes toward actual execution.

Maina (2019) conducted research in Meru County with the intention of determining the factors that influence the application of IFMIS in the national government agencies. A census was carried out in Meru County, using a target population consisting of 68 individuals who were employed by various sectors of the national government. According to the findings of the research, the government has developed appropriate policies in respect to the implementation of IFMIS; nevertheless, the study also found that the existence of rules alone is not sufficient to permit its implementation. This was shown through hypothesis testing, which revealed that management support, technical infrastructure, and competent people are all essential components for the successful

adoption of the IFMIS system in national government departments. Management support was shown to be the most crucial component. The findings of the research indicated that policies that do not include adequate implementation interventions do not promote IFMIS implementation effectively.

Ogachi and Muturi (2016) wanted to investigate the variables that influence the deployment of integrated financial management information systems (IFMIS) in county governments in Kenya, specifically in the counties of Kisii, Migori, Homabay, Kericho, and Nyamira. This research relied only on qualitative methods for its approach. The researchers used a method called purposive sampling to choose the participants for their study from a total population of 150 workers drawn from five counties. Interviews with real people, facilitated by questionnaires and given to a representative cross-section of the population were used to collect the main data for this study. According to the results of this study, most counties do not use individualized approaches to IFMIS deployment; IT infrastructure for IFMIS deployment was in place; no consistent IFMIS training programs existed; there was little incentive to retain competent staff; the political establishment did not back IFMIS's introduction; and counties did not invest enough time or money into IFMIS's rollout.

Njihia and Makori's (2015) study looked at the National Treasury as a case study to determine what variables affect the efficiency of the IFMIS in Kenya's public sector. The research used a descriptive survey approach for its intended participants, who consisted of 800 government workers working in the National Treasury. The number of participants in the sample was eighty, and a stratified sampling method was utilized to gather data. Research questionnaires were used as the primary instrument for data collection.

According to the findings of the investigation, the ICT Infrastructure had the most significant impact on the positive aspects of the organization's IFMIS Performance. In addition, the capability of the organization's human resources, the implementation plan, and the government policy all have a favorable correlation to the success of IFMIS.

Chepkwony and Okello (2016) examined the determinants of effective adoption of procure-to-pay system in County Government of Bomet. The study population comprised of 57 employees working in County Information Communication Technology, procurement and finance office and the county director of procurement. Owing to the limited number of employees in the three departments, all the employees were involved in the study making the study a census survey. The study used structured questionnaires in data collection. The study revealed that ICT infrastructure, staff training and management support are all critical determinants of procure-to-pay system.

Ndaiga (2016) examined the factors that led Mombasa County Government, one of Kenya's 47 Counties, to implement IFMIS. The research used a descriptive survey methodology (quantitative techniques) to collect feedback from those who were directly engaged in the adoption process. Six hundred and six people met the study's inclusion criteria. A total of 68 participants were able to fill out the survey after a sample size of 86 was selected based on the findings of Yamane (1967). Poor network infrastructure and a lack of suitable hardware equipment were shown to have a detrimental effect on IFMIS adoption, despite the fact that both were necessary for the system's smooth and flawless operation. Lastly, our findings revealed that the stakeholders were not intensely involved and this affected their attitude towards the adoption of a new system.

Mutongwa and Abeka (2017) aimed at assessing the factors affecting IFMIS application in Kenyan public sector. Data was adopted from a thesis research, Sample size of 300 participants, which consisted of employees from public sector. Data was analyzed by Structure Equation Modeling. Findings indicated an overall low significance on LOIT, with strong association by MgtS and TOS Results on three Split model Path diagrams indicated that MgtS and LOIT have slightly strong association power (45%) while TOS and MgtS have a weak association power 25%. Results for Correlation of TOS,MgtS and LOIT indicate that MgtS and LOIT registered a very strong Correlation 97.5% indicating high association power. Its clear that factors MgtS and LOIT combine together to influence the IFMIS use. While TOS and MgtS posted a Correlation 0.841(84.1%), which was weaker compared to that of MgtS and LOIT hence low association power.

## 2.6 Critique of Relevant Literature

Opiyo (2017) indicated that that the efficiency of the IFMIS has had a positive effect on financial management. However, financial management was measured using cash management practices. Further, the study was purely descriptive and therefore the results cannot be generalized to other country governments in the republic. Bonface (2016) found that the IFMIS system increased the efficiency and effectiveness of the organization's performance because of the following. Cash management aided in the organization's performance. Despite promising approach, this research only provided limited descriptive data and no inferential analyses. No suggestions for better cash management were offered in the research.

Rangira and Mulyungi (2017) indicated that IFMIS has significant financial performance government institutions in Rwanda. The study was mixed up from the abstract to

Government and this leaves a significant gap on how the study was carried out. Further, the study locale was Ministry of Finance Rwanda. However, the conclusion and recommendations had an element of county government, were these two studies in one?

According to research by Wangari and Jagongo (2015), IFMIS's internal control system has a significant impact on SACCOs' credit ratings in Nyeri. The study was conducted in financial institutions and therefore it was difficult to be applied to public sector. Secondly, the sample size of 30 was less than 50 which is recommended for social science study as per (Sekeran, 2005). Lastly, the study did not indicate how primary and secondary data was analyzed and combined so as to achieve comprehensive conclusion.

Success factors for IFMIS implementation on the budgetary cycle were highlighted by Muita and Karanja (2018). These factors included improved budget accountability, efficiency, and effectiveness; increased scrutiny of expenditures; increased adherence to legal and regulatory frameworks; and faster decision making. The study did not examine effect of IFMIS budgeting system on performance but rather success factors which was interpreted as budgeting process performance. The study did not indicate which public sector organizations or institutions were sampled and why. The use of secondary data as benchmarking was not evident in the study though it was indicated in the methodology. The number of ministry sampled and participants was also not indicated.

According to Kibunja (2017), the county the government's revenue generation was heavily impacted by the budgeting process, which included planning, IFMIS execution, monitoring, and assessment. The study methodological approach was weak as it did not

indicate which design guided the study therefore; the conclusion cannot be conclusive with finality. The study confined itself to IFMIS implementation of budgetary system on performance implying that other aspects of IFMIs budgetary system such as formulation were omitted. Mwaim, Mbiti and Kiama (2017) found that IFMIS connectivity affect budget implementation. There were also inadequacies in sampling procedure as the study did indicate the number of sampled from each county. The study failed to relate IFMIS budgetary implementation and performance of the selected counties.

### 2.7 Summary of Research Gaps

According to Opiyo (2017), the IFMIS has improved the effectiveness of cash management. The study did not find any connection between the IFMIS cash management module and county government efficiency or effectiveness. Furthermore, the research was descriptive only, therefore the findings cannot be extrapolated to other republican county administrations. Bonface (2016) found that the IFMIS system increased the efficiency and effectiveness of the organization's performance because of the following. Cash management aided in the organization's performance. Despite promising approach, this research only provided limited descriptive data and no inferential analyses. No suggestions for better cash management were offered in the research.

Rangira and Mulyungi (2017) indicated that to determine using IFMIS has significant financial performance government institutions in Rwanda. The study was mixed up from the abstract to conclusion. The study did not indicate which ministry members were sampled in Rwanda Government and this leaves a significant gap on how the study was carried out. Further, the study locale was Ministry of Finance Rwanda however, the conclusion and recommendations had an element of county government, were these two studies in one? According to Chado (2015), financial reporting systems have a notable and beneficial impact on public sector financial management.

Success factors for IFMIS implementation on the budgetary cycle were highlighted by Muita and Karanja (2018). These factors included improved budget accountability, efficiency, and effectiveness; increased scrutiny of expenditures; increased adherence to legal and regulatory frameworks; and faster decision making. The study did not examine effect of IFMIS budgeting system on performance but rather success factors which were

interpreted as budgeting process performance. The study did not indicate which public sector organizations or institutions were sampled and why. The use of secondary data as benchmarking was not evident in the study though it was indicated in the methodology. The number of ministry sampled and participants were also not indicated.

Kibunja (2017) concluded that the budgetary process involving planning, IFMIS implementation, monitoring and evaluation had a relationship and significantly influenced financial performance of the county government. The study methodological approach was weak as it did not indicate which design guided the study therefore; the conclusion could not be made with finality. The study confined itself to IFMIS implementation of budgetary system on performance implying that other aspects of IFMIs budgetary system such as formulation were omitted. Mwaim, Mbiti and Kiama (2017) found that IFMIS connectivity affect budget implementation. There were also inadequacies in sampling procedure as the study did indicate the number of sampled from each county. The study failed to relate IFMIS budgetary implementation and performance of the selected counties.

**Table 2.1: Summary of Research Gaps** 

Researcher(s)	Focus of Study	Methodology	Findings	<b>Knowledge Gaps</b>	How Current Study addressed the Gaps
Bonface (2016)	Analysis of the impact of an IFMIS on the performance of organizations in west Pokot County	this study was explanatory rather than experimental. Seventy individuals who worked for the West Pokot County Government were	increased the effectiveness of organizational performance: 79% of the organization's success was attributable to effective cash management, which was followed by budgeting, which contributed about 80%, reporting, which contributed 77%, and effective procurement,	the research was only descriptive in nature, the findings cannot be extrapolated to the governments of the other countries that make up the	the moderating influence of organizational resources on the link between IFMIS and financial performance. It did this by using inferential analytic
Rangira and Mulyungi (2017)	The impact of implementing an IFMIS on the level of financial performance shown by Rwandan government agencies	primary and secondary data was accomplished via the use of a descriptive survey. Participants working for the Ministry of Finance made up the bulk of the study's intended audience. The research tools that were employed were mostly questionnaires. Periodicals and administrative	IFMIS guarantees the timely availability of high-quality information, encourages the empowerment of workers and long-term objectives, and supports intervention targeted at promoting entrepreneurship and self-employment. Additionally,	indicate which ministry members were sampled in Rwanda Government and this leaves a significant gap on how the study was carried out. Further, the study locale was Ministry of Finance Rwanda however, the conclusion and recommendations	

		secondary sources of information.	financial administration in the county.	county government, is this two studies in one? The study didn't use any moderating variable	
Mohamed (2017)	Impact of the IFMIS on the Economic Performance of County Governments in Kenya, with a Particular Focus on Garissa County	2	The impact of IFMIS, both good and substantial, can be seen in Garissa County's overall financial performance. An increase in the amount of money spent on enhancing the IFMIS brought in an improvement in the County's overall financial performance, which can be measured by the amount of money brought in by the County as a whole.	The study focused only in IFMIS budgetary allocation towards total revenue collected in the county.  The study didn't use any moderating variable	Path analysis was used so that a determination could be made on the moderating influence of organizational resources.
Awino (2018)	The influence that implementing IFMIS has had on the provision of services in HomaBay County in the Western Region.	Secondary data	Automated Revenue collection, automated budgeting process, and automated financial reporting will not significantly affect service delivery in Homa Bay County. The alternative hypothesis was presented, and the null hypothesis was rejected.	of payment system on financial management The study focused on service delivery	reporting, payment, and

Michael,			Regression study revealed a	•	<u> </u>
Oyewale and	contribution to the	10 Procurement		indicate how	so that a determination
Oladosu (2017)	improved functioning of	Officers, 10	between the independent	-	could be made on the
	Nigeria's public sector	Employees of the	variables of financial	public sector was	moderating influence of
		Internal Audit	reporting, budgeting,	measured. The	organizational resources.
		Department, and 5	internal controls, and	study included	
		Employees of Quality	projects, and the impact of	government projects	
		Assurance were	IFMIS on public financial	besides financial	
		Sought After. Because	management. The research	reporting and	
		of the very modest size	uncovered this to be the	budgeting as part of	
		of the population, the	case.	IFMIS modules.	
		research used a census		The study did not	
		survey. A		use any moderating	
		questionnaire with a		variable	
		semi-structured format			
		was used in the data			
		collection process.			
Olali (2015)	The influence that the	The areas of the	The study's results suggest	The study used	The research focused on
	implementation of an	finance department	that budgeting, AR/AP, AP	procurement	Kenya's four different
	IFMIS has had on the	that were used to	management, PO/C	performance as	county administrations.
	efficiency of	compile the sample	management, and cash	dependent variable	•
	governmental	include budgeting,	management all play	The study focused	
	procurement in Kenya.	procurement, and	important roles in Kenya's	on national	
	ı ,	internal audits. The	relatively high level of	government	
		portions of the public	procurement effectiveness.	ministries.	
		works department that	1	The study did not	
		are responsible for		use any moderating	
		applying the financial		variable	
		systems were also			
		included.			
Simiyu and	The influence of the		The study discovered that	The study collected	Path analysis was used
Kaplelach	IFMIS on the	focuses on description.	budgeting frameworks, AR	-	so that a determination
(2013)	administration of the	Kenya has a total of 19		•	could be made on the
		<u> </u>	,		

	county's public finances	government ministries.		-	moderating influence of
	in Kenya's Kilifi County.	In light of the relatively low population, a census was suggested. Interviewer-administered questionnaires were used to gather primary data from chief procurement officers and IT managers working at the target institutions.	impacted public finance management in Kilifi County.	interview schedules and from secondary sources, however, the presentation was done for questionnaire only hence there was no triangulation  The study didn't use any moderating variable	organizational resources.
Njonde and Kimanzi (2012)	The impact of the IFMIS system on the overall performance of the public sector, particularly in Nairobi	Design methodology for descriptive	The relapse analysis found a positive correlation between the independent variables of financial announcements, budgeting, internal controls, and projects, and the appropriateness of IFMIS on open budgetary administration. The investigation uncovered this fact.	explicitly define performance of	different features of IFMIS, in addition to the revenue and budgeting
Cherono (2016)	The Impact That IFMISs Have Had, And Will Continue To Have, On The Accounting Functions Of Kenyan Government Agencies	people who work for	According to the findings, the study's independent variables—the trustworthiness of the IFMIS system, the competence of the staff, and	accounting	Path analysis was used so that a determination could be made on the moderating influence of organizational resources.

			information and communication technology—contributed to the observed changes in the dependent variable, which was the accounting operations of government agencies in Kenya.	IFMIS variables such as staff competency, ICT infrastructure was used as dependent variables. The study didn't use any moderating variable	
Alini (2018)	The implementation of integrated financial management systems and their success in Uganda's local governments Arua District Local Government will be the primary topic of this article.	included both quantitative and qualitative aspects. Secondary for a total of three years, starting in 2015 and ending in	government keeps better tabs on its financial		This research looked at IFMIS modules such as budgeting, collecting payments, generating income, and reporting financial data.
Hawo (2015)	the impact that IFMIS has had on the efficiency of financial management in Kenya's public sector		The study found that internal control systems, financial reporting systems, cash management and budgeting systems, and organizational accountability systems all significantly influenced the efficiency and effectiveness of public sector financial management.		The handling of finances served as the dependent variable in this study.
Omokonga (2014)	The impact of implementing an IFMIS	In all, 150 delegates from the Nairobi	The use of IFMIS was	•	Path analysis was used so that a determination

	on the work done by organizations in the public sector	<u> </u>	with increased transparency in financial reporting. This connection was analyzed quantitatively.	IFMIS on financial reporting and better control/governance. The study didn't use any moderating variable	could be made on the moderating influence of organizational resources.
Muthoni (2017)	The Efficiency of the Integrated Information and Management System for the Financial Sector	descriptive research approach, and it	The levels of control and governance were observed to rise significantly in correlation with the use of IFMIS.	The study was conducted in only one ministry of national government.  The conceptualization of financial reporting should entail transparency and accountability.  The study didn't use any moderating variable	The quality of financial management was evaluated based on timely payments, improved budget absorption rate, achieved revenue targets, and audit report quality. The study's primary emphasis was on financial management.
Wamalwa (2018)	The influence that Kenya's IFMIS has had on the country's public sector's approach to financial management		Financial management in government agencies was shown to be positively affected by improvements in cash management and budgeting systems, financial reporting systems, organizational openness and accountability, and financial management.	The study did not identify specific modules that influence financial	Path analysis was utilized to determine the moderating influence that organizational resources had on the relationships.
Njeru (2017)	The impact that the deployment of IFMIS has on the government of	research approach was	The study found that the national treasury's financial		The financial management of county governments in Kenya

	Kenya's ability to effectively manage public expenditures.	investigation.  Quantitative and qualitative information were both taken into consideration by the researcher. 108 participants made up the study's population, and 85 of them agreed to take part in the survey.	improved significantly with the introduction of an IFMIS.	aspects of financial management at county level The study didn't use any moderating variable	served as the dependent variable for the research, which concentrated on the topic at hand.
Oyinlola (2017)	Evaluation of the IFMIS's contribution to the improved functioning of Nigeria's public sector	Conduct research to provide a descriptive account of Kenya's 18 national government ministries.	The study concludes that the use of IFMIS apps is positively correlated with the administration of public funds.	The study relied on secondary data, however, there was no detailed section on how study variables were operationalized.  The study didn't use any moderating variable	Path analysis was utilized to determine the moderating influence that organizational resources had on the relationships.
Omar (2017)	Impact of the IFMIS on the Economic Performance of County Governments in Kenya, with a Particular Focus on Garissa County	The questionnaire was the main collection method for the data.	Financial reporting, budgeting, internal control, and government activities were all shown to benefit from the incorporation of IFMIS into public sector finance.	Financial performance was based on county expenditure toward IFMIS versus the collected revenue. The study didn't use any moderating variable	The outcomes of the research and the presentation concentrated on the data obtained from the questionnaire.
Ingabire, Olweny and Shukla (2017)	The impact of implementing an IFMIS on the fiscal health of	Secondary data	The findings indicate that IFMIS has a positive and sizable effect on the	The study did not reveal which modules of IFMIS	Path analysis was utilized to determine the moderating influence

	Rwanda's public		economic status of Garissa	1 2	that organizational
	institutions		County.	financial performance The study did not focus on devolved system of government. The study didn't use any moderating variable	resources had on the relationships.
Ndzovu and Ng'ang'a (2019)	The impact of Kwale County Government's IFMIS on the county's overall financial performance	In the research, both quantitative and qualitative approaches were used to analyzing the collected data.	The IFMIS software has been shown to improve business results. IFMIS promotes worker empowerment, makes high-quality information readily available, and seeks to intervene in order to boost chances for self-employment and small business ownership.	The focused only on budgeting and financial reporting excluding payment and revenue system. The metrication of financial	management was evaluated based on timely payments, improved budget absorption rate, achieved revenue targets, and audit report quality. The study's primary emphasis was on
Muiruri (2018)	The influence that an IFMIS has on the efficient administration of public monies within county governments	for descriptive research 1066 individuals who worked for the Ministry of East African Trade, Commerce, and	The study concluded that the county's financial performance improved significantly after adopting automated computerized budgeting, cash management, electronic procurement, and financial reporting.		5

Wangare, Mukanzi and Maniagi (2016)	The influence that IFMIS has had on the public financial management of the Kakamega County Government.	using a census. In the	increased, efficiency has been increased, public financial responsibility has risen, the quality of financial reports has increased, the accuracy of	for IFMIS plan to budget to account more than 75.0% of public finance management.  The study was conducted in one of the proposed sampled counties.  The study didn't use any moderating	The impact of IFMIS's revenue, budget, payment, and financial reporting system on financial management was investigated in this research.
Makhaya and Maniagi (2020)	The effect of internal control systems on the performance of the County Government of Kakamega using the IFMIS	Research of a descriptive kind conducted with a specified population in Kenya consisting of 35 Ministry State Departments. For the purpose of the research, primary data was gathered by the administration of	The analysis found that 75.9% of the variance in public financial	•	Path analysis was utilized to determine the moderating influence that organizational resources had on the relationships.

standardized questionnaires.

# 2.8 Conceptual Framework

The conceptual frame work for this study shows the relationship between IFMIS, organizational resources and financial management as shown in Figure 1. IFMIS was used as independent variable and it was conceptualized as plan to budget, procure to pay, record to report and revenue to cash. Organizational resources used as a moderating variable was conceptualized as financial resources, human resources, and internal control system and regulations. Financial management was measured using fund absorption rate, revenue targets and Nature of audits reports.

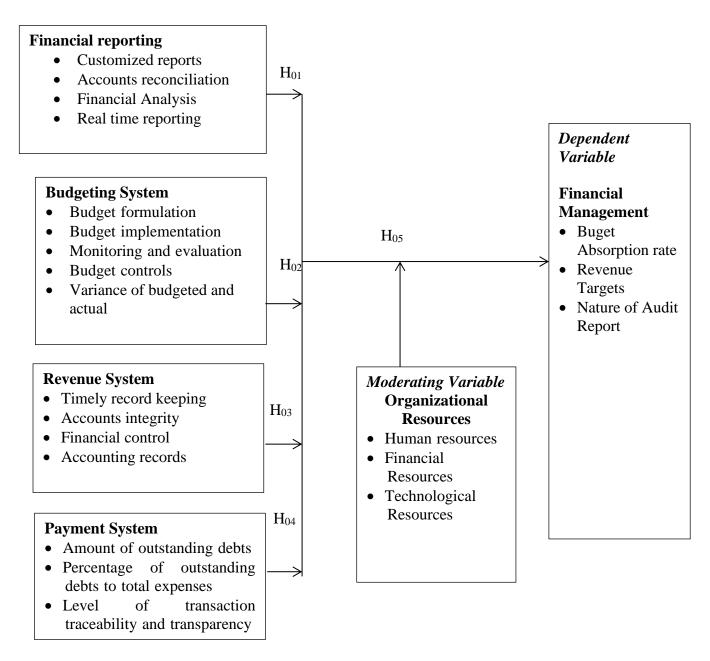


Figure 1: Conceptual Framework Source: Developed from the Reviewed Literature by Author (2020)

### 2.8.1 Operationalization of Variables

The following table shows how the study variables were measured, measurement scale to be used and the corresponding questions in the questionnaire.

**Table 2. 2: Operationalization of Variables** 

Variable	Variable Type	Indicators/Operationalization	Section in questionnaire
IFMIS	Independent	Customized reports	2
Financial		Accounts reconciliation	
reporting		Financial Analysis	
		Real time reporting	_
IFMIS	Independent	Budget formulation	3
Budgeting		Budget implementation	
		Monitoring and evaluation	
		Budget controls	
		Variance of budgeted and actual	
IFMIS	Independent	Auto-reconciliation of revenue	4
Revenue		Revenue Generation	
		Revenue Collection	
		Forecasted cash inflows and outflows	
IFMIS	Independent	Amount of outstanding debts	5
Payment		Percentage of outstanding debts to total expenses	
		Level of transaction	
		traceability and transparency	
		Receipts matched to invoices	
Organizational	Moderating	Human resources	6
Resources		Financial Resources	
Financial	Dependent	Budget Absorption rate	7
Management	1	Revenue Targets	
S		Nature Audit Report	
		Efficiency of payments	

Source: Author (2020)

#### **CHAPTER THREE**

#### RESEARCH METHODOLOGY

#### 3.1 Introduction

This chapter discusses the research design, target population, Sampling and sample size, data collection methods, data collection instruments and data analysis method that was used in the study.

### 3.2 Research Philosophy

The positivist approach to research that served as the basis for this study. A research philosophy is an approach to data collection, analysis, and application. It has connections to theories of knowledge and being. Auguste Comte, in the 19th century, rejected metaphysics and asserted that only scientific knowledge can disclose truth about reality, ushering in the era of positivism as a philosophical paradigm. Hume's comprehensive view of being and the relationships between existents and their manner of being was embraced by positivism as its philosophical ontology. It focuses on the characteristics of things that are inherent to their make-up and existence. Content that may really be used must be verified by human editors. Beliefs on the nature of reality are called "ontologies." Based on his analysis, Hume came to the conclusion that the world is well-structured and predictable.

Positivism also incorporated Descartes's notion of knowing, or epistemology. Knowledge, he thought, should be acquired by rational thought. Epistemology elucidates the connection between the researcher and established facts. Positivists believe that occurrences can be seen objectively and explained by logical analysis, whereas epistemologists wonder how we came to know what we know. Focusing on such minute scales allows for exploration

that is external complexity-free. The scientific approach is used to draw results from which policy recommendations are drawn (Descartes, 1998).

When doing research, researchers that adhere to the positivist school of thought presume a process that is regulated by choosing a study subject, research hypotheses, and an appropriate methodology. One is able to use statistical methods to the testing of hypotheses and analyze research data gathered via the use of quantitative research methodologies if they subscribe to positivism. Positivists are those who think that reality is consistent and that it can, as a result, be seen from an objective point of view. Positivists say that a phenomena can be isolated, and observations can be repeated (Creswell, 2006). In order to do this, reality is manipulated by the application of different levels of an independent variable (Wilfred, 2006). The goal is to discover patterns and establish connections between the many components that make up the social environment.

## 3.3 Research Design

The study used descriptive and causal research designs. Descriptive design entails describing a variable or phenomena. Descriptive design is a valid option since it represents the state of play with regard to the study's variables and allows for more straightforward data collection on the phenomenon's current state. It is also possible to collect a large amount of data for detailed analysis since the study covered participants from five county governments in Kenya.

The study also used a causal research approach, which looks for underlying causes and effects. It is clear that there is a connection between the dependent and independent variables in this study's design. A symbol or idea that can be predicted and is the result of

an experimental variable is called a variable quantity (Baskerville & Pries-Heje, 2014). Consistent with Creswell and Creswell (2017), the causal research design is employed to analyze the extent to which variable changes are reflected in alteration within the other variable. The primary goal of a causal research design is to establish a chain of causation between the research problem's causes and variables. Conversely, it seeks to provide light on the current situation by testing theories that have been previously formed (Bowen, Rose, & Pilkington, 2017).

Table 3. 1: Research Designs

Specific Objective	Research Design
Establish the effect of IFMIS financial reporting system on financial management in Kenya's county governments	Descriptive, causal research design
Establish the effect of IFMIS budgeting system on financial management in Kenya's county governments	Descriptive, causal research design
Establish the effect of IFMIS revenue system on financial management in Kenya's county governments	Descriptive, causal research design
Establish the effect of IFMIS payment system on financial management in Kenya's county governments	Descriptive, causal research design
Establish the joint effect of IFMIS financial reporting, budgeting, revenue and payment systems on financial management in Kenya's county governments	Causal Research Design
Determine the moderating effect of organizational resources on the relationship between IFMIS and financial management in Kenya's county governments	Causal Research Design

## 3.4 Study Area

The investigation was conducted in the counties that are located in Western Kenya. The western part of Kenya contains the counties that are the focus of this initiative. There are a

total of five counties in this area: Busia County, Bungoma County, Kakamega County, and Trans Nzoia County. Vihiga County is also a part of this region. According to the research that has been done, poor financial management practices could be a general across all of Kenya's counties.

The region lies between latitudes and longitudes 0°30'N: 34°30'E. These counties share a boundary with Trans Nzoia County to the north, Nandi County to the east, Kisumu County to the south, and Siaya County to the west in Kenya. According to estimates provided by the Ministry of Development and Population (2016), the County has a total area of 531.0 km2 and is home to 4.334 million people. A significant amount of sugar is produced in Bungoma County, which is also home to a number of small-holder sugar mills in addition to the biggest sugar factory in the nation. In addition to pearl millet and sorghum, maize is also cultivated for the purpose of sustenance. Both dairy farming and the rearing of poultry are quite common practices in this region. There is a modest but significant tourism circuit that revolves on the circumcision rites that take place every two years. Agriculture in Kakamega County includes both subsistence and cash crop production, with sugar cane serving as the county's favored crop for medium- to large-scale production. Two sugar mills may be found within the county. The Kakamega Forest is also the focus of a significant portion of the tourist sector in the region. Flooding is a constant problem in Busia County as a result of the Nzoia River, although fishing on Lake Victoria is the county's primary source of revenue. A little amount of farming for commercial purposes is also done, mostly of sugar cane. The cultivation of cassava for subsistence purposes is widespread. Tea is a major industry in Vihiga County, which also has the highest population density of any rural county in Kenya. The mountainous county is home to a substantial amount of quarrying, which is done for the purpose of obtaining building materials. In addition, dairy farming is a significant industry in the region of Vihiga. The western region of Kenya is home to a number of sizable enterprises, among them are four sugar manufacturing facilities. The most important of them is Mumias Sugar, which has its headquarters in Mumias, which is located to the west of Kakamega. This plant is an economic success story since it produces the sugar brand that has the dominating market share in Kenya. Despite this, living conditions are typically poor, and the majority of people of the County do not have access to basic social facilities like as running water and electricity (KNBS, 2021; MoD, 2021).

Even though they have received a significant amount of money from the treasury, the counties in western Kenya are not as developed as those in other parts of Kenya, making them an appropriate subject for the research. It's notable for the fact that its members come from a wide range of political perspectives and that almost every major political party is represented among them. The counties' middle-of-the-road levels of development are a natural reflection of the development platforms upon which each county's independent and, hence, decentralized system of government was founded. All of the Counties have problems with collecting taxes and spending the money they get from the federal government, which points to issues with county administration and budgeting. As a result, the counties constitute a useful case study for Kenyan counties.

### 3.5 Target population

The term "target population" was used by Lavrakas (2008) to describe a set of components that might range from finite to infinite in size. A person, group, company, customer database, or quantity of qualitative data is all examples of population elements, as defined

by Cooper and Schindler (2003). The population of this research consisted of 302 workers, including all accountants and staff linked to finance who worked in the Treasury Department of the County Governments of Kakamega, Bungoma, Busia, and Vihiga. These included 42 Revenue Officers, 44 Procurement Officers, 46 Internal Auditors, 89 Accountants, and 87 Finance Officers from the Treasury department; all of these individuals are users of IFMIS.

**Table 3.2: Target Population** 

Category of Staff	Kakamega	Bungoma	Busia	Vihiga	Trans	Total
					Nzoia	
Procurement officers	13	10	7	5	9	44
Internal auditors	14	11	7	6	8	46
Accountants	22	21	15	13	18	89
Finance officers	24	19	15	12	17	87
Revenue officers	12	10	7	5	8	42
Total	<b>79</b>	71	51	41	60	302

Source: County Governments Human Resource, 2020

### 3.6 Sampling Technique and Sample Size

Ngechu (2004) emphasizes the significance of constructing a sampling frame in order to pick a sample that is reflective of the whole. To compile a sample, the target population was divided into subgroups, and the appropriate number of subjects, participants, elements, and businesses were chosen from those subgroups. Methods of sampling that were both stratified and proportionately random were used in order to choose the sample. According to Kothari (2004), the stratified and proportional random sampling approach gave estimates of general population parameters with better accuracy. Additionally, this technique guaranteed a more representative sample that was obtained from a population

that was largely similar in nature. The objective of stratification is to lessen the impact of standard error by exerting some influence on variance. The participants were divided into five different categories for the purpose of this study: procurement officials, internal auditors, accountants, finance officers, and revenue officers.

Using a method called simple random sampling, the researchers chose 172 participants from each of the study's strata out of a total pool of 302. Because of this, the accuracy of any estimating methodologies that are used is improved. According to Yamane (1973), the following formula was employed in the research to arrive at a sample size of 172. This formula was utilized to get at the results of the study.

$$n = \frac{N}{1 + Ne^2}$$

Where:

n is the desired sample size

N is the Target population

e is the standard error

When we substitute the values as per the formula

$$\frac{302}{1+302(0.05)_2} = 172.0797721$$

This translates to 172 participants

The selection was as follows:

Table 3.3: Sample Size

Category of	Kakameg	Bungoma	Busia	Vihiga	Trans	Tota
Staff	a				Nzoia	1
Procuremen		(10/302)*17				_
t officers	(13/302)*172	2	(7/302)*172	(5/302)*172	(9/302)*172	
	=7	=6	=4	=3	=5	25
Internal		(11/302)*17				
auditors	(14/302)*172	2	(7/302)*172	(6/302)*172	(8/302)*172	
	=8	=6	=4	=3	=5	26
Accountants		(21/302)*17	(15/302)*17	(13/302)*17	(18/302)*17	
	(22/302)*172	2	2	2	2	
	=14	=11	=8	=7	=10	50
Finance		(19/302)*17	(15/302)*17	(12/302)*17	(17/302)*17	
officers	(24/302)*172	2	2	2	2	
01110015	=12	=10	=8	6	=10	46
Revenue		(10/302)*17				
officers	(12/302)*172	2	(7/302)*172	(5/302)*172	(8/302)*172	
	=7	=6	=4	=3	=5	25
Total	50	39	28	22	35	172

**Source: Author Computation (2020)** 

### 3.7 Data collection Instruments and Procedures

## 3.7.1 Types and Sources of Data

According to Kothari (2004), the term "data" refers to any fact or piece of information that is analyzed and put to use in order to determine anything or make a choice. Primary and secondary data are the two categories under which information falls. The information that was used in the course of carrying out this research came mostly from two different sources. These references came from both primary and secondary sources.

#### 3.7.2 Instrumentation

This research relied on original sources of data. The use of questionnaires allowed for the collection of the data. Because it was expected that participants in the research would be literate and fairly capable of providing appropriate responses to the questions posed, the questionnaire was the method of choice in this study. There were four sections to the

questionnaire. Part 1 included questions designed to elicit broad demographic information from participants; Part 2 included closed-ended questions designed to elicit information on specific independent variables of the study; Part 3 focused on moderating variables; and Part 4 sought data on the financial management of County governments Fifth (Strongly) concur, fourth (Agree), trio (Undecided), two (Disagree), and one (Strongly) disagreement responses were collected across all variables using a 5-point Likert-type scales.

### 3.7.3 Data Collection procedures

A questionnaire that the participants filled out on their own was used to acquire quantitative data for this investigation. The respondent was advised by the researcher that the instruments that were being administered were only being used for research reasons, and that the researcher would keep the respondent's replies private and confidential. The researcher started by obtaining an introduction letter from the university in order to gather data from the participants who were randomly picked, and then he or she got a study license letter from NACOSTI. The Drop and Pick approach included four trained research assistants delivering questionnaires to participants, having participants fill them out, and then collecting the completed surveys at a later time. The surveys were stored individually in accordance with their respective counties.

### 3.8 Pilot Study

The validity of the data gathering procedures was determined by a pilot study. According to Orodho (2005), the pilot study enabled the researcher to establish the accuracy and dependability of the instruments. Kisumu County, in the western part of the country, was chosen as a pilot site because it is representative of the kind of county used in the research. For the pilot portion of the project, there were 17 individuals recruited from the County

Government of Kisumu. They consisted of 2 Revenue officers, 5 Finance officers, 2 Procurement officers, 3 Internal Auditors, and 5 Accountants. In addition, there were 5 Accountants. According to Isaac and Michael (1995), the recommended number of sample responses for a pilot research is between 10 and 30 percent of the whole population being studied. The researcher was able to discover questions in the questionnaire that were poorly written thanks to the pilot test, which also allowed the researcher eliminate ambiguities, simplify the questions, and further refine questions for simpler coding.

### 3.8.1 Validity of Research Instrument

An instrument's validity is determined by how well it measures the construct for which it was designed (Burton and Mazerolle, 2011; Bolliger and Inam, 2012). The term "validity" is used to describe how well a certain measuring device provides accurate results for the variables of interest. According to Aila and Ombok (2015), "validity" describes the extent to which a theoretical concept, idea, or action has been implemented in practice. Construct validity and content validity were the two aspects of the validity of the research instrument that were investigated in this study. The content validity of the questionnaire was evaluated based on how well it represented the goals of the research. This was done by determining the degree to which the objectives were reflected in the responses to the questionnaire. When constructing the study instrument, great care was taken to guarantee that it would accurately measure and gather the data that it was intended to collect. The report's content was informed by the professional judgment of supervisors and other experts offered by the School of Business and Economics at Masinde Muliro University of Science and Technology. Factor analysis and confirmatory factor analysis were used to test the instrument's construct validity, which is the extent to which it accurately assesses the

phenomena under study. For large sample sizes (n>50), this strategy is recommended (Aila and Ombok, 2015).

Convergent validity was examined by the use of Average Variance Extracted (AVE) in this research. According to Barclay et al. (1995), in order for the constructions to be considered reasonable, the threshold value of AVE has to be more than 0.5. According to the information in Appendix II, the values were more than 0.5. The idea of discriminant validity examines whether or not one concept in a research instrument is distinct from other concepts that are closely connected to it. In this study, we used cross loading and Fornell and Larcker's (1981) criteria, two methods for assessing discriminant validity that they created. Fornell and Larcker's (1981) criterion compares the square root of AVE to construct correlations, but a cross-loading approach to evaluating discriminant validity demands that indicator loadings be higher on the target construct than on any other construct. For cross-loading to be a meaningful measure of discriminant validity, indicator loadings must be relatively high on the target construct.

### 3.8.2 Reliability of Research Instrument

According to an explanation provided by Mugenda & Mugenda (2003), reliability is a measurement of the degree to which a research instrument produces consistent outcomes or data after approved trials. The degree to which a certain method consistently produces the same outcomes over a range of separate instances is referred to as the reliability of the measures. The researcher gives the questionnaire to the pilot group, who he or she then uses to collect data by scoring the questions.

The degree of reliability was calculated using the Cronbach Alpha method. The Cronbach alpha coefficient was determined by analyzing the data in SPSS, statistical software for social scientists. The strategy included correlating the results of one item with the results of other items on the same instrument. Cronbach's Alpha was then computed to examine internal consistency and discover relationships between variables. According to Ahmad, Yussiff and Mustapha (2015), Cronbach's alpha of  $\alpha \ge 0.9$  is excellent,  $0.7 \le \alpha < 0.9$  is good,  $0.6 \le \alpha < 0.7$  is acceptable,  $0.5 \le \alpha < 0.6$  is poor, and  $\alpha < 0.5$  is unacceptable. For the variables included in this analysis, a high value of alpha (larger than 0.7) indicated strong instrument reliability.

# 3.9 Data Analysis and Presentation Techniques

The process of reviewing, cleaning, manipulating, and modeling data with the intention of emphasizing relevant information, drawing conclusions, and providing assistance for decision making is known as data analysis. The information that was gathered for this investigation was first sorted, tabulated, and categorized. Editing the data included looking over the acquired raw data for mistakes and omissions, which were subsequently filled in or removed as appropriate. This includes doing a thorough review of the surveys once they had been filled out. After then, the data were coded by giving numerical values to the various replies so that they could be sorted into a predetermined number of groups or classes. After that, descriptive and inferential analyses of the data were carried out with the help of SPSS. The results were detailed in tables, charts, and models throughout the presentation. The analysis of the data was carried out in accordance with the goals.

### 3.9.1 Descriptive statistics

In order to demonstrate the trends of both the dependent and the independent variables, descriptive statistics were carried out. The mean, standard deviation, along with the highest and lowest possible values, are these. They were mostly used in the creation of indices and measures for the purpose of summarizing the data that was gathered (Kothari, 2007). The mean is a measurement of central tendency that is used to characterize the value that is the most usual among a group of values. The standard deviation quantifies the degree to which a distribution deviates from its mean value. The range of the dataset was shown using the minimum and maximum values. Tables and charts were used to display this information's results.

#### 3.9.2 Inferential statistics

Inferential statistics, such as correlation and regression analysis, were utilized in the research to evaluate the validity of the null hypothesis. The threshold of statistical significance for these tests was set at 5%. This was accomplished with the assistance of SPSS.

### 3.9.2.1 Correlation Analysis

The Pearson Correlation Coefficient, often known as Pearson r, is a statistical tool that analyzes the degree to which two variables are related to one another (Jahangir and Begum, 2008). The Pearson r statistic may be used to assess the quality and orientation of a linear relationship between two variables, as suggested by Mugenda and Mugenda (2008). Bivariate correlation analysis was used to assess the significance and direction of the relationships between the variables in this study. Sporta, Ngugi, Ngumi, and Nanjala

(2017) state that a significant correlation indicates a linear relationship between the two variables when the significance level is minimal (less than 0.05). However, if the significance threshold is high, 0.50 or more, the correlation is not significant, and the two variables are not linearly associated.

# 3.9.2.2 Regression Analysis

A quantitative research approach called regression analysis is utilized when the study involves modeling and analyzing a number of variables, and the connection between those variables includes a dependent variable and one or more independent variables. This kind of research is carried out when there are several variables involved. Multiple regression analysis, as defined by Alusa and Kariuki (2015), involves including many predictor variables into a single regression equation. Multiple regression analysis was utilized to determine the causal relationship between the independent variables and the dependent variable.

To measure how much of an effect IFMIS has had on the County Government's budgeting, a multiple regression model was used. One simple linear regression and many more linear regressions were included. When analyzing individual organizational resources, the simple linear regression method was used, but the multiple linear regression method was utilized when analyzing all organizational resources together. The R square, the F ratio, and the significance level were the metrics that the research used to analyze the possible influence of IFMIS on the financial management of county governments in Kenya. The four models are laid up like this in Table 3.3.

# 3.9.2.3 Testing for Moderating Effect using Path Analysis

# 3.9.3 Analytical Model

In addition, the relative value of each factor in explaining the result was calculated using a multivariate regression model. Multiple regressions were a versatile approach of data analysis that could be utilized whenever the relationship between quantitative variables (the dependent) and any other factors (represented as independent or predictor variable) had to be investigated. To further clarify, multiple regressions may be utilized to examine the connections between numerical variables and other factors. It is possible to investigate the impacts of a single variable or numerous variables with or without considering the effects of other factors, and the relationships between them are not limited to being linear (Cohen, West & Aiken, 2003). The regression model is explained as follows:

 $H_{01}$ : IFMIS Financial Reporting System has no statistically significant effect on the financial management in county governments, Kenya. H1 was modeled as:

$$FM = \beta_0 + \beta_1 IFMIS\_FRS + \epsilon$$

 $H_{02}$ : IFMIS Budget System has no statistically significant effect on the financial management in county governments, Kenya. H2 was modeled as:

$$FM = \beta_0 + \beta_1 IFMIS\_BS + \epsilon$$

 $H_{03}$ : IFMIS Revenue System has no statistically significant effect on the financial management in county governments, Kenya. H3 was modeled as:

$$FM = \beta_0 + \beta_1 IFMIS\_RS + \epsilon$$

 $H_{04}$ : IFMIS Payment System has no statistically significant effect on the financial management in county governments, Kenya. H4 was modeled as:

$$FM = \beta_0 + \beta_1 IFMIS\_PS + \epsilon$$

 $H_{05}$ : IFMIS financial reporting, budgeting, revenue and payment system has no significant combined effect on the financial management in County Governments, Kenya. H5 was modeled as:

$$FM = \beta_0 + \beta_1 BS_1 + \beta_2 FRS_2 + \beta_3 RS_3 + \beta_4 PS_4 + \xi$$

H<sub>06</sub>: Organizational Resources has no significant moderating effect on the relationship between IFMIS and financial Management H<sub>6</sub> was modeled as:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \ \beta_4 X_4 + \ \beta_5 Z + \beta_6 X_1 \ Z \ + \beta_7 X_2 \ Z \ + \ \beta_8 X_3 \ Z + \beta_9 X_4 \ Z \ + \ \epsilon$$

Y=Financial Management of County Governments

X<sub>1</sub>=Financial Reporting

X<sub>2</sub>= Budgeting System

X<sub>3</sub>= Revenue System

X<sub>4</sub>= Payment System

Z= Organizational Resources

 $\beta_{0}$ = Constant

 $\beta_{1-}$   $\beta_{9=}$ Regression Coefficients

 $\varepsilon$  =Error term

Table 3. 4: Data analysis procedure for Specific Objective						
Objectives	Measurable variables /	Data Analysis				
Establish the effect of IFMIS financial reporting system on financial management in county governments, Kenya	<ul> <li>Customized reports</li> <li>Accounts reconciliation</li> <li>Financial Analysis</li> <li>Real time reporting</li> </ul>	Descriptive Statistics: Standard deviation, means, percent, frequency Inferential: Pearson Correlation, Simple linear regression				
Establish the effect of IFMIS budgeting system on financial management in county governments, Kenya	<ul> <li>Budget formulation</li> <li>Budget implementation</li> <li>Monitoring and evaluation</li> <li>Budget controls</li> <li>Variance of budgeted and actual</li> </ul>	Descriptive Statistics: Standard deviation, means, percent, frequency Inferential: Pearson Correlation, Simple linear regression				
Establish the effect of IFMIS revenue system on financial management in county governments, Kenya	<ul><li>Timely record keeping</li><li>Accounts integrity</li><li>Financial control</li><li>Accounting records</li></ul>	<b>Descriptive Statistics:</b> Standard deviation, means, percent, frequency  Inferential: Pearson Correlation, Simple linear regression				
Establish the effect of IFMIS payment system on financial management in county governments, Kenya	<ul> <li>Amount of outstanding debts</li> <li>Percentage of outstanding debts to total expenses</li> <li>Level of transaction traceability and transparency</li> </ul>	Descriptive Statistics: Standard deviation, means, percent, frequency Inferential: Pearson Correlation, Simple linear regression				
Establish the joint effect of IFMIS financial reporting, budgeting, revenue and payment systems on financial management in county governments, Kenya	<ul> <li>IFMIS Financial Reporting</li> <li>IFMIS Budgeting</li> <li>IFMIS Revenue</li> <li>IFMIS Payment</li> </ul>	Inferential: Bi-variate Pearson Correlation, Multiple linear regression				
Determine the moderating effect of organizational	<ul><li>Internal Controls</li><li>Human resources</li></ul>	<b>Descriptive Statistics:</b> Standard deviation, means, percent,				

Source: Researcher (2020)

resources on the relationship

between IFMIS and financial

in

county

management

governments, Kenya

• Financial Resources

• Regulations

frequency

regression

Inferential: Hierarchical linear

### 3.9.4 Diagnostic Tests

Diagnostic studies were undertaken in order to evaluate the assumption of Pearson correlation and multiple regression analyses before inferential statistics were carried out. This includes testing for normalcy using the Shapiro-Wilk test, testing for multicollinearity using the VIFand Tolerance test, and testing for linearity using scatter plots.

**Multi-collinearity:** The connection that exists between the several independent variables is referred to as multi-collinearity. When the independent variables have a strong correlation with one another, multi-collinearity is present. Standard errors for each independent variable are inflated due to multicollinearity, making it more difficult to disentangle the effect of each independent variable on the dependent variable (Yoo et al., 2014). According to the literature (Cai, Wu, Xu, & Zeng, 2017), multicollinearity may be corrected by excluding one or more of the correlated independent variables from the regression model. Removing correlated independent variables from the regression model with multicollinearity. To determine whether or not multicollinearity exists. We made use of the Variance Inflation Factor in conjunction with the Tolerance level. It is permissible to have a tolerance level that is more than 0.1 or a VIF that is lower than 10.

### **Normality:**

The assumption of normality must be satisfied in order to proceed with the majority of the parametric tests. According to Garson (2012), normality denotes that the distribution of the test is normally distributed, also known as bell-shaped, with a mean of zero, a standard deviation of one, and a curve that is symmetrically bell-shaped. Both the

Kolmogorov-Smirnov and the Shapiro-Wilk tests were used in order to put the assumption of normality to the test. In order to validate the assumption of normalcy, this test ought not to provide significant results. The residuals must have a normal distribution around the scores of the anticipated dependent variable in order to be considered normal.

# Linearity

In order to do linear regression, it is necessary to have a linear connection between the variables that are independent and those that are dependent. Due to the fact that linear regression is sensitive to the effects of outliers, it is also crucial to check for any outliers. According to Chatterje and Hadi (2015), scatter plots are the most effective tool for testing the linearity assumption.

Homoscedasticity: The linear regression models cannot function without the crucial assumption of homoscedasticity. For cases in which the error term is constant for all values of the independent variables, the idea of homoscedasticity offers an explanation. When this error component changes in size across all of the independent variable's values, however, we get heteroscedasticity. Gelfand (2015) argues that the degree to which deviations from the assumption of homoscedasticity have an influence increases as heteroscedasticity increases. When the variance of the dependent variable varies throughout the data, a condition known as heteroscedasticity is present in regression analysis. If the variance of the dependent variable is the same across all observations, then we say that the data are homoscedastic.

# 3.9.5 Hypothesis testing

The four hypotheses were tested using the following framework: **Table 3.5: Hypothesis testing** 

	<b>Hypothesis Statement</b>	Model	<b>Hypothesis Testing</b>
i	H <sub>01</sub> : IFMIS Financial Reporting		$H_{01}$ : $\beta = 0$
	System has no significant effect		$H_{0A}: \beta \neq 0$
	on the financial management		Reject $H_{01}$ if $\beta \neq$ and P value $\leq 0.05$
		$FM=\beta_0+\beta_1F$	otherwise fail to reject $H_{01}$ if $\beta = 0$
		IFMIS_FRS <sub>1</sub> + $\xi$	and P value $> \alpha$
			$\alpha = 0.05$
ii	<b>H</b> <sub>02</sub> : IFMIS Budget System has no		$H_{02}$ : $\beta = 0$
	significant effect on the financial		$H_{0A}$ : $\beta \neq 0$
	management.		Reject $H_{02}$ if $\beta \neq 0$ and P value $\leq$
		$FM = \beta_0 + \beta_1$	$0.05$ otherwise fail to reject $H_{02}$ if
		IFMIS_BS <sub>1</sub> + $\xi$	$\beta_{2=}$ 0 and P value $> \alpha$
		•	$\alpha = 0.05$
iii	H <sub>03</sub> :IFMIS Revenue System has		$H_{03}: \beta = 0$
	no significant effect on the		$H_{0A}: \beta \neq 0$
	financial management.		Reject $H_{03}$ if $\beta = 0$ and P value $\leq$
	<u> </u>	$FM=\beta_0+\beta_1$	$0.05$ otherwise fail to reject $H_{03}$ if
		IFMIS_RS <sub>1</sub> + $\Sigma$	$\beta = 0$ and P
		_	Value $> \alpha$
			$\alpha = 0.05$
iv	H <sub>04</sub> :IFMIS Payment System has		$H_{04}: \beta = 0$
	no significant effect on the		$H_{0A}: \beta \neq 0$
	financial management.		Reject $H_{04}$ if $\beta = 0$ and P value $\leq$
	-	$FM=\beta_0+\beta_1$	$0.05$ otherwise fail to reject $H_{04}$ if
		IFMIS_PS <sub>1</sub> + $\xi$	$\beta = 0$ and P
		_	Value $> \alpha$
			$\alpha = 0.05$
V	H <sub>05</sub> : IFMIS financial reporting,	$FM = \beta_0 + \beta_1 BS_1$	$H_{05}: \beta_{i4} = 0$
	budgeting, revenue and payment	$+\beta_2FRS_2 +\beta_3RS_3 +$	$H_{0A}: \beta_{i4 \neq 0}$
	systems has no significant effect	$\beta_4 PS_4 + \xi$	Reject $H_{05}$ if $\beta_{i4} = 0$ and P value $\leq$
	on the financial management of		$0.05$ otherwise fail to reject $H_{05}$ if
	County Governments in Kenya		$\beta_{i4} = 0$ and P
			Value $> \alpha$
			$\alpha = 0.05$
vi	H <sub>06</sub> : Organizational Resources has	Y =	$H_{06}$ : $\beta_{i9} = 0$
	no significant moderating effect	$\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 +$	$H_{0A}: \beta_{i\dots 9\neq 0}$
	on the relationship between	$\beta_4 X_4 + \beta_5 Z + \beta_6 X_1 Z$	Reject $H_{06}$ if $\beta_{i9} = 0$ and P value $\leq$
	organizational resources and	$+\beta_7 X_2 Z + \beta_8 X_3$	0.05 otherwise fail to reject H <sub>06</sub> if
	financial management of County	$Z+\beta_9X_4Z+\epsilon$	$\beta_{i9} = 0$ and P
	governments in Western Kenya.		Value $> \alpha$
	•		$\alpha = 0.05$

Source: Author (2020)

#### 3.10 Ethical Consideration

The study was carried out in a manner that adhered to the predetermined ethical criteria, which are of the highest significance in situations when human beings are engaged in the research. During the course of the study, maintaining a high level of professionalism was made possible because to these ethical concerns.

Every single person who took part in the study had their privacy and dignity respected throughout the process. The confidentiality and respect of the sources of the personal information gathered were maintained at all times. The agreement of the people who were going to participate in the study was sought in advance (See Appendix V). Nobody was ever used as a research subject without first being contacted in advance and asked for their involvement in the study. There was absolutely no coercion or bribery of any type used in any way to urge a person to take part in the study in any way. Following the consultation of the appropriate individuals, authorities, and committees, a research authorization was acquired from NACOSTI (Appendix IV) Before a person agrees to participate in research, they are provided with information on the objectives, procedures, and potential advantages of the study.

All research was conducted in a way that was consistent with the participants' ethical standards, and all participants' intellectual property rights were respected via the accurate attribution of all data and content. Plagiarism, fabrication, falsification, poor data gathering methods, and incorrect attribution of work were all strictly avoided in the sake of scientific integrity. The research was conducted in a methodical and objective manner, making it a valuable contribution to the scientific community.

#### **CHAPTER FOUR**

# DATA ANALYSIS, FINDINGS AND DISCUSSIONS

#### 4.1 Introduction

This chapter presents the conclusions of the research, which were derived through the analysis of the data that was gathered, and it also discusses these results.

# 4.1.1 Results on Reliability and Validity Testing

In order to determine whether or not the questionnaire was reliable and valid and whether or not it could correctly gather data, the research examined it. (Kimberlin and Winterstein, 2008) Reliability studies were carried out to determine the extent to which research tools could consistently provide the same results. The purpose of the reliability test was to determine the degree to which the results have remained stable over the course of time. In order to calculate Cronbach's Alpha ( $\alpha$ ), the research used the method of internal consistency. Because the suggested value of 0.7 was chosen as the threshold, the tool is considered consistent only when the Cronbach's Alpha value is larger than or equal to 0.7; in all other cases, the tool must be examined and adjusted appropriately. Table 4.1 displays the results received from the reliability tests that were conducted.

**Table 4. 1: Reliability of Research Instruments** 

Variable	Number of	Cronbach Alpha	Reliable
	Items		
IFMIS financial reporting	7	0.769	Yes
system			
IFMIS budgeting system	8	0.773	Yes
IFMIS revenue system	8	0.836	Yes
IFMIS payment system	8	0.869	Yes
Organizational resources	8	0.883	Yes
Financial management	8	0.874	Yes

The values of Cronbach alpha are shown in Table 4.1, and they vary from 0.769 for the IFMIS financial reporting system to 0.883 for the organizational resources. The questionnaire's high degree of internal consistency between the items of the instrument and the high consistency between the questions both indicate a consistency coefficient of more than 0.7. Thus, the instrument was not further modified and was retained as is.

### 4.1.2 Validity testing

The purpose of using the statistical method of dimension reduction known as factor analysis is to investigate the underlying structure of a collection of observable variables. The fundamental premise of unidimensionality in measurement theory states that a group of components that together constitute an instrument for measuring one characteristic all have the same dimensions. In order to investigate the relationship between two variables, one of the variables must be unidimensional. This means that all of the items that form the basis of the data must measure the same characteristics. Without taking into consideration any a priori models or theories, exploratory factor analysis discovers underlying factors

and categorizes things that are strongly related to one another. This allows for a high number of variable components to be condensed into a small number of underlying variables that are easier to comprehend and more controllable (Leech, Barrett, and Morgan, 2011). The results of KMO and Bartlett's Test are summarized in Table 4.2.

Table 4. 2: KMO and Bartlett's Test

	(KMO) Measure	Bartlett's	ricity	
Variable	of Sampling	Approx. Chi-	Degrees of	n valua
	Adequacy	Square (X <sup>2</sup> )	freedom	p-value
IFMIS financial	0.751	416.151	21	0.000
reporting				
IFMIS Budgeting	0.793	376.204	28	0.000
System				
IFMIS Revenue System	0.836	472.061	28	0.000
IFMIS payment System	0.770	641.617	28	0.000
Financial Management	0.790	590.296	28	0.000
Organizational	0.892	1574.369	28	0.000
Resources				

Source: Field Data (2022)

The KMO value was discovered to be between 0.751 and 0.892 for organizational resources, which is a high number that is near to 1 and acceptable. This was shown to be the case for IFMIS financial reporting as well. Bartlett's sphericity test searches for strong markers-marker relationships. The correlation matrix of indicators is not an identity matrix, indicating a substantial association between variables (Pallant, 2010). Bartlett's test chi-square distribution was calculated to be between 376.204 and 1574.369%, with a significance level of 0.000. This was found for the Bartlett's test used in the present

investigation. At the 5% level of significance, a p-value below 0.05 indicates that the indicators' correlation matrix is not an identity matrix; this means that there is a clear significant relationship between the indicators, which is in line with what would be expected from a good factor analysis.

**Table 4. 3: Summary of Factor Analysis** 

		Overall	KMO	Total	
	No of	Factor		Variance	Item(s)
Factors	Items	Loading		Explained	Dropped
IFMIS financial reporting	7	0.781	0.751	66.8%	0
IFMIS Budgeting System	8	0.790	0.793	72.6%	0
IFMIS Revenue System	8	0.779	0.836	76.2%	0
IFMIS payment System	8	0.769	0.770	66.9%	0
Financial Management	8	0.744	0.790	68.9%	0
Organizational Resources	8	0.921	0.892	85.1%	0
Total/Overall	39	0.797	0.805	72.8%	0

The comprehensive examination of all the variables as a whole. According to the rule of thumb for an acceptable factor loading of 40%, all of the products were kept. The variance explained were greater than 60% with an overall of 72.8% an indication of convergence validity. The sampling adequacy was attained as indicated by Kaiser-Meyer-Olkin (KMO) of more than 0.5 with an overall value of 0.805. Williams et al (2012) stated that KMO of 0.50 is acceptable degree for sampling adequacy with values above 0.5 being better

In addition to that, the results of the CFA were put to use to verify the construct validity of the data that was gathered. Validity of a construct may be established by investigation of both its convergent and its discriminant validity. A measure called convergent validity confirms that the things that are supposed to have connections do in fact have those relationships, while a measure called discriminant validity confirms that things that aren't supposed to be linked do not in fact have those links. Convergent validity and discriminant

validity are both types of validity. The level of convergent validity was evaluated based on the results of calculating the average variances extracted (AVEs) from CFA. According to Teo (2011), AVEs are measurements of the overall amount of variation that may be attributed to the latent concept.

Table 4. 4: Convergent and Discriminant Validity for Financial Management

Item	AVE	Squared Multiple Correlation	Factor Loading
Because IFMIS monitors compliance with the	0.557	Correlation	Loaumg
budget, the county's absorption rate has	0.557		
increased, which contributes to the system's			
overall improvement in financial management.		0.390	0.79
The use of IFMIS has made it easier for the		0.570	0.17
county to meet its objectives for income from			
its own sources.		0.319	0.752
IFMIS modules have enhanced tax collection		0.517	0.732
by increasing transparency, organizational			
resource use, and overall efficiency of county			
government collection processes.		0.417	0.804
The financial management of allocations and		01.11	0.00
the administration of public expenditures in			
the County have both been enhanced thanks to			
the modules of IFMIS.		0.256	0.711
IFMIS has improved the County's financial			
management by increasing the efficiency with			
which monies are allocated for development			
expenditures.		0.195	0.664
Without the need for subjective judgments, the			
method has been helpful in assigning sufficient			
money to the many initiatives undertaken by			
the county administration.		0.209	0.677
The theft of public money in the County due to			
expenditures that were not permitted has			
decreased as a result of linked IFMIS modules.		0.492	0.838
Since the implementation of IFMIS, there has			
been, in general, an increase in both efficiency			
and effectiveness at the county.		0.263	0.716

Source: Field Data (2022)

According to Teo (2011), it was discovered that the AVEs for all of the constructs were more than 0.5, which is considered to be satisfactory for convergent validity. The squared

multiple correlations and average variance retrieved must be compared to determine a test's discriminant validity. In this investigation, every squared multiple correlation was smaller than the corresponding constructs' AVE, indicating discriminant validity. This meant that the data utilized had construct validity, as confirmed by the results showing confirmation of convergent and discriminant validity.

# 4.2 Response Rate

Within the scope of the research, 172 questionnaires were sent to participants throughout the four counties, of which 132 were returned. In other words, the researcher was successful in obtaining data from 132 participants, which is 76.7% of the total. According to Allen (2016), an appropriate response rate is one that is more than 49% but does not exceed 59%; a good response rate is one that is greater than 59% but does not surpass 69%; and a very high response rate is one that is greater than 69%. Due to the fact that the response rate of 76.7% was higher than 69%, it was deemed to be very high. Based on the targeted and sampled categories, this response rate was sufficient for reliable research results. After piloting, the questionnaire and drop-and-pick approach were carefully built for easy understanding and high response rates. This was the reason for the survey's impressively high level of participation.

**Table 4. 5: Response Rate** 

Questionnaires	Kakamega	Bungoma	Busia	Vihiga	Trans Nzoia	Total
Administered	50	39	28	22	35	172
Returned	39	30	20	17	26	132
Response Rate	78	76.9	71.4	77.3	74.3	76.7

# 4.3 Analysis on Participants Background Information

For the purpose of the research, background information on the participants was sought out, including their gender, age, degree of academic credentials acquired, and length of time spent working for their present company. The gathered data were analyzed, and the results are provided in Table 4.6.

Table 4. 6: Rate of response for Age of the Participants

Age	Frequency	Percent	Valid Percent	<b>Cumulative Percent</b>
25-34 years	48	36.4	36.4	36.4
35-44 years	36	27.3	27.3	63.6
45-54 years	48	36.4	36.4	100.0
Total	132	100.0	100.0	

Source: Field Data (2022)

Table 4.6, shows that 36.4% (48) of the participants were between the ages of 25-34 years, 27.3% (36) aged between 35-44 years while 36.4% (48) of the participants were between the ages of 45-54 years. This implies that the majority of the participants were between the age of 25-34 years and 45-54 years. County governments have expanded their human resource resulting to recruitment of employees between 25 and 45 years old.

**Table 4.7: Rate of response for Gender of Participants** 

Gender	Frequency	Percent	Valid Percent	<b>Cumulative Percent</b>
Female	28	21.2	21.2	21.2
Male	104	78.8	78.8	100.0
Total	132	100.0	100.0	

The results indicated that female were 21.2% while male were 78.8% of the sparticipants. This implied that, female who participated in this study were less than a third, an indication that a third gender rule as enshrined in the constitution has not been achieved.

**Table 4. 8: Rate of response for Education of Participants** 

Education	Frequency	Percent	Valid Percent	<b>Cumulative Percent</b>
Diploma	18	13.6	13.6	13.6
Bachelor's degree	76	57.6	57.6	71.2
Master's Degree	38	28.8	28.8	100.0
PhD	0	0	0	100.0
Total	132	100.0	100.0	

Source: Field Data (2022)

In regards to education level, 13.6% of the participants were having diplomas, 57.6% were having bachelor's degrees while 28.8% were having master's degrees. The minimum requirement for most position in the county government is Diploma.

**Table 4. 9: Rate of response for Period of Service** 

				Cumulative
Period of Service	Frequency	Percent	Valid Percent	Percent
Below 1 year	4	3.0	3.0	3.0
1-5 years	52	39.4	39.4	42.4
6-10 years	76	57.6	57.6	100.0
Over 10 years	0	0	0	
Total	132	100.0	100.0	

Lastly, in terms of period of service, 3.0% of the participants have been working in their current position for less than a year, 39.4% of the participants for a period between 1 and 5 years while 57.6% for a period between 6 and 10 years. This is the period when counties in Kenya expanded their human resource after adoption of Constitution 2010 which brought forth devolution with increased devolved functions.

# 4.4 Descriptive Statistics for Variables

The data were analyzed via a quantitative lens with the purpose of producing descriptive statistics for the research. The purpose of using descriptive statistics was to help us draw inferences and make broad statements about the connection between the Independent Variables (IVs) and the Dependent Variable (DV). The research assessed the data with regard to the goals in an attempt to determine the connections between the factors. Particularly noteworthy is the fact that the relevant questions were in accordance with the study goals. The responses to the items in the questionnaire were ranked using a Likert scale that ranged from 1 to 5 where; strongly Disagree = 1; Disagree = 2: Neutral = Fairly Agree: Agree = 4: Strongly Agree = 5.

### 4.4.1 Descriptive Statistics for IFMIS financial reporting system

The initial purpose of this project was to investigate the impact that the IFMIS financial reporting system had on the financial administration of Kenya's county governments. In regard to seven statements about the IFMIS financial reporting system, the participants were given the option of indicating their degree of agreement on a scale ranging from

strongly disagreeing (1) to strongly agreeing (5). Table 4.10 presents the results in their entirety.

**Table 4. 10: Descriptive Statistics for IFMIS Financial Reporting System** 

	IFMIS Financial Reporting	5	4	3	2	1	Mean	Stdev
1	The different stakeholders are given the ability, via the financial reporting							
	of IFMIS, to comprehend the real cost	22.7%	50%	24.2%	0%	3%	2.0	0.0
	of services offered by the county on an	(30)	(66)	(32)	(0)	(4)	3.9	0.9
	activity-by-activity basis, hence improving supervision.							
2	From IFMIS, several stakeholders may easily derive individualized	24.2%	53%	16.7%	3%	3%	3.9	0.9
	reports, which can then be used in ways that promote effective decision	(32)	(70)	(22)	(4)	(4)	3.9	0.9
3	making. The IFMIS provides the personnel of							
	the county with simple access to the	28.8%	28.8%	36.4%	6.1%	0%	3.8	0.9
	exact information they need in order	(38)	(38)	(48)	(8)	(0)	3.6	0.9
	to carry out their jobs.							
4	The workers at the Treasury are able	18.2%	43.9%	28.8%	9.1%	0%	2.7	0.0
	to do real-time data reconciliation on transactions thanks to IFMIS.	(24)	(58)	(38)	(12)	(0)	3.7	0.9
5	The IFMIS system allows for the							
	development of individualized reports	15.2%	50%	31.8%	3%	0%	3.8	0.7
	that can be used both internally and externally.	(20)	(66)	(42)	(4)	(0)	3.0	0.7
6	Compliance with Financial Reporting	15.2%	30.3%	45.5%	6.1%	3%		
	requirements has improved as a result	(20)	(40)	(60)	(8)	(4)	3.5	0.9
7	of IFMIS's implementation.	` /	` ,	` /	` /	` /		
7	The dependability of financial records	24.2%	30.3%	33.3%	9.1%	3%	3.6	1.0
	has been increased as a result of IFMIS.	(32)	(40)	(44)	(12)	(4)	3.0	1.0

Source: Field Data (2022)

Based on the results in Table 4.10, we can see that 22.7% of participants strongly agreed with the statement, and another 50% agreed that IFMIS financial reports help various stakeholders understand the precise cost of services provided by the county per activity,

which in turn strengthens supervision. Furthermore, 24.2% of participants somewhat agreed that IFMIS financial reports enable various stakeholders in understanding the precise cost of services provided by the county per activity, hence enhancing supervision. An further 3% of people responded with severe disagreement to the statement that "IFMIS financial reports allow diverse stakeholders to grasp the exact cost of services given by the county per activity, thus improving oversight." None of the responders, however, took issue with this assertion. This was supported further by the fact that the standard deviation was not statistically significant (0.9) and the mean score was 3.9. In other words, the majority of participants agreed that the IFMIS financial reports help various stakeholders understand the true cost of the county's services per activity, which in turn increases supervision while reducing volatility.

In addition, 53 percent of participants agreed and 24 percent strongly agreed that IFMIS may be used to provide individualized reports that can be used to improve decision quality. The results also showed that this assertion was supported by a majority of participants (53%). In addition, 16.7% of participants strongly agreed that multiple stakeholders may readily extract customized reports from IFMIS in ways that assist quality decision making, whereas 3% of participants disagreed with this statement and 3% of participants disagreed with it. This was corroborated by a mean of 3.9 and a standard deviation that was negligible at 0.9. Further, 28.8% of participants strongly agreed, and another 28.8% agreed, that County staff may easily utilize IFMIS to extract the precise information they need to carry out their work. The results confirmed this to be the case. In addition, 36.4% of participants were in agreement, 6.1% were unsure, and 0% were firmly against the idea that County staff could easily utilize IFMIS to obtain the exact information they needed to

do their jobs. The standard deviation was small at 0.9, and the mean score was 3. This indicated that participants agreed that county workers can efficiently utilize IFMIS to retrieve the precise data they need to do their tasks with little variation.

In the study, 43.9 percent of participants said they agree or strongly agree that treasury staff may utilize IFMIS to reconcile transaction data in real time. However, when asked if treasury workers can reconcile transactions data in real time, 28.8% of participants either agreed or strongly agreed that they can do so with the help of IFMIS. Furthermore, treasury employees are able to reconcile transactions data in real-time owing to IFMIS (mean: 3.7, standard deviation: 0.9), with 9.1% of participants disagreeing and 0% severely disagreeing. In a survey, 50% of participants said they agreed with the statement, "The IFMIS system enables generation of custom reports for internal and external use," while 15.2% strongly agreed. Furthermore, 31.8% of participants agreed that the IFMIS system allows for the generation of individualized reports for both internal and external use, while 3% disagreed slightly and 0% were very unconvinced. The mean score was 3.8, with a small standard deviation of 0.7 indicating that the participants agreed that the IFMIS system allows the creation of specialized reports for both internal and external consumption.

According to table 4.10, 15.2 percentage of the participants strongly agreed that IFMIS has contributed to improvement in compliance with Financial Reporting requirements, and another 30.3 percentage of the participants felt that the same was true. However, 45.5% of participants somewhat agreed, 6.1% of participants disagreed, and 3% of participants definitely disagreed with the statement that IFMIS has led to improvement in compliance with Financial Reporting requirements. This was substantiated by a mean score of 3.5

and a standard deviation that was not significant at 0.9. In addition, the results showed that 24.2% of participants strongly agreed that IFMIS has increased the trustworthiness of financial records, and an additional 30.3% of participants agreed that the same assumption is true. On the other side, 33.3% of participants agreed that IFMIS has increased the dependability of financial records, whereas 9.1% (74) of participants disagreed and 3% of participants strongly disagreed on the same statement, with a mean of 3.6 and a substantial standard deviation of 1.0. This indicates that there is a significant amount of disagreement on this statement. This indicated that participants were in agreement that IFMIS had increased the dependability of financial records, despite the fact that not all participants validated this assumption.

The results are backed by the results of Lamba (2018), which demonstrated that a well-functioning IFMIS platform has the potential to monitor transactions on a real-time basis. This is something that is beneficial to the government as a whole owing to the quality of the financial reporting. IFMIS is a financial instrument that, in an ideal world, provides governments with a comprehensive set of capabilities for financial management, all of which are integrated into a single set of utilizations. According to Muiruri (2018), the implementation of IFMIS has resulted in increased levels of transparency, enhanced efficiency, increased levels of accountability of public finances, increased levels of quality of financial reports, increased levels of accuracy in financial reporting, improved levels of government accounting processes, and increased levels of accessibility of financial data to auditors.

# 4.4.2 Descriptive statistics for IFMIS Budgeting system

The second goal was to determine the impact that using the IFMIS budgeting system will have on the financial management practices used by Kenya's county administrations. Regarding the IFMIS revenue system, the participants were given a list of 10 statements and asked to rate their degree of agreement with each statement on a scale from strongly disagreeing (1) to strongly agreeing (5). Table 4.11 presents the results in their entirety.

Table 4. 11: Descriptive Results for IFMIS Budgeting system

-	IFMIS Budgeting	5	4	3	2	1	MeanStdev
1	Because to IFMIS's contribution, unit itemized budget misallocations have decreased, leading to an improvement in the County's overall quality of financial performance and fewer audit inquiries.	24.2% (32)	39.4% (52)	15.2% (20)	19.7% (26)	1.5% (2)	3.7 1.1
2	In order to implement efficient budget controls, the County has connected computerized budgeting to modules that are utilized in other departments.  The integration of electronic	18.2% (24)	42.4% (56)	28.8% (38)	6.1% (8)	4.5% (6)	3.6 1.0
3	budgeting with the systems of other units has resulted in an improvement in the monitoring and assessment of monetary expenditures.		24.2% (32)	22.7% (30)	31.8% (42)	3% (4)	3.2 1.2
4	The management has been provided with the ability to make suitable decisions on the priority activities throughout the budget implementation thanks to the system.	15.2% (20)	39.4% (52)	45.5% (60)	0% (0)	0% (0)	3.7 0.7
5	The use of electronic budgeting has increased openness throughout the budgeting process, particularly	18.2% (24)	45.5% (60)	18.2% (24)	13.6% (18)	4.5% (6)	3.6 1.1

	with regard to the decision-making							
	process.							
6	The methods for formulating the							
	budget in the County have been	33.3%	34.8%	27.3%	4.5%	0%	4.0	0.0
	enhanced thanks to the use of	(44)	(46)	(36)	(6)	(0)	4.0	0.9
	electronic budgeting.							
7	The County has been successful in							
	allocating sufficient resources to							
	the planned projects, which has	13.6%	53%	25.8%	4.5%	3%	2.7	0.0
	resulted in a decrease in the	(18)	(70)	(34)	(6)	(4)	3.7	0.9
	number of outstanding invoices	` /	· /	` /	` /	` /		
	related to public spending.							
8	The system has made it possible to							
	undertake projects for the county							
	government in a timely manner,	15 2%	34 8%	40.9%	6.1%	3%		
	•				(8)		3.5	0.9
	which has resulted in a reduction	(20)	(46)	(54)	(0)	(4)		
	in the number of cash that ended							
	the year unused.							

According to table 4.11, 24.2% of participants strongly agreed that IFMIS has decreased unit's itemized budget misallocations, which has enhanced quality of financial performance in the County, which has resulted in fewer audit inquiries. A further 39.4% of participants agreed that IFMIS has achieved these results. In addition, 15.2% of participants agreed that IFMIS had decreased unit's itemized budget misallocations, whereas 19.7% of participants disagreed with this statement, and an additional 1.5% strongly disagreed with it. This resulted in better quality of financial performance in the County, which resulted in fewer audit inquiries. This was backed even further by the fact that the mean was 3.7 and the standard deviation was a considerable 1.1. In addition, the results showed that 18.2% of those polled strongly agreed with the assumption that the County has connected electronic budgeting to modules that are utilized in other units for effective budget management, and that 42.4% of those polled agreed with the same assertion. In addition, 28.8% of those who responded agreed somewhat, 6.1% of those who

responded disagreed, and 4.5% of those who responded strongly disagreed, with a mean score of 3.6 and a substantial standard deviation of 1.0. Although most participants stated that their county had linked electronic budgeting to modules used in other units for effective budget management, this suggested that there was substantial variation among participants. Despite the fact that most participants said their county had integrated computerized budgeting with modules used by other departments, this was still the case.

In addition, the results showed that 18.2% of those polled highly agreed, and another 24.2% agreed, with the statement that the linking of electronic budgeting with the modules of other units has enhanced the monitoring and assessment of budget expenditures. Also, 22.7% of the participants had a moderate agreement, 31.8% of the participants had a disagreement, and 3% of the participants had a severe disagreement, with a mean score of 3.2 and a substantial standard deviation of 1.2. According to the results of the survey, 15.2% of participants strongly agreed that the system has helped the management to make suitable decisions on the priority activities throughout the budget execution, and 39.4% agreed on the same statement. On the other side, 45.5% of participants agreed somewhat with the statement, while none of the participants opposed or strongly disagreed, yielding a mean score of 3.7 and an insignificant standard deviation of 0.7. Respondent verified that system has helped management to make proper choice on the priority activities throughout the budget execution, with minimum variance across participants, as demonstrated by the findings.

The results of the survey showed that 18.2% of participants strongly agreed that electronic budgeting has increased openness on decision making procedures in budgeting processes, and 45.5% agreed that this is the case. Also, 18.2% of those polled had a

moderate agreement with the statement, 13.6% had a disagreement, and 4.5% had a severe disagreement, with a mean score of 3.6 and a large standard deviation of 1.1. In addition, 33.3% of participants strongly agreed that electronic budgeting has enhanced the budget formulation procedures in the County, and 34.8% of participants agreed that electronic budgeting has had the same effect. On the other hand, 27.3% of those who responded agreed somewhat with the statement, 4.5% disagreed with it, and none of those who responded strongly disagreed with it. The mean score was 4.0, and the standard deviation was an inconsequential 0.9. The demonstrate that the use of computerized budgeting has resulted in an enhancement of the procedures involved in the creation of budgets in the County, with very little variance across the participants.

In addition, the results showed that 13.6% of participants strongly agreed that The County has been able to devote appropriate resources to the planned projects, hence minimizing the number of outstanding bills on public spending, and an additional 53% of participants agreed that the same claim was true. with the other side, 25.8% of the participants agreed somewhat with the statement, while 4.5% of the participants opposed, and 3% of the participants strongly disagreed with the same statement. The mean score was 3.7, and the standard deviation was 0.9, which was not a significant value. In conclusion, with respect to the declaration that the system has permitted timely execution of county government projects, hence reducing the amount of unutilized monies at the end of the year, 15.2% of the participants strongly agreed with the statement, and 34.8% of the participants agreed with the statement. In addition, 40.9% of the participants were somewhat in agreement, 6.1% of the participants were in disagreement, and 3% of the participants were severely in disagreement, with a mean score of 3.5 and a standard

deviation that was minor at 0.9. The results showed that participants generally agreed that the system has permitted timely execution of county government projects, which has resulted in a reduction in the amount of unutilized monies at the end of the year; nevertheless, there was a large degree of diversity among the replies.

Dener and Young (2013) observed that just 24 countries (12%) have prominent practices in delivering open budget data from reliable IFMIS solutions, despite the widespread availability of 176 FMIS systems that are used by 198 governments throughout the world. According to Muita and Karanja (2018), the implementation of IFMIS on the budgetary cycle has resulted in increased accountability, efficiency, and effectiveness thanks to better management of cash flows, closer scrutiny of expenditures, stricter adherence to legal and regulatory frameworks, and quicker decision making. According to Kibunja (2017), the county government's financial performance was heavily impacted by the budgeting process, which included planning, IFMIS implementation, monitoring, and assessment.

# 4.4.3 Descriptive statistics for IFMIS Revenue system

The third goal was to determine the impact that using the IFMIS revenue system will have on the financial management practices of Kenya's county governments. Concerning the nine statements that dealt with the IFMIS revenue system, the participants were asked to indicate their degree of agreement on a scale that ranged from strongly disagreeing (1) to strongly agreeing (5). Table 4.12 presents the results in their entirety.

Table 4. 12: Descriptive statistics for IFMIS Revenue System

	IFMIS Revenue System	5	4	3	2	1	Mean Stdev
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	Automated Revenue Management has improved cash management system and financial reporting in the County.  6.1% (8)	47% (62)	(40)	12.1% (16)	4.5% (6)	3.4	0.9
2	Automated Revenue Management has enhanced timely record keeping of 31.8% accounting transactions	24.2% (32)	33.3% (44)	9.1% (12)	1.5% (2)	3.8	1.0
	In terms of accountability, openness, secrecy, and correctness of account transactions in the County, the system (28) has contributed to an improvement in the integrity of the accounts.	34.8% (46)	30.3% (40)	13.6% (18)	0% (0)	3.6	1.0
4	The Automated Revenue Management system has been connected to the IFMIS modules that are used in other departments to provide efficient financial management.  6.1% (8)	36.4% (48)	28.8% (38)	28.8% (38)	0% (0)	3.2	0.9
5	The Public Expenditure Management was significantly enhanced as a result of the linking of the Automated Revenue Management module with the modules of other units.  6.1% (8)	42.4% (56)	31.8% (42)	18.2% (24)	1.5% (2)	3.3	0.9
6	Because of the employment of IFMIS in the Automated Revenue Management process, the level of responsibility has increased, and the waste of public money has decreased.	(60)	21.2% (28)	9.1% (12)	0% (0)	3.8	0.9
	payments received in the county (16)	39.4% (52)	(42)	(22)	0% (0)	3.5	0.9
8	IFMIS revenue system has reduced fraud during the revenue receipt (20) process	(56)	31.8% (42)	10.6% (14)	0% (0)	3.6	0.9

According to table 4.12, 6.1% of the participants strongly agreed that automated revenue management has enhanced the cash management system and financial reporting in the County, while another 47% of the participants agreed that automated revenue management has improved these aspects of the system. In addition, 30.3% of participants somewhat agreed, 12.1% of participants disagreed, and 4.5% of participants definitely disagreed with the statement that automated revenue management has enhanced the cash

management system and financial reporting in the County. This was backed even further by a mean score of 3.4 and a standard deviation that was minor at 0.9. In addition, the results showed that 31.8% of participants strongly agreed that automated revenue management has strengthened timely record keeping of accounting transactions, and an additional 24.2% agreed that the same assumption was true. In addition, 33.3% of those polled agreed somewhat, 9.1% disagreed somewhat, and 1.5% disagreed severely, with a mean score of 3.8 and a large standard deviation of 1.0. This indicates that participants believed that automated revenue management had strengthened timely record keeping of accounting transactions, despite the fact that there was considerable disagreement across replies.

A total of 21.2% of participants were in agreement with the statement that the system improved the accountability, transparency, confidentiality, and accuracy of account transactions in the County, while an additional 34.8% were in agreement with the statement. With an average score of 3.6 and a significant standard deviation of 1.0, the results show that 30.3% of participants were slightly agreeing, 13.6% were disagreeing, and 0% were definitely disagreeing. Results showed that 6.1% of participants strongly agreed that the county has linked automated revenue management to IFMIS modules used by other units for efficient financial control, with another 36.4% agreeing with this assessment. 6.1% of those surveyed felt very strongly that the county had integrated automated revenue management with IFMIS modules used by other units for efficient financial control. Conversely, 28.8% of participants strongly agreed, 28.8% of participants disagreed, and the remaining 0% did not provide a strong opinion either way, for a mean score of 3.2 and a vanishingly small standard deviation of 0.9. Participants were almost

unanimous in their agreement with the assertion that the county has connected automated revenue management to IFMIS modules used by other units for effective financial control.

In response to the statement that linking the Automated Revenue Management module with other units' modules has enhanced Public Expenditure Management, 6.1% of the participants strongly agreed, while 42.4% agreed with the statement. In addition, 31.8% of the participants were somewhat in agreement, 18.2% were in disagreement, and 1.5% were severely in disagreement, with a mean score of 3.3 and an insignificant standard deviation of 0.9. According to table 4.12, 24.2% of the participants strongly agreed that the implementation of IFMIS in automated revenue management process has improved the payment procedures and has decreased abuse of public money, and another 45.5% of the participants agreed on the same point. On the other hand, 21.2% of the participants were somewhat in agreement, 9.1% of the participants were in disagreement, and 0% of the participants were strongly in disagreement, with a mean score of 3.8 and a substantial standard deviation of 1.0. However, there was significant disagreement among participants about whether or not the use of IFMIS in automated revenue management has resulted in better payment procedures and a reduction in the inappropriate use of public money.

Furthermore, the results revealed that 12.1% of those questioned strongly agreed that the IFMIS revenue system has enhanced the transparency and traceability of payments received in the county, while 39.4% agreed that the same premise is accurate. But although 31.8 percent of participants said they agreed, 16.7 percent said they disagreed, and 0 percent said they strongly disagreed that the IFMIS revenue system had improved the county's capacity to track and account for money coming in. This produced a mean score

of 3.5 with a statistically negligible standard deviation of 0.9. Finally, with regards to the allegation that the IFMIS revenue system has lowered fraud throughout the process of revenue receiving, 42.4% agreed with the statement, while 15.2% strongly agreed. A total of 31.8 percent of participants gave a positive response, 10.6 percent gave a negative response, and 0 percent gave a very negative response; the average score was 3.6 and the standard deviation was 0.9, which is not significantly different from zero. It was hypothesized that participants were in agreement that the IFMIS revenue system had decreased fraud throughout the process of revenue receiving with just a minor amount of difference across responses.

Opiyo (2017) came to the conclusion that the IFMIS implementation method had a good impact on revenue management after results that 64% of participants agreed with this statement. Odoyo, Adero, and Chumba (2014) also demonstrated that a reliable system is fundamentally one that collects information in an accurate, timely, comprehensive, and consistent manner. Additionally, they demonstrated that the infrastructure that supports the IFMIS ought to be protected from destruction, corruption, unauthorized access, and breach of confidentiality to ensure effective revenue management. There is a correlation between the adaptability of a local IFMIS design and a reduction in the likelihood of cash management failure. The results also showed that the deployment of IFMIS has not been successful due to the top-down management style that has been shown in the majority of the public sector.

# 4.4.4 Descriptive statistics for IFMIS Payment System

The fourth goal was to determine the impact that using the IFMIS payment system will have on the financial management practices of Kenya's county governments. Concerning

the IFMIS payment system, the participants were given the option of indicating their degree of agreement on a scale ranging from strongly disagreeing (1) to strongly agreeing (5). Table 4.13 presents the results in their entirety.

Table 4. 13: Descriptive statistics for IFMIS payment system

	IFMIS Payment System	5	4	3	2	1	Mean	Stdev
1	IFMIS payment System has led to							
	improvement in the payment process	18.2%	60.6%	12.9%	6.8%	1.5%	3.9	0.8
	of suppliers and expenses in the	(24)	(80)	(17)	(9)	(2)	3.9	0.8
	county							
2	IFMIS payment System enable							
	increase in the transparency and	13.6%	40.2%	37.9%	6.8%	1.5%	3.6	0.9
	traceability of payments made by the	(18)	(53)	(50)	(9)	(2)	3.0	0.9
	county							
3	IFMIS payment System has led to							
	reduction in the percentage of	15.2%	44.7%	32.6%	6.1%	1.5%	3.7	0.9
	outstanding debts to total debts in the	(20)	(59)	(43)	(8)	(2)	3.7	0.9
	county (payment efficiency)							
4	IFMIS payment System enable have	15.2%	56 1%	11.4%	15 2%	2 3%		
	led to reduction of fraud during	(20)	(74)	(15)	(20)	(3)	3.7	1.0
	payment of suppliers.	(20)	(74)	(13)	(20)	(3)		
5	The system has enabled the county							
	government to control the quality of	12.9%	43.2%	31.1%	11.4%	1.5%	3.5	0.9
	supplies made hence value for	(17)	(57)	(41)	(15)	(2)	3.3	0.9
	money.							
6	IFMIS payment System enable	12.1%	52 3%	23.5%	10.6%	1 5%		
	automatic matching of invoices with	(16)	(69)		(14)	(2)	3.6	0.9
	receipts	(10)	(0)	(31)	(17)	(2)		
7	IFMIS payment System enable							
	separate procedure for approval of			35.6%	18.2%	1.5%	3.4	1.0
	invoices that exceeded the user	(25)	(34)	(47)	(24)	(2)	3.1	1.0
	tolerances							
8	IFMIS payment system provides the							
	functionality to enter, monitor,		13.6%	40.9%	15.9%	7.6%	33	1.2
	maintain and process for payment of	(29)	(18)	(54)	(21)	(10)		1.4
	invoices and credit notes,							

Source: Field Data (2022)

According to table 4.13, 18.2% of the participants strongly agreed, and an additional 60.6% agreed, that the IFMIS payment System has contributed to improvements in the payment process of suppliers and costs in the county. In addition, 12.9% of participants agreed somewhat, 6.8% of participants disagreed, and 1.5% of participants strongly disagreed that the IFMIS payment System has led to an improvement in the payment process of suppliers and costs in the county. This resulted in a mean score of 3.9 and an insignificant standard deviation of 0.8. In addition, the results showed that 13.6% of those polled strongly agreed that the IFMIS payment System enables an improvement in the openness and traceability of payments made by the county, and another 40.2% of those polled agreed on the same point. Additionally, 37.9% of the participants fairly agreed, 6.8% of the participants disagrees while 1.5% strongly disagreed with a mean of 3.6 and an insignificant standard deviation of 0.9. This postulated that the participants were in agreement that IFMIS payment System enabled increase in the transparency and traceability of payments made by the county with minimal variation among participants.

In addition, the resuts revealed that 15.2% of participants strongly agreed, and another 44.7% agreed, that the IFMIS payment System has resulted in a decrease in the ratio of outstanding debts to total debts in the county (payment efficiency). This was shown to be the case by the results. In addition, 32.6% of the participants strongly agreed, 6.1% of the participants disagreed, and 1.5% severely disagreed, with a mean score of 3.7 and a standard deviation that was minor at 0.9. According to the results of the survey, 15.2% of participants strongly agreed that the IFMIS payment System has led to a decrease in the amount of fraud that occurs during the payment of suppliers. On the other hand, 56.1% of those who participated in the survey agreed with the statement that the IFMIS payment

System has enabled a decrease in the amount of fraud that occurs during the payment of suppliers. In addition, 11.4% of participants had a moderate agreement, 15.2% had a disagreement, and another 2.3% had a severe disagreement, yielding an average score of 3.7 with a large standard deviation of 1.0. This implies that participants agreed that the IFMIS payment System had contributed to a decrease in fraud during the payment of suppliers, despite their being considerable difference across replies.

According to the results of the survey, 12.9% of participants strongly agreed, and 43.2% agreed, that the system has allowed the county government to regulate the quality of the goods that are manufactured, hence providing value for money. Also, 31.1% of the participants strongly agreed, 11.4% disagreed, and 1.5% somewhat disagreed with the statement that the system has allowed the county government to regulate the quality of supplies supplied, hence providing value for money. The mean was 3.5, and the standard deviation was small at 0.9. According to table 4.13, 12.1% of participants strongly agreed that the IFMIS payment System enables automated matching of invoices with receipts, while another 52.3% of participants agreed that the system does permit automatic matching. On the other hand, 23.5% of the participants were somewhat in agreement, 10.6% of the participants were in disagreement, and 1.5% of the participants were strongly in disagreement, with a mean score of 3.6 and a standard deviation that was minor at 0.9. This suggested that the majority of participants agreed that the IFMIS payment System enables the automated matching of invoices with receipts, with just a small percentage of participants expressing disagreement.

In addition, the results showed that 18.9% of participants strongly agreed with the claim that the IFMIS payment System enables a distinct process for the approval of invoices that

exceed the user tolerances, and another 25.8% of participants agreed with the same assertion. On the other side, 35.6% of the participants agreed somewhat with the statement, while 18.2% of the participants disagreed with the statement, and 1.5% of the participants severely disagreed with the statement. The mean score for this statement was 3.4, and the significant standard deviation was 1.0. In conclusion, with regards to the allegation that the IFMIS revenue system has decreased fraud throughout the process of revenue reception, 22% of the participants strongly agreed with the statement, while 13.6% agreed with the statement. In addition, 40.9% of participants somewhat agreed, 15.9% of participants disagreed, and 7.6% of participants definitely disagreed with the statement that the IFMIS revenue system has decreased fraud throughout the process of revenue reception, with a mean score of 3.3 and a substantial standard deviation of 1.2. This suggested that the majority of participants agreed that the IFMIS revenue system had decreased fraud throughout the process of revenue receiving; nevertheless, the fact that the standard deviation was minor showed that there was some diversity in the replies.

### 4.4.5 Descriptive statistics for Organizational Resources

Establishing the combined influence of IFMIS's financial reporting, budgeting, revenue, and payment systems on the financial management of Kenya's county governments was the fifth goal of this project. Concerning the organizational resources available in the county administrations of Western Kenya, the participants were given the option of indicating their degree of agreement on a scale from strongly disagreeing (1) to strongly agreeing (5). Table 4.14 presents the results in their entirety.

**Table 4. 14: Descriptive statistics for Organizational Resources** 

	Organizational Resources 5	5	4	3	2	1	Mean	Stdev
1	assigned to them in IFMIS.	5% 27)	31.8% (42)	32.6% (43)	13.6% (18)	1.5% (2)	3.6	1.0
2	By using IFMIS, the company has made a concerted effort to promote 22.' collaboration and information exchange (30 across its many divisions.	(0)	(44)	31.8% (42)	10.6% (14)	1.5% (2)	3.7	1.0
3	IFMIS initiatives get an appropriate share of the company's financial resources, as determined by management.	.5% .27)	38.6% (51)	28% (37)	11.4% (15)	1.5% (2)	3.7	1.0
4	avoided	28)	(51)	(35)	(16)	(2)	5.7	1.0
5	There is sufficient resource available to produce and manage technical change in order to facilitate IFMIS use.	2% (4)	38.6% (51)	22% (29)	16.7% (22)	4.5% (6)	3.5	1.1
6	For the management of organizational resources necessary for IFMIS usage, 20.1 there is enough planning, processes, and (2 training in place.			24.2% (32)	10.6% (14)	1.5% (2)	3.7	1.0
7	The organization has obtained technologies that are relevant and 22 sufficient for the administration of (2' IFMIS.	29)	(47)	(41)	(13)	(2)	3.7	1.0
8	Top management is committed to provide adequate resources for effective operationalization of IFMIS	5% 27)	33.3% (44)	31.8% (42)	10.6% (14)	3.8% (5)	3.6	1.1

Source: Field Data (2022)

Results from table 4.14, 20.5% of the participants believed that individual workers had the appropriate abilities needed for their respective responsibilities in IFMIS, and another 31.8% of the participants agreed that individual employees have these talents. In addition, 32.6% of participants believed that individual workers had the appropriate abilities that are needed for the particular positions that they play in IFMIS. In addition, 13.6% of those who

responded disagreed with the statement, and an additional 1.5% strongly disagreed, leading to an overall mean score of 3.6 and a large standard deviation of 1.0. Further analysis of the data indicated that 22.7% of participants strongly agreed that the business had purposefully enabled information exchange across its many departments using IFMIS, and an additional 33.3% of participants agreed on the same affirmation. In addition, 31.8% of participants strongly agreed, 10.6% disagreed, and 1.7% very disagreed, with a mean score of 3.6 and a substantial standard deviation of 1.0. This stated that participants agreed that the company had purposefully enabled information exchange across its numerous departments utilizing IFMIS, and a further 33.3% agreed on the same affirmation, despite the fact that there was some difference in the results.

In addition, the results showed that 20.5% of the participants agreed, and another 38.6% agreed, that the management provides appropriate financial resources to the IFMIS initiatives. In addition, 28% of the people who participated in the survey agreed or strongly agreed that the management provides sufficient financial resources to the IFMIS programs. On the other side, 11.4% of participants disagreed and 1.5% strongly disagreed that the management devotes enough financial resources towards IFMIS initiatives, with a mean score of 3.7 and a substantial standard deviation of 1.0. This indicates that there is a significant amount of disagreement among participants. The results of the survey showed that 21.2% of participants were in complete agreement that the organization had appropriate financial allocation for the execution of its main tasks. On the other hand, 38.6% of those who participated in the survey agreed with the statement that the organization had a suitable financial allocation for the execution of its primary tasks. In addition, 26.5% of the participants were somewhat in agreement, 12.1% were in

disagreement, and 1.5% were severely in disagreement, yielding an average score of 3.7 with a considerable standard deviation of 1.0. This showed that participants were in agreement that the organization has appropriate financial allocation for the execution of its key initiatives. Despite the fact that there was substantial diversity among participants, the participants were in agreement that the organization has adequate budgetary allocation.

In line with the fact that there are sufficient resources available to produce and manage technical change for IFMIS application, the aforementioned. 18.2% of those polled had a highly affirmative response, while 38.6% provided a positive response overall. Also, 22% of the participants somewhat agreed, 16.7% disagreed, and 4.5% strongly disagreed that there are appropriate resources required to produce and manage technical change for IFMIS usage. This was corroborated by a mean of 3.5 and a large standard deviation of 1.0. According to table 4.14, 20.5% of the participants strongly agreed that there is enough planning, processes, and training in place for managing organizational resources necessary for IFMIS usage, and another 43.2% of the participants agreed on the same point. With a mean score of 3.7 and a considerable standard deviation of 1.0, however, 24.2% of participants somewhat agreed with the statement, 10.6% disagreed with the statement, and 1.5% of participants strongly disagreed with the statement. This postulates that there is appropriate planning, processes, and training in place for managing organizational resources necessary for IFMIS usage; nevertheless, this assumption did not represent the perspective of all participants.

In addition, the results indicated that 35.6% of the participants agreed with the claim that the business has acquired appropriate and suitable technology for the administration of IFMIS, while 22% of the participants strongly agreed with the statement. On the other

side, 31.1% of participants agreed that the company has acquired appropriate and suitable technology for management of IFMIS. 9.8% of participants disagreed with this statement, and 1.5% of participants strongly disagreed with it. The mean score for this statement was 3.7, and the significant standard deviation was 1.0. In conclusion, in terms of good practice on procedural observation to guarantee that personal interests do not trump the interests of the county government through abuse of IFMIS, 20.5% of the participants strongly agreed on the claim, and 33.3% of the participants agreed on the same assertion. In addition, 31.8% of the participants were somewhat in agreement, 10.6% of the participants were in disagreement, and 3.8% of the participants were severely in disagreement, with a mean score of 3.6 and a large standard deviation of 1.1. This showed that participants were in agreement that there is excellent practice on procedural observation to guarantee that personal interests do not trump the interests of the county government through abuse of IFMIS, despite the fact that this did not represent the view of all participants. However, this did imply that participants were in agreement that there is good practice on procedural observation.

Chepkwony and Okello (2016) examined the determinants of effective adoption of procure-to-pay system in County Government of Bomet. The study revealed that ICT infrastructure, staff training and management support are all critical determinants of procure-to-pay system. According to Ndaiga (2016), insufficient hardware and unreliable networks were major barriers to IFMIS's widespread implementation. Finally, our research showed that their stakeholders were not very invested in the success of the new system they were implementing. The ICT framework required for the roll out of IFMIS has been built, and Ogachi and Muturi (2016) found that most county did not have diverse strategic

approaches to IFMIS deployment; on IFMIS, there are no regular courses to update one's abilities, and there is also little incentive to keep qualified staff; both the political class and the county governments are opposed to the implementation of IFMIS, and the counties have not committed a sufficient amount of money to the project.

# **4.4.6** Descriptive statistics for Financial Management

The overarching purpose of the research was to investigate the connection between IFMISs, organizational resources, and efficient financial management within Kenya's county governments. Regarding the topic of financial management in the county governments in Western Kenya, the participants were given the option to express their degree of agreement on a scale ranging from strongly disagreeing (1) to strongly agreeing (5). Table 4.15 presents the results in their entirety.

 Table 4. 15: Descriptive statistics for Financial Management

	Financial Management	5	4	3	2	1	Mean	Stdev
1	By guaranteeing that the budget is							
	followed, IFMIS has increased the absorption rate in the county, which has led to an improvement in the county's overall financial			30.3% (40)	9.1% (12)	9.1% (12)	3.4	1.1
2	performance. The use of IFMIS has made it easier for the county to meet its objectives for income from its own sources.	6.1% (8)	21.2% (28)	31.8% (42)	30.3% (40)	10.6% (14)	2.8	1.1
3	The use of IFMIS modules has increased revenue collection because they foster openness, accountability, and efficiency in county government collection processes.	4.5% (6)	43.9% (58)	25.8% (34)	19.7% (26)	6.1% (8)	3.2	1.0
4	The financial management of allocations and the administration of public expenditures in the County have both been enhanced thanks to the modules of IFMIS.	13.6% (18)	48.5% (64)	19.7% (26)	16.7% (22)	1.5% (2)	3.6	1.0
5	IFMIS has contributed to an improvement in the County's overall financial performance by more effectively allocating monies for development expenditures.	18.2% (24)	40.9% (54)	21.2% (28)	18.2% (24)	1.5% (2)	3.6	1.0
6	Without the need for subjective judgments, the method has been helpful in assigning sufficient money to the many initiatives undertaken by the county administration.	6.1% (8)	31.8% (42)	37.9% (50)	19.7% (26)	4.5% (6)	3.2	1.0
7	The theft of public money in the County due to expenditures that were not permitted has decreased as a result of linked IFMIS modules.		31.8% (42)	30.3% (40)	13.6% (18)	4.5% (6)	3.5	1.1
8	Since the implementation of IFMIS, there has been an overall improvement in the county's level of efficiency and effectiveness.		59.1% (78)	15.2% (20)	3% (4)	0% ()	4.0	0.7

Source: Field Data (2022)

Table 4.13 shows that 16.7% of participants strongly believe that IFMIS has improved financial performance in the county by increasing the absorption rate and ensuring compliance with the budget. Another 34.8 percent of those who took the survey felt that the county's absorption rate had increased because of IFMIS. Furthermore, 30.3% of participants said IFMIS improved the county's financial performance by ensuring conformity with the budget, leading to a higher absorption rate. In addition, 9.1% of those who responded were against it, and another 9.1% were adamantly opposed to it. The average score was 3.4, and the significant standard deviation was 1.1. In addition, the results showed that 6.1% of the participants highly agreed that IFMIS has boosted the accomplishment of own source income objectives in the county, and another 21.2% of the participants agreed on the same statement. In addition, 31.8% of the participants strongly agreed, while 30.3% of the participants did not agree at all, resulting in a mean score of 2.8 and a large standard deviation of 1.1. This suggests that participants agreed that IFMIS had boosted the accomplishment of objectives for own source income in the county, despite the fact that some participants had the opposite view.

In addition, the results showed that 4.5% of participants strongly agreed with the statement, and another 43.9% of participants agreed with the statement, that IFMIS modules have encouraged openness, accountability, and efficiency of county government collections, which has led to better revenue collection. Also, 25.8 percent of participants were somewhat in agreement, 19.7 percent of participants were in disagreement, and 6.1 percent of participants were severely in disagreement, with a mean score of 3.2 and a substantial standard deviation of 1.0. According to the results of the survey, 13.6% of participants strongly agreed that the financial management of allocations and the management of

public expenditures in the County had been improved as a result of the implementation of IFMIS modules. On the other hand, 48.5% of those who participated in the survey agreed with the statement that the use of IFMIS modules has led to an improvement in the financial management of allocations and the management of public expenditures in the County. In addition, 19.7% of those who responded agreed somewhat with the statement, 16.7% disagreed, and 1.5% strongly disagreed, yielding an average score of 3.6 and a large standard deviation of 1.0. This indicated that the participants were in agreement that the IFMIS modules had enhanced the financial management of allocations and the management of public expenditures in the County, despite the fact that some of the participants expressed a view of apathy about this matter.

In accordance with IFMIS, which has improved financial performance in the County via effective allocation of money for development spending, 18.2% of the participants strongly agreed, and 40.9% agreed with the statement. In addition, 21.2% of those polled agreed somewhat with the statement that IFMIS has improved financial performance in the County via the effective allocation of money for development expenditures, whereas 18.2% disagreed with the statement and 1.5% strongly disagreed. The mean score for this statement was 3.6, and the significant standard deviation was 1.0. According to table 4.13, 6.1% of the participants strongly agreed that the system has aided in allocating enough resources on the county government projects without biased viewpoints, and another 31.8% of the participants agreed that the system has assisted in the same way. On the other hand, 37.9% of those who responded were somewhat in agreement, 19.7% of those who responded were not in agreement, and 4.5% of those who responded were not in agreement at all, with a mean score of 3.2 and a large standard deviation of 1.0. This

suggested respondent fairly agreed that system has aided in assigning the necessary resources on the county government projects without any biased views and with a large diversity in the replies.

In addition, the results showed that 19.7% of participants strongly agreed with the assumption that Linked IFMIS modules have decreased the misuse of public money in the County via unapproved expenditures, and another 31.8% of participants agreed with the same argument, with the other hand, thirty-three point five percent of participants agreed with the statement, thirteen point six percent of participants disagreed, and four point five percent of participants strongly disagreed with the same statement. The mean score was three point five and the significant standard deviation was one point one. In conclusion, the data showed that 22.7% of participants strongly agreed and an additional 59.1% agreed with the statement that there has been an improvement in the overall level of efficiency and effectiveness at the county since the implementation of IFMIS. In addition, 15.2% of the participants strongly agreed, 3% of the participants disagreed, and 0% of the participants severely disagreed, with a mean of 4.0 and a standard deviation of 0.7, which is not significant. It is clear, based on the mean, that the participants are in agreement with the assumption that, in general, there has been greater efficiency and effectiveness at the county ever since IFMIS was implemented, an opinion that had minimum variance.

#### 4.5 Pearson Correlation Analysis

The study computed Pearson correlation coefficient (r) to show the strength and direction of the relationship between IFMIS Financial Reporting System and Financial Management.

Table 4. 16: Correlation between IFMIS Financial Reporting System and Financial Management

		FRS	BS	RS	PS	OR		
Financial Reporting	Pearson Correlation	1						
System	Sig. (2-tailed)							
	N	132						
<b>Budgeting System</b>	Pearson Correlation	.549**	1					
	Sig. (2-tailed)	.000						
	N	132	132					
Revenue System	Pearson Correlation	.569**	.527**	1				
	Sig. (2-tailed)	.000	.000					
	N	132	132	132				
Payment System	Pearson Correlation	.558**	.581**	.656**	1			
	Sig. (2-tailed)	.000	.000	.000				
	N	132	132	132	132			
Organizational	Pearson Correlation	.226**	$.223^{*}$	$.208^{*}$	.107	1		
Resources	Sig. (2-tailed)	.009	.010	.017	.221			
	N	132	132	132	132	132		
Financial	Pearson Correlation	.649**	.603**	.665**	.711**	.392**		
Management	Sig. (2-tailed)	.000	.000	.000	.000	.000		
-	N	132	132	132	132	132		
**. Correlation is significant at the 0.01 level (2-tailed).								
•	$\alpha$ if icant at the 0.05 leve							

\*. Correlation is significant at the 0.05 level (2-tailed).

Table 4.16 Shows that IFMIS financial reporting system is moderate and positively correlated to financial management (r = 0.649; p < 0.05). Therefore, an upgrade in the IFMIS financial reporting system will result in an improvement in the financial management of Western Kenya's county governments. Mburu and Ngahu (2016) investigated the effect of IFMIS on financial management in County Governments. Their results provide support for the conclusions of this study. According to the results of the research, the use of financial reporting systems had a favorable and substantial effect on the financial management of public sector organizations. Rangira and Mulyungi (2017)

found that there is a substantial association between financial reporting system and the financial performance of government entities in Rwanda.

When a similar analysis was done to show the relationship between IFMIS budgeting System and Financial Management, the study found out that there was equally a moderate positive relationship (r = 0.603; p < 0.05) between the two variables. This implies that improvement in IFMIS budgeting System would improve Financial Management of county governments in Western Kenya. Njonde and Kimanzi (2014) report that the effectiveness of IFMIS on public financial management is positively correlated with the independent variable budgeting. The existence of this connection was shown. Oyinlola et al. (2017) conducted a regression study and discovered that the performance of IFMIS on public financial management was positively correlated with that of the revenue management system. One of the results of their research was this realization. Implementing IFMIS in public finance was associated with better financial reporting, budgeting, and internal control, as well as better government projects, according to the study's results.

Similarly, the correlation coefficient between IFMIS revenue system and financial management positive and moderate (r = 0.665, p < 0.05). This implies that improvement in IFMIS revenue system would results to significant improvement in financial management. The research that was carried out with the purpose of evaluating the effect that the implementation of IFMIS had on the overall performance of public institutions in Rwanda and published by Harelimana (2017) took place between the years 2012 and 2016. This had a good effect on the performance of the organization, as shown by the correlation coefficient of 0.976 between the implementation of the IFMIS revenue to cash

management module and the performance of MINECOFIN, which indicates a significant link. Akoth (2019) revealed that revenue collection techniques are significant predictors of financial performance with electronic revenue collection.

Similar analysis done between IFMIS Payment System and Financial Management produced a strong positive correlation with r=0.711 and p<0.05. This suggests that enhancements to the IFMIS Payment System will lead to improvements in the financial management of county governments in Western Kenya. Olali (2015) conducted research to determine the extent to which the implementation of an IFMIS (IFMIS) improved the efficiency of public procurement in Kenya. According to the results of the research, both buy ordering and payment have a good and substantial impact on the country of Kenya's overall procurement performance. A majority of participants generally believed that there is enhanced tracking of government financial activities, according to the research, both the research conducted by Alini (2018). According to the findings of the research, both the payment module and buy ordering have a large and favorable impact on the overall performance of employees in state commissions.

As a last point, we find that organizational resources and financial management are weakly positively related (r = 0.392; p <0.05). This suggests that better financial management would follow from increased organizational resources. Njeru (2017) looked at how implementing IFMIS changed the way the Kenyan government handled public funds, and their findings corroborate these findings. The research showed a favorable and statistically significant connection between the IFMIS payment module and government spending oversight. Even if the research findings reveal that more integration of the system modules

is needed to increase adequate monitoring controls of public spending, this demonstrates that IFMIS has considerably enhanced the management of public expenditure.

### 4.6 Diagnostic Test for Linear Regression Analyses

# **4.6.1 Normality Test**

Statistics errors occur often in published works because many parametric procedures, like as correlation, regression, analysis of variance, and the t-test, rely on the assumption of a Gaussian or normal distribution. It will be challenging to arrive at a reliable outcome if this assumption turns out to be incorrect. A visual inspection of normality has been recommended by Ghasemi and Zahedias (2012). The research produced normal Q-Q plots, which showed that the deviation from normality was not significant in comparison to the approximation to the line of best fit, proving that the assumption was correct (Refer to figure 4.1).

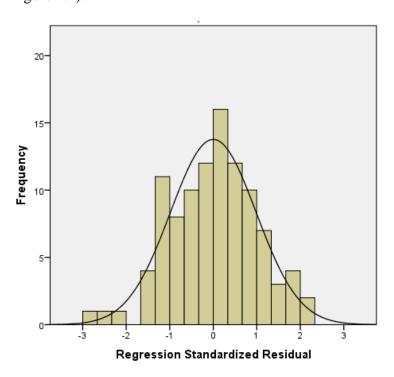


Figure 4. 1: Normal Curve for Regression Residual

Source: Field Data (2022)

# 4.6.1 Linearity

The study used the suggested scatter plots to determine if there was a linear relationship between financial management and IFMIS (IFMIS financial reporting system; IFMIS budgeting system; IFMIS revenue system and IFMIS payment system) by Gill *et al.* (2010). The closer the data points come to forming a straight line when plotted, the higher the correlation between the two variables, or the stronger the relationship. If the data points make a straight line going from near the origin out to high y-values, the variables are said to have a positive correlation. If the data points start at high y-values on the y-axis and progress down to low values, the variables have a negative correlation. For this study, there is evidence of positive correlation between independent variables (IFMIS constructs) and dependent variable (Financial Management). The results are as shown in Figure 4.2.

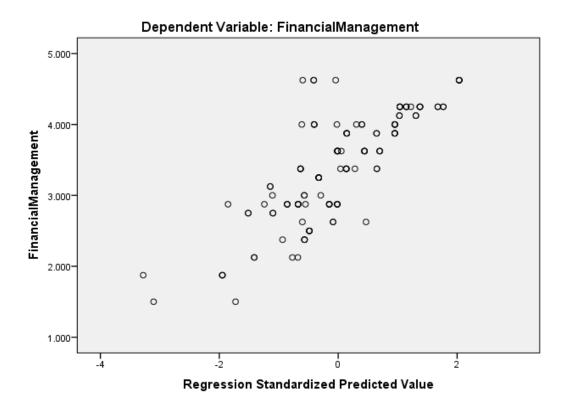


Figure 4. 2: Linearity Using Scatter Plot

Source: Field Data (2022)

# **4.6.3** Multi-collinearity Test

Multicollinearity refers to a situation in which two or more previously independent variables are substantially associated with one another. According to Cooper and Schindler (2011), a rise in multicollinearity may cause fluctuations in the regression coefficient, which makes it more difficult to interpret the coefficient as an indication of predicting factors. In order to test for multicollinearity, variance inflation factors (VIF) or tolerance values were used. If the VIF values are less than ten, then the general rule is that there is no multi-collinearity issue. Similarly, if the tolerance values have a value of one or less, then there is also no multi-collinearity problem.

**Table 4. 17: Multicollinearity Statistics** 

Variable	Tolerance	VIF
IFMIS financial reporting	.568	1.759
system	.500	1.757
IFMIS revenue system	.577	1.734
IFMIS budgeting system	.499	2.005
IFMIS payment system	.474	2.107

Source: Field Data (2022)

Table 4.17 shows the current study tolerance ranged from 0.474 to 0.577 which are all above 0.2 and therefore its reciprocal, the VIF was between 1.734 and 2.107, which are below the threshold value of 10 as required and even much lower than 5. This indicated that the independent variables were not collinear.

## 4.6.4 Homoscedastic Test of Financial management

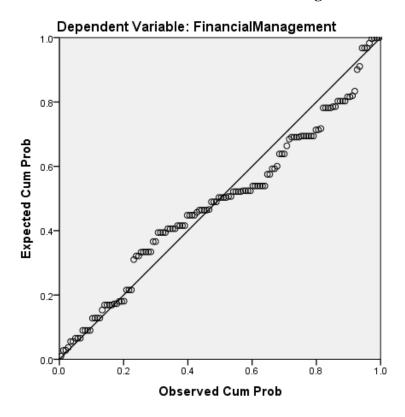


Figure 4. 3: Homoscedastic Test of financial management

Source: Field Data (2022)

The results of the homoscedasticity test are shown in Figure 4.3. These results indicate that the variances of the independent variables must be equal; if they are not, a heteroscedasticity issue will exist (Garson, 2012). In the context of a regression model, a test for homoscedasticity is a test for the variance in the residuals. According to Cappelleri and Bushmakin (2013), homoscedasticity of data distribution is shown by the probability versus probability plot (P-P Plot). Figure 4.3 depicts a typical P-P plot in the field of financial management, showing that the points only slightly vary from the straight line that crosses the plane. This means the data utilized in this study is homoscedastic, which led researchers to choose a multiple linear regression model.

## **4.7 Linear Regression Analyses**

A regression analysis was carried out to discover the factors that had the most impact on tshe variable that served as the dependent variable. These investigations produced the coefficient of correlation, denoted by the letter R, as well as the coefficient of determination, denoted by the letter R square. The Significance level (P-value), B coefficients, and F statistics were three other outcomes that caught our attention. The hypothesis was evaluated using the correlation coefficient (Beta;  $\beta$ ). If is statistically significant, the research will be considered to have failed to reject the null hypothesis, whereas if  $\beta$  is significant, the study will be considered to have met its test conditions

### 4.7.1 Effect of IFMIS Financial Reporting System on Financial Management

The effect of the IFMIS financial reporting system on the fiscal management of County governments in Western Kenya was analyzed using a regression model. The results are shown in Table 4.18.

Table 4. 18: Regression Analysis- IFMIS financial reporting system

			Model	Summary			
Model	R	R Square	Adjus	sted R Squa	are Std. Er	ror of the E	stimate
1	.649a	.422			.417		.571518
a. Predic	ctors: (Cons	tant), IFMIS Fi	nancial Re	eporting Sys	tem		
			AN	NOVAa			
Model		Sum of Squ	ıares	Df	Mean Square	$\mathbf{F}$	Sig.
1 F	Regression		30.945	1	30.945	94.739	$.000^{b}$
F	Residual		42.462	130	.327		
7	Γotal		73.407	131			
a. Deper	ndent Varial	ble: Financial N	Managemei	nt			
b. Predic	ctors: (Cons	stant), IFMIS F	inancial Re	eporting Sys	stem		
			Coe	fficients <sup>a</sup>			
					Standardize		
			Unstand	dardized	d		
			Coeff	icients	Coefficients		
Model			В	Std. Erro	r Beta	T	Sig.
1 (Cons	stant)		.270	.32	26	.831	.408
IFMI:	S Financial	Reporting	926	00	26 640	0.722	000
Syste	em		.836	30.	36 .649	9.733	.000
a. Deper	ndent Varial	ble: Financial N	/Ianagemer	nt			

Source: Field Data (2022)

According to Table 4.18, the R value is 0.649 and the P=0.005, which suggests that the link between the IFMIS financial reporting system and financial management in County governments of Western Kenya is moderate and favorable. As a consequence of this, an expansion of the IFMIS financial reporting system will lead to an improvement in the level of financial management practiced by county governments in Western Kenya. The  $R^2$ , also known as the coefficient of determination, demonstrates that the IFMIS financial reporting system explains the variation of up to 42.2% of the variance in financial management across the county governments in Western Kenya ( $R^2=0.422$ ). This is shown by the fact that the system has a value of 0.422. This suggests that the IFMIS financial

reporting system has a significant effect on the financial management in the county governments in Western Kenya. The F test produced a result of (1, 131) = 94.739, which indicates that the model does an excellent job of describing the variance in the dependent variable. This conclusion is supported by the fact that the P value is less than 0.05. Additionally, this indicates that the IFMIS financial reporting system is a reliable predictor of the level of financial management in the county governments in Western Kenya.

The IFMIS financial reporting system had a significance level of P=0.05, and the unstandardized regression coefficient ( $\beta$ ) value was 0.836. This suggested that a modification of one unit in the IFMIS financial reporting system would result in a modification of 0.836 units in the financial management of the county governments in Western Kenya. As a consequence of using the IFMIS financial reporting system, the regression equation that was used to measure the level of financial management in the county governments in Western Kenya was expressed as follows:

#### Financial management = 0.270+0.836 IFMIS financial reporting system

From the results it evident IFMIS financial reporting system have significant positive effect on the financial management in Kenya's county governments. The results are reinforced by Langat (2016), who aimed to evaluate how IFMIS influences the performance of water infrastructure in Bomet County. Langat's findings may be seen here. According to the results of the research, IFMIS has a beneficial impact on financial performance. IFMIS supports the timely production of excellent financial reporting, encourages the empowerment of workers, and promotes long-term objectives, as well as intervention targeted at promoting entrepreneurship and self-employment.

## 4.7.2 Effect of IFMIS Revenue System on Financial Management

An investigation on the impact that the IFMIS revenue system has had on the budgetary practices of county governments in Western Kenya was carried out by means of a regression analysis. The results are shown in Table 4.19 below.

Table 4. 19: Model Summary and ANOVA IFMIS revenue system

			Mode	el Summ	ıary				
Model	R	R Square	Ad	justed R	Squa	re Std.	Error	of the E	stimate
1	$.665^{a}$	.4	43			.438			.561013
a. Predic	tors: (Const	tant), IFMIS R	Revenue S	ystem					
			A	NOVA					
Model Sum of Squares df Mean Square F									
1 Regi	ression		32.492	1		32.492	103	.234	$.000^{b}$
Resi	dual		40.916	130		.315			
Tota	1		73.407	131					
a. Depen	dent Variab	ole: Financial	Managem	ent					
b. Predic	tors: (Cons	tant), IFMIS F	Revenue S	ystem					
			Co	efficient	s <sup>a</sup>				
			Unstand	lardized		Standard	ized		
			Coeffi	cients		Coefficie	ents		
Model			В	Std. E1	ror	Beta		T	Sig.
1 (Cons	tant)		1.115		.230			4.841	.000
IFMIS	Revenue S	System	.670		.066		.665	10.160	.000
a. Depen	dent Variab	ole: Financial l	Managem	ent					

Model Cummony

Source: Field Data (2022)

Table 4.21 displays a R value of 0.665, with a significance level of 0.000 indicating a somewhat good link between the IFMIS revenue system and financial management in the County governments of Western Kenya. Consequently, better fiscal management in the counties of Western Kenya would follow from a more widespread use of IFMIS's tax collection software. The IFMIS revenue system substantially accounts for up to 44.3% of

the variance in financial management in County governments in Western Kenya ( $R^2$ =0.443), as shown by the R square which is the coefficient of determination. This points to the fact that the IFMIS revenue system has a major impact on the fiscal management of the counties in Western Kenya. According to the results of the F test, the model is an excellent fit for explaining the variance in the dependent variable, with a value of (1, 131) = 103.234, P<0.05. This results also indicates that the IFMIS revenue system is a reliable indicator of county governments' ability to manage their finances in Western Kenya.

If we choose a significance threshold of p<.001, we find that the IFMIS revenue system has a regression coefficient ( $\beta$ ) of 0.670. This revealed a 0.670 percentage point shift in county governments' financial management as a consequence of a unit shift in IFMIS revenue system. To calculate how much better county governments in Western Kenya are at handling finances thanks to the IFMIS revenue system, a regression equation was derived:

#### Financial management = 1.115+0.670 IFMIS revenue system

The results indicate that the IFMIS revenue system used by county governments in Kenya has a significant effect on Kenya's macroeconomic management. The impact of IFMIS on Kwale County Government's financial performance was analyzed by Ndzovu and Ng'ang'a (2019). Their findings confirm the conclusions drawn from the previous study. According to the findings, the ratio of the county's income to its cash flow had a beneficial and substantial impact on the county's overall financial performance. Omar (2017) found that the IFMIS revenue system has a favorable and substantial influence on the county of Garissa's overall financial performance. Improvements in the County's financial

performance, as measured by the amount of money brought in by the County as a whole, may be directly attributed to the increased funding allocated to strengthening the IFMIS system. Kirimi (2015) reports that the Meru County office's productivity greatly improved with the introduction of an online payment process and the automation of revenue collecting activities. The study also finds that the efficiency of the Meru County office is significantly improved by the introduction of online response processes and the automation of revenue collection procedures.

### 4.7.3 Effect of IFMIS Budgeting System on Financial Management

It was determined using regression analysis how much of an impact the IFMIS budgeting system had on the county governments' ability to effectively manage their finances in Western Kenya. The results are shown in Table 4.20 below.

Table 4. 20: Model Summary and ANOVA for IFMIS budgeting system

			Mode	l Summary					
Model	R	R Square	Adj	justed R Sq	uare S	td. Err	or of tl	he Es	timate
1	.603a		.363		.358				.599640
a. Predic	ctors: (Const	tant), IFMIS Bi	udgeting S	System					
			A	NOVA <sup>a</sup>					
		Sum of							
Model		Squares	(	df	Mean S	Square	$\mathbf{F}$		Sig.
1 F	Regression	26.663		-		26.663	74.154		$.000^{b}$
F	Residual	46.744		130	)	.360			
7	Γotal	73.407		131					
a. Deper	ndent Variab	ole: Financial M	<b>I</b> anageme	nt					
b. Predic	ctors: (Cons	tant), IFMIS B	udgeting S	System					
			Coe	efficients <sup>a</sup>					
			Unstand	lardized	Stand	lardized	i l		
			Coeffi	icients	Coef	ficients			
Model			В	Std. Error	· F	Beta		T	Sig.
(Consta	ınt)		.712	.31	7			2.248	_
<b>IFMIS</b>	Budgeting S	System	.742	.08	6	.60	03	8.611	.000
a. Deper	ndent Variat	ole: Financial M	<b>J</b> anageme	nt					

Source: Field Data (2022)

The significance level, P, is 0.000, and the correlation value, R, is 0.603 as shown in Table 4.20. This suggests that the IFMIS budgeting system is positively associated with financial management in the county administrations of Western Kenya. Therefore, better financial management by county governments in Western Kenya will result from the upgraded IFMIS budgeting system. According to the results of the  $R^2$ , the IFMIS budgeting system substantially accounts for up to 36.3% of the variance in financial management across the county governments in Western Kenya ( $R^2 = 0.363$ , P = 0.000). This results is supported by the fact that. This suggests that the budgeting system used by IFMIS has a substantial impact on the financial management used by county governments in Western Kenya. The F test produced a result of (1, 131) = 74.154, which supports the goodness of fit of the

model in explaining the variation in financial management in county governments of Western Kenya. It also suggests that IFMIS Budgeting system is a useful predictor of financial management in the county governments in Western Kenya.

The unstandardized regression coefficient ( $\beta$ ) value of IFMIS budgeting system was 0.742 and significance level of p< .001. This indicated that a unit change in IFMIS budgeting system would result in change in financial management in County governments of Western Kenya by 0.742. The regression equation to estimate the financial management in County governments of Western Kenya as a result of IFMIS budgeting system was hence stated as:

### Financial management = 0.712+0.742 IFMIS budgeting system

According to the results of the research, there is a correlation between the IFMIS budgeting system and the financial management in Kenya's county governments that is statistically significant. The findings are reinforced by Wangare, Mukanzi, and Maniagi (2016), who conducted an investigation into the impact of IFMIS on the public financial management in the County Government of Kakamega. According to the data, IFMIS largely accounted for 75.9% of the variation in the area of public finance management. It has been determined that the IFMIS plan to budget has a favorable and substantial effect on the public finance management of the Kakamega county government. According to Ndzovu and Ng'ang'a (2019), the use of computerized budgeting has a good and considerable effect on the county's overall financial performance.

## 4.7.4 Effect of IFMIS Payment System on Financial Management

Regression analysis was done to determine the influence of IFMIS payment system on the financial management of County governments in Western Kenya. The results are as shown in Table 4.23.

Table 4. 21: Model Summary and ANOVA for IFMIS payment system

			Model	Summary				
Model	R	R Square	Adju	sted R Squ	are	Std. Error o	f the Esti	mate
1	.711 <sup>a</sup>	.500	5			.528083		
a. Predic	ctors: (Cons	tant), IFMIS	Payment	System				
			Al	NOVAa				
Model		Sum of Squ	uares	df	Mea	ın Square	$\mathbf{F}$	Sig.
1 F	Regression	3	37.154	1		37.154	133.230	$.000^{b}$
Residual		3	36.253	130		.279		
Т	Total	,	73.407	131				
a. Deper	ndent Varial	ole: Financial	Manage	ement				
b. Predic	ctors: (Cons	tant), IFMIS	Payment	t System				
			Coe	fficients <sup>a</sup>				
			Unstan	dardized	S	tandardized		
			Coef	ficients		Coefficients		
Model			В	Std. Error	r	Beta	t	Sig.
(Constan	nt)		.639	.24	4		2.622	.010
IFMIS I	Payment Sy	stem	.772	.06	57	.711	11.543	.000
a. Deper	ndent Varial	ole: Financial	Manage	ement				

Source: Field Data (2022)

results shows that correlation (R) value is 0.711, P=0.000 implying that the relationship between IFMIS payment system and financial management in County governments of Western Kenya is moderate and positive. Therefore, improvement in IFMIS payment system would results in increase in financial management in County governments of Western Kenya. The R square shows that up to 50.6% of variation in financial management

in County governments of Western Kenya is significantly accounted for by IFMIS payment system ( $R^2$ =0.506). This indicates that IFMIS payment system have significant influence of the financial management in County governments of Western Kenya. The F test gave a value of (1, 131) = 133.230, P<0.05, which supports the goodness of fit of the model in explaining the variation in the Financial management in County governments of Western Kenya. It also suggests that IFMIS payment system is a useful predictor of financial management in County governments of Western Kenya.

The test criterion was set such the study fails to accept the null hypothesis  $H_04$  if  $\beta_1\neq 0$ . Regression results were achieved when latent variable of IFMIS payment system were regressed with latent variable of financial management of County Governments in Western Kenya and the results are as shown in Table 4.10. Results show that IFMIS payment system had a positive, linear and significant (p-value is less than 0.05) association with the financial management of County Governments in Western Kenya {regression coefficient, B=0.772 and t-test value, t=11.543}. The results are represented in the following model:

$$Y = \beta 0 + \beta_3 X_3 + \epsilon$$

Where Y = financial performance,

 $\beta_0 = 0.639$  (constant)

 $\beta_3 = 0.772$ 

X<sub>3</sub>= IFMIS payment system

Substituting equation above with values, the model becomes:  $Y=0.639+0.772X_3+\epsilon$ From the above model, the constant had coefficient of 0.639, p=0.000, this implies that in the absence of IFMIS payment system, financial management would be positively at 0.639. This financial management would be significant (P<0.05). Further, IFMIS payment system had beta coefficient of 0.772, P=0.000. This implies when everything is held constant, a unit increase in the IFMIS payment system would results to a significant increase in performance by 0.772 units

Based on these results, there was sufficient evidence to reject the fourth null hypothesis since there is a positive, linear, and significant (p-value is less than 0.05) relationship between the two variables. Olali (2015) conducted research to determine the extent to which the implementation of an Integrated Financial Management Information System (IFMIS) improved the efficiency of public procurement in Kenya. According to the results of the research, both buy ordering and payment have a good and substantial impact on the country of Kenya's overall procurement performance. A majority of participants generally believed that there is enhanced tracking of government financial activities, according to the findings of the research conducted by Alini (2018). According to the results of the research, both the payment module and buy ordering have a large and favorable impact on the overall performance of employees in state commissions.

#### 4.8 Multiple Linear Regressions

This study set out to answer the question, "How do integrated financial management information systems relate to the actual financial management practices of county governments in Kenya?" by surveying and interviewing county officials from throughout the country. This conclusion was reached by the use of standard multiple regressions. The purpose of this research was to examine how different financial management structures interacted with one another inside a model of an IFMIS. The study's R-squared and model coefficients benefited from this procedure, allowing us to rule out the null hypothesis and

evaluate alternative research hypotheses. This study's complete results are shown in Table 4.22.

Table 4. 22: Model Summary Integrated Financial Management Information System and Financial Management

				Std.		Chang	tics		
			Adjusted	Error of	R				
		R	R	the	Square	${f F}$			Sig. F
Model	R	Square	Square	Estimate	Change	Change	df1	df2	Change
1	.801a	.642	.631	.454889	.642	56.939	4	127	.000
a. Predic	ctors: (0	Constant)	, IFMIS Pa	yment Syste	m, IFMIS	Financial 1	Reportin	g Syste	m, IFMIS
Budgeti	ng Sys	tem, IFM	IS Revenue	System					

Source: Field Data (2022)

The results are summarized in Table 4.22, which demonstrates that a positive and linear association exists between financial management and each of the four predictor variables: the IFMIS budgeting system, the IFMIS financial reporting system, the IFMIS payment system. The coefficient of correlation was 0.801, also written as r=0.801, in this study. The  $r^2$  value of 0.642 shows that the four predictor variables in the study account for 64.2% of the variance in financial management, while the remaining 35.8% of the variance in financial management can be attributed to other, unmeasured factors.

Table 4. 23: ANOVA for Integrated financial management information system

Mode	el	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	47.128	4	11.782	56.939	$.000^{b}$
	Residual	26.279	127	.207		
	Total	73.407	131			

a. Dependent Variable: Financial Management

Source: Field Data (2022)

Table 4.23, Shows that the F test for the ANOVA results yielded a value of F (4, 131) =56.939, p <.01, which is large enough to support the goodness of fit of the model in explaining the variation in dependent variable. It also means intergrated financial management system is a useful predictor of financial management in county governments

Table 4. 24: Coefficients of the Independent Variables and Financial management

		ndardized efficients	Standardized Coefficients		
Model	В	Std. Error	Beta	T	Sig.
(Constant)	560	.286		-1.962	.052
IFMIS Financial Reporting System	.324	.091	.252	3.577	.000
IFMIS Budgeting System	.187	.086	.152	2.175	.032
IFMIS Revenue System	.221	.076	.220	2.923	.004
IFMIS Payment System	.367	.084	.338	4.388	.000
a. Dependent Variable: Financial I	Managen	nent			

Source: Field Data (2022)

Table 4.19 displays the results of a multiple linear regression analysis performed on the financial management dependent variable:

b. Predictors: (Constant), IFMIS Payment System, IFMIS Financial Reporting System, IFMIS Budgeting System, IFMIS Revenue System

Financial management =  $-.560+0.324 X_{1}+0.187 X_{2}+0.221 X_{3}+0.367 X_{4}$ 

 $X_{1=}$  IFMIS financial reporting system

X<sub>2=</sub> IFMIS budgeting system

X<sub>3=</sub> IFMIS revenue system

X<sub>4=</sub> IFMIS budgeting system

From table 4.23, IFMIS financial reporting system, IFMIS revenue system, IFMIS payment system and IFMIS budgeting system carried positive and significant predictive power (P<0.05). If IFMIS is held at zero or it is absent, the financial management will be

-560, p>0.05. This implies that financial management will be negative and insignificant.

The IFMIS financial reporting system is a significant predictor of financial management when the IFMIS revenue system, IFMIS payment system, and IFMIS budgeting system are held constant (beta = 0.324, t = 3.577, P = 0.000). This means that a one-unit increase in the IFMIS financial reporting system is associated with a 0.324-unit increase in financial management. Omokonga's (2014) study set out to discover how much of an effect IFMISs had on the achievements of public sector businesses. The use of IFMIS was significantly correlated with increased transparency in financial reporting. This connection was analyzed quantitatively. On the other side, Awino (2018) sought to learn how deploying IFMIS will affect service delivery in Homa Bay County, which is part of the Western Region. The premise that computerized financial reporting does not significantly affect the quality of services in Homa Bay County was not rejected.

If the IFMIS revenue system, the IFMIS payment system, and the IFMIS financial reporting system are all under control, the IFMIS budgeting system reaches a statistically

significant level with a beta of 0.187. This indicates that a one-unit increase in the IFMIS budgeting system will lead to a substantial 0.187-unit increase in financial management. IFMIS improves an organization's bottom line, as shown by researchers Rangira and Mulyungi (2017). High-quality data is delivered on time, worker empowerment is encouraged, and measures to improve self-employment are supported thanks to IFMIS's support. The county's fiscal administration system has also been updated thanks to IFMIS. Using a regression analysis, Michael, Oyewale, and Oladosu (2017) found that the three independent variables of financial reporting, budgeting, and projects positively correlated with the impact of IFMIS on public financial management. One of the results of their study was this discovery. The financial management of ministries and state agencies benefits greatly from the implementation of budgeting procedures, financial reporting systems, organizational transparency, and accountability, as stated by Muthoni (2017).

If the IFMIS budgeting system, the IFMIS payment system, and the IFMIS financial reporting system are all under control, the IFMIS revenue system's beta value of 0.221 indicates that it has reached a statistically significant level. This suggests that an improvement of one unit in the IFMIS revenue system will result in a significant improvement of 0.221 units in financial management. It was shown by Odoyo, Adero, and Chumba (2014) that the dependability of IFMIS and the flexibility of IFMIS had a good effect on revenue management. Madegwa and Namusonge (2018) investigated the effect that computerizing the process of collecting revenues has on the overall organizational effectiveness of Trans Nzoia County. The study concludes that the online approach has a considerable impact on productivity in the Trans Nzoia County Government office. Bonface (2016) presented research showing that the IFMIS system helped improve

organizational performance. Specifically, the IFMIS revenue system improved performance by 79%.

In conclusion, when the IFMIS budgeting system, the IFMIS revenue system, and the IFMIS financial reporting system are controlled, the IFMIS payment system reaches a statistically significant level with a beta of 0.367. If the IFMIS payment system is improved by one unit, this predicts that the financial management system will also improve by 0.367 units. Hawo (2015) found that public sector financial management improved significantly when organizations used accountability and payment mechanisms. Mohamed (2017) claims that the IFMIS payment module has a large and beneficial effect on the economic results in Garissa County. Since additional resources were allocated to enhancing the IFMIS system, the County's financial performance increased as measured by the quantity of money brought in. On the other hand, Simiyu and Kaplelach (2013) set out to look at how IFMIS in Kenya affected the handling of county revenues in Kilifi. According to the findings of the research, accounts payable do not have a major and emphatic influence on the administration of the public finances in Kilifi County.

# 4.9 Hierarchical Linear Regression

In this particular investigation, a moderating role was played by organizational resources. The results of the study's analysis of the moderating role of organizational resources in the association between IFMIS and financial management are shown below. This was achieved through the use of hierarchical regression analysis, in which the organizational resource components were controlled. The equation that was utilized to determine the level of moderating effect was as follows:

 $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 Z + \beta_6 X_1 Z + \beta_7 X_2 Z + \beta_8 X_3 Z + \beta_9 X_4 Z + \epsilon$ 

Where X = Independent variables (IFMIS financial Reporting, Revenue, Budgeting, Payment)

Z = Moderating variable (Organizational resources)

Y = Financial management

The magnitude, direction, and statistical significance of the link between the betas were analysed using a regression technique. This entailed three models as explained here. In the first model, the independent variables in this case IFMIS financial reporting, revenue system, budgeting system and payment system were added leading to model one. Secondly, the moderator was added as additive variable in this case organizational resources to yield model 2. As a final step, we accounted for the impact of both the independent and moderating factors in the model. This is the result of multiplying organizational assets by each person's independent factors. As a consequence, the third model of the research was created. There is no moderating impact if this correlation is not statistically significant. The results are as follows

**Table 4. 25: Model Summary for Moderating Variable of Organizational resources** 

				Std.		<b>Change Statistics</b>				
				Error of						
		R	Adjusted	the	R Square	$\mathbf{F}$			Sig. F	
Model	R	Square	R Square	Estimate	Change	Change	df1	df2	Change	
1	.801a	.642	.631	.454889	.642	56.939	4	127	.000	
2	.833 <sup>b</sup>	.694	.682	.421906	.052	21.633	1	126	.000	
3	.859°	.738	.719	.397082	.043	5.062	4	122	.001	

a. Predictors: (Constant), IFMIS Payment System, IFMIS Financial Reporting System, IFMIS Budgeting System, IFMIS Revenue System

Source: Field Data (2022)

As shown in Table 4.25, Model one which comprises of independent variables, IFMIS Payment System, IFMIS Financial Reporting System, IFMIS Budgeting System, and IFMIS Revenue System also had significant relationship with financial management. With an R square of 0.642, this model significantly explained 64.2% change in financial management.

Model two which comprises of IFMIS Payment System, IFMIS Financial Reporting System, IFMIS Budgeting System, and IFMIS Revenue System as well as organizational resources also had significant relationship with financial management. With an R square of 0.694, this model significantly F(1,126)= 21.633 explained 69.4% change in financial management. The additional variance to organizational resources was 5.2%.

b. Predictors: (Constant), IFMIS Payment System, IFMIS Financial Reporting System, IFMIS Budgeting System, IFMIS Revenue System, Organizational Resources

c. Predictors: (Constant), IFMIS Payment System, IFMIS Financial Reporting System, IFMIS Budgeting System, IFMIS Revenue System, Organizational Resources, PS\*OR, BS\*OR, RS\*OR, FRS\*OR

Finally, model 3 was obtained by including interaction terms between the independent variables and the moderator (in this case, organizational resources) in the regression model. In addition, there was a statistically significant association between financial management and the independent and moderator variables in Model 3, which includes the IFMIS Payment System, IFMIS Financial Reporting System, IFMIS Budgeting System, IFMIS Revenue System and organizational resources. With an R square of 0.738, this model significantly F (4,122) = 5.062 explained 73.8% change in financial management. Interaction terms contributed an extra 4.3% to the total variance. This indicates that organizational resources have the ability to moderate the relationship between the IFMIS and the administration of finances in Kenya's county governments.

Table 4. 26: Regression Coefficients for Moderating Variable of Organizational resources

	Unstandardized		Standardized		
	Coefficients		Coefficients		
Model	В	Std. Error	Beta	T	Sig.
1 (Constant)	560	.286		-1.962	.052
Financial Reporting System	.324	.091	.252	3.577	.000
<b>Budgeting System</b>	.187	.086	.152	2.175	.032
Revenue System	.221	.076	.220	2.923	.004
Payment System	.367	.084	.338	4.388	.000
2 (Constant)	948	.278		-3.414	.001
Financial Reporting System	.279	.085	.217	3.302	.001
Budgeting System	.140	.080	.114	1.739	.084
Revenue System	.186	.071	.184	2.628	.010
Payment System	.410	.078	.378	5.245	.000
Organizational Resources	.192	.041	.239	4.651	.000
4 (Constant)	303	.306		989	.325
Financial Reporting System	208	.558	161	372	.710
<b>Budgeting System</b>	962	.486	782	-1.981	.050
Revenue System	142	.439	141	325	.746
Payment System	.255	.372	.235	.685	.495
Organizational Resources	- 1.755	.466	-2.182	-3.770	.000
FRS*OR	.902	1.132	.744	.797	.427
BS*OR	2.193	.975	1.828	2.249	.026
RS*OR	.505	.828	.450	.610	.543
PS*OR	.279	.706	.237	.395	.694
a. Dependent Variable: Financia	al Mana	gement			

Source: Field Data (2022)

Table 4.26 presents the results of an analysis that was conducted to determine the coefficient value for the moderating impact that organizational resources have on the connection between IFMIS and financial management. In the first model, each of the IFMIS components has a positive value and a considerable effect. These results are

consistent with the results shown in Table 4.26. With a beta of 0.324, t = 3.577, and P = 0.000, the IFMIS financial reporting system is at a statistically significant level and is a good predictor of financial management. This suggests that an increase in the IFMIS financial reporting system by one unit will result in a significant increase in financial management by 0.324 units. The IFMIS budgeting system has a beta value of 0.187, which indicates that it has reached a statistically significant level. This suggests that a one-unit improvement in the IFMIS budgeting system will result in a substantial improvement in financial management equal to 0.187 units. The IFMIS revenue system has a beta value of 0.221, which indicates that it has reached a level at which it is statistically significant. According to these results, a 1% increase in IFMIS income would result in a 0.221 percentage point improvement in financial management. An increase in the IFMIS payment system by one unit is expected to significantly improve financial management by 0.367 units, given that the IFMIS payment system has a beta of 0.367, indicating that it has achieved a statistically significant level.

In model two, Organizational resources which was introduced is positive and significant  $(B=0.192,\,t=4.651,\,P=0.000)$  in regards to its effect on financial management. This implies that if organizational resources change by one unit, the financial management significantly changes by 0.192 units in same direction. All the independent variables maintain their positive predictive power, however budget system losses its significance level at 0.05 from P=0.032 to P=0.084

In model three, upon the introduction of the interaction term (cross-product between organizational resources and IFMIS constructs). All the IFMIS constructs lose their significant level at 95.0% confidence level. At the same time, only payment system

maintains it positive predictive power. Similarly, organizational resources retain a significance level but it has a negative regression coefficient. All the interactions terms are having positive regression coefficients, however, only budget system interaction organizational resources have significant interaction (B = 2.193, t = 2.249, P = 0.026) Model 3 reveals that organizational resources moderate the association between IFMIS budgeting system and financial management in Western Kenyan county administrations. Model three's regression coefficient of Table 4.28 yielded the study's sixth regression model.

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 Z + \beta_6 X_1 Z + \beta_7 X_2 Z + \beta_8 X_3 Z + \beta_9 X_4 Z + \epsilon$$

$$Y = -0.303 - 208 X_1 - 0.962 X_2 - 0.142 X_3 + 0.255 X_4 - 1.755 Z + 0.902 X_1 Z + 2.193 X_2 Z + 0.505 X_3 Z + 0.279 X_4 Z$$

### Where

Y=Financial Management of County Governments

X<sub>1</sub>=Financial Reporting

X<sub>2</sub>= Budgeting System

 $X_3$ = Revenue System

X<sub>4</sub>= Payment System

Z= Organizational Resources

Specifically, the research showed that for every one unit increase in organizational resources, there was a corresponding one unit rise in the influence of IFMIS components on financial managemen. However, only one interaction term had significant moderating effect on financial management, IFMIS budgeting system and Organizational resources implying that a unit increase in organizational resources will not significantly cause the

level of IFMIS budgeting system effect on financial management significantly increases by 2.193 (P = 0.026).

The moderating influence of organizational resources on the link between financial management and IFMIS financial reporting is shown graphically in Figure 4.4, which makes use of the Hayes Model. As can be seen, low levels of organizational resources exhibit a gradual slope, which may be attributed to the fact that there is a causal connection between the IFMIS financial reporting system and financial management. When the levels of organizational resources are increased, the slope of the curve that depicts the relationship between the IFMIS reporting system and financial management becomes steeper. Stronger associations between the IFMIS budgeting system and financial management are shown at higher levels of organizational resources, suggesting that increasing the amount of organizational resources has a beneficial moderating influence. Because of this, moderation thrives at high levels of organizational resources.

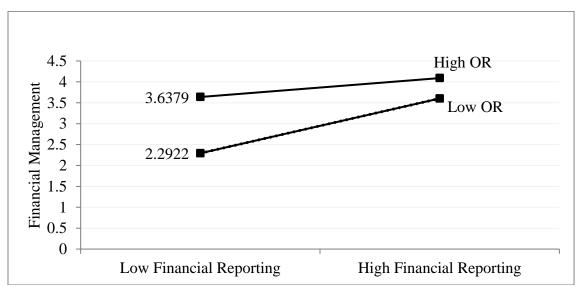


Figure 4. 4: Moderating effect of Organizational resources on IFMIS Financial Reporting system and financial management.

Source: Field Data (2022)

The presence of a causal link between the IFMIS budgeting system and financial management is shown by the fact that low levels of organizational resources exhibit a gradual slope (shown in 4.5). This slope is due to the fact that there is an association between the two concepts. The incline of the curve depicting the relationship between the IFMIS budgeting system and financial management becomes steeper whenever there is a rise in the amount of organizational resources. The slope of the line continues to rise at larger levels of organizational resources, which suggests that raising the levels of organizational resources has a positive moderating impact, which strengthens the strength of the causal association between the IFMIS budgeting system and financial management. As a result, moderation thrives at high levels of organizational resources.

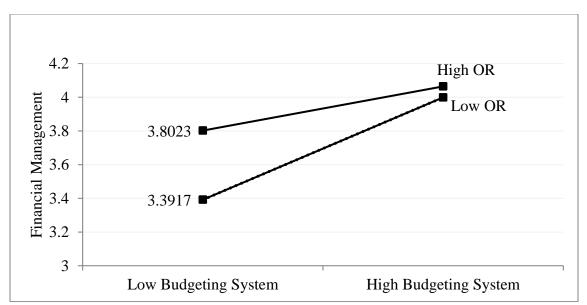


Figure 4. 5: Moderating effect of Organizational resources on IFMIS Budgeting system and financial management.

Source: Field Data (2022)

Because there is a direct connection between the IFMIS revenue system and financial management, figure 4.6 demonstrates that low levels of organizational resources exhibit a

gradual slope. This is because of the presence of a causal link between the two concepts. If the levels of organizational resources are increased, the slope of the curve that depicts the relationship between the IFMIS revenue system and financial management will also be increased. The fact that the slope continues to rise with rising levels of organizational resources suggests that raising the levels of organizational resources has a positive moderating impact, which strengthens the strength of the causal association between the IFMIS revenue system and financial management. As a result, moderation thrives at high levels of organizational resources.

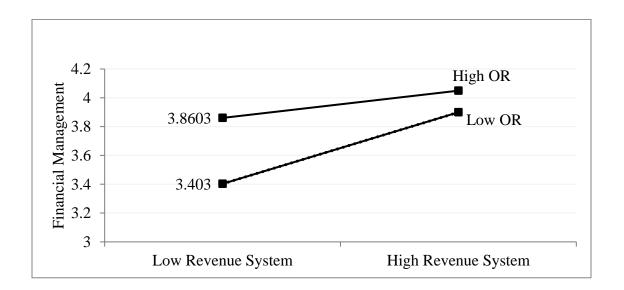


Figure 4. 6: Moderating effect of Organizational resources on IFMIS revenue system and financial management.

Source: Field Data (2022)

As shown in Figure 4.7, there is no evidence of moderation as the two lines seem to be parallel to each other. Increasing the level of organization resources will not affect the influence of IFMIS payment system on financial management..

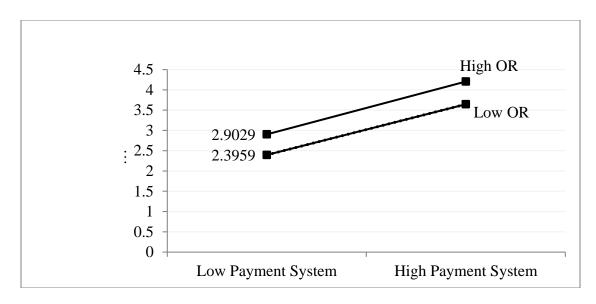


Figure 4. 7: Moderating effect of Organizational resources on IFMIS Payment system and financial management.

### Source: Field Data (2022)

According to the findings of Njihia and Makori (2015), the ICT Infrastructure had the most significant beneficial impact on the performance of the IFMIS system in the company. In addition, there is a favorable correlation between the ability of human resource management, the implementation plan, and the policy of the government and the performance of IFMIS inside the company. According to Mohamud (2018), who came to the conclusion that the technical ability does not have an effect on the implementation of IFMIS in Puntland public institutions, these findings are not substantiated. The findings of the study project also revealed that the amount of money allocated to finance the project or funding is a factor that affects how well the IFMIS is implemented in public organizations.

Maina (2019) shown that the government has formulated appropriate policies with respect to the implementation of IFMIS; nonetheless, the mere existence of policies is not sufficient to allow the implementation of the system. This was shown through hypothesis

testing, which revealed that management support, technical infrastructure, and competent people are all essential components for the successful adoption of the IFMIS system in national government departments. Management support was shown to be the most crucial component. The results of the research indicated that policies that do not include adequate implementation interventions do not promote IFMIS implementation effectively.

### 4.10 Stepwise Regression

In stepwise regression, an algorithm selects which variables will serve as predictors in the final model. This method of fitting regression models is known as the stepwise regression method. At each stage of the process, a variable is evaluated to determine if it should be added to, or removed from, the collection of explanatory variables depending on some criteria that has been established in advance. Table 4.27 presents the results in their entirety.

**Table 4. 27: Stepwise Regression** 

				Std.	Change Statistics				
				Error of					
		R	Adjusted	the	R Square	$\mathbf{F}$			Sig. F
Model	R	Square	R Square	Estimate	Change	Change	df1	df2	Change
1	.711a	.506	.502	.528083	.506	133.230	1	130	.000
2	.774 <sup>b</sup>	.598	.592	.478026	.092	29.651	1	129	.000
3	.793°	.629	.620	.461468	.030	10.423	1	128	.002
4	.801 <sup>d</sup>	.642	.631	.454889	.013	4.730	1	127	.032

a. Predictors: (Constant), IFMIS Payment System

### Source: Field Data (2022)

According to the results shown in Table 4.27 that make use of R2, the value rises with the inclusion of each of the independent factors. At a confidence level of 95%, the F value demonstrates that the IFMIS payment system, the IFMIS revenue system, the IFMIS budgeting system, and the IFMIS financial reporting system are all significant on every addition. These results indicate that the value of R<sup>2</sup> for the important variables rises with each successive stage, reaching a maximum of 0.642 as a total. Based on the above values it shows that IFMIS payment system accounts for 50.2% in explaining variance in financial management in Kenya's county governments, while the contribution of IFMIS financial reporting system is 9.2%, the contribution of IFMIS Revenue system to the model is 3.0%. Lastly, IFMIS budgeting had the least contribution to financial management as shown by 1.3%. This shows that IFMIS payment system contributed the highest followed IFMIS

b. Predictors: (Constant), IFMIS Payment System, IFMIS Financial Reporting System

c. Predictors: (Constant), IFMIS Payment System, IFMIS Financial Reporting System, IFMIS Revenue System

d. Predictors: (Constant), IFMIS Payment System, IFMIS Financial Reporting System, IFMIS Revenue System, IFMIS Budgeting System

financial reporting system, then IFMIS revenue system and lastly, IFMIS budgeting system.

## **4.11 Testing for null hypotheses**

The null hypotheses were based on B Coefficient, t-statistics and P Values. If B coefficient is not equal to zero ( $B\neq 0$ ), t>1.96 and P<0.05 then hypothesis is reject as illustrated hereunder (Uriel, 2013)

Table 4. 28: Null Hypotheses

Hypothesis	B≠0	t>1.96	P<0.05	Verdict		
H <sub>01:</sub> IFMIS financial reporting system				Rejected		
has no significant effect on the financial	0.324	3.577	.000			
management in Kenya's county	0.321	3.377	.000			
governments.						
H <sub>02</sub> : IFMIS budgeting system has no				Rejected		
significant effect on the financial	0.187	2.175	.032			
management in Kenya's county		21176				
governments.				Daigatad		
<b>H</b> <sub>03:</sub> IFMIS revenue system has no significant effect on the financial				Rejected		
management in Kenya's county	0.221	2.923	.004			
governments.						
H <sub>04</sub> : IFMIS payment system has no				Rejected		
significant effect on the financial	0.0.5			.,		
management in Kenya's county	0.367	4.388	.000			
governments						
H <sub>05:</sub> Organizational Resources has no	$\mathbb{R}^2$	F		Rejected		
significant moderating effect on the	change	Change	0.000			
relationship between IFMIS and	0.043	5.048	0.000			
financial Management in Kenya's county						
governments						

Source: Research Data 2022

#### **CHAPTER FIVE**

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter provides a summary of the material that was discussed in the chapters that came before it. In addition to this, it emphasizes the conclusions that were drawn based on the results of the research, as well as the recommendations and suggestions for studies that should be conducted in the future.

## **5.1 Summary of findings**

The primary purposed of the research was to investigate the effect of the relationship between IFMISs, organizational resources, and efficient financial management in Kenya's county governments. The specific objectives were, Establishing the effect of IFMIS financial reporting system on financial management, determining the effect of IFMIS revenue system on financial management, establishing the effect of IFMIS budgeting system on financial management, establishing the effect of IFMIS payment system on financial management, and establishing the moderating effect of organizational resources on the relationship between integrated financial management system and financial management were the specific objectives of this study. On both the independent and combined effects, tests of hypotheses were conducted with a confidence level of 95 percent or below (p<0.05). The results summary is provided in the same way and format across the remaining sections.

### 5.1.1 Effect of IFMIS financial reporting system on financial management

The study set out to determine whether or not the Kenyan county governments were better able to manage their finances after adopting the IFMIS financial reporting system. Participants agreed that IFMIS financial reports improve supervision by allowing various parties to better comprehend the true cost of services provided by the county on an activity-by-activity basis; IFMIS makes it simple for a variety of stakeholders to get individualized reports in a format that is conducive to the production of high-quality decisions; The personnel of the county may quickly use IFMIS in order to get the particular information they need in order to carry out their duties; The workers at the Treasury are able to do real-time data reconciliations on transactions thanks to IFMIS; The IFMIS system allows for the development of individualized reports that may be used both internally and outside; IFMIS has contributed to an increase in the degree of compliance with the requirements for financial reporting; The dependability of financial records has been increased as a result of IFMIS.

The findings of the inferential analysis showed that there is a direct association between the IFMIS financial reporting system and financial management in the county governments of Western Kenya (R = 0.649, P = 0.000). This suggests that an expansion of the IFMIS financial reporting system will lead to an expansion of the financially sound management practices used by county governments in Western Kenya. According to the coefficient of determination obtained by the  $R^2$ , the IFMIS financial reporting system accounts for a considerable portion ( $R^2 = 0.422$ , P = 0.000) of the change that occurred in the financial management of the county governments in the Western region of Kenya. This suggests that the IFMIS financial reporting system is a crucial factor in determining the degree to which

county governments effectively manage their finances. When both the IFMIS revenue system and the IFMIS budgeting system are under control, an increase of one unit in the IFMIS financial reporting system will result in a significant increase of 0.324 units in financial management ( $\beta$ 1=0.324, P=0.000). Therefore, it may be concluded that the research does not support the first version of the null hypothesis: **H**<sub>01</sub>: IFMIS financial reporting system has no significant effect on the financial management in Kenya's county governments.

### 5.1.3 Effect of IFMIS budgeting system on the financial management

The study also looked at how the county governments of Kenya fared financially after adopting the IFMIS budgeting system. The majority of respondents agreed that IFMIS had increased the quality of financial performance in the County and decreased the number of audit inquiries, as shown by the descriptive data. The County has also integrated computerized budgeting with modules used by other departments to ensure stringent financial management. Budgetary decision-making is now more transparent because to the rise of computerized budgeting; the budgeting procedures in the County have been streamlined thanks to computerized budgeting; when compared to paper budgets, electronic budgets make it easier to track expenditure and evaluate results, allowing for better prioritization of resources throughout budget execution; the budgeting procedures in the County have been streamlined thanks to computerized budgeting; and the County has been able to allocate adequate resources. The participants were mostly in agreement that the linkage of electronic budgeting with other units' modules has significantly enhanced monitoring and assessment of budget expenditures.

The findings of the inferential analysis showed that there is a direct association between the IFMIS budgeting system and financial management in the county governments of Western Kenya (R = 0.603, P = 0.000). In light of this, it can be deduced that an expansion of the IFMIS budgeting system will lead to an increase in the level of financial management practiced by county governments in Western Kenya. According to the results of the coefficient of determination R square, the IFMIS budgeting system is substantially responsible for up to 36.3% of the change in financial management in the county governments in Western Kenya (R2 = 0.363, P = 0.000). This suggests that the IFMIS budgeting system is an important factor in determining the level of financial management achieved by county governments. When both the IFMIS financial reporting system and the IFMIS revenue system are under control, an increase of one unit in the IFMIS budgeting system will result in a significant increase of 0.187 units in financial management  $(\beta_1=0.187, P=0.032)$ . As a result, the third null hypothesis, which asserts that there is no significant difference between the two groups, cannot be supported: H<sub>02</sub>: IFMIS budgeting system has no significant effect on the financial management in Kenya's county governments.

### 5.1.3 Effect of IFMIS revenue system on financial management

The third goal was to learn how the IFMIS budgeting system has influenced county governments' ability to manage their finances effectively in Kenya. The majority of responders believed that ARM software improved the accuracy and timeliness of financial records; accountability concerns have been addressed, and the system has benefited as a result, transactions in the County's accounts are transparent, discreet, and accurate; incorporating IFMIS into the AReM process has streamlined payments and cut down on

waste of public cash; payments received by the county may now be more easily tracked and accounted for thanks to IFMIS; and IFMIS revenue system has reduced fraud during the revenue receipt process. Participants were more or less in agreement that the County's cash management system and financial reporting have both benefited from the implementation of Automated Revenue Management and that these improvements have been made possible by the module's integration with the IFMIS modules used by other units for effective financial control.

According to the inferential findings, there is a direct association between the IFMIS revenue system and the financial management in the county governments of Western Kenya (R = 0.665, P = 0.000). This suggests that an improvement in the IFMIS revenue system will lead to an improvement in the financial management of county governments in Western Kenya. The value of the coefficient of determination, R<sup>2</sup>, indicated that the IFMIS financial reporting system substantially accounts for up to 44.3% of the variance in financial management across the county governments in Western Kenya ( $R^2 = 0.443$ , P =0.000). This finding was supported by the fact that the coefficient of determination was significant. It may be deduced from this that the IFMIS financial reporting system is an effective indicator of how county governments handle their finances. When both the IFMIS financial reporting system and the IFMIS budgeting system are under control, an increase of one unit in the IFMIS revenue system will result in a substantial rise of 0.221 units in financial management ( $\beta_2 = 0.221$ , P = 0.004). As a result, there was sufficient evidence to reject the third null hypothesis, which states that there is no relationship between the two variables; H<sub>03</sub>: IFMIS revenue system has no significant effect on the financial management in Kenya's county governments.

### 5.1.4 Effect of IFMIS payment system on the financial management

The fourth goal of the research was to determine the impact that using the IFMIS payment system has had on the financial management practices of Kenya's county administrations. All participants agreed that the county's ability to pay its bills and its suppliers had been enhanced by the IFMIS payment system; the IFMIS payment system improves the county's capacity to account for and track its expenditures; The ratio of delinquent debt to total county debt has decreased (payment efficiency) as a result of the implementation of the IFMIS payment system; the IFMIS payment system has helped cut down on supplier payment fraud; the system has led to an improvement in the payment process of suppliers. On the other hand, participants were mostly in agreement that the IFMIS payment System enables a distinct method for the approval of invoices that have exceeded the user tolerances. Furthermore, the IFMIS payment system gives the ability to input, monitor, and store invoices and credit notes, as well as process payments for them.

According to the findings of the inferential analysis, there is a direct association between the IFMIS payment system and financial management in the county governments of Western Kenya (R = 0.711, P = 0.000). In light of this, it can be deduced that an expansion of the IFMIS payment system will lead to an expansion of the financial management in the county governments in Western Kenya. According to the coefficient of determination obtained by the  $R^2$ , the IFMIS payment system is largely responsible for up to 50.6% of the change that occurred in the financial administration of the county governments located in Western Kenya ( $R^2 = 0.506$ , P = 0.000). This suggests that the IFMIS payment system is a crucial factor in determining the degree to which county governments effectively manage their finances. A unit increase in the IFMIS payment system will result in a

substantial increase in financial management by 0.367 units ( $\beta_1$ =0.367, P=0.000), provided that the IFMIS budgeting system, IFMIS financial reporting system, and IFMIS revenue system are all under control. As a result, the fourth null hypothesis, which claims that there is no relationship between the two variables, could not be supported by the evidence:

**H**<sub>04</sub>: IFMIS payment system has no significant effect on the financial management in Kenya's county governments.

# 5.1.5 Moderating effect of organizational resources on the relationship between organizational resources and financial management

Financial management in Kenya's county governments was examined to see whether there was a correlation between the use of an IFMIS and improved fiscal management. All participants believed that all individuals had the IFMIS expertise necessary to perform their assigned tasks; Using IFMIS, the company has promoted departmental-level information exchange on purpose; the administration provides sufficient funding for IFMIS; top management has put mechanisms in place to ensure that resources meant for IFMIS are properly utilized to avoid wastage; for effective use of IFMIS, it is necessary to invest in the creation and management of new technologies; organizational resources necessary for IFMIS use have been adequately planned for, systematized, and trained; the organization has acquired relevant and adequate technologies for management of IFMIS and top management is committed to provide adequate resources for effective operationalization of IFMIS.

The results of a multiple linear regression showed that there is a direct association between organizational resources and financial management in the county governments of Western

Kenya (R=0.392, P=0.000); this was the case. This suggests that an increase in the resources available to organizations will lead to a rise in the level of financial management practiced by county governments in Western Kenya. According to the results of the coefficient of determination using the  $R^2$ , IFMIS is substantially responsible for accounting for up to 64.2% of the change in financial management in the county governments of Western Kenya ( $R^2=0.642$ , P=0.000). Additional 9.5% of the improvement in financial management can be attributed to organizational resources, bringing the total percentage of change that can be attributed to organizational resources in the model up to 73.8% ( $R^2=0.738$ , P=0.001).

The study established that the interaction of organizational resources and IFMIS constructs have positive coefficient, meaning that as organizational resources increases by one unit, the level of IFMIS construct effect on financial management also increase. However only one interaction term had significant moderating effect on financial management, IFMIS budgeting system and Organizational resources implying that a unit increase in organizational resources will significantly cause the level of IFMIS budgeting system effect on financial management significantly increases by 2.193 (P=0.026). Therefore, there was sufficient evident to reject the fifth null hypothesis that posits: Hos: Organizational resources have no significant moderating effect on the relationship between IFMIS and financial management in Kenya's county governments.

### **5.2 Conclusion**

IFMIS financial reporting system has significant has significant positive effect on financial management in County governments of Western Kenya. This implies that increase in

IFMIS financial reporting system especially customizing of reports, accounts reconciliation, financial Analysis and real time reporting would result in significant improvement in financial management in County governments of Western Kenya in terms of quality of audit reports. IFMIS made it simple for a wide variety of stakeholders to extract individualized reports in a manner that facilitated high-quality decision-making. Additionally, the IFMIS system has made it possible to generate customs reports that can be used both internally and externally. As a result of this, the authors of the research came to the conclusion that the IFMIS financial reporting system had a major impact on the financial management of Kenya's county governments, which led them to reject the initial null hypothesis.

IFMIS revenue system has significant relationship with financial management in County governments of Western Kenya. This postulates that increase in IFMIS revenue system specifically timely record keeping, accounts integrity, financial control and accounting records would result in significant increases in financial management in County governments of Western Kenya in terms of attainment of revenue targets. In terms of accountability, openness, secrecy, and correctness of account transactions in the County, the system has contributed to an improvement in the integrity of the accounts. In addition, the use of IFMIS inside the automated process of revenue management has enhanced accountability and significantly cut waste of publicly funded resources. As a result of this study's findings, researchers came to the conclusion that the IFMIS revenue system has a considerable impact on the way Kenya's county governments handle their finances.

Budgeting using IFMIS has been linked to improved financial management in the counties of Western Kenya. Financial management in the County governments of Western Kenya

stands to benefit greatly from an upgrade to the IFMIS budgeting system in all areas, especially in terms of the absorption rate of funds and the level of efficiency and effectiveness, were such an upgrade to be implemented. As a result, the research came to the conclusion that the budgeting system used by IFMIS has a substantial impact on the financial management used by Kenya's county governments. According to the findings of the research, IFMIS has enhanced the quality of financial performance in the county, leading to fewer audit enquiries. This has resulted in fewer misallocations of funds within individual units' itemized budgets. The management has been provided with the ability to make suitable decisions on the priority activities throughout the budget implementation thanks to the system.

County administrations in Western Kenya have benefited greatly from using the IFMIS payment system. This indicates that major improvements in financial management in County governments in Western Kenya, notably in the timely payments, will arise from enhancing the IFMIS budgeting system in terms of the degree of transaction traceability and transparency. Financial management in Kenya's county governments is affected, the research found, because of the IFMIS payment system. According to the results, the county's capacity to track and account for its expenditures has improved thanks to the IFMIS payment system. IFMIS payment system has enabled automatic matching of invoices with receipts.

An IFMIS was discovered to enhance the financial administration of the five county governments in Western Kenya. Resources inside a company may account for some of the unexplained IFMIS difference in financial management. The findings suggest a positive association between organizational resources and IFMIS components, with a one-to-one

correlation between increases in organizational resources and subsequent improvements in IFMIS's influence on financial management. However only one interaction term had significant moderating effect on financial management, IFMIS budgeting system and Organizational resources implying that a unit increase in organizational resources will significantly cause the level of IFMIS budgeting system effect on financial management to increase significantly.

### 5.3 Implication to Practices, Policy and Theory

Within the context of Kenya's county governments, this research studied the impact that IFMIS has had on financial management. The vast majority of the empirical studies that were looked at on the topic of the public sector's financial management after the introduction of IFMIS in this sector found positive results. After the implementation of IFMIS, there was a bare minimum of attention paid to decentralized county administrations. Therefore, it is essential that more study be conducted to assess the impact that IFMIS has had in other domains where its application has taken form. This work therefore adds to the existing corpus of empirical literature and will be of benefit to future researchers. In addition, the research contributes to the body of theoretical literature since it provides support for the proposals made by task technology fit theory, resource dependence theory, and accountability theory about the use of IFMIS in county governments in order to enhance financial management. The current study therefore, has significant implications on practice, policy and theory and therefore, it has significant contribution to new knowledge.

### **5.3.1 Implication to Practices**

The study set out to determine the correlation between counties in Kenya's use of an IFMIS, the availability of relevant organizational resources, and the effectiveness of county governments' financial management. Precise research objectives and a testable hypothesis were developed to facilitate the study's stated aims. In order to accomplish its goals, the research investigates, evaluates, and analyzes not only the conceptual framework and the theoretical framework, but also the empirical investigations. Due to the fact that the study's goals were successfully accomplished, it is possible to draw some practical implications from the research.

In regards to practical implication, there is a need for an upgrade of the IFMIS infrastructure to improve real time reporting as well as customer satisfaction. In order to reduce downtime cases that have been reported in the use of the system, it is suggested that the integrity of the user and the system should be the priority. More sophisticated systems should be procured with ability to manage multiple tasks owing to the clientele base and geographical location that out to be captured respectively. This should be followed by adequate training of the users as well.

The study establishes that there is moderate emphasize on linking IFMIS modules in the public sector which attributes to less efficiency in implementation of IFMIS hence inadequate financial management. There is need to link various IFMIS modules in the public sector. This would enhance efficient system controls and monitoring of various activities undertaken by county governments. With guidance of the research findings, there is need to increase awareness of the integrated system applications so as to ensure each public officer is interacting with the system on daily basis.

Since security, reliability, accuracy, promptness, relevance, and authenticity of financial reporting had a more significant impact on the county's financial management, steps should be taken to verify data and account for receipts and payments, improving transparency and decreasing waste. Budgeting systems have been found to have a beneficial and large influence on financial management in the county, and the IFMIS system, an enterprise resource planning software, may be used to improve the budgeting process in County governments. The IFMIS payment system has the ability to significantly cut down on fraudulent activities and corrupt practices in county governments. The public sector's financial management was significantly impacted by organizational accountability systems, which included the monitoring of financial events, the provision of information, the conduct of cost-benefit analyses, and the disclosure of relevant information.

Since the study reveals that as much as public finance management depend on effective IFMIS, it also indicates that the effectiveness the system depends on organizational resources. The government should increase the amount of resources for the system implementation and further monitoring of its operations. This would also enhance system controls which would reduce unauthorized transactions. System integration for the modules should be fast-tracked and administered from a centralized destination by an independent personnel. This would reduce the extent to which an authorized budget shifting occurs at different departments. This shows county governments are commitment of ensuring IFMIS is running smoothly in all the department. This is an indication that the public sector is making a great milestone in improving the financial management which are critical in achieving objectives of devolution..

### **5.3.2 Implication to Policy**

The results of the research have led to a number of different policy implications being discussed. Concerning IFMIS, county governments should implement regulations that are adaptable enough to accommodate future technological developments. It is essential that measures be taken to fortify the IFMIS platform in order to protect the many control mechanisms that are integrated into the system. Additionally, in order to guarantee that only authorized workers are permitted access to this system, the county governments had to establish stringent laws about passwords. In addition to this obligation, the county governments are tasked with bolstering their online platforms in order to improve the overall efficacy and productivity of all operations carried out by the counties.

Public officials need special skills and training to effectively present IFMIS and similar technological frameworks. The county government should take use of skilled gracefully competent officials in handling the public advantages obtained. To ensure accurate and timely financial reporting for dynamic, the government should establish and enhance IFMIS. This will allow government personnel to verify IFMIS benefits.

If county governments are serious about making IFMIS work for their budgeting needs, they should evaluate the policy guidelines. IFMIS requires a solid policy and legal framework supported by county governments. To reduce the need for legislative interventions or further training for the personnel, the system should be set up such that the IFMIS procedures firmly align with the manual processes in existence. It is important to remember that these suggestions do not remove the need for change in cases when it is necessary to cut down on waste, boost productivity, and do away with graft. To make IFMIS a genuine e-government system, it is essential that all processes, to the extent

feasible, be managed entirely inside the platform. In order to lessen wastage, improve record-keeping, facilitate planning, and cut down on corruption, the system should be built to handle all financial transactions inside the county government.

### **5.3.3** Implication to Theory

This research contributes to the expanding body of work that establishes the fundamental connections between IFMIS and public sector finance management. The knowledge gained from studying this topic will not only help to improve task technology fit theory, resource based theory, and accountability theory, but will also fill a gap in the literature by illuminating how IFMISs influence financial management through organizational resources in county government. The investigation also confirms the theoretical foundations and lends credence to the different explanatory models.

The study has widened the application of the various theories such as task technology fit theory to understand the relationship between IFMIS and financial management in County Government. This study has widened the scope of application of the theories to understanding of IFMIS outcomes. From the perspective of Task technology fit theory, financial management and Information System are now taking on new meanings in context of various organizational settings. These developments in information systems make it seem relevant to explore how information systems simultaneously constitute a facilitator and a barrier in relation to organizational financial management.

The theory enjoys unprecedented support in accounting research but it is not free from criticism. This is arising in some particular instances where its appropriate application in management accounting is challenged. The notion of task technology fit is criticized for

being unmoving and unable to accommodate for the evolution of organizations. Others argue that it's not a good idea for businesses to try to achieve compatibility with the uncertainties they face, as the uncertainties might shift even as the company adjusts its structure to meet them. This has been adequately addressed by introduction of third variable, organizational resource with corresponding resource based theory.

In support of task technology fit theory, the study also used accountability theory in regards to financial management in county governments. As indicated in the study findings, financial management is influenced directly by IFMIS and this influence is strengthened by presence of organizational resources. Thus, the notion of accountability is pertinent to this research since it has shown how accountability may be improved using IFMIS features.

### **5.3.4 Contribution to New Knowledge**

The results of this study offer a number of topics that have contributed to new understanding in the field of finance and in disciplines connected to it. The findings of this research have been especially significant in filling in the previously highlighted knowledge gaps, and as a consequence, they have made a contribution to the expanding boundaries of our understanding. Not only has the research contributed to the development of an extensive conceptual framework of financial management, organizational resources, and IFMISs, but it has also conducted empirical research on this framework. According to the results of the research, IFMIS by themselves do not provide a guarantee of better financial management; nevertheless, when suitable organizational resources are present, improved financial management is guaranteed. In light of the fact that IFMIS and other organizational resources are available, managers need to have an understanding of the key drivers of sound financial management as well as those factors that operate against it.

In light of the widespread misconceptions about IFMIS and organizational resources that are prevalent in the literature on financial management, these empirical results proved to be quite helpful. This research makes a significant addition to the improvement of academic knowledge on financial management by examining it within the context of a setting typical of sub-Saharan Africa, with a specific focus on devolved governments in Kenya. Existing research bemoans the dearth of academic contributions on IFMIS and financial management emanating from sub-Saharan Africa and focusing on public sector settings. As a result of this, further academic work on IFMIS, organizational resources, and financial management in sub-Saharan Africa has been promoted as a direct result of the research.

In conclusion, managers who are interested in better understanding the impact that IFMIS has had on financial management should find this research helpful. According to the data, the impact was somewhat convoluted. Nonetheless, there are certain inferences that are applicable. It was determined that financial management could be accomplished without a correspondingly detrimental impact of IFMIS on financial management if appropriate organizational resources were available, especially monetary, technical, human, and regulatory/political resources. This was under the condition that adequate organizational resources were available.

### **5.4 Recommendations**

Both policy and practical suggestions, depending on the research's unique aims, were produced from the result of the study. These were presented in the following format.

According to the findings of the research, the use of the IFMIS financial reporting system has a substantial impact on Kenya's county governments' approaches to financial management. As a consequence of this, the research suggests that county governments in Kenya should strictly adhere to the principles of their financial reporting policies, fulfill their legal duties for financial reporting, and implement financial reporting technology. The compliance with the rules for financial reporting will improve as a result of this. The report suggests that the County government should take measures to guarantee that the accounting and financial reporting records it maintains are accurate, and that these records should convey accurate financial information to the County's various stakeholders.

According to the findings of the research, the use of the IFMIS budgeting system has a substantial impact on the manner in which Kenya's county governments handle their finances. As a result, the research suggests that controlled adoption and strategic engagement in automated budgeting processes should be done in order to expedite the development agenda at the grassroots levels. In addition, the research suggested that county governments should integrate electronic budgeting with the modules of other units in order to better monitoring and assessment of expenditures related to budgets. Because of this, management will be able to make suitable decisions on the prioritized activities throughout the implementation of the budget, which will result in smart financial management.

According to the findings of the research, Kenya's county governments' use of the IFMIS revenue system has a substantial impact on the country's overall financial management. According to the findings of the research, county governments should consider automating all points at which they collect income in order to guarantee feasible attainment, sustainability, and the effective delivery of services to the residents. For efficient financial

control, the county government should establish a connection between the automated management of income and the IFMIS modules that are used in other divisions. This will increase accountability and decrease waste of publicly funded resources.

According to the findings of the research, the implementation of the IFMIS payment system has a substantial impact on the financial management of Kenya's county governments. According to the findings of the research, the county government should completely automate the payment process in order to offer a procurement and payment system that is both effective and streamlined. According to the findings of the research, county governments should increase their adoption of IFMIS since payment systems offer distinct procedures for the approval of bills that are higher than the user tolerances.

The upper management of county governments should show their support for the adoption and deployment of IFMIS by making suitable resources, including those in the areas of human resources, financial resources, and technical resources, available. According to the findings of the research, county governments should look at expanding their funding options rather than placing their IFMIS operations solely on the shoulders of the exchequer. In order to accomplish this goal, public-private partnerships should be actively promoted and pursued as a means of assisting in the creation of strategic synergy, particularly with regard to the pooling of capital bases in order to provide resources to county governments. According to the findings of the research, county governments should consider technology resources to be key strategic resources and manage them as such. This is because the usage of these resources helps increase efficiency and contributes to a decrease in operating expenses. This can be achieved by including acquisition and utilization of technological resources in their strategic plan as well as embracing strategic alliance with both

governmental and non-governmental organization in the acquisition of appropriate technological resources for efficient financial management.

### **5.5 Suggestion for further studies**

Based on the findings of this research, it was determined that IFMIS, in conjunction with organizational resources, was responsible for explaining financial management in Kenya's county governments. On the other hand, the factors in the research were able to explain 74.3% of the variance in the financial management of county governments in Western Kenya. This indicates that IFMIS and organizational resources are not the only aspects of financial management in these counties; rather, there are a number of additional elements at play. Researchers could therefore consider introducing other variables apart from moderating variables in similar studies to establish their influence on financial management. Such variables include IFMIS procure to pay, IFMIS cash management as well as government policy and regulations.

To examine their data, researchers may choose from a variety of statistical methodologies, including structural equation modeling. The relationship between IFMIS, organizational resources and the fiscal management of county governments might be studied in great detail using a purely qualitative approach. It is possible that future research may wish to study the causes for major and negligible effect of interaction term when paired with other factors.

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### **APPENDICES**

# APPENDIX I: QUESTIONNAIRES

### **SECTION 1: BACKGROUND INFORMATION**

1. What is your gender? Male [ ] Female [ ]

		What is your age?					
		Below 25 years [ ] 25-34 years [ ] 35-44 years	[ ]				
		45-54 years [ ] above 55 years [ ]					
	3.	What is your highest level of education?					
	Se	econdary education [ ] Certificate [ ]					
	D	iploma [ ] Bachelor's degree [ ]					
		Master's Degree [ ] others [ ]					
	4.	How long have you worked in this Cu?					
		Below 1 year [ ] 1-5 years [ ] 6-10 years [ ]					
		11-15 years [ ] Over 15 years [ ]					
		Tras years [ ] ever respens [ ]					
tabl	e bel	ow 1 Strongly disagree SD, 2 Disagree D, 3 Fairly Agree FA, 4 A	ore	e 1	5	Stro	1
	ee sa						ngıy
agre	ee sa			4	3	2	ngiy
agree SE	ee sa CTIO	ON 2: IFMIS Financial Reporting	5				ngly
agre	ee sa CTIO	ON 2: IFMIS Financial Reporting different stakeholders are given the ability, via the financial	5				1
agree SE	CTION The repo	ON 2: IFMIS Financial Reporting different stakeholders are given the ability, via the financial rting of IFMIS, to comprehend the real cost of services offered by	5				1
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3E0 1	The repo the supe From repo	ON 2: IFMIS Financial Reporting  different stakeholders are given the ability, via the financial rting of IFMIS, to comprehend the real cost of services offered by county on an activity-by-activity basis, hence improving rvision.  IFMIS, several stakeholders may easily derive individualized rts, which can then be used in ways that promote effective decision	5				1
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SE0	The repo the supe From repo mak The the e	different stakeholders are given the ability, via the financial rting of IFMIS, to comprehend the real cost of services offered by county on an activity-by-activity basis, hence improving rvision.  IFMIS, several stakeholders may easily derive individualized rts, which can then be used in ways that promote effective decision ing.  IFMIS provides the personnel of the county with simple access to exact information they need in order to carry out their jobs.  IS is equipped with built-in analytical capabilities that make it	5				1
3 agree	The repo mak The the e IFM poss	different stakeholders are given the ability, via the financial rting of IFMIS, to comprehend the real cost of services offered by county on an activity-by-activity basis, hence improving rvision.  IFMIS, several stakeholders may easily derive individualized rts, which can then be used in ways that promote effective decision ing.  IFMIS provides the personnel of the county with simple access to exact information they need in order to carry out their jobs.  IS is equipped with built-in analytical capabilities that make it ible to do trend analysis on a number of different aspects of the	5				1
SE0 1 2 3	The repo mak The the ethe from the from	different stakeholders are given the ability, via the financial rting of IFMIS, to comprehend the real cost of services offered by county on an activity-by-activity basis, hence improving rvision.  IFMIS, several stakeholders may easily derive individualized rts, which can then be used in ways that promote effective decision ing.  IFMIS provides the personnel of the county with simple access to exact information they need in order to carry out their jobs.  IS is equipped with built-in analytical capabilities that make it ible to do trend analysis on a number of different aspects of the aty's fiscal operations.	5				1
3 agree	The repo the supe From repo mak The the e IFM poss cour	different stakeholders are given the ability, via the financial rting of IFMIS, to comprehend the real cost of services offered by county on an activity-by-activity basis, hence improving rvision.  IFMIS, several stakeholders may easily derive individualized rts, which can then be used in ways that promote effective decision ing.  IFMIS provides the personnel of the county with simple access to exact information they need in order to carry out their jobs.  IS is equipped with built-in analytical capabilities that make it ible to do trend analysis on a number of different aspects of the	5				1

6	The IFMIS system allows for the development of individualized reports			
	that can be used both internally and externally.			
7	Compliance with Financial Reporting requirements has improved as a			
	result of IFMIS's implementation.			
8	The dependability of financial records has been increased as a result of			
	IFMIS.			

In this section please tick ( $\sqrt{}$ ) the most appropriate response for each of the questions in the table below 1 Strongly disagree SD, 2 Disagree D, 3 Fairly Agree FA, 4 Agree A, 5 Strongly agree **SA ECTION 3: IFMIS Budgeting** Because to IFMIS's contribution, unit itemized budget misallocations have been minimized, leading to an improvement in the quality of financial management in the county and fewer audit inquiries. In order to implement efficient budget controls, the County has connected computerized budgeting to modules that are utilized in other departments. The integration of electronic budgeting with the systems of other units has resulted in an improvement in the monitoring and assessment of monetary expenditures. The management has been provided with the ability to make suitable decisions on the priority activities throughout the budget implementation thanks to the system. The use of electronic budgeting has increased openness throughout the budgeting process, particularly with regard to the decision-making process. The methods for formulating the budget in the County have been enhanced thanks to the use of electronic budgeting. The County has been successful in allotting sufficient money to the planned projects, which has resulted in a decrease in the number of outstanding invoices related to public spending. The system has made it possible to undertake projects for the county government in a timely manner, which has resulted in a reduction in the number of cash that ended the year unused.

table	his section please tick ( $$ ) the most appropriate response for each of the below 1 Strongly disagree <b>SD</b> , <b>2</b> Disagree <b>D</b> , <b>3</b> Fairly Agree <b>FA</b> , <b>4</b> Agree <b>SA</b>	-				
		5	4	3	2	1
ECT	TON 4: IFMIS Revenue System					

1	The County's cash management system as well as its reporting on		
	financial matters have both seen improvements as a result of the		
	implementation of Automated Revenue Management.		
2	The timely recording of accounting transactions has been improved		
	thanks to the use of automated revenue management.		
3	In terms of organizational resources, openness, confidentiality, and		
	correctness of account transactions in the County, the system has		
	enhanced the integrity of the accounts, which has led to an improvement		
	in the overall integrity of the accounts.		
4	The Automated Revenue Management system has been connected to the		
	IFMIS modules that are used in other departments to provide efficient		
	financial management.		
5	The Public Expenditure Management was significantly enhanced as a		
	result of the linking of the Automated Revenue Management module		
	with the modules of other units.		
6	The use of IFMIS in the Automated Revenue Management process has		
	resulted in an improvement of the payment procedures and a reduction		
	in the misappropriation of public monies.		
7	The IFMIS revenue system has seen a decrease in the proportion of		
	outstanding debtors to total income, indicating that money has been		
	collected more effectively.		
8	The IFMIS revenue system has improved both the visibility and the		
	trackability of the payments that have been received in the county.		
9	During the process of revenue reception, fraud has been decreased		
	thanks to IFMIS's revenue system		

In t	his section please tick ( $\vee$ ) the most appropriate response for each of the	ne (	ques	stio	ns ir	ı the
tabl	e below 1 Strongly disagree SD, 2 Disagree D, 3 Fairly Agree FA, 4 A	gre	ee A	, 5	Stro	ngly
	ee SA	U		,		0,
		5	4	3	2	1
SE	CTION 5: IFMIS Payment System				•	
1	The implementation of the IFMIS payment System has resulted in an					
	improvement in the manner in which the county pays its costs and its					
	suppliers.					
2	Increases in both openness and traceability of payments made by the					
	county are made possible through the IFMIS payment System.					
3	The IFMIS payment System has increased payment efficiency, which					
	has resulted in a decrease in the proportion of outstanding debts to the	:				
	total debts owed in the county.					
4	A decrease in the amount of fraud that occurs during the payment of					
	suppliers has been attributed to the IFMIS payment System.					

5	The county government is now able to control the quality of the supplies			
	that are manufactured thanks to the system, which results in better value			
	for their money.			
6	IFMIS is a payment system that allows for the automated matching of			
	receipts and invoices.			
7	A different method for the approval of invoices that exceeded the user			
	tolerances is made possible by the IFMIS payment System.			
8	The IFMIS payment system gives users the ability to input, monitor, and			
	retain invoices and credit notes, as well as process those notes and			
	invoices for payment.			

In this section please tick ( $\sqrt{}$ ) the most appropriate response for each of the questions in the table below 1 Strongly disagree **SD**, 2 Disagree **D**, 3 Fairly Agree **FA**, 4 Agree **A**, 5 Strongly agree **SA** 

agi	ee sa				1	_
		5	4	3	2	1
	SECTION 6: Organizational Resources					
1	The personnel members individually had the appropriate abilities	\$				
	necessary for the positions that were assigned to them in IFMIS.					
2	By using IFMIS, the company has made a concerted effort to promote	;				
	collaboration and information exchange across its many divisions.					
3	The administration devotes an acceptable portion of the IFMIS income	,				
	system to the IFMIS programs.					
4	My company has set aside sufficient funds in its budget to see that its					
	most important initiatives are carried out.					
5	There is sufficient resource available to produce and manage technical					
	change in order to facilitate IFMIS use.					
6	For the management of organizational resources necessary for IFMIS					
	usage, there is enough planning, processes, and training in place.					
7	The organization has obtained technologies that are relevant and					
	sufficient for the administration of IFMIS.					
8	By abusing IFMIS, one might risk having one's own interests prioritized					
	over those of the county government. However, there are procedures					
	that one can follow to guarantee this does not happen.					
9	When using IFMIS, there is a distinct delineation between the jobs that					
	are performed.					

In this section please tick ( $\sqrt{}$ ) the most appropriate response for each of the questions in the table below 1 Strongly disagree **SD**, **2** Disagree **D**, **3** Fairly Agree **FA**, **4** Agree **A**, **5** Strongly agree **SA** 

	SC S/1	5	4	3	2	1
	SECTION 7: Financial Management					
1	Through increased compliance with the budget and overall improvements to financial management, the absorption rate in the county has been enhanced thanks to IFMIS.					
2	The use of IFMIS has made it easier for the county to meet its objectives for income from its own sources.					
3	IFMIS modules have enhanced tax collection by increasing transparency, organizational resource use, and overall efficiency of county government collection processes.					
4	The financial management of allocations and the administration of public expenditures in the County have both been enhanced thanks to the modules of IFMIS.					
5	IFMIS has improved the way financial management is handled in the County by allowing for more effective use of monies for various types of development expenditures.					
6	Without the need for subjective judgments, the method has been helpful in assigning sufficient money to the many initiatives undertaken by the county administration.					
7	The theft of public money in the County due to expenditures that were not permitted has decreased as a result of linked IFMIS modules.					
8	Since the implementation of IFMIS, there has been an overall improvement in the county's level of efficiency and effectiveness.					

# APPENDIX II: CONFIRMATORY FACTOR ANALYSIS

		Squared	Factor
Financial Management	AVE	Multiple	Loading
		Correlation	
Because IFMIS monitors compliance with the	0.557		
budget, the county's absorption rate has increased,			
which contributes to the system's overall			
improvement in financial management.		0.390	0.79
The use of IFMIS has made it easier for the county			
to meet its objectives for income from its own			
sources.		0.319	0.752
IFMIS modules have enhanced tax collection by			
increasing transparency, organizational resource			
use, and overall efficiency of county government			
collection processes.		0.417	0.804
The financial management of allocations and the			
administration of public expenditures in the County			
have both been enhanced thanks to the modules of			
IFMIS.		0.256	0.711
IFMIS has improved the County's financial			
management by increasing the efficiency with			
which monies are allocated for development			
expenditures.		0.195	0.664
Without the need for subjective judgments, the			
method has been helpful in assigning sufficient			
money to the many initiatives undertaken by the			
county administration.		0.209	0.677
The theft of public money in the County due to			
expenditures that were not permitted has decreased			
as a result of linked IFMIS modules.		0.492	0.838

Since the implementation of IFMIS, there has been,		
in general, an increase in both efficiency and		
effectiveness at the county.	0.263	0.716

		Squared	Factor
Organizational Resources	AVE	Multiple	Loading
		Correlation	
Each employee has the appropriate set of abilities necessary to perform the duties assigned to them in IFMIS.	0.850	0.604	.882
By using IFMIS, the company has made a concerted effort to promote collaboration and information exchange across its many divisions.		0.781	.940
IFMIS initiatives get an appropriate share of the company's financial resources, as determined by management.		0.801	.946
My company has set aside sufficient funds in its budget to see that its most important initiatives are carried out.		0.743	.928
There is sufficient resource available to produce and manage technical change in order to facilitate IFMIS use.		0.605	.882
For the management of organizational resources necessary for IFMIS usage, there is enough planning, processes, and training in place.		0.804	.947
The organization has obtained technologies that are relevant and sufficient for the administration of IFMIS.		0.833	.955
By abusing IFMIS, one might risk having one's own interests prioritized over those of the county government. However, there are procedures that one can follow to guarantee this does not happen.		0.642	.895

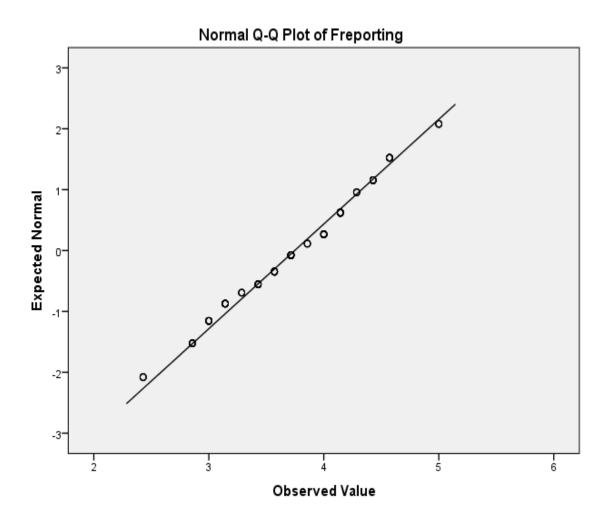
		Squared	Factor
Financial Reporting	AVE	Multiple	Loading
		Correlation	
The many stakeholders are able to have a better understanding of the real cost of the services given by the county, activity by activity, thanks to the financial reports	0.624	0.619299	0.00.000
provided by IFMIS.  From IFMIS, several stakeholders may easily derive individualized reports, which can then be used in ways that promote effective decision making.		0.340315	0.886998
The IFMIS provides the personnel of the county with simple access to the exact information they need in order to carry out their jobs.		0.494308	0.793187
The workers at the Treasury are able to do real-time data reconciliation on transactions thanks to IFMIS.		0.148643	0.62089
The IFMIS system allows for the development of individualized reports that can be used both internally and externally.		0.362747	0.627919
Compliance with Financial Reporting requirements has improved as a result of IFMIS's implementation.		0.533532	0.909616
The dependability of financial records has been increased as a result of IFMIS.		0.616622	2.2 32 31 0
			0.886131

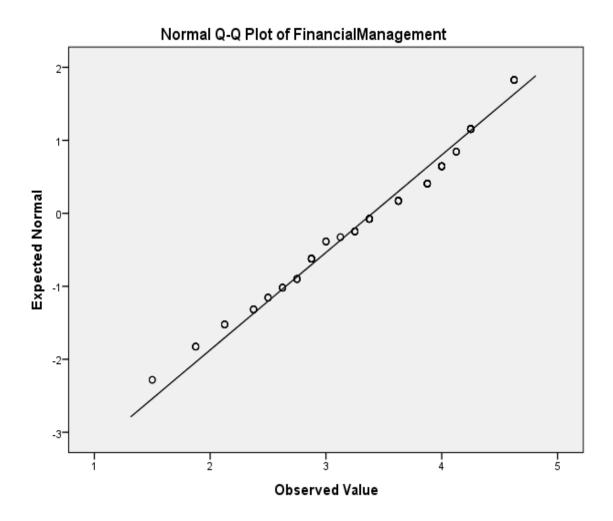
	Squared	Factor	
AVE	Multiple	Loading	
	Correlation		
0.632			
	0.565396	0.8540.6 70	
	0.688299		
		0.775353	
	0.338808		
		0.73141	
	0.520425		
		0.957791	
	0.424599		
		0.800111	
	0.624756		
		0.680924	
	0.322786	0.681874	
	0.51089	0.841303	
		Multiple Correlation  0.632  0.565396  0.688299  0.338808  0.520425  0.424599  0.624756	

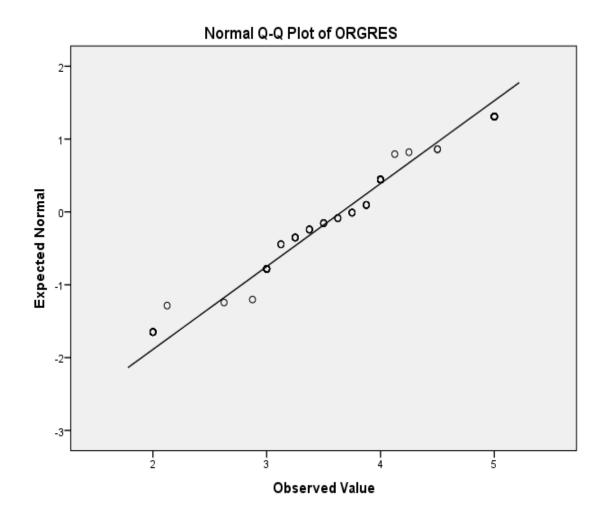
		Squared	Factor	
Revenue System	AVE	Multiple	Loading	
		Correlation		
The County's cash management system	0.615			
as well as its reporting on financial matters have both seen improvements as a result of the implementation of		0.570919		
Automated Revenue Management.			0.896245	
The timely recording of accounting transactions has been improved thanks to the use of automated revenue		0.587052		
management.			0.875053	
In terms of accountability, openness, secrecy, and correctness of account transactions in the County, the system has contributed to an improvement in the integrity of the accounts.		0.514228	0.782299	
The Automated Revenue Management system has been connected to the IFMIS modules that are used in other departments to provide efficient financial management.		0.495645	0.725671	
The Public Expenditure Management was significantly enhanced as a result of the linking of the Automated Revenue Management module with the modules of other units.		0.487882	0.751293	
The use of IFMIS in the Automated Revenue Management process has resulted in an improvement of the payment procedures and a reduction in the misappropriation of public monies.		0.548997	0.606025	
The IFMIS revenue system has improved both the visibility and the trackability of the payments that have been received in the county.		0.50892	0.868152	
During the process of revenue reception, fraud has been decreased thanks to IFMIS's revenue system.		0.392772	0.000132	
ii iviis s revenue system.			0.727865	

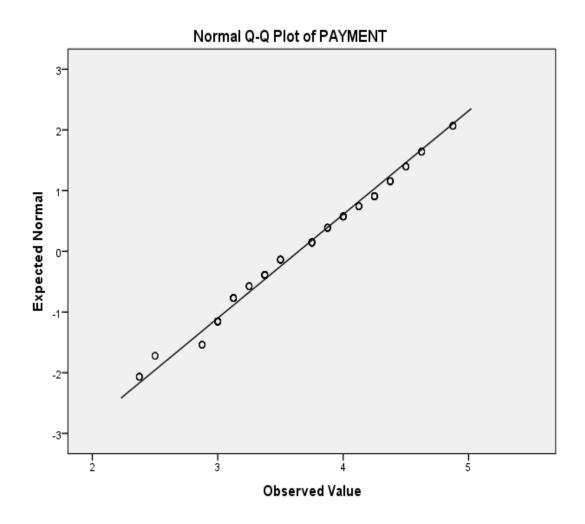
		Squared	Factor	
Payment System	AVE	Multiple	Loading	
		Correlation		
The Automated Revenue Management system has helped enhance the County's cash management system as well as the financial reporting system.	0.608	0.091669	0.518137	
Record keeping of accounting transactions has been made more timely as a result of automated revenue management.		0.355633	0.744517	
Accounts in the County have improved in terms of accountability, openness, secrecy, and correctness as a result of the implementation of the system.		0.571585	0.866584	
In order to exercise efficient management over its finances, the County has connected the Automated Revenue Management system to the IFMIS modules that are used by other units.		0.558851	0.829108	
There was an improvement in the Public Expenditure Management as a result of linking the Automated Revenue Management module with the modules of other units.		0.37653	0.675579	
The use of IFMIS in the Automated Revenue Management process has resulted in an improvement of the payment procedures as well as a reduction in the misappropriation of public monies.		0.563046	0.682876	
The IFMIS revenue system has improved the level of openness and traceability of the payments that the county has received.		0.510817	0.933225	
The IFMIS revenue system has significantly cut down on fraudulent activity throughout the revenue reception process.		0.534993	0.898479	

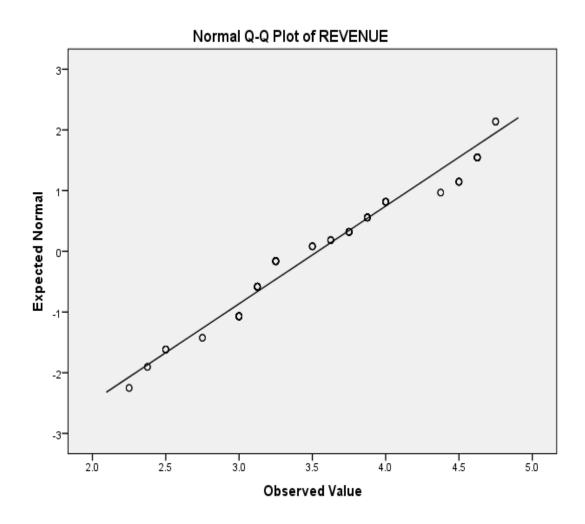
# APPENDIX III: NORMALITY

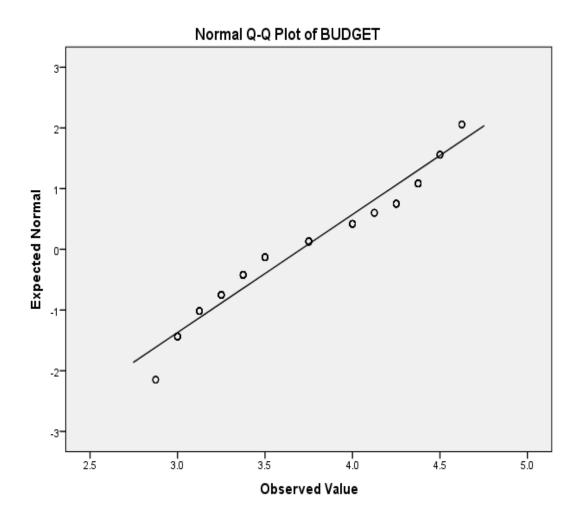












APPENDIX IV: CONSENT FORM

My name is Jamgun Jensen Iravonga. I am a PhD student at Masinde Muliro University of

Science and Technology and carrying out a study on "Integrated Financial Management

Information Systems, Organizational Resources and Financial Management in county

governments, Kenya." Being one of the participants; you have been selected to participate

in this study. If you consent to answering the questionnaire, you will be treated with utmost

confidentiality and will be used for academic purposes only. The study will not cause any

disadvantage to any institution (e.g. the school or department etc.) or to you as an individual

in any capacity. If you agree to participate in the study you will be doing so professionally

and voluntary and there will be no any monetary returns. Any benefits of the research will

largely contribute to knowledge in order to improve policy and practice in County

governments in Kenya. You are free to ask any question before, during and after filling the

questionnaire. You are also at liberty not to respond to questions you do not feel

comfortable answering. The filling of the questionnaire/interview will take approximately

30 minutes. Kindly note that if you have any queries as far as ethical issues are concerned

do not hesitate to contact,

Name: Jamgun Jensen Iravonga

Phone No.: 0726442266

Email: jamujens@gmail.com

Please sign.....

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- a. Dependent Variable: Financial Management
- b. All requested variables entered.

#### **Model Summary**

					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.200ª	.040	.032	.736338	.040	5.389	1	130	.022
2	.807 <sup>b</sup>	.651	.637	.450915	.611	55.166	4	126	.000
3	.837°	.700	.686	.419400	.049	20.647	1	125	.000
4	.862 <sup>d</sup>	.743	.722	.394620	.043	5.048	4	121	.001

- a. Predictors: (Constant), Period of service
- b. Predictors: (Constant), Period of service, IFMIS payment system, IFMIS financial reporting system, IFMIS budgeting system, IFMIS revenue system
- c. Predictors: (Constant), Period of service, IFMIS payment system, IFMIS financial reporting system, IFMIS budgeting system, IFMIS revenue system, Organizational Resources
- d. Predictors: (Constant), Period of service, IFMIS payment system, IFMIS financial reporting system, IFMIS budgeting system, IFMIS revenue system, Organizational Resources, PS\*OR, BS\*OR, RS\*OR, FRS\*OR

Category of Staff	Kakamega	Bungoma	Busia	Vihiga	Trans Nzoia	Total
Procurement officers	13	10	7	5	9	44
Internal auditors	14	11	7	6	8	46
Accountants	22	21	15	13	18	89
Finance officers	24	19	15	12	17	87
Revenue officers	12	10	7	5	8	42
Total	79	71	51	41	60	302
Procurement officers	7.40397351	5.695364	3.986755	2.847682	5.125828	
Internal auditors	7.973509934	6.264901	3.986755	3.417219	4.556291	
Accountants	12.52980132	11.96026	8.543046	7.403974	10.25166	
Finance officers	13.66887417	10.82119	8.543046	6.834437	9.682119	
Revenue officers	6.834437086	5.695364	3.986755	2.847682	4.556291	

#### APPENDIX V: NACOSTI PERMIT

